AGENDA

CITY COUNCIL
REGULAR MEETING

May 9, 2017
4:00 PM
City Council Chamber
One Civic Center Plaza
Irvine, CA 92606

Donald P. Wagner
Mayor

Lynn Schott
Mayor Pro Tempore

Melissa Fox
Councilmember

Jeffrey Lalloway
Councilmember

Christina Shea
Councilmember

Speaker's Card/Request to Speak: If you would like to address the City Council on a scheduled agenda item – including a Consent Calendar item, a Regular Council Business item, a Public Hearing item, or Public Comments – please complete the Request to Speak Form. The card is at the table at the entrance to the City Council Chamber. Please identify on the card your name and the item on which you would like to speak and return to the City Clerk. The Request to Speak Form assists the Mayor in ensuring that all persons wishing to address the City Council are recognized. It also ensures the accurate identification of meeting participants in the City Council minutes. Your name will be called at the time the matter is heard by the City Council. City policy is to limit public testimony to up to three minutes per speaker depending on relevant circumstances (unless the time limit is extended by the Mayor), which includes the presentation of electronic or audio visual information. Speakers may not yield their time to other persons.

Please take notice that the order of scheduled agenda items below and/or the time they are actually heard, considered and decided may be modified by the Mayor or the City Council during the course of the meeting, so please stay alert.

CALL TO ORDER

ROLL CALL

Scan this QR code for an electronic copy of the City Council staff reports.

1. CLOSED SESSION

1.1 a) CONFERENCE WITH LEGAL COUNSEL – ANTICIPATED LITIGATION: Potential initiation of litigation pursuant to paragraph (4) of subdivision (d) of Section 54956.9: 1 potential case (Safari Substation/Southern California Edison)

b) CONFERENCE WITH LEGAL COUNSEL – ANTICIPATED LITIGATION: Significant exposure to litigation pursuant to paragraph (2) or (3) of subdivision (d) of Section 54956.9: 1 potential case (Safari Substation/Southern California Edison)

1.2 CONFERENCE WITH LABOR NEGOTIATORS (Pursuant to Government Code Section 54957.6) Agency Negotiators: Sean Joyce, City Manager; Grace Leung, Assistant City Manager; Michelle Grettenberg, Assistant to the City Manager; Jimmee Medina, Manager of Human Resources; Brian King, Human Resources Administrator; Peter Brown, Liebert, Cassidy, Whitmore; Employee Organizations: Associated Supervisory/Administrative Personnel (ASAP); Irvine City Employees Association (ICEA); Irvine Professional Employees Association (IPEA); Irvine Police Association (IPA); Irvine Police Management Association (IPMA); Management and Non-Represented Employees; Confidential Employees; and Part-Time Employees

RECONVENE TO THE CITY COUNCIL MEETING

PLEDGE OF ALLEGIANCE

INVOCATION

2. PRESENTATIONS

2.1 Irvine 2/11 Marine Adoption Committee Annual Report

CITY MANAGER'S REPORT

ANNOUNCEMENTS/COMMITTEE REPORTS/COUNCIL REPORTS

Announcements, Committee Reports and Council Comments are for the purpose of presenting brief comments or reports, are subject to California Government Code Section 54954.2 of the Brown Act and are limited to 15 minutes per meeting.

ADDITIONS AND DELETIONS

Additions to the agenda are limited by California Government Code Section 54954.2 of the Brown Act and for those items that arise after the posting of the Agenda and must be acted upon prior to the next City Council meeting.

3. CONSENT CALENDAR

All matters listed under Consent Calendar are considered by the City Manager to be routine and enacted by one roll call vote. There will be no discussion of these items unless members of the City Council request specific items to be removed from the Consent Calendar for separate discussion. Any member of the public may address the Council on items on the Consent Calendar. See information for Speaker's Card/Request to Speak on first page.

3.1 MINUTES

ACTION:
Approve the minutes of a regular meeting of the Irvine City Council held on April 25, 2017.

3.2 PROCLAMATIONS

ACTION:
Proclaim May 20, 2017 as "Kids to Parks Day."

3.3 WARRANT AND WIRE TRANSFER RESOLUTION

ACTION:
Adopt - A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, ALLOWING CERTAIN CLAIMS AND DEMANDS AND SPECIFYING THE FUNDS OUT OF WHICH THE SAME ARE TO BE PAID

3.4 MEASURE M2 WATER QUALITY GRANT PROGRAM APPLICATION

ACTION:
Adopt - A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, APPROVING THE SUBMITTAL OF A GRANT APPLICATION TO THE ORANGE COUNTY TRANSPORTATION AUTHORITY FOR FUNDING UNDER THE MEASURE M2 TIER 1 ENVIRONMENTAL CLEANUP PROGRAM

3.5 ANNUAL MEASURE M2 ELIGIBILITY SUBMITTAL

ACTION:
1) Approve and authorize staff to submit to the Orange County Transportation Authority the Measure M2 Seven-Year Capital Improvement Program for Fiscal Years 2017-18 through 2023-24 to comply with Measure M2 eligibility criteria.
2) Adopt – A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, CERTIFYING COMPLIANCE WITH THE COUNTYWIDE MEASURE M2 PROGRAM

3.6 APPROVAL OF PLANS, SPECIFICATIONS AND CONTRACT DOCUMENTS FOR THE LAKEVIEW SENIOR CENTER OUTDOOR PATIO AND ROSE GARDEN REHABILITATION

ACTION:

1) Approve the construction plans, specifications and contract documents for the Lakeview Senior Center Rehabilitation, Capital Improvement Project 361733.
2) Approve the Engineer's Estimate, Construction Contingency and Project Funding Summary.
3) Authorize staff to solicit competitive bids and award the construction contract to the lowest responsive and responsible bidder, in accordance with the City's purchasing policies and procedures, within the approved project budget.

3.7 MEMORANDUM OF UNDERSTANDING WITH CONCORDIA UNIVERSITY FOR CAMPUS BUILD-OUT PROJECT AT 1530 CONCORDIA WEST, PLANNING AREA 21 (TURTLE ROCK), AND SECOND READING AND ADOPTION OF ORDINANCE NO. 17-05 REVISING SPECIAL DEVELOPMENT REQUIREMENTS IN ZONING ORDINANCE SECTION 9-21-7

ACTION:

1) Authorize Mayor Pro Tem Schott to sign a Memorandum of Understanding and Covenants between the City of Irvine and Concordia University for Concordia University's Campus Master Build-Out Plan Update associated with Conditional Use Permit Modification 00612052-PCPU, Zone Change 00629029-PZC and Final Environmental Impact Report SCH No. 2015091023/File No. 00618828-PCLE
2) Read by title only, second reading and adoption of ORDINANCE NO. 17-05 – AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, APPROVING ZONE CHANGE 00629029-PZC TO REVISE ZONING ORDINANCE SECTION 9-21-7.B, SPECIAL DEVELOPMENT REQUIREMENTS FOR CONCORDIA UNIVERSITY (CHRIST COLLEGE IRVINE); PLANNING AREA 21, (TURTLE ROCK); FILED BY CONCORDIA UNIVERSITY

   (Unless otherwise directed by a Member of the City Council, the vote at second reading will reflect the same vote as at first reading. However, if a Councilmember was absent at first reading, his or her vote cast at second reading will be reflected. If a Councilmember is not present at the second reading/adoption, the vote will be reflected as absent.)

3.8 COMMUNITY PARTNERSHIP FUND GRANT NOMINATIONS

ACTION:

1) Approve Councilmember Lalloway's request for Community Partnership Fund Grant nomination to Myford Elementary School Parent Teacher Organization in the amount of $500 in support of program costs.
2) Approve Mayor Wagner's request for Community Partnership Fund Grant nomination to the American Red Cross in the amount of $500 in support of the American Red Cross Orange County Heroes Luncheon.
3) Authorize the City Manager to prepare and sign the funding agreements listed in Actions 1 and 2.

4. COUNCIL BUSINESS

4.1 CONSIDERATION OF A REQUEST BY MAYOR PRO TEMPORE SCHOTT AND COUNCILMEMBER LALLOWAY FOR PUBLIC DISCUSSION OF SITING OF SAFARI SUBSTATION IN THE SPECTRUM BUSINESS CENTER AND FOR RECONSIDERATION OF DECISION TO INITIATE A PROCEEDING WITH THE CALIFORNIA PUBLIC UTILITIES COMMISSION CONCERNING SAME

ACTION:
City Council discussion and direction.

4.2 PARKS MASTER PLAN

ACTION:
Adopt – A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, APPROVING A CITY-INITIATED PARKS MASTER PLAN

4.3 A RESOLUTION OF INTENT TO CONSIDER GRANTING NONEXCLUSIVE FRANCHISE AGREEMENTS FOR COMMERCIAL WASTE COLLECTION AND RECYCLING SERVICES

ACTION:
Adopt – A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, DECLARING ITS INTENT TO CONSIDER GRANTING NONEXCLUSIVE FRANCHISE AGREEMENTS FOR COMMERCIAL WASTE COLLECTION AND RECYCLING SERVICES AND SETTING FORTH THE PROPOSED TERMS AND CONDITIONS OF SAID FRANCHISE

4.4 CONSIDERATION OF COUNCILMEMBER FOX'S REQUEST FOR ALLOCATION OF FUNDING TO SUPPORT THE EFFORTS OF THE ORANGE COUNTY TASK FORCE FOR DROWNING PREVENTION

ACTION:
City Council discussion and direction.

PUBLIC COMMENTS - Public comments will be heard at approximately 6:30 p.m. or prior to adjournment, whichever occurs earlier.

Any member of the public may address the City Council on items within the City Council's subject matter jurisdiction but which are not listed on this agenda during Public Comments; however, no action may be taken on matters that are not part of the posted agenda. See information for Speaker's Card/Request to Speak on the first page.

ADJOURNMENT

NOTICE TO THE PUBLIC

LIVE BROADCASTING AND REBROADCASTING

Regular City Council meetings are broadcast live every 2nd and 4th Tuesday of the month at 4 p.m. and are replayed on Tuesdays at 4 p.m. (in weeks in which there is not a live City Council meeting), Sundays at 11 a.m., Wednesdays at 7 p.m., and Thursdays at 10 a.m. until the next City Council meeting. All broadcasts can be viewed on Cox Communications Local Access Channel 30 and U-Verse Channel 99. City Council meetings are also available via live webcast and at any time for replaying through the City's ICTV webpage at cityofirvine.org/ictv. For more information, please contact the City Clerk's office at (949) 724-6205.

ADJOURNMENT

At 11:00 p.m., the City Council will determine which of the remaining agenda items can be considered and acted upon prior to 12:00 midnight and will continue all other items on which additional time is required until a future City Council meeting. All meetings are scheduled to terminate at 12:00 midnight.

STAFF REPORTS

As a general rule, staff reports or other written documentation have been prepared or organized with respect to each item of business listed on the agenda. Copies of these materials are on file with the City Clerk and are available for public inspection and copying once the agenda is publicly posted, (at least 72 hours prior to a regular City Council meeting). Staff reports can also be downloaded from the City's website at *cityofirvine.org* beginning the Friday prior to the scheduled City Council meeting on Tuesday.

In addition, meetings can be viewed live at the time posted on the agenda and related staff reports can be opened and viewed simultaneously along with the streaming of the meeting. To view the meeting, go to *cityofirvine.org/ictv*.

If you have any questions regarding any item of business on the agenda for this meeting, or any of the staff reports or other documentation relating to any agenda item, please contact City Clerk staff at (949)724-6205.

SUPPLEMENTAL MATERIAL RECEIVED AFTER THE POSTING OF THE AGENDA

Any supplemental writings or documents distributed to a majority of the City Council regarding any item on this agenda after the posting of the agenda will be available for public review in the City Clerk's Office,

One Civic Center Plaza, Irvine, California, during normal business hours. In addition, such writings or documents will be made available for public review at the respective public meeting.

If you have any questions regarding any item of business on the agenda for this meeting, or any of the staff reports or other documentation relating to any agenda item, please contact City Clerk staff at (949)724-6205.

SUBMITTAL OF INFORMATION BY MEMBERS OF THE PUBLIC FOR DISSEMINATION OR PRESENTATION AT PUBLIC MEETINGS

Media Types and Guidelines

1. Written Materials/Handouts:

   Any member of the public who desires to submit documentation in hard copy form may do so prior to the meeting or at the time he/she addresses the City Council. Please provide 15 copies of the information to be submitted and file with the City Clerk at the time of arrival to the meeting. This information will be disseminated to the City Council at the time testimony is given.

2. Large Displays/Maps/Renderings:

   Any member of the public who desires to display freestanding large displays or renderings in conjunction with their public testimony is asked to notify the City Clerk's Office at (949)724-6205 no later than 12:00 noon on the day of the scheduled meeting so that an easel can be made available, if necessary.

3. Electronic Documents/Audio-Visuals:

   Any member of the public who desires to display information electronically in conjunction with their public testimony is asked to submit the information to the Public Information Office (PIO) no later than 12:00 noon on the day of the scheduled meeting. To facilitate your request contact the PIO Office at (949)724-6253 or the City Clerk's Office at (949)724-6205.

   Information must be provided on CD, DVD, or VHS; or, emailed by 12:00 noon on the day of the scheduled meeting to pio@ci.irvine.ca.us. Members of the public will be asked to provide their name, identify the meeting and the agenda item to be addressed, and a day time phone number.

   The PIO office will notify the person submitting the information as soon as possible prior to the meeting if the information cannot be accessed or if the version provided is incompatible with the City's system. Every effort will be made by City staff to facilitate the presentation.

CITY SERVICES TO FACILITATE ACCESS TO PUBLIC MEETINGS

It is the intention of the City of Irvine to comply with the Americans With Disabilities Act (ADA) in all respects. If, as an attendee or a participant at this meeting, you will need special assistance beyond what is normally provided, the City of Irvine will attempt to accommodate you in every reasonable manner. Please contact the City Clerk's Office at (949)724-6205.

Assisted listening devices are available at the meeting for individuals with hearing impairments. Notification 48 hours prior to the meeting will enable the City to make reasonable arrangements to ensure accessibility to this meeting. (28 CFR 35. 102-35. 104 ADA Title II)

CHALLENGING CITY DECISIONS

The time limit within which to commence any lawsuit or legal challenge to any quasi-adjudicative decision made by the City is governed by Section 1094.6 of the Code of Civil Procedure, unless a shorter limitations period is specified by any other provision. Under Section 1094.6, any lawsuit or legal challenge

to any quasi-adjudicative decision made by the City must be filed no later than the 90th day following the date on which such decision becomes final. Any lawsuit or legal challenge that is not filed within this 90-day period will be barred.

If a person wishes to challenge the nature of the above actions in court, they may be limited to raising only those issues they or someone else raised at the meeting described in this notice, or in written correspondence delivered to the City of Irvine, at or prior to the meeting. In addition, judicial challenge may be limited or barred where the interested party has not sought and exhausted all available administrative remedies.

COMMUNICATION AND ELECTRONIC DEVICES

To minimize distractions, please be sure all personal communication and electronic devices are turned off or on silent mode.

MEETING SCHEDULE

Regular meetings of the City Council are held on the second and fourth Tuesdays of each month at 4:00 p.m. Study Sessions and/or Closed Sessions are periodically held prior to the start of the regular meeting. Agendas are available at the following locations:

- City Clerk's Office
- Police Department
- City's web page at www.ci.irvine.ca.us

I hereby certify that the agenda for the Regular City Council meeting was posted in accordance with law in the posting book located in the Public Safety Lobby of City Hall, One Civic Center Plaza, Irvine, California on May 4, 2017 by 8:08 pm as well as on the City's web page.

Molly McLaughlin, CMC
City Clerk

CLOSED SESSION

1.1-1-2

PRESENTATIONS

2.1

REQUEST FOR CITY COUNCIL ACTION

MEETING DATE: MAY 9, 2017

TITLE: PRESENTATIONS

City Clerk

RECOMMENDED ACTION:

Irvine 2/11 Marine Adoption Committee Annual Report

3.1

REQUEST FOR CITY COUNCIL ACTION

MEETING DATE: MAY 9, 2017

TITLE: MINUTES

City Clerk

RECOMMENDED ACTION:

Approve the minutes of a regular meeting of the Irvine City Council held on April 25, 2017.

MINUTES

CITY COUNCIL
REGULAR MEETING

April 25, 2017
City Council Chamber
One Civic Center Plaza
Irvine, CA 92606

CALL TO ORDER

The regular meeting of the Irvine City Council was called to order at 5:40 p.m. on April 25, 2017 in the City Council Chamber, Irvine Civic Center, One Civic Center Plaza, Irvine, California; Mayor Wagner presiding.

ROLL CALL

Present:	4	Councilmember:	Melissa Fox
		Councilmember:	Christina Shea
		Mayor Pro Tempore:	Lynn Schott
		Mayor:	Donald P. Wagner
Absent:	1	Councilmember:	Jeffrey Lalloway (excused)

Mayor Wagner announced that Councilmember Lalloway was ill and would not be attending the City Council meeting.

PLEDGE OF ALLEGIANCE

Mayor Wagner asked Police Chief Hamel to introduce the Irvine Police Color Guard and lead the Pledge of Allegiance.

INVOCATION

Mayor Wagner invited Pastor Mike Anderson from Good Shepard Lutheran Church in Irvine to provide the invocation.

MUSICAL PRESENTATION

Mayor Wagner introduced Catherine Song, who performed the National Anthem.

1. PRESENTATIONS

1.1 Proclaim May 14-20, 2017 as "National Police Week"

Mayor Wagner introduced Police Chief Hamel, Police Commander Mike Hallinan, and members of the Irvine Police Honor Guard; and presented a proclamation recognizing May 14-20, 2017 as "National Police Week."

1.2 Young Master's Art Show 2017 Cover Artist

Mayor Wagner introduced Michelle Tuchman and Mary Ann Breckenridge from the Assistance League of Irvine; and recognized Katerina Karas, sixth grade student from Meadow Park Elementary, as the "2017 Cover Artist" for her winning entry in the Young Masters Art Show.

1.3 Proclaim April 23-30, 2017 as "Days of Remembrance"

Mayor Wagner introduced Peter Levi, Regional Director from the Anti-Defamation League, Orange County/Long Beach Region, and presented a proclamation recognizing April 23-30, 2017 as "Days of Remembrance."

CITY MANAGER'S REPORT

City Manager Joyce turned to Police Chief Hamel, who announced that Sergeant James Hutchcraft was named the Distinguished Honor Graduate from the Alabama Military Academy; and noted that Sergeant Hutchcraft was awarded the Erickson Trophy for his accomplishment, which is presented annually to the distinguished graduates of each of the state National Guard Officer Candidate Schools.

ANNOUNCEMENTS/COMMITTEE REPORTS/COUNCIL REPORTS

Councilmember Fox provided a brief report on the recent disaster drill at John Wayne Airport, a simulation of a mass casualty event required for each airport every three years; and made the following announcement:

- The Orange County Fire Authority (OCFA) will be holding an open house on Saturday, May 20 from 10 a.m. to 3 p.m. at the OCFA Headquarters, 1 Fire Authority Road, Irvine. The event is free and open to the public.

Mayor Wagner expressed his appreciation to those who attended his first "Meet the Mayor" town hall meeting on April 22; and made the following announcements:

- The City of Irvine will participate in the U.S. Drug Enforcement Administration's "National Prescription Drug Take-Back Day" on Saturday, April 29 from 10 a.m. to 2 p.m. at the Irvine Police Department and Kaiser Permanente Irvine Medical Center. For information, visit *dea.gov*.

- The Wyland Foundation's National Mayor's Challenge for Water Conservation ends on April 30. Residents are encouraged to go online and commit to conserving water, energy, and other natural resources. For information, visit *cityofirvine.org.*

ADDITIONS AND DELETIONS

There were no additions or deletions to the agenda. However, Mayor Wagner noted that he and City Manager Joyce would be recusing themselves from Public Hearing Item No. 3.2 due to a conflict-of-interest, and reordered the agenda by moving the item to the end of the agenda. He further noted that Mayor Pro Tempore Schott would act as presiding officer in his absence.

2. CONSENT CALENDAR

ACTION: By consensus of those members present (Councilmember Lalloway absent), the City Council unanimously approved Consent Calendar Item Nos. 2.1 through 2.10. Prior to the vote, a public comment was heard on Item No. 2.7. Item No. 2.11 was removed for separate discussion.

2.1 MINUTES

ACTION:

1) Approved the minutes of a regular meeting of the Irvine City Council held on March 28, 2017.
2) Approved the minutes of an adjourned regular meeting of the Irvine City Council held on April 4, 2017.

2.2 PROCLAMATIONS

ACTION:
Proclaimed April 28, 2017 as "Arbor Day."

2.3 WARRANT AND WIRE TRANSFER RESOLUTION

ACTION:
Adopted RESOLUTION NO. 17-23 - A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, ALLOWING CERTAIN CLAIMS AND DEMANDS AND SPECIFYING THE FUNDS OUT OF WHICH THE SAME ARE TO BE PAID

2.4 LETTER OF CREDIT EXTENSIONS FOR FOUR ASSESSMENT DISTRICTS

ACTION:

1) Adopted RESOLUTION NO. 17-24 - A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, APPROVING THE EXTENSION OF THE STATED EXPIRATION DATE OF AN EXISTING LETTER OF CREDIT FOR THE REASSESSMENT DISTRICT NO. 85-7A LIMITED OBLIGATION IMPROVEMENT BONDS, ADJUSTABLE RATE SERIES A, APPROVING THE FORM OF AND AUTHORIZING THE EXECUTION AND DELIVERY OF AN AMENDMENT NO. 1 TO AMENDED AND RESTATED REIMBURSEMENT, CREDIT AND SECURITY AGREEMENT, AND AN AMENDMENT NO. 1 TO AMENDED AND RESTATED LETTER AGREEMENT, AND AUTHORIZING THE EXECUTION OF NECESSARY DOCUMENTS AND CERTIFICATES AND RELATED ACTIONS
2) Adopted RESOLUTION NO. 17-25 - A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, APPROVING THE EXTENSION OF THE STATED EXPIRATION DATE OF AN EXISTING LETTER OF CREDIT FOR THE ASSESSMENT DISTRICT NO. 94-13 LIMITED OBLIGATION IMPROVEMENT BONDS, ADJUSTABLE RATE SERIES, APPROVING THE FORM OF AND AUTHORIZING THE EXECUTION AND DELIVERY OF AN AMENDMENT NO. 1 TO SECOND AMENDED AND RESTATED REIMBURSEMENT, CREDIT AND SECURITY AGREEMENT, AND AN AMENDMENT NO. 1 TO AMENDED AND RESTATED LETTER AGREEMENT, AND AUTHORIZING THE EXECUTION OF NECESSARY DOCUMENTS AND CERTIFICATES AND RELATED ACTIONS

3) Adopted RESOLUTION NO. 17-26 - A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, APPROVING THE EXTENSION OF THE STATED EXPIRATION DATE OF AN EXISTING LETTER OF CREDIT FOR THE ASSESSMENT DISTRICT NO. 94-15 LIMITED OBLIGATION IMPROVEMENT BONDS, ADJUSTABLE RATE SERIES, APPROVING THE FORM OF AND AUTHORIZING THE EXECUTION AND DELIVERY OF AN AMENDMENT NO. 1 TO SECOND AMENDED AND RESTATED REIMBURSEMENT, CREDIT AND SECURITY AGREEMENT, AND AN AMENDMENT NO. 1 TO AMENDED AND RESTATED LETTER AGREEMENT, AND AUTHORIZING THE EXECUTION OF NECESSARY DOCUMENTS AND CERTIFICATES AND RELATED ACTIONS

4) Adopted RESOLUTION NO. 17-27 - A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, APPROVING THE EXTENSION OF THE STATED EXPIRATION DATE OF AN EXISTING LETTER OF CREDIT FOR THE ASSESSMENT DISTRICT NO. 97-16 LIMITED OBLIGATION IMPROVEMENT BONDS, ADJUSTABLE RATE SERIES, APPROVING THE FORM OF AND AUTHORIZING THE EXECUTION AND DELIVERY OF AN AMENDMENT NO. 1 TO SECOND AMENDED AND RESTATED REIMBURSEMENT, CREDIT AND SECURITY AGREEMENT, AND AN AMENDMENT NO. 1 TO AMENDED AND RESTATED LETTER AGREEMENT, AND AUTHORIZING THE EXECUTION OF NECESSARY DOCUMENTS AND CERTIFICATES AND RELATED ACTIONS

2.5 LESSOR CONSENT TO LEASEHOLD DEED OF TRUST AND AGREEMENT RELATED TO COMMUNITY ICE FACILITY AT THE ORANGE COUNTY GREAT PARK

ACTION:
Authorized the Mayor to execute Lessor Consent to Leasehold Deed of Trust and Agreement contingent upon approval by Farmers and Merchants Bank Board of Directors. **(Deed No. 1564)**

(Unless otherwise directed by a member of the City Council, the vote on this matter will reflect the prior action of each Councilmember when he or she sat and voted as a member of the Board of Directors of the Orange County Great Park Corporation. However, if a Councilmember is not present at the City Council meeting, his or her vote will be reflected as absent.)

Approved 4-0 (Director Lalloway absent).

2.6 SCOREBOARDS AND SPONSORSHIP AT THE GREAT PARK SPORTS COMPLEX

ACTION:

1) Authorized the City Manager to execute Second Amendment to August 4, 2016 Letter Agreement Between the City of Irvine and Heritage Fields El Toro, LLC Regarding Expenditure of Quimby Funds for Additional Sports Park Improvements. **(Contract No. 9401B)**
2) Approved a budget appropriation of $517,175 from the unallocated Great Park Fund balance to the Capital Improvement Project Fund, Project No. 361616, Sports Park Subarea Improvements, for the recommended scoreboard design enhancements.

(Unless otherwise directed by a member of the City Council, the vote on this matter will reflect the prior action of each Councilmember when he or she sat and voted as a member of the Board of Directors of the Orange County Great Park Corporation. However, if a Councilmember is not present at the City Council meeting, his or her vote will be reflected as absent.)

Approved 4-0 (Director Lalloway absent).

2.7 AMENDMENT TO MEMORANDUM OF UNDERSTANDING WITH THE UNIVERSITY OF CALIFORNIA, IRVINE REGARDING THE EAST CAMPUS APARTMENTS

Prior to the vote to approve the Consent Calendar, Courtney Santos, Irvine resident, spoke in support of the proposed housing project.

ACTION:

Authorized the Mayor to execute the First Amendment to the Memorandum of Understanding between the City of Irvine and the University of California regarding the UCI East Campus Student Apartments. **(Contract No. 4301A)**

2.8 NOTICE OF REVIEW AND PENDING APPROVAL FOR TRACT MAPS IN GREAT PARK NEIGHBORHOODS (HERITAGE HILLS), ORCHARD HILLS AND CYPRESS VILLAGE

ACTION:

Received and filed.

2.9 BUDGET ALLOCATION FOR LEGAL SERVICES REIMBURSEMENT RECEIVED FROM WASTE MANAGEMENT

ACTION:
Approved a Budget Adjustment to receive revenue in the amount of $127,145 and appropriate same to the Public Works operations budget for reimbursement of attorney services expenses associated with the development of a new franchise agreement with Waste Management of Orange County, Inc.

2.10 AT-LARGE COMMITTEE MEMBER APPOINTMENTS TO GREEN RIBBON ENVIRONMENTAL COMMITTEE

ACTION:
Appointed Ms. Salem Afeworki and Ms. Bemmy Maharramli to fill the two At-Large committee member vacancies on the Green Ribbon Environmental Committee.

2.11 AWARD OF CONTRACT AND BUDGET APPROPRIATION FOR WIRELESS AND TELECOMMUNICATIONS CONSULTING SERVICES AT THE ORANGE COUNTY GREAT PARK

This item was removed for separate discussion by Mayor Wagner.

Sean Broderick, representing Connected Nation Exchange (CNX), spoke in opposition to awarding a contract to 5 Bars, LLC, noting that CNX was willing to meet or beat any other proposal that is suggested beyond the scope of work reflected in the Request for Proposals.

City Council discussion included: questioning the Request for Proposals process with respect to the above-referenced contract; and provided a brief synopsis of the discussion and action taken earlier in the day at the Orange County Great Park Board meeting.

ACTION: Moved by Councilmember Shea, seconded by Mayor Wagner, to:

Ratify the recommendation of the Orange County Great Park Board of Directors at its earlier meeting to cancel the Request for Proposals and move forward with 5 Bars, LLC; and direct staff to open negotiations with that firm.

The motion carried as follows:

AYES:	3	COUNCILMEMBERS:	Fox, Shea and Wagner
NOES:	1	COUNCILMEMBERS:	Schott
ABSENT:	1	COUNCILMEMBERS:	Lalloway

3. PUBLIC HEARINGS

3.1 APPROVAL OF THE COMMUNITY DEVELOPMENT BLOCK GRANT AND HOME INVESTMENT PARTNERSHIPS 2017-2018 ACTION PLAN FUNDING RECOMMENDATIONS

Mark Asturias, Housing Manager, and Charles Kovac, Housing and Grants Analyst, presented the staff report and responded to questions.

Mayor Wagner opened the public hearing at 6:24 p.m.

Jim Shute, Vice Chairman of the Community Services Commission, spoke in support, noting that the Commission unanimously recommended the proposed funding allocations.

ACTION: By consensus of those members present (Councilmember Lalloway absent), Mayor Wagner closed the Public Hearing at 6:25 p.m.

City Council discussion included: noting the Community Services Department's eligibility for Community Development Block Grant (CDBG) funding; encouraging all eligible organizations to continue applying for funding; noted that CDBG funds must be paid back to the federal government if certain standards are not met; expressed appreciation to the Community Services Commission for its recommendations; noted the need for assistance from nonprofit community partners; and cited a preference to allocate CDBG grants to outside organizations that qualify instead of awarding funding to the City.

ACTION: Moved by Councilmember Shea, seconded by Mayor Pro Tempore Schott, and unanimously carried by those members present (Councilmember Lalloway absent) to:

Adopt RESOLUTION NO. 17-28 – A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, APPROVING THE 2017-2018 ACTION PLAN FOR FEDERAL COMMUNITY DEVELOPMENT BLOCK GRANT AND HOME INVESTMENT PARTNERSHIPS ENTITLEMENT GRANT PROGRAMS

Fiscal Year 2017-2018 CDBG & HOME Funding Allocations

CDBG PUBLIC SERVICES	FUNDING
1. AIDS Services Foundation **(Contract No. 9750)**	$9,500
2. Assistance League of Irvine **(Contract No. 9751)**	$21,534
3. City of Irvine - Meals on Wheels **(Contract No. 9752)**	$21,534
4. Council on Aging - Southern California **(Contract No. 9753)**	$8,230
5. Fair Housing Foundation (HUD Mandated Program) **(Contract No. 9754)**	$17,119
6. Families Forward **(Contract No. 9755)**	$20,758
7. Human Options **(Contract No. 9756)**	$11,446
8. Irvine Adult Day Health Services, Inc. **(Contract No. 9757)**	$18,837
9. Irvine Children's Fund **(Contract No. 9758)**	$32,294
10. Irvine Public Schools Foundation **(Contract No. 9759)**	$11,824
11. South County Outreach **(Contract No. 9760)**	$15,423
12. Stand Up for Kids **(Contract No. 9761)**	$9,586
TOTAL FUNDING	**$198,085**

CDBG CAPITAL	FUNDING
1. City of Irvine - Community Facilities ADA **(Contract No. 9762)**	$449,869
2. Families Forward - HVAC Improvements **(Contract No. 9763)**	$198,400
3. City of Irvine - Residential Rehabilitation Program	$337,853
TOTAL FUNDING	**$986,122**

HOME CAPITAL	FUNDING
1. City of Irvine - Residential Rehabilitation Program	$371,141
2. Community Housing Development Organization (CHDO)	$74,229
TOTAL FUNDING	**$445,370**

3.2 ZONE CHANGE TO REVISE SPECIAL DEVELOPMENT REQUIREMENTS IN ZONING ORDINANCE SECTION 9-21-7 AND CERTIFICATION OF A FINAL ENVIRONMENTAL IMPACT REPORT ASSOCIATED WITH A MODIFICATION TO THE CONDITIONAL USE PERMIT FOR CONCORDIA UNIVERSITY CAMPUS BUILD-OUT PLAN AT 1530 CONCORDIA WEST, PLANNING AREA 21 (TURTLE ROCK)*

* See Additions and Deletions

Stephen Higa, Principal Planner, and Timothy Gehrich, Deputy Director of Community Development, presented the staff report and responded to questions.

Mayor Pro Tempore Schott opened the public hearing at 7:52 p.m.

The following individuals spoke in support of the Concordia University project:

Ron Van Blarcom
Leslye Harper
Steve Mueller
Kurt Krueger
Aaron Ehrlach, representing Concordia East homeowners
Peter Senkbeil
Ken Ammann
Tim Jaeger
Steve Young
Michael Hammerle
Courtney Santos, Irvine resident
Andrew Parker, Dove Canyon resident
Jeff Held
Gilbert Fujitt
Coralee Newman

The following individuals spoke in opposition to the project based on traffic and/or additional concerns:

Arthur Strauss
Jean Liao
Judith Gass
Christina Thomas
Don Gellar, Irvine resident
Norma Hardgrove, Irvine resident
Richard A. Kaufman, Irvine resident
Christine Bronstein, Irvine resident
Susan Sayre, Irvine resident
Auram Grossman, Irvine resident
Karen Jaffe, Irvine resident
Beverly Jacobs
Deirdre Michalski, Irvine resident
Joe Martinez, Irvine resident
Dr. Samy Adham, Irvine resident
Geri Zollinger
Robert Brower, Irvine resident
Jim Quiroga
Steve Lynch
Dell Self

The following individuals submitted a Request to Speak card but did not speak:

Maria Severson
Nancy Kidder, Irvine resident
Kirk Van Rooyan, M.D., Irvine resident
Harvey Liss, Irvine resident

ACTION: Moved by Councilmember Shea, seconded by Councilmember Fox, and unanimously carried by those members present (Mayor Wagner and Councilmember Lalloway absent), to close the public hearing at 9:34 p.m.

City Council discussion included: reaffirming the City Council's commitment to traffic improvements and safety; noted Concordia University's (Concordia) commitment to no additional trip counts and reduction in proposed lighting locations, including hours of operation; suggested other transportation options, such as shuttles; expressed support for Concordia's proposal for a mitigation fund related to traffic improvements; acknowledged the City's history with Concordia; noted the uniqueness of the campus location and surrounding area; suggested that Concordia was not designed for expansion; questioned whether the current trip count exceeded a prior agreement and if a current traffic study had been conducted; questioned a discrepancy in student population numbers; inquired about resident notification of university events and questioned the number of events per year, including outside events; noted Concordia's efforts to engage nearby homeowners to achieve consensus on campus upgrades; addressing traffic concerns on University between Ridgeline and California Interstate 405 (I-405); noted that many traffic concerns were independent of Concordia's campus upgrades; questioned enforcement mechanisms and suggested that a new agreement would provide accountability; limiting outside events from 400 to 25 per year; questioned whether the City would have the ability to initiate the timeframe for conducting traffic studies; questioned the review and discretionary approval process of Phases 3 and 4 by the Planning Commission; inquired about construction related traffic and whether the City had the ability to reopen dialogue to mitigate traffic related issues; whether a traffic management plan was part of the program; and suggested including homeowner association representatives in discussions related to traffic within Concordia.

Manuel Gomez, Director of Public Works, noted that the widening of University Drive between Ridgeline to I-405 was a long-term recommendation (5-10 years) in the recent traffic study and that funding had not yet been identified and allocated for the project. However, the final design phase was underway for intersection improvements at University Drive and Ridgeline.

Jeffrey Melching, City Attorney, clarified the anticipated timeframes for each phase of development and certain conditions within the proposed resolution.

ACTION: Moved by Mayor Pro Tempore Schott, seconded by Councilmember Fox, to:

> Approve the modification with the five additional items offered by Concordia University as a Memorandum of Understanding to ensure compliance with these conditions to allow the University to commence the first two phases of construction, and further commit to these restrictions, including but not limited to: 1) adding in any additional trips to what is currently generated, 2) limiting the number of field lights, and 3) submitting to independent traffic counting, so that the City Council has a mechanism to enforce the conditions agreed upon.

Prior to vote, City Attorney Melching clarified the motion and content of the Memorandum of Understanding as follows:

1) Include the five items identified in the April 25, 2017 letter from Concordia University;
2) Item No. 1 (Discretionary Review for Phases 3 and 4) would be modified to ensure that the subsequent discretionary review would be by way of Conditional Use Permit that would be reviewed by the Planning Commission for Phases 3 and 4;
3) Item No. 3 (Vehicle Trip Counts), which relates to Condition 6.21, would be structured to ensure that trip counts would be conducted independently, and the timing of the trip counts would be set by the City independently;
4) Condition 2.33 (Construction Staging and Management) would be modified slightly to allow a member of the community association to participate in the review of the Construction Staging and Management Plan, if they so choose; and
5) A Memorandum of Understanding would return to the City Council for consideration concurrent with the second reading of the Ordinance.

Following discussion, Mayor Pro Tempore Schott and Councilmember Fox, as the maker and seconder of the motion, agreed with City Attorney Melching's clarification of the motion.

The motion carried as follows:

AYES:	3	COUNCILMEMBERS:	Fox, Shea and Wagner
NOES:	1	COUNCILMEMBERS:	Schott
ABSENT:	1	COUNCILMEMBERS:	Lalloway

ACTION: Moved by Councilmember Shea, seconded by Mayor Pro Tempore Schott, and unanimously carried by those members present (Mayor Wagner and Councilmember Lalloway absent), to:

Adopt RESOLUTION NO. 17-29 – A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, CERTIFYING AN ENVIRONMENTAL IMPACT REPORT (SCH NO. 2015091023, 00618828-PCLE) AND ADOPTING A MITIGATION MONITORING AND REPORTING PROGRAM AND ENVIRONMENTAL FINDINGS PURSUANT TO THE CALIFORNIA ENVIRONMENTAL QUALITY ACT FOR CONDITIONAL USE PERMIT MODIFICATION 00612052-PCPU FOR CONCORDIA UNIVERSITY CAMPUS MASTER BUILD-OUT PLAN AND ZONE CHANGE 00629029-PZC TO REVISE ZONING ORDINANCE SECTION 9-21-7.B, SPECIAL DEVELOPMENT REQUIREMENTS; LOCATED AT 1530 CONCORDIA WEST IN PLANNING AREA 21 (TURTLE ROCK); FILED BY CONCORDIA UNIVERSITY

ACTION: Moved by Councilmember Shea, seconded by Mayor Pro Tempore Schott, and unanimously carried by those members present (Mayor Wagner and Councilmember Lalloway absent), to:

Introduce for first reading and read by title only ORDINANCE NO. 17-05 - AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, APPROVING ZONE CHANGE 00629029-PZC TO REVISE ZONING ORDINANCE SECTION 9-21-7.B, SPECIAL DEVELOPMENT REQUIREMENTS FOR CONCORDIA UNIVERSITY (CHRIST COLLEGE IRVINE); PLANNING AREA 21, (TURTLE ROCK); FILED BY CONCORDIA UNIVERSITY

4. COUNCIL BUSINESS

4.1 AWARD OF CONTRACT FOR WIRELESS AND TELECOMMUNICATIONS CONSULTING SERVICES

This item was considered prior to Public Hearing Item No. 3.2 as noted above.

Sean Broderick, representing Connected Nation Exchange (CNX), submitted a Request to Speak card but did not speak.

City Manager Joyce recommended the consideration of ratifying the recommendation that was made by the City Council earlier in the day in its capacity as the Orange County Great Park Board of Directors.

There was no City Council discussion.

ACTION: Moved by Councilmember Shea, seconded by Councilmember Fox, to:

Cancel the Request for Proposals and move forward with 5 Bars, LLC for citywide wireless and telecommunications consulting services; and direct staff to open negotiations with that firm.

The motion carried as follows:

AYES:	3	COUNCILMEMBERS:	Fox, Shea and Wagner
NOES:	1	COUNCILMEMBERS:	Schott
ABSENT:	1	COUNCILMEMBERS:	Lalloway

RECESS

Mayor Wagner called a recess at 7:30 p.m. and left the meeting.

RECONVENE

Mayor Pro Tempore Schott reconvened the City Council meeting at 7:41 p.m. Mayor Wagner and Councilmember Lalloway were absent.

PUBLIC COMMENT

The following individuals spoke in opposition to the proposed Southern California Edison Safari Substation on Wald Street:

Jane Klassen
Bill Klassen
Doug Bender
Zeki Kayiran
John Rohrick
Mia Severson

The following individuals spoke in support of a BMX Bike Park at the Orange County Great Park:

Blain Dickerson
Steve Larson
Ron Johnson
John Lender
Rob and John Williams
Brian Valdez
Mark Newgent

Matt Whitcomb spoke in support of a skate park at the Orange County Great Park.

Michael Klubniken spoke in support of his friend, Ilya Tseglin, reiterating a domestic issue related his autistic son.

Ilya and Robert Tseglin reiterated a domestic issue related to an autistic family member.

Stephen Wontrobski, Mission Viejo resident, spoke in in opposition to the Orange County Fire Authority overcharging the City of Irvine for fire related services.

Paul Lam, Noah Cha, and Tim Lane submitted a Request to Speak cards but did not speak.

ADJOURNMENT – IN MEMORIAM

Prior to adjournment, Mayor Pro Tempore Schott noted the recent passing of Kum Dam Kim, mother-in-law to former Mayor Sukhee Kang, who passed away on March 15 at the age of 85; and asked that the meeting be adjourned in her memory.

Moved by Councilmember Shea, seconded by Councilmember Fox, and unanimously carried by those members present (Mayor Wagner and Councilmember Lalloway absent) to adjourn the meeting in memory of Kum Dam Kim at 10:28 p.m.

_____
MAYOR OF THE CITY OF IRVINE

_____ May 9, 2017
CITY CLERK OF THE CITY OF IRVINE

3.2

REQUEST FOR CITY COUNCIL ACTION

MEETING DATE: MAY 9, 2017

TITLE: PROCLAMATIONS

City Clerk

RECOMMENDED ACTION:

Proclaim May 20, 2017 as "Kids to Parks Day."

CITY OF IRVINE

Proclamation

KIDS TO PARKS DAY
MAY 20, 2017

WHEREAS, May 20, 2017 marks the seventh annual "Kids to Parks Day" organized and launched by the National Park Trust; and

WHEREAS, "Kids to Parks Day" encourages children to lead a more active lifestyle to reduce childhood diseases related to physical inactivity; and

WHEREAS, "Kids to Parks Day" fosters the introduction of new generations to the nation's parks by helping to develop children's appreciation for nature and environmental stewardship of the outdoors; and

WHEREAS, "Kids to Parks Day" is open to all children and adults across the country and encourages families to enjoy the outdoors and visit community parks and open spaces.

NOW, THEREFORE, the City Council of the City of Irvine **DOES HEREBY PROCLAIM May 20, 2017 as KIDS TO PARKS DAY** and encourages children and their families to explore a neighborhood, state, or national park.

DONALD P. WAGNER
MAYOR OF THE CITY OF IRVINE
MAY 9, 2017

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3.3

REQUEST FOR CITY COUNCIL ACTION

MEETING DATE: MAY 9, 2017

TITLE: WARRANT AND WIRE TRANSFER RESOLUTION

Director of Financial Services

City Manager

RECOMMENDED ACTION

Adopt - A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, ALLOWING CERTAIN CLAIMS AND DEMANDS AND SPECIFYING THE FUNDS OUT OF WHICH THE SAME ARE TO BE PAID

EXECUTIVE SUMMARY

A detailed register of claims, the Register of Warrants and Wire Transfers, are submitted to the City Council for review and authorization on a weekly basis. Approval of the attached resolution ratifies the disbursement of funds for the period of April 19, 2017 through May 2, 2017 in accordance with Section 2-7-211 of the Irvine Municipal Code.

ATTACHMENT Warrant and Wire Transfer Resolution

CITY COUNCIL RESOLUTION NO. 17-___

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, ALLOWING CERTAIN CLAIMS AND DEMANDS AND SPECIFYING THE FUNDS OUT OF WHICH THE SAME ARE TO BE PAID

(SEE ATTACHED)

PASSED AND ADOPTED by the City Council of the City of Irvine at a regular meeting held on the 9th day of May 2017.

_____
MAYOR OF THE CITY OF IRVINE

ATTEST:

_____
CITY CLERK OF THE CITY OF IRVINE

STATE OF CALIFORNIA)
COUNTY OF ORANGE) SS
CITY OF IRVINE)

I, MOLLY MCLAUGHLIN, City Clerk of the City of Irvine, HEREBY DO CERTIFY that the foregoing resolution was duly adopted at a regular meeting of the City Council of the City of Irvine, held on the 9th day of May 2017.

AYES:	COUNCILMEMBERS:
NOES:	COUNCILMEMBERS:
ABSENT:	COUNCILMEMBERS:
ABSTAIN:	COUNCILMEMBERS:

_____
CITY CLERK OF THE CITY OF IRVINE

ATTACHMENT

4/19/2017 through 4/25/2017

REGISTER OF DEMANDS AND WARRANTS

Fund	Fund Description	Amount
001	GENERAL FUND	1,078,240.75
004	PAYROLL CLEARING FUND	2,243,487.83
005	DEVELOPMENT SERVICES FUND	109,872.25
024	BUILDING & SAFETY FUND	263,233.21
027	DEVELOPMENT ENGINEERING FUND	27,159.75
111	GAS TAX FUND	19,782.90
114	HOME GRANT	8,111.60
119	LIGHTING, LANDSCAPE & PARK MNT	147,217.99
125	COMM DEVELOP BLOCK GRANT FUND	18,988.75
126	SENIOR SERVICES FUND	10,053.86
128	OFFICE ON AGING PROGRAMS FUND	1,785.00
139	SUPPL LAW ENFORCEMENT SERVICES	10,073.29
143	PUBLIC SAFETY GRANTS	6.80
146	I SHUTTLE	0.00
149	SPECIAL PROGRAM GRANTS	2,989.63
180	ORANGE COUNTY GREAT PARK	63,083.03
204	CFD 2013-3 GREAT PARK	19,800.00
218	AD 03-19 NORTHERN SPHERE	2,200.00
250	CAPITAL IMPROV PROJ FUND - CIR	11,124.49
254	RAILROAD GRADE SEPARATION	964,036.39
260	CAPITAL IMPROV PROJ-NON CIRC	181,215.60
271	IRVINE BUSINESS COMPLEX	23,211.35
501	INVENTORY	6,258.88
570	INSURANCE FUND	66,169.32
574	FLEET SERVICES FUND	175,395.06
578	MAIL INTERNAL SERVICES	62,806.36
579	STRATEGIC TECHNOLOGY PLAN FUND	239,027.26
580	CIVIC CTR MAINT & OPERATIONS	21,259.85
714	REASSESSMENT 12-1 FIXED RATE	4,285,330.08
716	RAD 13-1 FIXED RATE	2,277,751.14
723	AD03-19 WOODBURY SER B VAR RT	7,500.00
726	AD10-23 SERIES B FR LAGUNA ALT	355,232.04
730	11-24 FIXED RT CYPRESS VILLAGE	588,011.91
731	AD07-22 GROUP 4 FIXED RATE	609,154.36
732	RAD 04-20 GROUP 3 FIXED RATE	260,865.15
744	CFD 2013-3 GREAT PARK	3,243,474.43
745	CFD 2005-2R COLUMBUS GROVE SP	381,782.72
746	CFD 2004-1 CENTRAL PARK	460,649.50
772	RAD 15-1 FIXED RATE	1,939,000.87
773	RAD 15-2 FIXED RATE	1,088,835.63
777	RAD 05-21 G1 FIXED RATE	1,647,518.23
778	RAD 04-20 G4 FIXED RATE	187,929.94

4/19/2017 through 4/25/2017

REGISTER OF DEMANDS AND WARRANTS

Fund	Fund Description	Amount
	GRAND TOTAL	**23,109,627.20**

4/26/2017 through 5/2/2017

REGISTER OF DEMANDS AND WARRANTS

Fund	Fund Description	Amount
001	GENERAL FUND	690,690.77
004	PAYROLL CLEARING FUND	41,669.52
005	DEVELOPMENT SERVICES FUND	80,834.50
024	BUILDING & SAFETY FUND	53,946.14
111	GAS TAX FUND	83,750.24
114	HOME GRANT	5,356.60
119	LIGHTING, LANDSCAPE & PARK MNT	312,884.54
125	COMM DEVELOP BLOCK GRANT FUND	37,240.49
126	SENIOR SERVICES FUND	4,741.31
128	OFFICE ON AGING PROGRAMS FUND	5,520.95
180	ORANGE COUNTY GREAT PARK	121,571.95
204	CFD 2013-3 GREAT PARK	118,295.16
208	AD 87-8 SPECTRUM 5 NORTH	39,800.00
260	CAPITAL IMPROV PROJ-NON CIRC	97,465.25
271	IRVINE BUSINESS COMPLEX	14,275.00
286	GREAT PARK DEVELOPMENT FUND	19,710.96
501	INVENTORY	15,008.61
570	INSURANCE FUND	26,155.43
574	FLEET SERVICES FUND	40,267.53
578	MAIL INTERNAL SERVICES	16,466.97
579	STRATEGIC TECHNOLOGY PLAN FUND	189,385.58
781	INTERAGENCY CUSTODIAL FUND	2,026.18
	GRAND TOTAL	**2,017,063.68**

3.4

REQUEST FOR CITY COUNCIL ACTION

MEETING DATE: MAY 9, 2017

TITLE: MEASURE M2 WATER QUALITY GRANT PROGRAM APPLICATION

Director of Public Works

City Manager

RECOMMENDED ACTIONS

Adopt - A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, APPROVING THE SUBMITTAL OF A GRANT APPLICATION TO THE ORANGE COUNTY TRANSPORTATION AUTHORITY FOR FUNDING UNDER THE MEASURE M2 TIER 1 ENVIRONMENTAL CLEANUP PROGRAM

EXECUTIVE SUMMARY

The proposed resolution authorizes the Director of Public Works to submit a grant application for the Orange County Transportation Authority (OCTA) Measure M2 Tier 1 Environmental Cleanup Program. The proposed grant request of $30,720 will be used to purchase and install 100 catch basin filter systems along City streets in the Spectrum area to minimize litter and debris from collecting in City catch basins and potentially polluting downstream waterways and beaches. The proposed resolution also authorizes the Director of Public Works to execute grant related documents necessary to accept the funds on behalf of the City, in accordance with City Financial Policies and Procedures.

COMMISSION/BOARD/COMMITTEE RECOMMENDATION

Not applicable.

ANALYSIS

OCTA is accepting grant applications for the Measure M2 Tier 1 Environmental Cleanup Program (ECP). The ECP is a countywide annual competitive program with objectives to improve water quality from transportation-related pollution. All 34 cities in Orange County are eligible to apply and OCTA plans to award up to $3.1 million in grant funds to the eligible applicants. The grant guidelines allow for a maximum grant award of $500,000 per agency with a minimum local match requirement of 20 percent. Grant applications must be submitted to OCTA by May 17, 2017.

Based on staff's review of prior year application submittals and grant awards, staff recommends submitting one grant application requesting $30,720 to purchase and install

100 connector pipe screen (CPS) units for existing catch basins located within Planning Area 33 (Irvine Spectrum Center) and Planning Area 35 (Irvine Spectrum 2), depicted in Attachment 1. The City's grant application last year in the amount of $200,000 was not approved and a lower grant request increases the competitiveness of the City's grant application. If the grant funds are awarded, the City will be required to provide a matching fund contribution in the amount of $7,680. The City's match is expected to be available from the Public Works annual maintenance budget for Fiscal Year 2017-18.

The ECP grant program requires applicants to designate a representative authorized by City Council Resolution to apply for and accept grant funds awarded by OCTA for this program. The proposed City Council Resolution (Attachment 2) designates the Director of Public Works as the City representative. The Director of Public Works will notify the City Council of any grant award prior to executing the required documents to accept the grant funds. A copy of the City's proposed application is included as Attachment 3.

ALTERNATIVES CONSIDERED

The City Council could elect not to participate in the ECP grant program and defer the proposed catch basin installation or may direct staff to identify other City funding sources to complete the proposed installation. These alternatives are not recommended because the grant funds allow the City to maximize its resources for maintenance services citywide. The proposed grant funds also support the City's goal of providing cost-effective sustainable environmental stewardship by helping to reduce water pollution. The City Council could also authorize an alternative City designee to accept the grant funds if awarded by OCTA.

FINANCIAL IMPACT

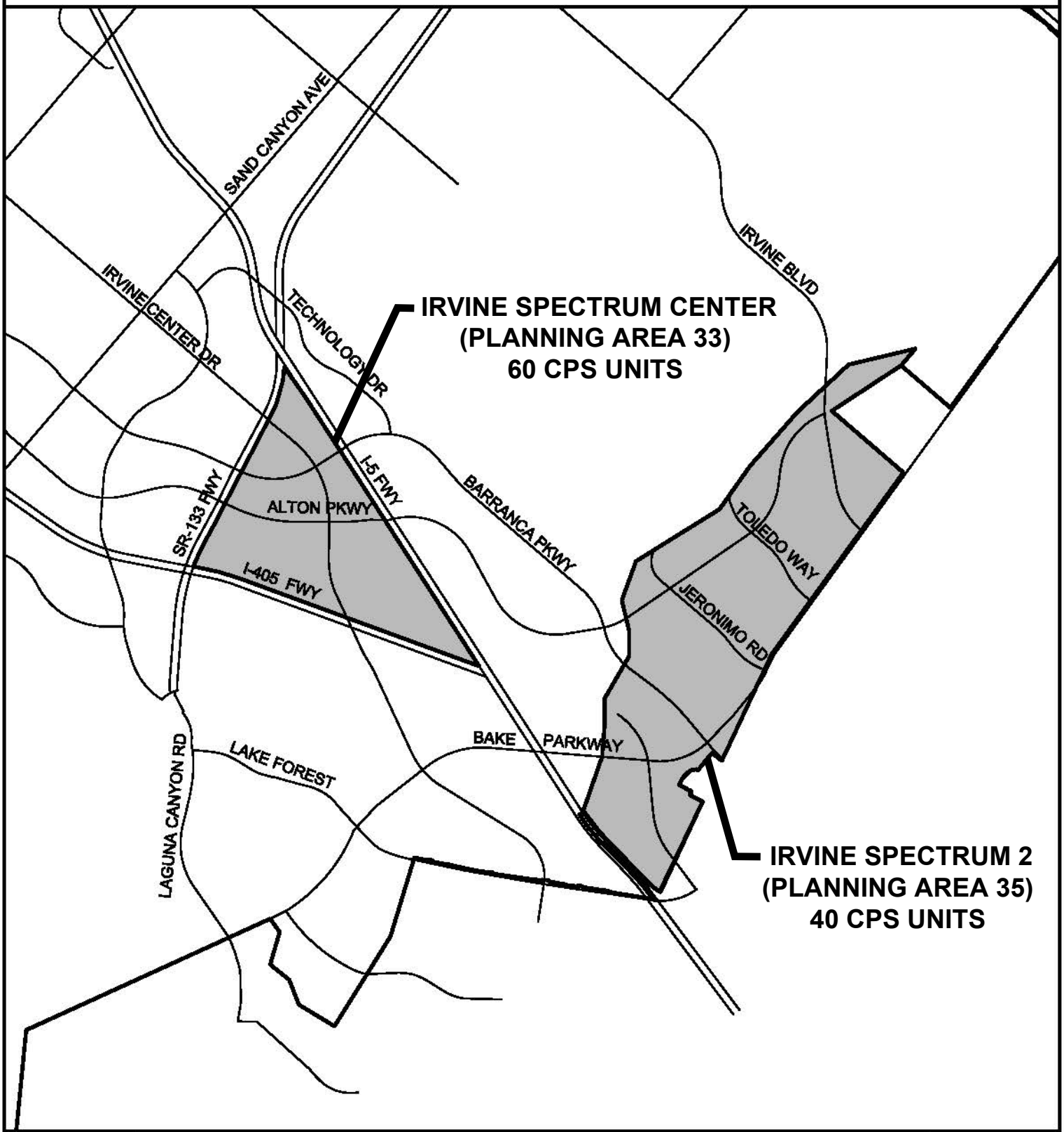
The recommended action allows the City to request $30,720 in ECP grant funds with a corresponding 20 percent, or $7,680, in local matching funds. Matching funds will be provided through the Public Works annual operating and maintenance budget for Fiscal Year 2017-18.

REPORT PREPARED BY Cheryl Lea, Associate Transportation Analyst

ATTACHMENTS

1. Site Plan
2. City Council Resolution
3. M2 Grant Application

IRVINE SPECTRUM CATCH BASIN
CONNECTOR PIPE SCREEN (CPS) INSTALLATION PROJECT



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SITE PLAN

CITY OF IRVINE 1971

ATTACHMENT 1

CITY COUNCIL RESOLUTION NO. 17-XX

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, APPROVING THE SUBMITTAL OF A GRANT APPLICATION TO THE ORANGE COUNTY TRANSPORTATION AUTHORITY FOR FUNDING UNDER THE MEASURE M2 TIER 1 ENVIRONMENTAL CLEANUP PROGRAM

WHEREAS, Orange County Local Transportation Ordinance No. 3, dated July 24, 2006, known and cited as the Renewed Measure M Transportation Ordinance and Investment Plan, makes funds available through the Environmental Cleanup Program to help protect Orange County beaches and waterways from transportation-generated pollution (urban runoff) and improve overall water quality; and

WHEREAS, the Environmental Cleanup, Tier 1 Grant Program consists of funding purchases and installation to catch basins with Best Management Practices, such as screens, filters, inserts, and other “street scale” low flow diversion projects; and

WHEREAS, the Orange County Transportation Authority has established the procedures and criteria for reviewing proposals; and

WHEREAS, the City of Irvine possesses authority to nominate water quality improvement projects that have a transportation pollution nexus to finance and construct the proposed project; and

WHEREAS, by formal action the City Council of the City of Irvine authorizes the nomination of the Irvine Spectrum Catch Basin Connector Pipe Screen Installation Project, including all understanding and assurances contained therein, and authorizes the person identified as the official representative of the City of Irvine to act in connection with the nomination and to provide such additional information as may be required; and

WHEREAS, the City of Irvine will maintain and operate the equipment acquired and installed; and

WHEREAS, the City of Irvine will give the Orange County Transportation Authority’s representatives access to and the right to examine all records, books, papers or documents related to the funded Tier 1 Grant Project; and

WHEREAS, the City of Irvine will cause work on the project to be commenced within a reasonable time after receipt of notification from the Orange County Transportation Authority and that the project will be carried to completion with reasonable diligence; and

WHEREAS, the City of Irvine will comply where applicable with provisions of the California Environmental Quality Act, the National Environmental Policy Act, the

Americans with Disabilities Act, and any other federal, state, and/or local laws, rules and/or regulations; and

WHEREAS, the City of Irvine must include all projects funded by Net Revenues in the seven-year Capital Improvement Program as part of the Renewed Measure M Ordinance eligibility requirement; and

WHEREAS, the City of Irvine authorizes a formal amendment to the seven-year Capital Improvement Program to add projects approved for funding upon approval from the Orange County Transportation Authority Board of Directors.

NOW, THEREFORE, the City Council of the City of Irvine DOES HEREBY RESOLVE as follows:

SECTION 1. That the City of Irvine hereby authorizes the Director of Public Works as the official representative of the City of Irvine to prepare and submit an application for Environmental Cleanup, Tier 1 Grant Program funds for the Irvine Spectrum Catch Basin Connector Pipe Screen Installation Project.

SECTION 2. That the City of Irvine hereby authorizes the Director of Public Works as the official representative of the City of Irvine to accept the grant funds upon the Orange County Transportation Authority Board of Directors approval of grant funding for the Irvine Spectrum Catch Basin Connector Pipe Screen Installation Project.

SECTION 3. That the City of Irvine agrees to fund its share of the project costs and any additional costs over the identified programmed amount.

SECTION 4. That the City Clerk shall certify to the passage and adoption of this Resolution.

PASSED AND ADOPTED by the City Council of the City of Irvine at a regular meeting held on the 9th day of May 2017.

_____
MAYOR OF THE CITY OF IRVINE

ATTEST:

_____
CITY CLERK OF THE CITY OF IRVINE

STATE OF CALIFORNIA)
COUNTY OF ORANGE) SS
CITY OF IRVINE)

I, MOLLY MCLAUGHLIN, City Clerk of the City of Irvine, HEREBY DO CERTIFY that the foregoing Resolution was adopted at a regular meeting of the City Council of the City of Irvine, held on the 9th day of May 2017.

AYES: COUNCILMEMBERS:

NOES: COUNCILMEMBERS:

ABSENT: COUNCILMEMBERS:

ABSTAIN: COUNCILMEMBERS:

_____
CITY CLERK OF THE CITY OF IRVINE

GRANT APPLICATION TO:

ORANGE COUNTY TRANSPORTATION AUTHORITY

M2 ENVIRONMENTAL CLEAN-UP PROGRAM (TIER 1) / FY 2017-18

IRVINE SPECTRUM CATCH BASIN CONNECTOR PIPE SCREEN (CPS) INSTALLATION PROJECT

CITY OF IRVINE
ONE CIVIC CENTER PLAZA
P.O. BOX 19575
IRVINE, CA 92623-9575

Submitted: MAY 17, 2017

ATTACHMENT 3

Table of Contents

Section	**Page**
Tier 1 Funding Application	
Section 1: General Project Information	1
Section 2: Detailed Project Information	3
Section 3: Funding	9

Attachments

Attachment A – Environmental Document
Attachment B – Detailed Project Estimate
Attachment C – Location Map(s)
Attachment D – Project Site Photos
Attachment E – Detailed Project Schedule
Attachment F – Design / Concept Drawings
Attachment G – City Council Resolution
Attachment H – City Staff Organization Chart

APPLICATION

ORANGE COUNTY TRANSPORTATION AUTHORITY
M2 ENVIRONMENTAL CLEANUP PROGRAM
TIER 1 FUNDING APPLICATION

SECTION ONE: GENERAL PROJECT INFORMATION

Project Title Irvine Spectrum Catch Basin Connector Pipe Screen (CPS) Installation Project

Lead Agency Information

Local Agency: City of Irvine
Project Manager: Joe Dillman
Address: 6427 Oak Canyon, Irvine, CA 92618
Phone: 949-724-7696
Email: jdillman@cityofirvine.org

Funding Request Summary

Total ECP Funds Requested: $ 30,720
Total Local Match (cash only): $ 7,680

☐ Project is part of a larger construction effort

Joint Applicant Information

Local Agency
Project Manager
Address
Phone
Email

Local Agency
Project Manager
Address
Phone
Email

Local Agency
Project Manager
Address
Phone
Email

Local Agency
Project Manager
Address
Phone
Email

Schedule Information

	Start Date	*Completion Date*
City Council Appoval	October 2017	December 2017
Design and Permitting *(if applicable)*	N/A	N/A
Award of Contract	March 2018	June 2018
Construction/Installation	July 2018	September 2018

Application Checklist

- ✔ Environmental Documentation (as applicable)
- ✔ Detailed Project Estimate
- ✔ Location Maps
- ✔ Project Site Photos
- ✔ Detailed Project Schedule
- ✔ Design/Concept Drawings
- ☐ Joint Applicant Support Documentation
- ✔ City Council Resolution
- ✔ City Staff Organization Chart

SECTION ONE: GENERAL PROJECT INFORMATION (CONTINUED)

Project Description

Describe the project location and the Tier 1 type improvements proposed. If the project is included in an existing Integrated Water Management Plan, please provide details on why it was included. *

The Irvine Spectrum Catch Basin Connector Pipe Screen Installation Project (Project) is located in the City of Irvine and entails purchase and installation of 100 Connector Pipe Screen (CPS) units into existing catch basins within the Irvine Spectrum Center Planning Area 33 (PA 33), and Irvine Spectrum 2 Planning Area (PA 35).

PA 33 and PA 35 are selected due to increased development (urbanization) over the past decade, increased vehicle/pedestrian traffic, the absence for treatment of stormwater into a natural treatment system (NTS), and the proximity to downstream receiving waters with the presence of pollutants listed on the Clean Water Act (CWA) Section 303(d) List of Impaired Water Bodies.

PA 33 and PA 35 is characterized by the following land uses by acreage (ac): Transportation (1.1 ac); Industrial (342 ac); Commercial (692 ac); High Density Residential (160 ac); and Mixed Urban (110 ac); with an overall drainage area of 1,300 ac. PA 33 features the Irvine Spectrum Center, which is a popular entertainment, restaurant, and outdoor shopping destination that attracts thousands of local and regional visitors year-round. Commercial offce and high density residential communities are also located in PA 33. PA 35 is predominantly an industrial/commercial area with thriving technology/engineering/science businesses and the Irvine Auto Center with fourteen dealerships. Historic land uses were associated with agricultural activities with citrus orchards, strawberry fields, and seasonal crops.

Transportation needs in PA 33 and PA 35 are served through primary arterials with the following Average Daily Traffic (ADT): Alton Parkway (22,300); Bake Parkway (51,800); Barranca Parkway (20,650); and Irvine Center Drive (22,600); along with secondary arterials and private streets. All streets are constructed with curb and gutters for conveyance of stormwater into catch basins inlets that discharge into downstream receiving waters and ultimately into the Upper Newport Bay. Since PA 33 and PA 35 have been developed and constructed with traditional methods for flood control and stormwater conveyance, via catch basin inlets, etc., the retrofit CPS units in existing catch basins through the assistance of the ECP Tier 1 grant program will provide an effective solution for improving surface water pollution, as further described in this grant application.

An Integrated Regional Watershed Management Plan (Central Orange County IRWM Plan) has been developed; however, this Project has not been specifically listed.

**** Use additional pages as needed.***

SECTION TWO: DETAILED PROJECT INFORMATION AND SCORING

1. Describe the need for the selected BMP(s), including nexus to transportation pollutants, and detail the benefits to water quality the BMP(s) will achieve. ***(up to 15 Points)***

The Project is selected due to increased development in PA 33 and PA 35 over the past decade, increased vehicle/pedestrian traffic, the absence for treatment using a natural treatment system (NTS), and the proximity to downstream receiving waters with the presence of numerous pollutants listed on the Clean Water Act (CWA) Section 303(d) List of Impaired Water Bodies.

Transportation/urbanization activities are a major contributor of pollutants to receiving waters via storm and non-stormwater discharges, as well as aerial deposition. Results of trash generation studies conducted in Los Angeles County and City of Los Angeles in 2001 and 2004 concluded that high trash generation rates occur at highly populated and highly visited areas that attract vehicular and pedestrian traffic. Objects that can be easily transported by wind, such as plastic and paper trash, are problematic because they can become floatable trash even when originally disposed of in an appropriate manner. Uncontained trash can be blown directly into surface waters (including rivers, estuaries), enclosed bays, and the ocean, or it can be transported to the ocean if blown into a river, stream, or enclosed bay, that empties to coastal waters (U.S. EPA 2002, San Diego CoastKeeper 2010).

Since trash is generated by human activity, it is difficult to control at the source and can adversely affect beneficial uses, threaten aquatic life, wildlife, and human health. Local economies dependent on beach tourism can also be adversely affected by transportation related pollutants which negatively impact water quality. Pollution can be significantly reduced with proper BMP implementation. A major source of stormwater pollution is trash and debris that are intentionally or accidently discarded from vehicles or by pedestrians. Landscaping and agriculture activities use fertilizers, pesticides, and may create grading/erosion that result in high loads of nutrients/toxic chemicals, thereby disrupt sensitive aquatic/wildlife ecosystems, and deleterious impacts with eutrophication (suffocate aquatic species). Also, construction vehicles track sediment, which can transport secondary pollutants.

Newer developed areas in the City utilize sustainable methods and employ "Site Design, Source Control, and Treatment Control BMPs” in accordance with the requirements of the City's MS4 Permit. These newer developed areas have NTS, or natural treatment systems, which provide direct treatment of stormwater runoff and numerous environmental benefits. However, PA 33 and PA 35 was developed using more traditional methods for design and construction of stormwater and flood control facilities, which result in immediate conveyance of runoff that sheet flow into catch basins via curb and gutters, and in turn, directly discharge into waterways 'untreated'.

According to the National Oceanic and Atmospheric Administration, it is estimated that 80 percent of marine trash comes from land-based sources (1999). Evidence of floating trash and trash on the sea-floor suggests that trash from land-based sources can travel and impact waters downstream, along coastal shores, and in marine waters of the state. Trash that ends up in waterways and beaches is indicative of trash accumulated from upstream sources, as well as other sources such as visitor littering, poor management of waste containers, and recreational water activities. Both PA 33 and PA 35 directly discharge into 303(d) Listed Waterbodies, as further described in this grant application, and ultimately conveys into the Upper Newport Bay at City of Newport Beach.

An effective method for preventing surface water pollution is the installation of full-capture devices on existing municipal storm drain facilities (catch basins) that discharge into the waterways and beaches. The City proposes to purchase and install 100 CPS units with the funding assistance of the M2 ECP Tier 1 Grant. The catch basins will be strategically selected based on historic maintenance records targeting prone areas for litter, trash, debris, and organic matter entering the storm drain system.

SECTION TWO: DETAILED PROJECT INFORMATION AND SCORING (CONTINUED)

2. List each receiving waterway associated with this project. If the receiving waterway is on the 303(d) list of impaired waters, identify the pollutant(s) for which it is listed. ***(2 points per waterway; 3 points if waterway is 303(d) listed, up to 12 points)***

PA 33 and PA 35 are located in the Newport Bay Watershed (HUC 12),and Upper San Diego Creek sub-watershed. Below is a listing of receiving waters with corresponding pollutants reported on the Clean Water Act 303(d) List of Impaired Water Bodies:

- Bee Canyon - not a 303(d) listed water body
- Borrego Canyon Wash (Borrego Creek / Agua Chinon) - Ammonia and Indicator Bacteria
- Serrano Creek - Ammonia, Indicator Bacteria, and pH
- San Diego Creek Reach 2 - Indicator Bacteria, Nutrients, Sedimentation/Siltation, and Unknown Toxicity
- San Diego Creek Reach 1 - Fecal Coliform, Nutrients, Pesticides, Sedimentation/Siltation, Selenium, Toxaphene
- Upper Newport Bay (Ecological Reserve) - Chlordane, Copper, DDT, Indicator Bacteria, Metals, Nutrients, PCBs, Pesticides, Sediment Toxicity, and Sedimentation/Siltation

Drainage from Upper Newport Bay further mixes into:
- Lower Newport Bay - Chlordane, Copper, DDT, Indicator Bacteria, Nutrients, PCBs, Pesticides, and Sediment Toxicity

3. List the pollutant(s) that would be addressed by the proposed project *and* the source(s) generating those pollutants. ***(2 points per pollutant and source; 3 points if the pollutant is on the 303(d) list for any receiving waterways identified in Question 2, up to 16 points)***

The Project will directly address pollutants 5mm in size and greater that would otherwise discharge into impaired waterways. CPS units is a 'full-capture' device that prevents trash and debris from further conveyance, it will also capture 'significant levels' of solid waste (trash, litter, cigarette butts, water bottles, plastic), organic material (leaves, branches, grass clippings, sediment), and certain toxic pollutants that adhere to sediment sources due to transportation, landscaping, urbanization, and natural erosion. PA 33 and PA 35 are tributary to impaired receiving waters with pollutants of concern. A tremendous concern is the impact to ecosystems in the Upper Newport Bay (Ecological Reserve). Below is a list of urban activities and associated pollutants that have directly impaired the corresponding receiving waters:

- Activity: Transportation/Vehicles - Copper, Metals, pH, Sediment Toxicity, Sedimentation/Siltation, Unknown Toxicity
- 303(d) Listed: Serrano Creek, San Diego Creek (R-2), and Upper Newport Bay

- Activity: Landscaping/Agriculture - Fertilizer (Ammonia, Nutrients, pH); Pesticide/Insecticide (Chlordane, DDT, Pesticides, Toxapheme); Other (Sediment Toxicity, Sedimentation/Siltation, Unknown Toxicity)
- 303(d) Listed: Borrego Canyon Wash, Serrano Creek, San Diego Creek (R-2), San Diego Creek (R-1), Upper Newport Bay

- Activity: Urbanization/Pets/Commercial-Industrial - Cleaning (Ammonia); Pets (Fecal Coliform, Indicator Bacteria); Industrial Compounds/Byproduct of Chemical Waste (PCBs); Other (pH, Sediment Toxicity, Sedimentation/Siltation, Unknown Toxicity)
- 303(d) Listed: Borrego Canyon Wash, Serrano Creek, San Diego Creek (R-2), San Diego Creek (R-1), Upper Newport Bay

- Activity: Other - Natural Erosion / Mineral Deposits (Selenium)
- 303(d) Listed: San Diego Creek Reach 1

SECTION TWO: DETAILED PROJECT INFORMATION AND SCORING (CONTINUED)

4. How effectively will the proposed project deal with the more visible forms of pollutants, such as a litter and debris? ***(up to 10 points)***

The CPS unit is designed to retain all trash larger than 5 mm in the catch basin and meet the full (100%) trash capture definition set forth by the State and Regional Water Quality Control Board. Actual trash volumes collected may vary from each catch basin depending on land use type, storm event, and drainage area. The CPS units are to be installed inside of the existing catch basin and out of view from the street level, thereby minimizing the potential for flooding into the streets during large rain events, compare to Automated Retractable Screens (ARS) located at curb and gutters, eliminating the visibility of large trash particles on the street, and reducing the potential of wind blown trash being carried into surrounding areas during high wind conditions.

The City will evaluate the volume of litter and debris for a minimum of three consecutive cleanings and extrapolate the results for all installed devices on an annual average precipitation and a ten year average precipitation period. City staff will inspect the devices for cleaning and maintenance prior to the beginning of the wet season and after a major storm event. The CPS bypass design accommodates the catch basin design capacity if the screen becomes clogged.

Further, the Project meets the intent of the ECP Tier 1 program which is designed to mitigate the impacts of transportation pollutants to our waterways sourced from the City's roadways and sidewalks.

5. What other BMP types were considered for this project? Why was the proposed BMP chosen? ***(5 points)***

Other BMP types were considered for this project included installing Automatic Retractable Screen (ARS) at the openings of catch basins and were determined to not be ideal due to their predisposition to clog and lead to potential flooding of the roadway. Debris gates also tend to result in potential health concerns due to standing water during low-flow periods. Low-flow (i.e. irrigation run-off) can be trapped by accumulated debris along the gutter/catch basin inlet. Another key consideration was the fact the trash retained by these screens at the the catch basin inlet would be visible to the traveling public and become an eye sore. Further, but most importantly, these screens would not offer the degree of capture that can be attained by a full capture device, as proposed. Although routine street sweeping improves the condition, it doesn't removal attached pollutants from the screen at the catch basin opening. CPS units should also keep the storm drain pipes in the system relatively clean. Maximizing the amount of trash that can be removed before reaching our local waterways and beaches is the primary goal. Further, CPS units have a lower relative cost compared to ARS units capital investment. As a result of these considerations, the City has identified the CPS units as the most effective gross pollutant removal device to reduce the overall pollutant load from drainage areas in PA 33 and PA 35.

SECTION TWO: DETAILED PROJECT INFORMATION AND SCORING (CONTINUED)

6. Provide information on proposed BMP perfomance efficiency and/or effectiveness, including pollutant capture, storage capacity, flow capacity, etc. ***(up to 6 points)***

The proposed CPS units were tested five years ago and have demonstrated BMP performance efficiency for pollutant removal capability, capacity, impact to existing infrastructure, potential for flooding impacts, and operation and maintenance requirements. The City of San Diego conducted a "Storm Drain Insert Pilot Study", dated May 25, 2012, to evaluate the performance and operation/maintenance of storm drain insert BMPs, including the CPS units, for municipalities.

The designated study site, referenced as BER-TC, retrofitted the existing catch basin with the CPS unit and Drain Pac Curb Inlet Basket, manufactured by United Storm Water, Inc. The designated study site was situated in a light commercial area consisting of banks, gas stations, office buildings, restaurants, and retail stores. At the site where a CPS unit was installed (BER-TC and ECB-F), the total amount of gross solids collected includes solids retained in the bottom of the catch basin, and solids removed from the surface of the CPS, since the CPS is a component of the BMP. BER-TC collected a gross solids volume of 2.76 cubic feet, 88% more than the average site (16 sites, average 1.46 cubic feet). In terms of pounds, BER-TC collected 174.5 lbs., 66% more than the average. In general, more pounds of gross solids were removed during the first maintenance visit (M1) than the second (M2). The first maintenance visit was preceded by a long dry weather period, allowing for greater accumulation of gross solids in the BMPs. Fewer pounds of gross solids were collected for M2, likely as a result of a shorter period of gross solids accumulation, lower amount of sediment and/or possible loss/re-suspension of sediment and organic debris from the BMPs into the catch basin as a result of storm flows. It should be noted that for sites without a CPS (which is a component of the BMP), any gross solids that bypass the insert will likely eventually enter the storm drain system during wet weather, because an outlet pipe screen is typically not present. The CPS is designated to retain gross solids in the catch basin, and gross solids will bypass the CPS and enter the storm drain system as a function of the CPS hydraulics (i.e. CPS dimensions, flow, clogging of the screen, etc.). The CPS provides overflow, 100% bypass.

As a result of this study, it is expected that the proposed CPS units will be an effective BMP based on the following considerations: pollutant removal capability, capacity, impact to existing infrastructure, potential for flooding impacts, and operation and maintenance requirements.

7. Project Readiness: The project schedule will be reviewed by the evaluation committee to determine when the proposed BMP will be operational following OCTA Board of Director's approval. Points will be assigned as follows:

(●) <4 Months ***(6 points)*** ( ) 4 - 8 months ***(4 points)*** ( ) 8 - 12 months ***(2 points)*** ( ) >12 months ***(1 point)***

SECTION TWO: DETAILED PROJECT INFORMATION AND SCORING (CONTINUED)

8. Will the project provide any secondary benefits beyond water quality improvement (i.e., water-use efficiency, public awareness, flood control, recreation, habitat, sustainability)? ***(up to 5 points)***

The removal of trash and debris will prevent solids from clogging the storm drain system and will provide aesthetic and water quality benefits, including reduction of suspended solids in waterways, oxygen-demanding substances, and of foul odors. Also, removal of trash, debris, and organic matter may reduce bacteria and chemicals that could potentially impact the delicate balance of the ecosystems, wildlife/aquatic species, and estuaries in the impaired receiving waters. In addition, the debris build-up in the catch basins inadvertently provides a secondary benefit of protection against spills. The CPS can also act as a screen to prevent/minimize discharges such as oil and paint from entering the lateral pipe due to debris build-up working as an absorbent layer. The clean-up process for such spills would be limited to removing the oil/paint in the catch basin.

9. What is the methodology for measuring pollutant reduction before and after the BMP is implemented? How frequently will monitoring and performance assessment occur? ***(up to 10 points)***

City staff will inspect and clean the retrofitted catch basins twice a year, at minimum, and immediately after rain storm events. Inspection and cleaning practices involve recording the quantity of trash and debris being removed.

After the inspection of each storm drain facility, reports will provide pre- and post-retrofit trash and debris volume data that will be compiled and analyzed to determine the total annual debris-volume reduction. For those catch basins that are more prone to trash and debris, more inspections will be conducted to continually monitor the trash and debris intake. Also, staff will compare the list of locations before and after to determine the increase, if any, in trash accumulation.

SECTION TWO: DETAILED PROJECT INFORMATION AND SCORING (CONTINUED)

10. Provide an operations and maintenance plan for the lifespan of the proposed project. Include schedule of inspections, cleaning, removal and disposal of pollutants, repairs, etc. ***(up to 15 points)***

The City's Street Maintenance Division follows a robust Operation and Maintenance Plan supporting local streets, sidewalks, ADA ramps, and stormwater facilities. Division staff is trained and certified to conduct inspections, cleaning, operations, maintenance, and reporting of all stormwater facilities, including catch basin inlets/CPS units in accordance with the MS4 Permit.

The CPS units has a ten-year design life, which is warranted by the manufacturer for normal use, but a twenty year life expectancy. City staff will inspect the catch basin/CPS units prior to the wet season, and/or after a major storm event, as needed. Routine inspections will ensure that the device is functioning properly and efficiently. On an annual basis, or at any time that a catch basin is at least 40% full, removal of trash/debris and organic matter will be performed by qualified personnel and transported and disposed properly.

Removal of the trash/debris and organic matter will be performed based on the inspection findings and be disposed in compliance with City practices. Trash/debris and organic matter are transported to the City's operations support facility where the material is quantified by load, and then, transported to other facilities for disposal. Maintenance of these devices will require routine inspections, storm-related inspections, necessary cleaning and/or device related maintenance including replacement of the screen(s).

11. **BONUS:** How many different Tier 1 type BMPs are currently installed within the local agency's jurisdiction, excluding BMPs funded by previous ECP grants. ***(1 point per BMP type, up to 5 points)***

The City received ECP Tier 1 grant funds in FY 2015-16 for purchase and installation of 79 CPS units in catch basins within the Irvine Business Complex (IBC) Planning Area (PA 36). IBC is comprised of four zoning districts including mixed use, multi-use, industrial, and residential. The IBC is a major employment center which contributes a high daytime population to the City, including high traffic volumes on its roadway system. The City submitted the final report in April 2017 for reimbursement of grant funds. It is expected that the retrofitted catch basins will significantly reduce the pollutants from entering into the San Diego Creek (Reach 1) and tributaries.

12. **BONUS:** Are local matching funds in excess of the 20% minumum being proposed? If yes, at what percentage? ***(.5 point for each 5% cash overmatch, up to 5 points)*** *Note: overmatch bonus points can only be granted to projects whose match is entirely cash, no in-kind services.*

No, the City will contribute the minimum requirement of matching funds (20%).

SECTION THREE: FUNDING

Project Budget Summary

Total ECP Funds Requested	$ 30,720
Local Match (cash only)	$ 7,680
Local Match %	20 %
Total Project Cost	**$** 38,400

** A detailed cost estimate must be included with the application*

Match Sources

Other Grants: Non-M2 competitive grants may be used as match. Any grants used as match must be dedicated to the project for match credit to be received. Please list the name and amount of the grants being proposed as match.

Matching funds will be sourced from local funds in the City's operating and maintenance budget for fiscal year 2017-18. Matching funds will not be sourced from federal or state funds.

ATTACHMENT A: ENVIRONMENTAL DOCUMENT

Print Form

Notice of Exemption

DRAFT

Appendix E

To: Office of Planning and Research
P.O. Box 3044, Room 113
Sacramento, CA 95812-3044

County Clerk
County of: Orange

From: (Public Agency): City of Irvine
1 Civic Center Plaza, PO Box 19575
Irvine, CA 92623-9575
(Address)

Project Title: Irvine Spectrum Catch Basin Connector Pipe Screen (CPS) Installation Project

Project Applicant: City of Irvine, 1 Civic Center Plaza, PO 19575 Irvine, CA 92623-9575

Project Location - Specific:
Project is located within City of Irvine Planning Area 33 (Irvine Spectrum Center) and Planning Area 35 (Irvine Spectrum2). Specifically, project location will be at catch basin inlets along major arterials.

Project Location - City: Irvine Project Location - County: Orange

Description of Nature, Purpose and Beneficiaries of Project:
The project proposes to install/retrofit catch basin inlets with a connector pipe screen (CPS) unit to capture trash and debris, that would otherwise, discharge into the downstream waterways and beaches. The project will provide water quality benefits by capturing pollutants less than 5 mm in size.

Name of Public Agency Approving Project: City of Irvine, Department of Public Works

Name of Person or Agency Carrying Out Project: Joe Dillman, Street Maintenance Superintendent

Exempt Status: **(check one):**

- ☐ Ministerial (Sec. 21080(b)(1); 15268);
- ☐ Declared Emergency (Sec. 21080(b)(3); 15269(a));
- ☐ Emergency Project (Sec. 21080(b)(4); 15269(b)(c));
- ☒ Categorical Exemption. State type and section number: Existing Facilities, 15301 (c) Class I
- ☐ Statutory Exemptions. State code number:

Reasons why project is exempt:
This project is exempt as it entails minor alterations to the existing catch basins to capture trash and debris that would otherwise be discharged into downstream receiving waterway and beaches. The project does not result in the expansion of the existing use which is to drain stormwater run-off into our local water-bodies.

Lead Agency Contact Person: Joe Dillman Area Code/Telephone/Extension: (949) 724-7696

If filed by applicant:

1. Attach certified document of exemption finding.
2. Has a Notice of Exemption been filed by the public agency approving the project?. ☐ Yes ☐ No

Signature: Date: 5/2017 Title: Assoc. Trans. Analyst

☒ Signed by Lead Agency ☐ Signed by Applicant

Authority cited: Sections 21083 and 21110, Public Resources Code.
Reference: Sections 21108, 21152, and 21152.1, Public Resources Code.

Date Received for filing at OPR:

Revised 2011

ATTACHMENT B: DETAILED PROJECT ESTIMATE

Attachment B: Detailed Project Estimate
OCTA - M2 ECP Tier 1 Grant Application (FY 2017-18)
City of Irvine
Project: Irvine Spectrum Area (PA33 and PA35) Catch Basin CPS Installation Project

Irvine Spectrum Catch Basin CPS Installation Project

				COST ESTIMATE	
ITEM #	**TASK DESCRIPTION**	**UNIT**	**QTY**	**UNIT PRICE**	**TOTAL**
1	Connector Pipe Screen (CPS) Units	EA	100	$368.31	$36,831.00
2	Pre-installation catch basin cleaning	EA	100	$15.00	$1,500.00
			TOTAL PROJECT CONSTRUCTION COST:		**$38,331.00**

Assumptions:

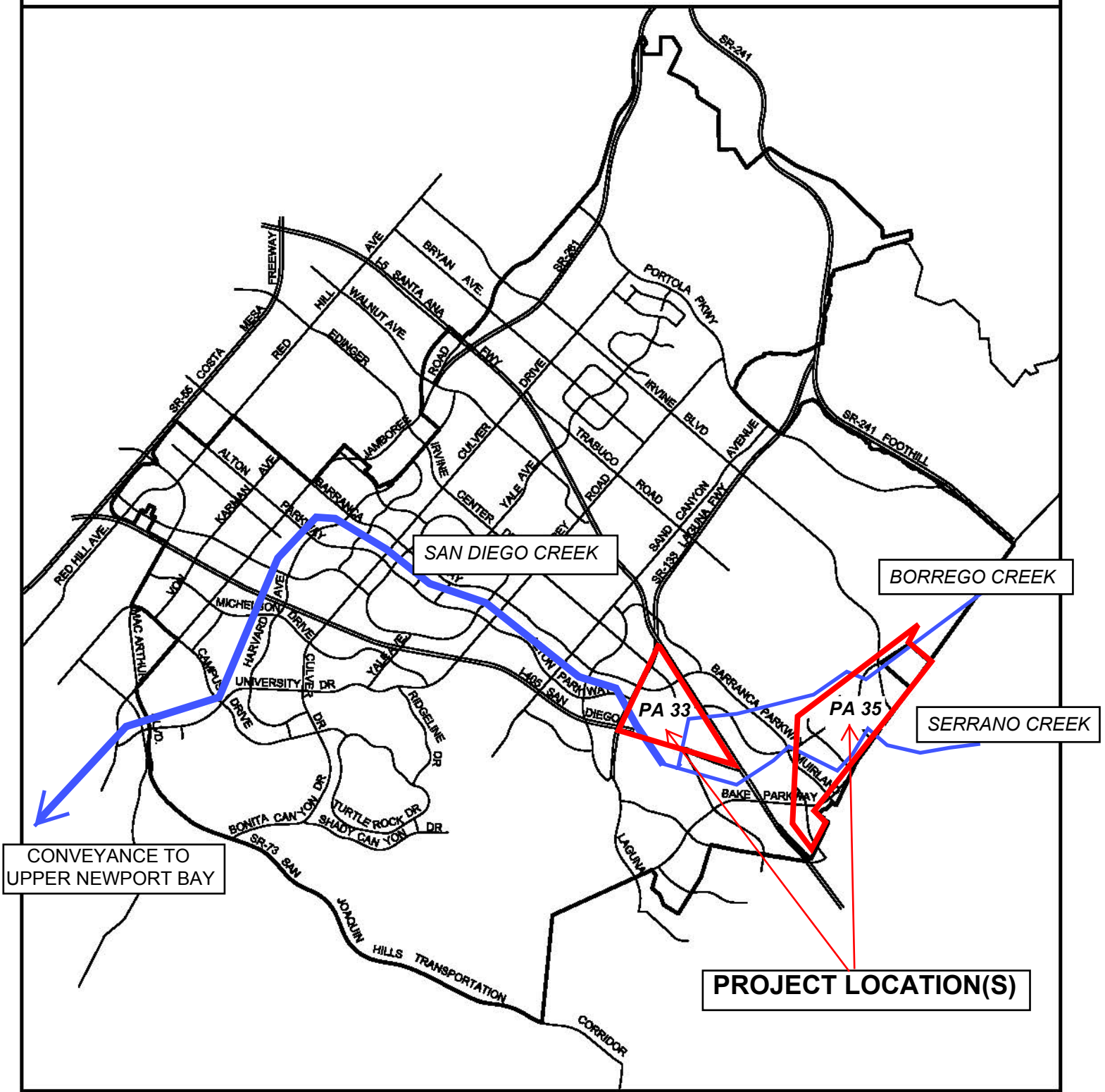
* Cost Estimate Received from OCTA ECP Tier 1 - Call For Projects / List of Purchase and Installation Agreements for United Storm Water, Inc.

http://www.octa.net/Projects-and-Programs/Measure-M/Measure-M2-(2011-2041)/Water-Quality/Tier-1-Call-for-Projects/

* Costs include sales tax, delivery, and installation by manufacturer / vendor.

ATTACHMENT C: LOCATION MAP(S)

IRVINE SPECTRUM CATCH BASIN
CONNECTOR PIPE SCREEN (CPS) INSTALLATION PROJECT



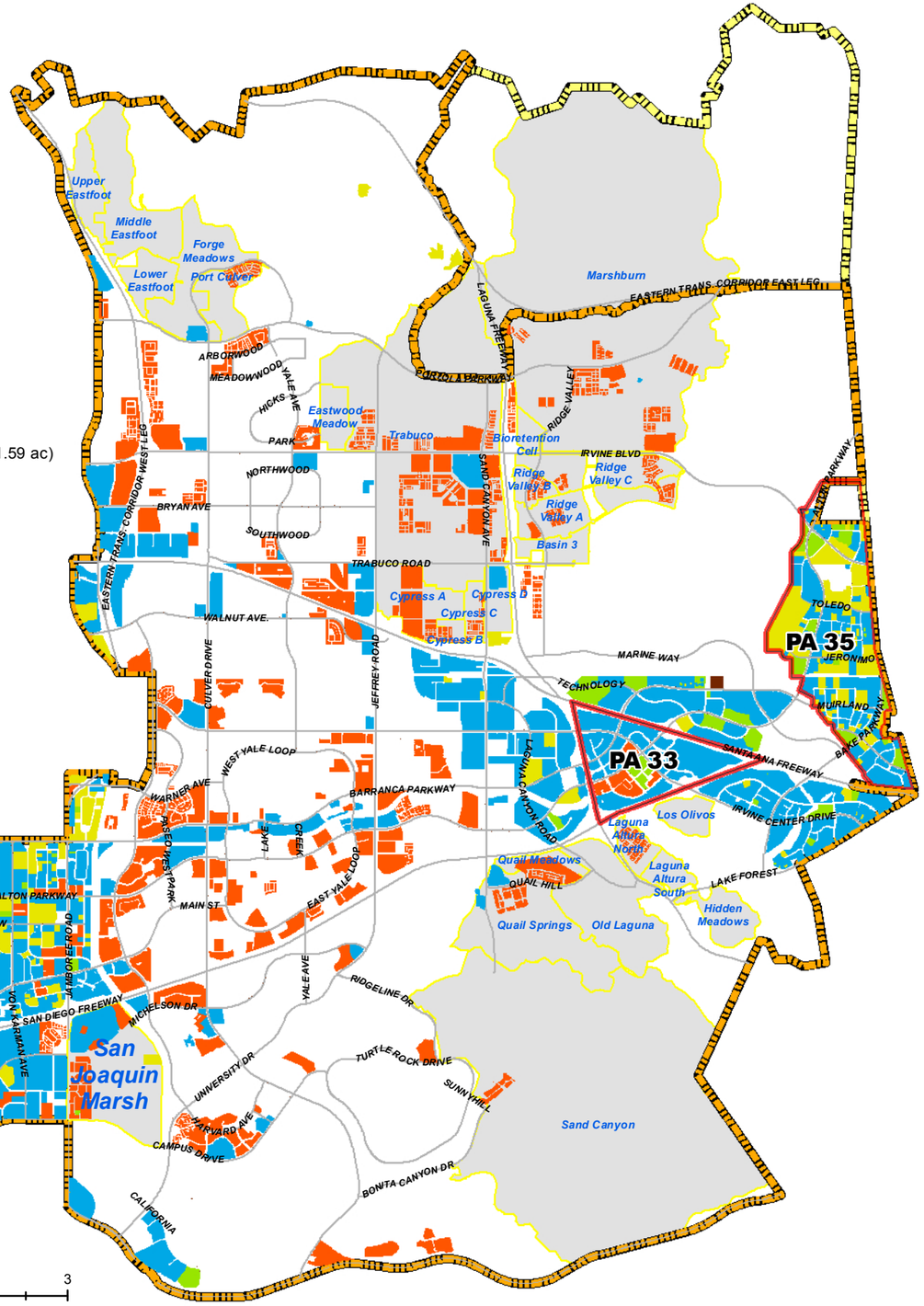
VICINITY MAP

Priority Land Use

With NTS

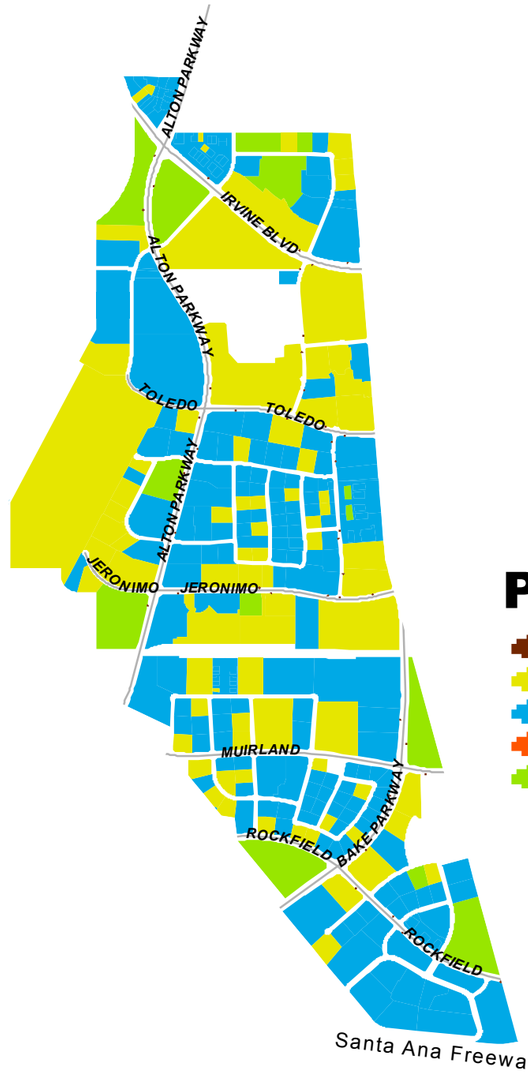
PLU

- Transportation (15.88 ac)
- Industrial (962.59 ac)
- Commercial (4,166.50 ac)
- Hi Density Residential (2,531.59 ac)
- Mixed Urban (376.41 ac)
- City Boundary
- City Sphere of Influence
- NTS



PA 33

- Transportation (0.32 ac)
- Industrial (0.0 ac)
- Commercial (276.80 ac)
- Hi Density Residential (159.73 ac)
- Mixed Urban (20.41 ac)



PA 35

- Transportation (0.76 ac)
- Industrial (341.51 ac)
- Commercial (415.45 ac)
- Hi Density Residential (0.0 ac)
- Mixed Urban (89.24 ac)

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Irvine Spectrum Center

Planning Area 33

PLU

- Transportation (0.32 ac)
- Industrial (0.0 ac)
- Commercial (276.80 ac)
- Hi Density Residential (159.73 ac)
- Mixed Urban (20.41 ac)

IRVINE CENTER DRIVE

Bee Canyon Wash

BARRANCA PARKWAY

ALTON PARKWAY

ALTON PARKWAY

MARINE WAY

ALTON PARKWAY

Drain flow to Water way or Tributary

San Diego Creek

San Diego Creek

Agua Chinon Wash

San Diego Creek

IRVINE CENTER DRIVE

BAKE PARKWAY

Legend

- Storm Structure
- Storm Conduit
- Hydrology
- Centerline

N

0 0.5

Miles

1:8,000

20

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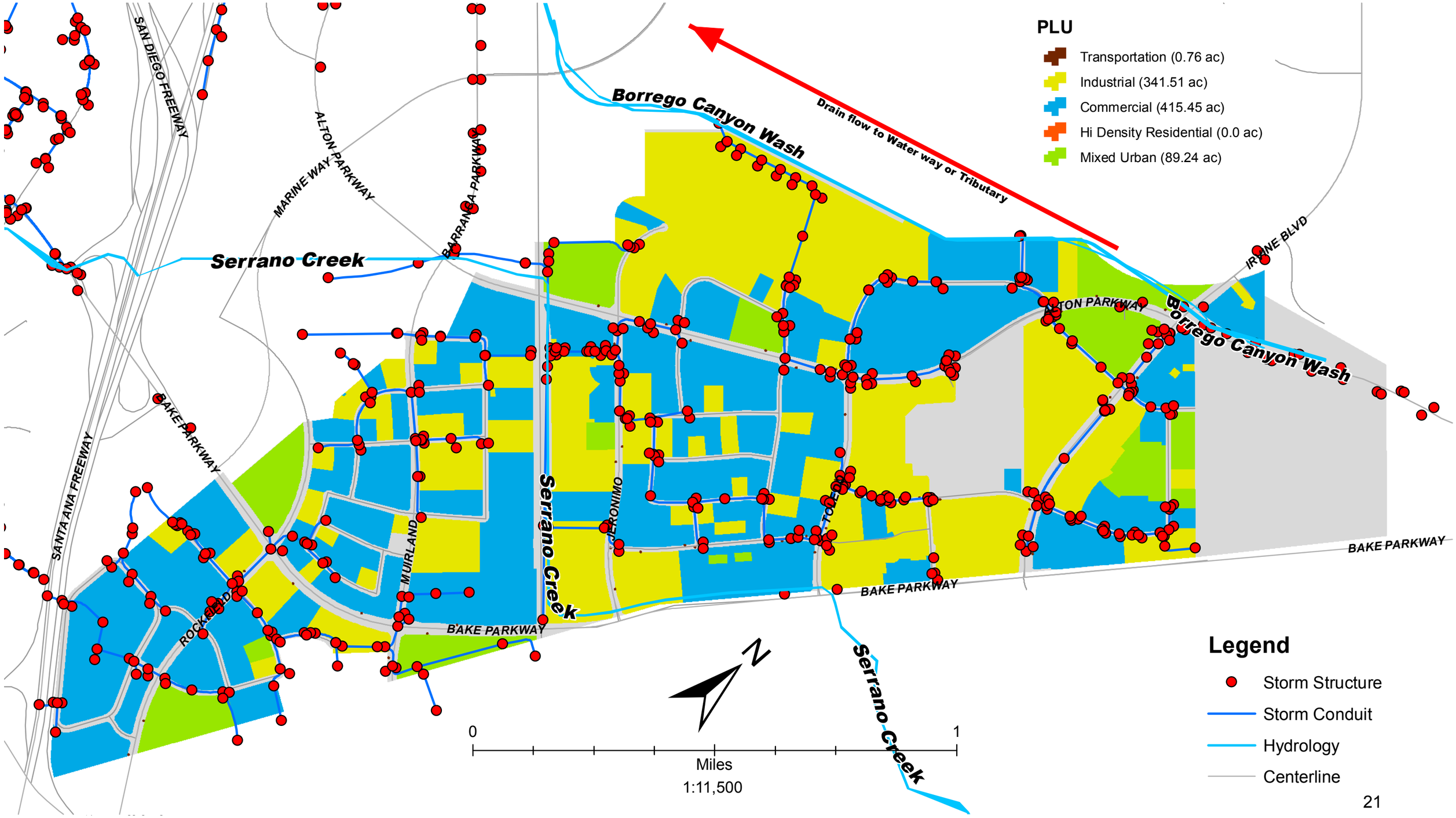
Irvine Spectrum 2

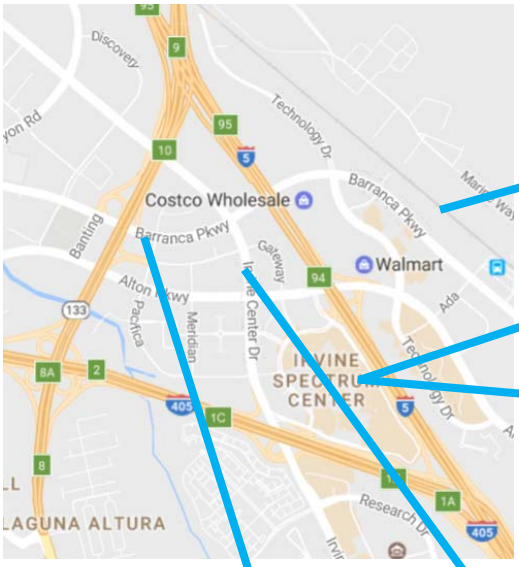
Planning Area 35



ATTACHMENT D: PROJECT SITE PHOTOS

ATTACHMENT D.1: SITE PHOTOS

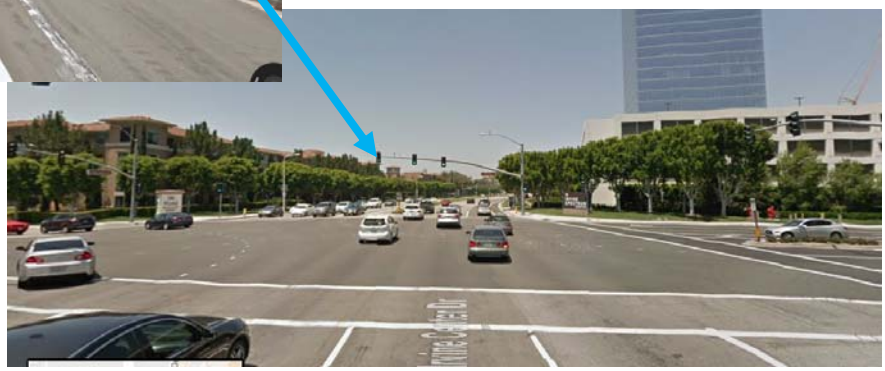
PLANNING AREA 33



Below: Borrego Channel head-waters east of Irvine Station

Above: Irvine Spectrum Center and intersection of Irvine Center Drive and Pacifica

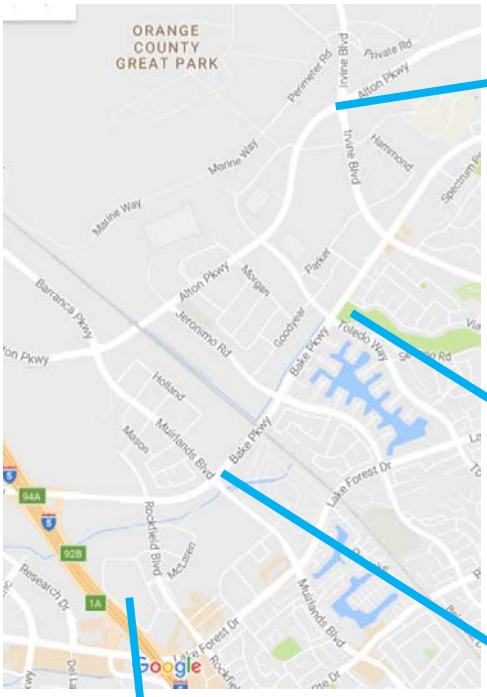
Below: Irvine Center Drive (EB) approaching Alton Parkway



Above: Barranca Parkway (EB) approaching Pacifica

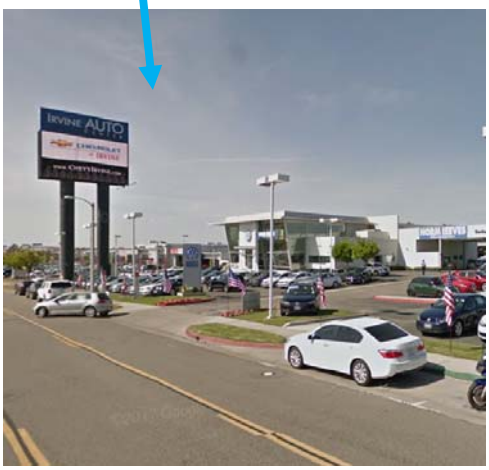
ATTACHMENT D.2: SITE PHOTOS

PLANNING AREA 35



Above: Irvine Boulevard (NB) approaching Alton Parkway

Left: Headwaters at Serrano Creek which traverses through PA 35

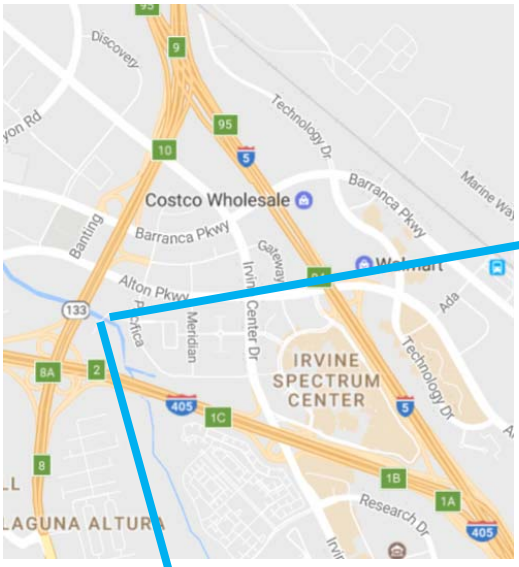


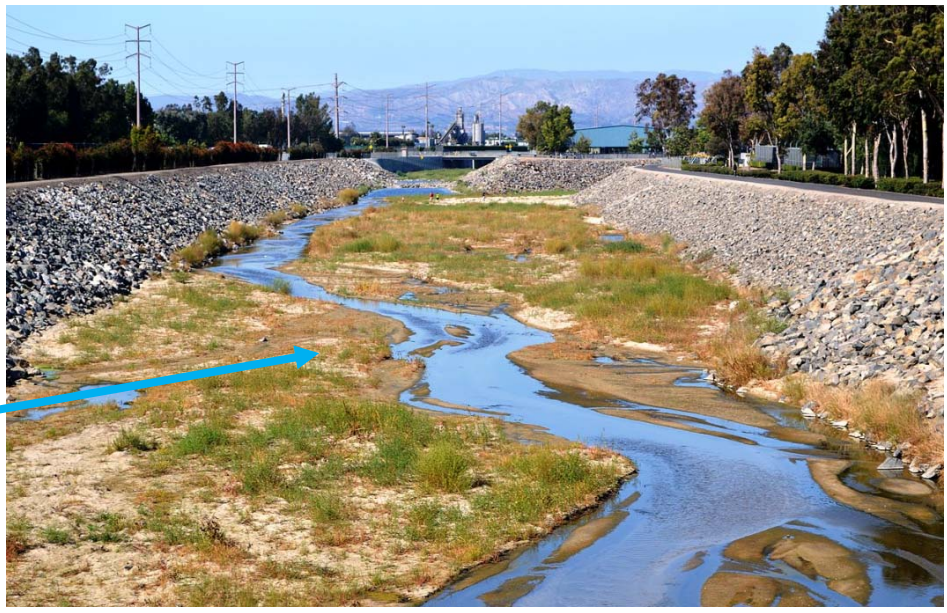
Above: Irvine Auto Center

Above: Bake Parkway (SB) approaching Muirlands Boulevard and Barranca Parkway

ATTACHMENT D.3: SITE PHOTOS

SAN DIEGO CREEK





Above, Left, Right, and Below: San Diego Creek (Reach2) impaired with sediment and nutrients (algae). Embankment laden with trash, debris, plastic bottles, etc.

Above: Catch Basin Inlet Proposed for CPS Unit

ATTACHMENT D.4: SITE PHOTOS

SAN DIEGO CREEK (REACH 1) AND SAN DIEGO CREEK BIKE TRAIL

Above: San Diego Creek (Reach 1), Upper Newport Bay impaired with sediment and nutrients (algae), etc.

Right and Below: San Diego Creek Bike Trail, a regional trail, runs along the San Diego Creek (Reach 2) from PA 33, and continues to San Diego Creek (Reach 1) to Upper Newport Bay (Below)

ATTACHMENT D.5: SITE PHOTOS

CATCH BASIN CONNECTOR PIPE SCREEN (CPS) UNIT

BEFORE AND AFTER INSTALLATION

ATTACHMENT E: DETAILED PROJECT SCHEDULE

Attachment E: Detailed Project Schedule

OCTA - M2 ECP Tier 1 Grant Application (FY 2017-18)
City of Irvine
Project: Irvine Spectrum Catch Basin CPS Installation Project

Item	*Task / Description*	*Start Date*	*Finish Date*
1	OCTA Allocates Funding	September 2017	September 2017
2	Execute Grant Agreement with OCTA	October 2017	December 2017
3	City Budget Adjustment / Program CIP	October 2017	December 2017
4	Award Contract/Issue PO*	March 2018	June 2018
5	Installation of CPS Unit	July 2018	August 2018
6	Inspection of CPS Units	August 2018	September 2018
7	Final Invoice / Submit Final Report	October 2018	December 2018
8	Project Complete	December 2018	
9	O&M	Ongoing	

* Deadline to award contract is June 30, 2018

ATTACHMENT F: DESIGN / CONCEPT DRAWINGS

MACHADO LAKE TRASH TMDL PROJECT
CIP NO.1-138

UNITED STORM WATER, Inc.
Protecting Our Water Resources

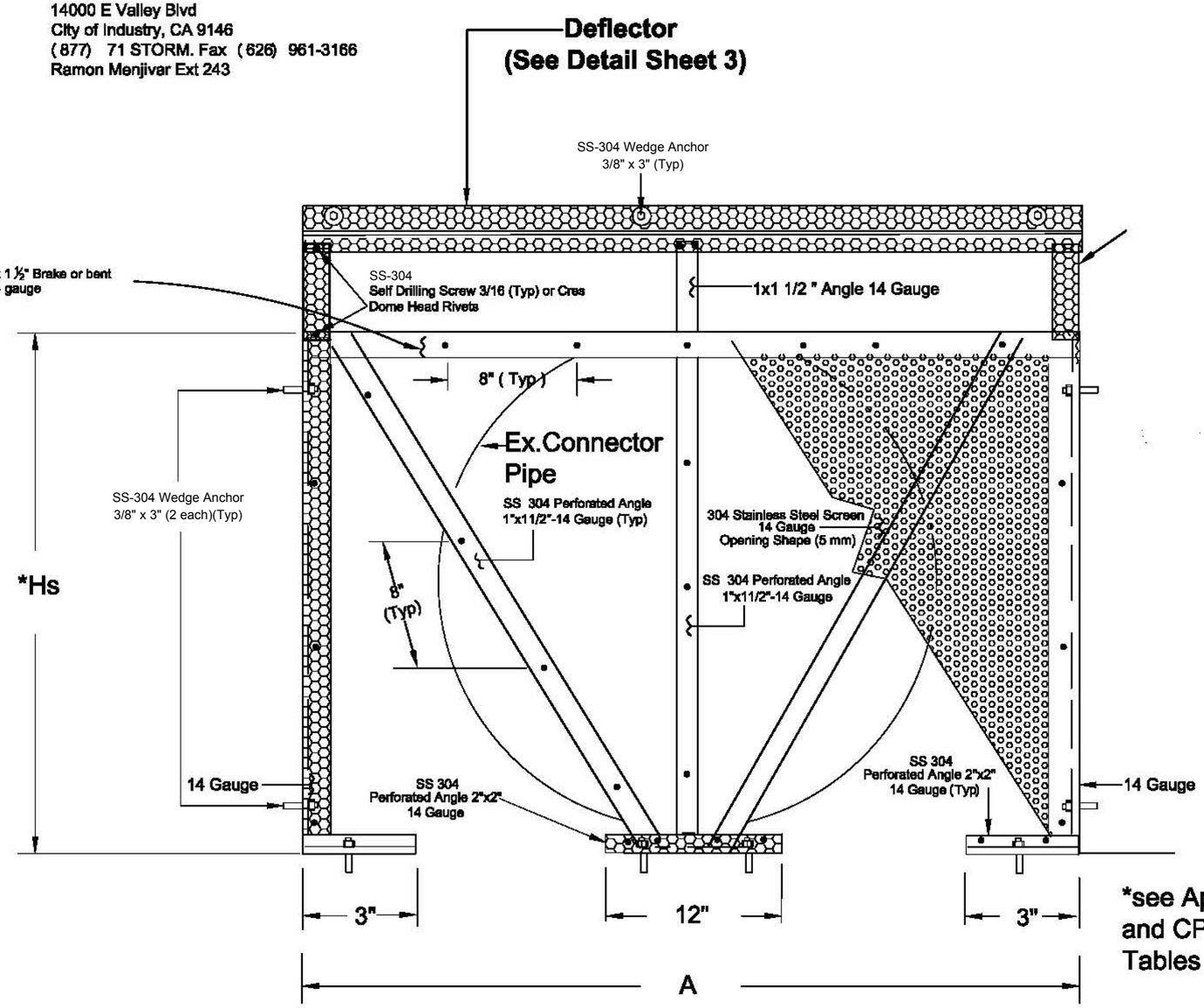
14000 E Valley Blvd
City of Industry, CA 9146
(877) 71 STORM. Fax (626) 961-3166
Ramon Menjivar Ext 243

LOS ANGELES COUNTY
DEPARTMENT OF PUBLIC WORKS

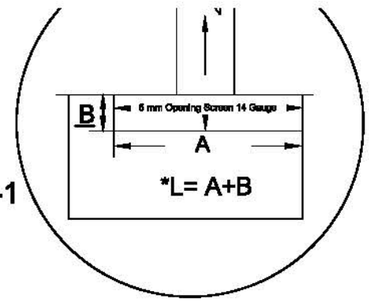
- [x] ACCEPTED
- [ ] MAKE CORRECTIONS NOTED
- [ ] REVISE CALCULATIONS
- [ ] REJECTED

REVIEW IS PERFORMED BY THE DEPARTMENT TO ENSURE THE CONTRACTOR'S GENERAL CONFORMANCE WITH THE DESIGN CONCEPT OF THE PROJECT AND GENERAL CONFORMANCE WITH THE SPECIFICATIONS. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE CORRECTNESS OF DIMENSIONS, PROPER CONSTRUCTION, AND INSTALLATION METHODS, AND FOR FULFILLING ALL CONTRACTUAL REQUIREMENTS. ACCEPTANCE INDICATED HEREON DOES NOT RELIEVE THE CONTRACTOR OF THESE OBLIGATIONS.

BY Amir Zandieh DATE 06-09-14



*see Appendix A-1
and CPS sizing
Tables 1 & 2



General Notes

Revision/Issue	Date

Name and Address
UNITED STORM WATER, Inc.
United Storm Water Inc.
14000 E. Valley Blvd
City of Industry, CA 91746

Project Name and Address
County of Los Angeles .
MACHADO LAKE TRASH TMDL PROJECT

Project: CIP NO. 1-138
Date: 02-19-2014
Scale: Not to Scale
Sheet: 1 of 5

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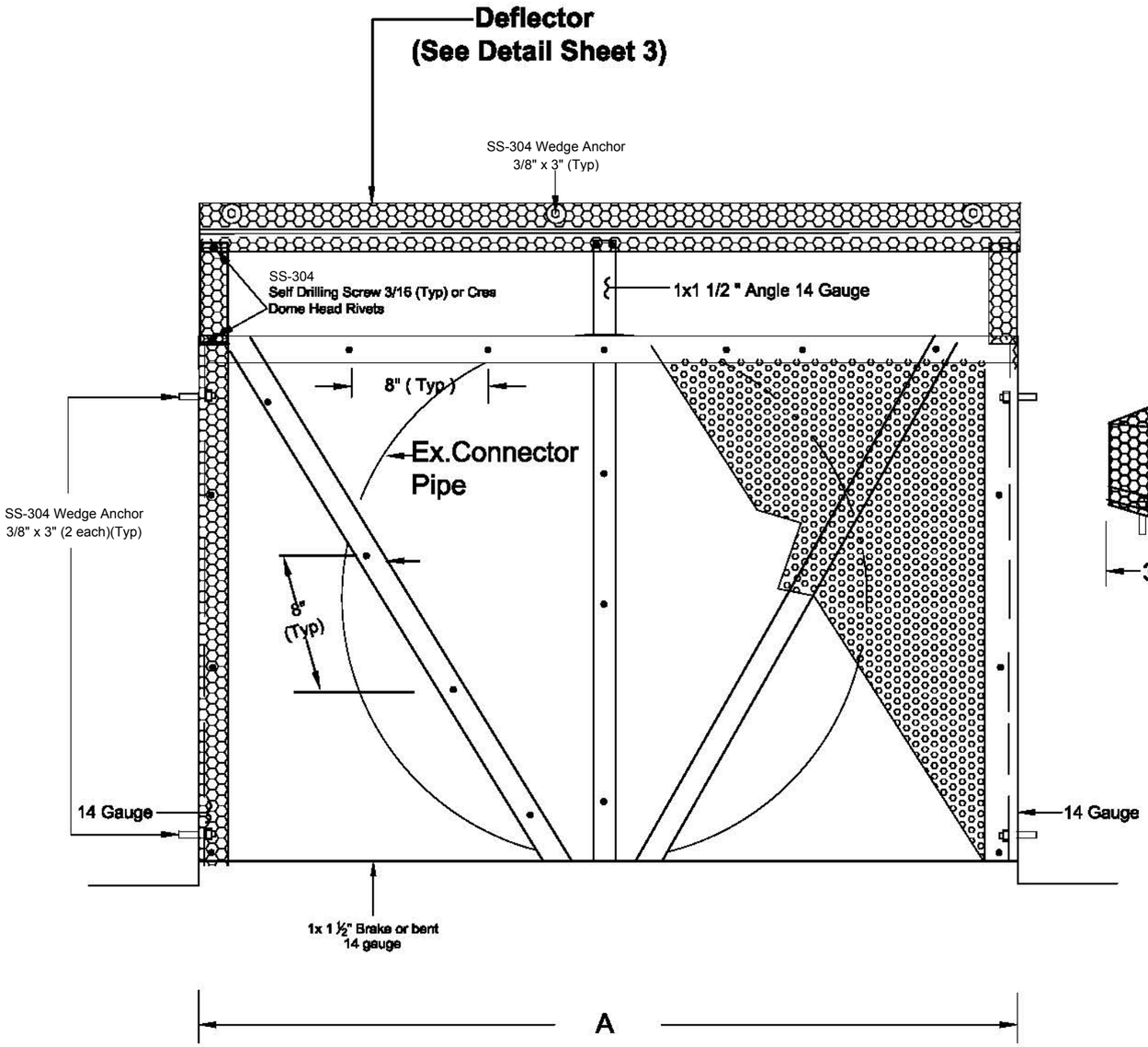

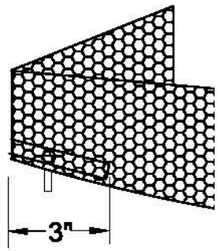

SS-304

LOS ANGELES COUNTY
DEPARTMENT OF PUBLIC WORKS

- [x] ACCEPTED
- [ ] MAKE CORRECTIONS NOTED
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- [ ] REJECTED

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BY Amir Zandieh DATE 06-09-14

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United Storm Water Inc.
14000 E. Valley Blvd
City of Industry, CA 91746

Project Name and Address
County of Los Angeles .
MACHADO LAKE TRASH TMDL PROJECT

Project	Sheet
CIP NO. 1-138	2 of 5
Date: 02-19-2014	
Scale: Not to Scale	

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MACHADO LAKE TRASH TMDL PROJECT
CIP NO.1-138

LOS ANGELES COUNTY
DEPARTMENT OF PUBLIC WORKS
☒ ACCEPTED
☐ MAKE CORRECTIONS NOTED
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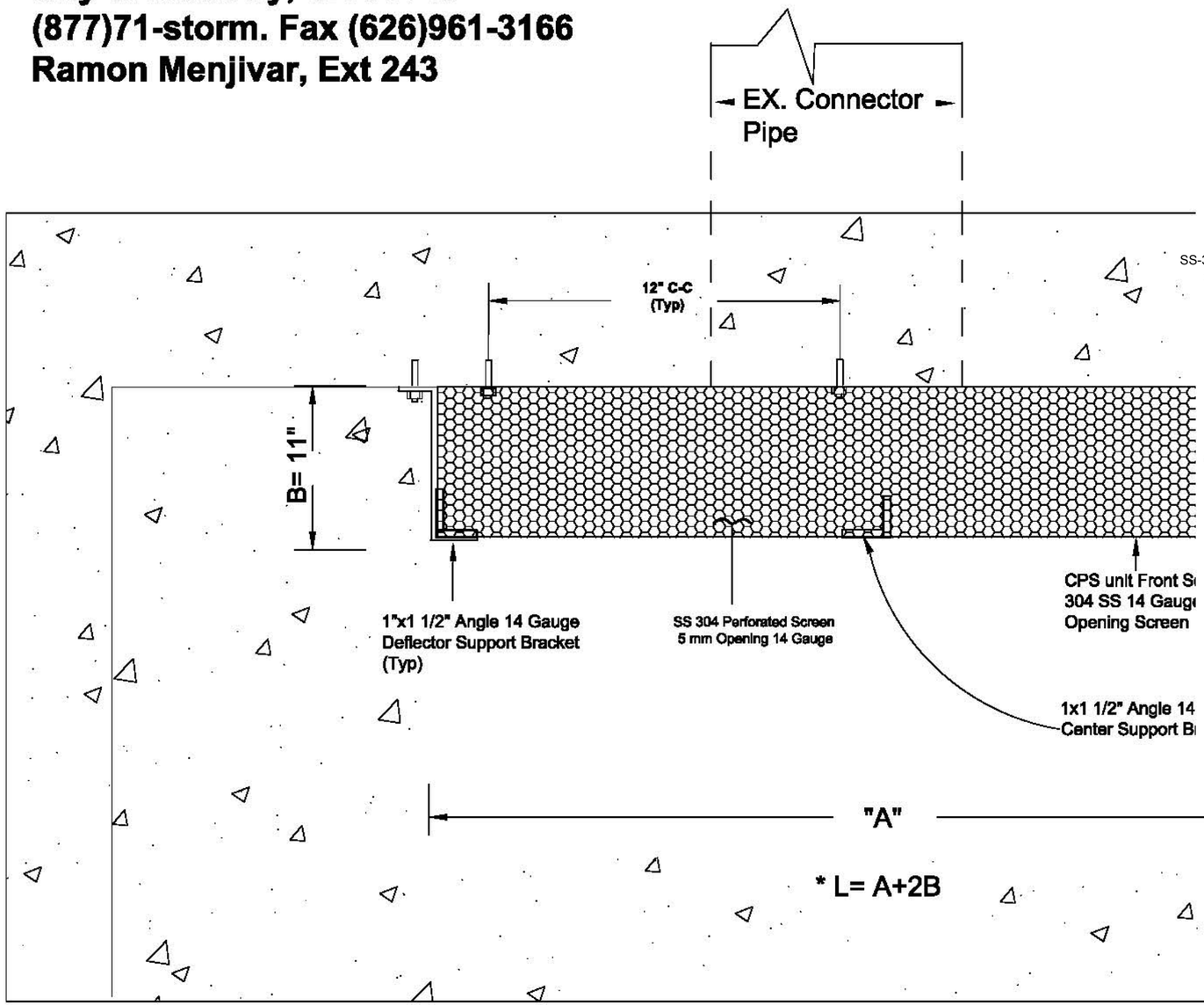
BY Amir Zandieh DATE 06-09-14



* see Appendix A-1 and CPS Sizing Tables 1 & 2

Deflector Detail
Plain View (Sheet 1)
N.T.S.

General Notes

Revision/Issue	Date

United Storm Water Inc.
14000 E. Valley Blvd
City of Industry, CA 91746

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County of Los Angeles
MACHADO LAKE TRASH TMDL PROJECT

Project: CIP NO. 1-138
Date: 02-19-2014
Scale: Not to Scale
Sheet: 3 of 5

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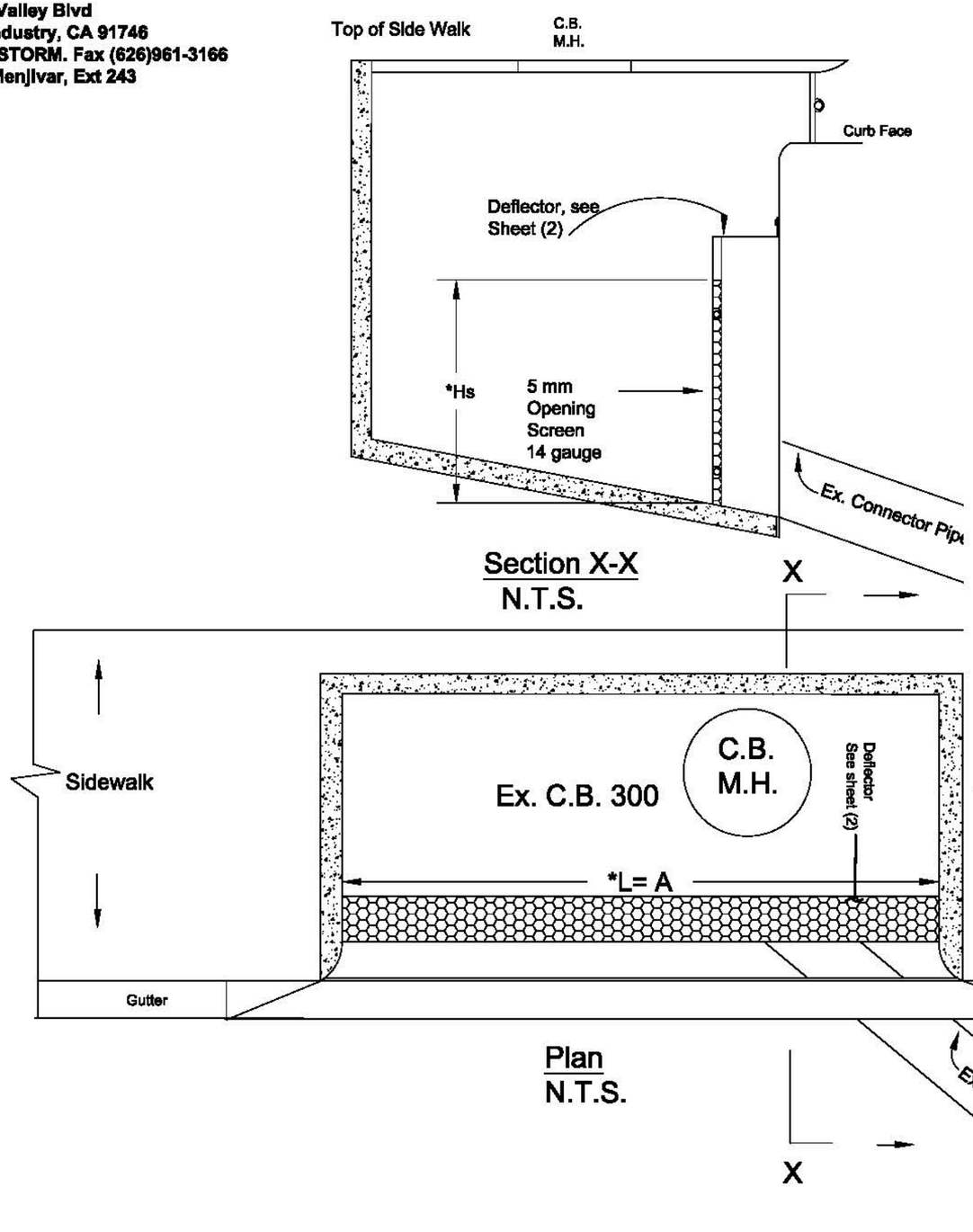

Section X-X
N.T.S.

Plan
N.T.S.

LOS ANGELES COUNTY
DEPARTMENT OF PUBLIC WORKS

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- [ ] MAKE CORRECTIONS NOTED
- [ ] RESUBMIT CALCULATIONS
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BY Amir Zandieh DATE 06-09-14

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14000 E. Valley Blvd
City of Industry, CA 91746

Project Name and Address
County of Los Angeles
MACHADO LAKE TRASH TMDL PROJECT

Project	Sheet
CIP NO. 1-138	4 of 5
Date: 02-19-2014	
Scale: Not to Scale	

MACHADO LAKE TRASH TMDL PROJECT
CIP NO.1-138

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Ramon Menjivar, Office (877)
71-STORM. Ext 243 (626)890-7104

LOS ANGELES COUNTY
DEPARTMENT OF PUBLIC WORKS

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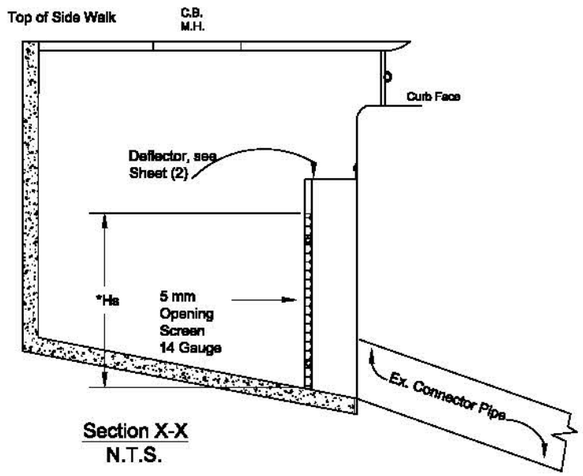
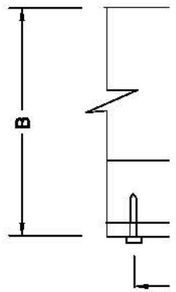
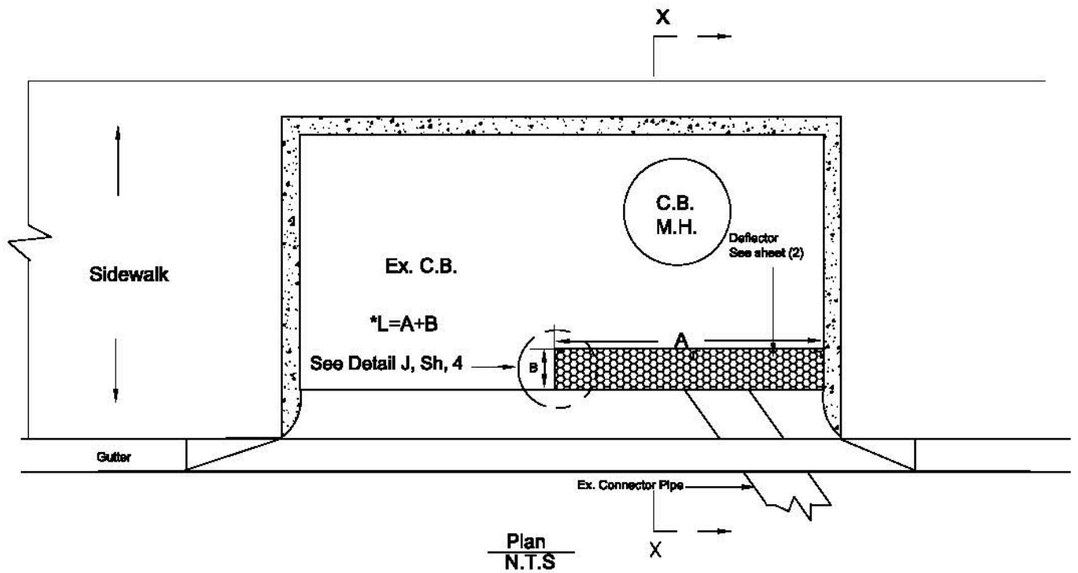


Section X-X
N.T.S.



SS-304 Wedge Anchor
3/8" x 3" (2 each)(Typ)

SS-304



Plan
N.T.S

* See Appendix A-1
and CPS Sizing Tables 1 & 2

** Both legs of Deflector Support Bracket must extend to the top of the Deflector and Also extend at least to the bottom of the Mounting Bracket.

General Notes

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Name and Address
UNITED STORM WATER, Inc.
United Storm Water Inc.
14000 E. Valley Blvd
City of Industry, CA 91746

Project Name and Address
County of Los Angeles
MACHADO LAKE TRASH TMDL PROJECT

Project	Sheet
CIP NO. 1-138	5 of 5
Date: 02-19-2014	
Scale: Not to Scale	

PROTECTING OUR WATER RESOURCES

Storm water pollution is the contaminated water that drains from urban areas, through municipal storm drain systems and into bays, the main source of which is the general public. The most common storm water pollutants are vegetation (leaves, grass clippings), trash (fast food wrappers, cigarette butts) and toxins (used motor oil, anti-freeze, fertilizer, pesticides, sewage overflow and pet droppings). Basically, anything dumped or dropped on the ground or in the gutter contributes to storm water pollution, and most people are not even aware that they are polluting.

United Storm Water, Inc. is a pioneer in storm water remediation and storm water management services exhibiting an outstanding level of technical experience, physical resources, and innovative solutions. Using advanced technologies in storm water management, United Storm Water aids its customers in protecting vital resources & reducing the amount of harmful contaminants that can enter waterways through storm drains. Our custom made treatment control best management practice (BMP) products have been tested and are proven to reduce the level of debris, heavy metals and petroleum hydrocarbons from storm water effluent. Our storm water management services provide proactive means of complying with the numerous local, state, and federal regulations that govern illicit storm water discharge.

PRODUCTS & SERVICES:

- Full Service Storm Water Management:
  - Inspection, Cleaning, Monitoring & Disposal
  - Curb Stenciling
  - TMDL Reporting
- Industrial Vacuum Truck & Industrial Vactor Jetter Services
- Installation of Curb Inlet Screen Covers
- Maintenance of all Varieties of Structural BMPs
- Sewer Maintenance
- CCTV Inspection
- Lake Draining & Excavation
- Sludge Dewatering
- 24-Hour Emergency Response Spill Clean-Up Services

CURRENT AREAS OF SERVICE

- Northern California
- Southern California
- Arizona
- Nevada
- Texas
- Florida
- Maryland
- Hawaii

... and more!

CUSTOMERS:

- Cities and Municipalities
- Housing Associations
- Comercial Facilities
- Private Industries
- Caltrans

We provide creative storm water management solutions to suit <u>your</u> individual needs!

Phone (626) 961-9326 www.unitedstormwater.com Fax (626) 961-3166

STORM WATER MANAGEMENT & CLEANING SERVICES

STORM WATER MANAGEMENT:

Storm water management is an integral part of meeting National Pollutant Discharge Elimination System (NPDES) general permit requirements and keeping storm drains clean and clear of contaminants. United's Project Managers will work with your organization to develop a maintenance schedule that is tailored to meet customer specific requirements and may include the following:

- Training in Storm Water Awareness & Management
- Storm Water Pollution Prevention Plans (SWPPPs)
- Curb Stenciling
- Inspections (Visual & CCTV)
- Cleaning
- BMP Maintenance
- Documentation & Monitoring
  - Field Reports of Drain Locations & Maintenance Data
  - TMDL Reports (MS Access Database)
- Sampling
- Transportation & Disposal of Extracted Waste

CLEANING:

With an extensive fleet of equipment United Storm Water is capable of providing a wide range of cleaning services that include, yet are not limited to the following:

- Storm Drain Catch Basins & Lines
- All Varieties of Structural BMPs
- Pump Houses
- CDS (Continuous Deflection Separation) Units
- Storm Ceptors & Vortech Units
- Sand Filters
- Culverts & Channels
- Lakes, Ponds & Streams
- Excavation

CONNECTOR PIPE SCREENS (CPS)

A metal screen assembly installed inside a catch basin in front of the entrance to a connector pipe to prevent debris from entering the pipe. The CPS unit is designed to retain all trash and gross solids larger than 5 mm (0.197 in) in the catch basin. Therefore, the trash capture and storage capacity of this product is dependent upon the size of the catch basin where it is installed. A CPS unit could be used in conjunction with a curb inlet screen cover and/or DrainPac for added effectiveness based on the level of trash and debris that commonly accumulates at the site. This product is listed within both the Los Angeles and San Francisco Bay Regional Water Quality Control Boards' full trash capture certification program.

PRODUCT SPECIFICATIONS:

- Manufactured using S-304 perforated stainless steel having 5 mm diameter holes
- Has a minimum overall vertical height of 2 feet
- Has a deflector to prohibit debris from falling behind the screen
- Has an open area of 50 % for overflow bypass
- The perimeter of the insert includes a structural frame for stiffness and a bolting surface to fasten the insert to the catch basin floor and wall
- Has a structural integrity to withstand a force of standing water within the catchment area
- Not recommended for installation in drop inlet type catch basins nor catch basins having connector pipes greater than 42" diameter

STANDARD CONFIGURATION - CLEAN
New installation with staff gauge painted on catch basin wall for inspecting drains requiring cleaning.

DIRTY DRAINS – CUSTOM CONFIGURATIONS

Custom configurations are designed as needed for nearly any shape. Can be configured to be permanently mounted to the catch basin or having a quick disconnect feature to facilitate pipe line jetting or to prevent flooding should the system become clogged. Catch basins containing CPS units should be cleaned when the screen is ≤ 40% covered to prevent the possibility of flooding and pollutant overflow into lateral line.

Certified full capture devices are custom made to client specifications!

ATTACHMENT G: CITY COUNCIL RESOLUTION

DRAFT

CITY COUNCIL RESOLUTION NO. 17-XX

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, APPROVING THE SUBMITTAL OF A GRANT APPLICATION TO THE ORANGE COUNTY TRANSPORTATION AUTHORITY FOR FUNDING UNDER THE MEASURE M2 TIER 1 ENVIRONMENTAL CLEANUP PROGRAM

WHEREAS, Orange County Local Transportation Ordinance No. 3, dated July 24, 2006, known and cited as the Renewed Measure M Transportation Ordinance and Investment Plan, makes funds available through the Environmental Cleanup Program to help protect Orange County beaches and waterways from transportation-generated pollution (urban runoff) and improve overall water quality; and

WHEREAS, the Environmental Cleanup, Tier 1 Grant Program consists of funding purchases and installation to catch basins with Best Management Practices, such as screens, filters, inserts, and other “street scale” low flow diversion projects; and

WHEREAS, the Orange County Transportation Authority has established the procedures and criteria for reviewing proposals; and

WHEREAS, the City of Irvine possesses authority to nominate water quality improvement projects that have a transportation pollution nexus to finance and construct the proposed project; and

WHEREAS, by formal action the City Council of the City of Irvine authorizes the nomination of the Irvine Spectrum Catch Basin Connector Pipe Screen Installation Project, including all understanding and assurances contained therein, and authorizes the person identified as the official representative of the City of Irvine to act in connection with the nomination and to provide such additional information as may be required; and

WHEREAS, the City of Irvine will maintain and operate the equipment acquired and installed; and

WHEREAS, the City of Irvine will give the Orange County Transportation Authority’s representatives access to and the right to examine all records, books, papers or documents related to the funded Tier 1 Grant Project; and

WHEREAS, the City of Irvine will cause work on the project to be commenced within a reasonable time after receipt of notification from the Orange County Transportation Authority and that the project will be carried to completion with reasonable diligence; and

WHEREAS, the City of Irvine will comply where applicable with provisions of the California Environmental Quality Act, the National Environmental Policy Act, the

Americans with Disabilities Act, and any other federal, state, and/or local laws, rules and/or regulations; and

WHEREAS, the City of Irvine must include all projects funded by Net Revenues in the seven-year Capital Improvement Program as part of the Renewed Measure M Ordinance eligibility requirement; and

WHEREAS, the City of Irvine authorizes a formal amendment to the seven-year Capital Improvement Program to add projects approved for funding upon approval from the Orange County Transportation Authority Board of Directors.

NOW, THEREFORE, the City Council of the City of Irvine DOES HEREBY RESOLVE as follows:

SECTION 1. That the City of Irvine hereby authorizes the Director of Public Works as the official representative of the City of Irvine to prepare and submit an application for Environmental Cleanup, Tier 1 Grant Program funds for the Irvine Spectrum Catch Basin Connector Pipe Screen Installation Project.

SECTION 2. That the City of Irvine hereby authorizes the Director of Public Works as the official representative of the City of Irvine to accept the grant funds upon the Orange County Transportation Authority Board of Directors approval of grant funding for the Irvine Spectrum Catch Basin Connector Pipe Screen Installation Project.

SECTION 3. That the City of Irvine agrees to fund its share of the project costs and any additional costs over the identified programmed amount.

SECTION 4. That the City Clerk shall certify to the passage and adoption of this Resolution.

PASSED AND ADOPTED by the City Council of the City of Irvine at a regular meeting held on the 9th day of May 2017.

_____
MAYOR OF THE CITY OF IRVINE

ATTEST:

_____
CITY CLERK OF THE CITY OF IRVINE

STATE OF CALIFORNIA)
COUNTY OF ORANGE) SS
CITY OF IRVINE)

I, MOLLY MCLAUGHLIN, City Clerk of the City of Irvine, HEREBY DO CERTIFY that the foregoing Resolution was adopted at a regular meeting of the City Council of the City of Irvine, held on the 9th day of May 2017.

AYES: COUNCILMEMBERS:

NOES: COUNCILMEMBERS:

ABSENT: COUNCILMEMBERS:

_____
CITY CLERK OF THE CITY OF IRVINE

ATTACHMENT H: CITY STAFF ORGANIZATION CHART

ORGANIZATIONAL CHART – STORM DRAIN CREW

Street Maintenance

Joe Dillman, Superintendent

Sweeping & Drainage

Alex De Haro, Street Maintenance Supervisor
Andy Gracia, Street Maintenance Technician
Juan Rodriguez, Equipment Operator II
Ruben Escamilla, Lead Street Maintenance Technician
Aaron Gennaro, Street Maintenance Specialist

Contract Services for O&M Services

3.5

REQUEST FOR CITY COUNCIL ACTION

MEETING DATE: MAY 9, 2017

TITLE: ANNUAL MEASURE M2 ELIGIBILITY SUBMITTAL

Director of Public Works

City Manager

RECOMMENDED ACTIONS

1. Approve and authorize staff to submit to the Orange County Transportation Authority the Measure M2 Seven-Year Capital Improvement Program for Fiscal Years 2017-18 through 2023-24 to comply with Measure M2 eligibility criteria.

2. Adopt – A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, CERTIFYING COMPLIANCE WITH THE COUNTYWIDE MEASURE M2 PROGRAM

EXECUTIVE SUMMARY

Annual submittal of Measure M2 eligibility documentation to the Orange County Transportation Authority (OCTA) is required to remain eligible to receive Measure M2 sales tax revenue funds. The submittal documentation this year requires City Council approval of an updated Measure M2 Seven-Year Capital Improvement Program and adoption of a resolution (Attachment 1) attesting to the consistency of the City's General Plan Circulation Element with the County Master Plan of Arterial Highways, confirming the City's existing transportation mitigation fee programs, and submitting to OCTA the City's updated local signal synchronization plan and citywide pavement management program. Approval of the recommended actions satisfies these requirements.

COMMISSION/BOARD/COMMITTEE RECOMMENDATION

Staff will present next year's Measure M2 eligibility submittal documents to the new Transportation Commission for appropriate recommendation to the City Council effective with the 2018 submittal.

ANALYSIS

To maintain its eligibility to receive Measure M2 sales tax revenue, the City is required to submit annual documentation on its transportation related programs to OCTA. Every seven years, OCTA requires an expanded submittal of the City's programs and projects effecting circulation and transportation to verify that these elements are in alignment with Measure M2 and countywide plans. This year's submittal requires the following documentation:

M2 Seven-Year Capital Improvement Program (CIP)

The City's Measure M2 Seven-Year CIP (Attachment 2) for Fiscal Years 2017-18 through 2023-24 is a transportation planning and fiscal forecasting document used to guide future programming for transportation capital improvement projects. The M2 Seven-Year CIP is consistent with the proposed citywide Capital Improvement Program Budget and Strategic Business Plan for Fiscal Year 2017-18. The submittal of the M2 Seven-Year CIP does not commit the City to funding the identified improvements. However, projects must be included in the M2 Seven-Year CIP to be eligible to receive Measure M2 funding. This document is updated every year to allow for changes based on City Council priorities. The City's M2 Seven-Year CIP includes 31 projects with a total preliminary projected budget requirement of more than $208 million over the seven-year period. The CIP emphasizes projects that improve circulation, mitigate traffic congestion and maintain the City's investment in existing transportation infrastructure.

Orange County Master Plan of Arterial Highway (MPAH) Consistency

The MPAH was established to provide planning, development, and preservation of a coordinated regional arterial highway network to supplement the countywide freeway system. To remain eligible for Measure M2 funds, the City's General Plan Circulation Element must be consistent with the MPAH by maintaining an equivalent number of minimum through lanes on each arterial highway shown on the MPAH map (Attachment 3). The City's Circulation Element is in full compliance with this requirement. Biennially, the City must submit a City Council-adopted resolution to OCTA attesting that no unilateral reduction in lanes has been made on any arterials identified in the MPAH.

Local Signal Synchronization Plan (LSSP)

The City's LSSP (Attachment 4) is a three-year plan identifying traffic signal synchronization, street routes and traffic signals to be improved, including all elements of the Regional Signal Synchronization Network located within the City. It includes goals that are consistent with those outlined as part of OCTA's Regional Traffic Signal Synchronization Master Plan, including signal synchronization across jurisdictions. An updated plan is required for submittal to OCTA as part of the City's eligibility documentation. The City's LSSP was updated in April 2017 and includes a three-year outlook for Fiscal Year 2017-18 through 2019-20.

Mitigation Fee Program Concurrence Documentation

Biennially the City must submit a City Council-adopted resolution to OCTA certifying that the City has an existing mitigation fee program that assesses traffic impacts of new development and requires new development to pay a fair share of necessary transportation improvements attributable to the new development. The resolution reaffirms the City's existing Irvine Business Complex and North Irvine Transportation Mitigation developer fee programs.

Pavement Management Program (PMP)

The City's PMP (Attachment 5) outlines the processes in place for the planning, preventative maintenance and repair of the City's roadways. The PMP analyzes pavement life cycles, assesses overall system performance costs, and assists the City in determining pavement maintenance strategies and cost estimates necessary to maintain the City's roadway network. An updated PMP report is required to be submitted to OCTA on a biennial basis. The City's PMP was updated in April 2017.

ALTERNATIVES CONSIDERED

The City Council may direct staff to modify any of the provisions included in the proposed Measure M2 eligibility documents as deemed appropriate by the City Council. This alternative is not recommended because the City's submittal, as presented, is consistent with the Measure M2 policies and guidelines, and ensures that the City will remain eligible to continue receiving funding from the Measure M2 funding programs.

FINANCIAL IMPACT

The proposed Fiscal Year 2017-18 budget anticipates receiving revenues of approximately $4.6 million from the Measure M2 local fair share program for circulation projects. The recommended actions will also position the City to receive additional funds through the Measure M2 competitive programs, subject to the City maintaining its eligibility.

REPORT PREPARED BY: Darrell Cheam, Associate Transportation Analyst

ATTACHMENTS

1. City Council Resolution
2. M2 Seven-Year Capital Improvement Program
3. Orange County Master Plan for Arterial Highways Map
4. Irvine Local Signal Synchronization Plan
5. Pavement Management Program

CITY COUNCIL RESOLUTION NO. 17-

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, CERTIFYING COMPLIANCE WITH THE COUNTYWIDE MEASURE M2 PROGRAM

WHEREAS, the City of Irvine desires to maintain and improve the streets within its jurisdiction, including those arterials contained in the Master Plan of Arterial Highways (MPAH) and

WHEREAS, the City had endorsed a definition of and process for, determining consistency of the City's Circulation Element with the MPAH, and

WHEREAS, the City has adopted a General Plan Circulation Element which does not preclude implementation of the MPAH within its jurisdiction, and

WHEREAS, the City is required to adopt a resolution biennially informing the Orange County Transportation Authority (OCTA) that the City's Circulation Element is in conformance with the MPAH and whether any changes to any arterial highways of said Circulation Element have been adopted by the City during Fiscal Years (FY) 2015-16 and FY 2016-17, and

WHEREAS, the City is required to send biennially to the OCTA all recommended changes to the City's Circulation Element and the MPAH for the purposes of re-qualifying for participation in the Comprehensive Transportation Funding Programs; and

WHEREAS, the Orange County Transportation Authority has developed the Regional Traffic Signal Synchronization Master Plan to identify traffic signal synchronization street routes and traffic signals within and across jurisdictional boundaries, and defines the means of implementing the Regional Traffic Signal Synchronization Program; and

WHEREAS, the Regional Traffic Signal Synchronization Program requires that local agency's adopt a Local Signal Synchronization Plan consistent with the Regional Traffic Signal Synchronization Master Plan as a key component of local agencies' efforts to synchronizing traffic signals across local agencies' boundaries; and

WHEREAS, the Local Signal Synchronization Plan must be updated by June 30, 2017 to continue to be eligible to receive Net Revenues as part of Measure M2; and

WHEREAS, the City is required to adopt a resolution biennially certifying that the City has an existing Mitigation Fee Program that assesses traffic impacts of new development and requires new development to pay a fair share of necessary transportation improvements attributable to the new development; and

WHEREAS, the City is required to adopt and update a Pavement Management Plan regarding the status of road pavement conditions and implementation of the Pavement Management Plan on a biennial basis.

NOW, THEREFORE, BE IT RESOLVED that the City Council for the City of Irvine, does hereby inform OCTA that:

a) The arterial highway portion of the City Circulation Element is in conformance with the MPAH.

b) The City attests that no unilateral reduction in through lanes has been made on any MPAH arterials during FY 2015-16 and FY 2016-17.

c) The City Council hereby adopts the June 2017 Local Signal Synchronization Plan that includes goals consistent with those outlined as part of the Regional Traffic Signal Synchronization Master Plan, including signal synchronization across jurisdictions.

d) The Local Signal Synchronization Plan identifies traffic signal synchronization street routes, including all elements of the Regional Signal Synchronization Network located within the City; a traffic signal inventory for traffic signal synchronization street routes; a three-year plan showing capital, operations, and maintenance of signal synchronization along the traffic signal synchronization street routes and traffic signals; an update on the status and performance of traffic signal synchronization activities; and a discussion on the review and revision, as may be necessary, on the timing of traffic signals on the traffic signal synchronization street routes.

e) The City reaffirms its existing Mitigation Fee Programs.

f) The City Council hereby adopts the April 2017 Pavement Management Plan and has provided an updated Pavement Management Plan report to Orange County Transportation Authority.

PASSED AND ADOPTED by the City Council of the City of Irvine at a regular meeting held on the 9th day of May 2017.

_____
MAYOR OF THE CITY OF IRVINE

ATTEST:

_____
CITY CLERK OF THE CITY OF IRVINE

STATE OF CALIFORNIA)
COUNTY OF ORANGE) SS
CITY OF IRVINE)

I, MOLLY MCLAUGHLIN, City Clerk of the City of Irvine, HEREBY DO CERTIFY that the foregoing resolution was duly adopted at a regular meeting of the City Council of the City of Irvine, held on the 9th of May 2017.

AYES: COUNCILMEMBERS:

NOES: COUNCILMEMBERS:

ABSTAIN: COUNCILMEMBERS:

ABSENT: COUNCILMEMBERS:

_____
CITY CLERK OF THE CITY OF IRVINE

Measure M

Seven Year Capital Improvement Program (Sorted by Project Name)
Fiscal Years 2017/2018 through 2023/2024

Agency: Irvine
Project Name: Alton Pkwy / Irvine Blvd Intersection Improvements
Project Limits: Intersection of Alton Parkway and Irvine Boulevard
Project Number:
Type of Work (TOW): Intersection
TOW Description: Add left turn lane(s) to intersection
Project Description: Intersection improvements in accordance with NITM studies including re-striping to provide 2.5 left-turn lanes and 1 right-turn lane.

FUND NAME	PERCENT	ESTIMATED COST	PROJECTED COST	NOTES
Other	100.00	$52,000	$52,000	NITM Fees
		$52,000	**$52,000**	

Project Phase	17/18	18/19	19/20	20/21	21/22	22/23	23/24	Estimated Cost	Projected Cost
E	$0	$0	$0	$0	$52,000	$0	$0	$52,000	$52,000
R	$0	$0	$0	$0	$0	$0	$0	$0	$0
C/I	$0	$0	$0	$0	$0	$0	$0	$0	$0
O&M	$0	$0	$0	$0	$0	$0	$0	$0	$0
	$0	**$0**	**$0**	**$0**	**$52,000**	**$0**	**$0**	**$52,000**	**$ 52,000**

Agency: Irvine
Project Name: Arterial and Local Street Rehabilitation Projects
Project Limits: Various locations
Project Number: N/A
Type of Work (TOW): Road Maintenance
TOW Description: Rehabilitation of roadway
Project Description: Maintain the street maintenance standard for various arterial and local streets using slurry seal, maintenance, and rehabilitation methods. Includes preparation of material reports and visual assessment of roadways.

FUND NAME	PERCENT	ESTIMATED COST	PROJECTED COST	NOTES
Gas Tax	2.52	$2,180,000	$2,299,991	
M2 Fairshare	5.06	$4,380,000	$4,621,083	
Other	0.49	$425,000	$448,393	Slurry Seal, Rehab Reserve
Unfunded	91.93	$79,565,000	$83,944,399	Gas Tax, M2 Fairshare, Rehab Reserve, Slurry Seal
		$86,550,000	**$91,313,865**	

Project Phase	17/18	18/19	19/20	20/21	21/22	22/23	23/24	Estimated Cost	Projected Cost
E	$250,000	$600,000	$600,000	$600,000	$600,000	$600,000	$600,000	$3,850,000	$3,850,000
R	$0	$0	$0	$0	$0	$0	$0	$0	$0
C/I	$8,285,000	$15,630,000	$21,735,000	$17,550,000	$6,000,000	$6,500,000	$7,000,000	$82,700,000	$87,463,865
O&M	$0	$0	$0	$0	$0	$0	$0	$0	$0
	$8,535,000	**$16,230,000**	**$22,335,000**	**$18,150,000**	**$6,600,000**	**$7,100,000**	**$7,600,000**	**$86,550,000**	**$ 91,313,865**

Measure M

Seven Year Capital Improvement Program (Sorted by Project Name)
Fiscal Years 2017/2018 through 2023/2024

Agency: Irvine
Project Name: Bake Pkwy/Jeronimo Rd Intersection Improvement
Project Limits: Intersection of Bake Parkway and Jeronimo Road
Project Number: N/A
Type of Work (TOW): Intersection
TOW Description: Add through and left turn lanes to intersection
Project Description: Intersection improvements in accordance with NITM and LFTM studies including installation of a dual left-turn lane.

FUND NAME	PERCENT	ESTIMATED COST	PROJECTED COST	NOTES
Developer	100.00	$5,714,002	$5,830,357	NITM Fees
		$5,714,002	**$5,830,357**	

Project Phase	17/18	18/19	19/20	20/21	21/22	22/23	23/24	Estimated Cost	Projected Cost
E	$425,130	$0	$0	$0	$0	$0	$0	$425,130	$425,130
R	$0	$1,257,756	$0	$0	$0	$0	$0	$1,257,756	$1,285,427
C/I	$0	$4,031,116	$0	$0	$0	$0	$0	$4,031,116	$4,119,801
O&M	$0	$0	$0	$0	$0	$0	$0	$0	$0
	$425,130	**$5,288,872**	**$0**	**$0**	**$0**	**$0**	**$0**	**$5,714,002**	**$ 5,830,357**

Agency: Irvine
Project Name: Bikeway Facilities & Amenities
Project Limits: Citywide
Project Number: N/A
Type of Work (TOW): Bikeways
TOW Description: Other
Project Description: Study, design, and construction of bikeway facilities and bikeway amenities. Also includes safety education and outreach program.

FUND NAME	PERCENT	ESTIMATED COST	PROJECTED COST	NOTES
Other	33.77	$520,000	$520,000	Rehab Reserve
Unfunded	66.23	$1,020,000	$1,020,000	AQMD, Grants, M2 Fairshare, Rehab Reserve, SDC-Circ, SDC-Non-Circ
		$1,540,000	**$1,540,000**	

Project Phase	17/18	18/19	19/20	20/21	21/22	22/23	23/24	Estimated Cost	Projected Cost
E	$16,000	$200,000	$600,000	$0	$200,000	$0	$20,000	$1,036,000	$1,036,000
R	$0	$0	$0	$0	$0	$0	$0	$0	$0
C/I	$504,000	$0	$0	$0	$0	$0	$0	$504,000	$504,000
O&M	$0	$0	$0	$0	$0	$0	$0	$0	$0
	$520,000	**$200,000**	**$600,000**	**$0**	**$200,000**	**$0**	**$20,000**	**$1,540,000**	**$ 1,540,000**

Measure M

Seven Year Capital Improvement Program (Sorted by Project Name)
Fiscal Years 2017/2018 through 2023/2024

Agency: Irvine
Project Name: Bridge Inspection, Maintenance & Repair
Project Limits: Citywide
Project Number: N/A
Type of Work (TOW): Road Maintenance
TOW Description: Bridge
Project Description: Bridge inspection, maintenance and repair/rehabilitation citywide.

FUND NAME	PERCENT	ESTIMATED COST	PROJECTED COST	NOTES
Unfunded	100.00	$1,450,000	$1,545,864	Gas Tax, M2 Fairshare, Rehab Reserve
		$1,450,000	**$1,545,864**	

Project Phase	17/18	18/19	19/20	20/21	21/22	22/23	23/24	Estimated Cost	Projected Cost
E	$0	$90,000	$0	$80,000	$0	$80,000	$0	$250,000	$250,000
R	$0	$0	$0	$0	$0	$0	$0	$0	$0
C/I	$0	$200,000	$200,000	$200,000	$200,000	$200,000	$200,000	$1,200,000	$1,295,864
O&M	$0	$0	$0	$0	$0	$0	$0	$0	$0
	$0	**$290,000**	**$200,000**	**$280,000**	**$200,000**	**$280,000**	**$200,000**	**$1,450,000**	**$ 1,545,864**

Agency: Irvine
Project Name: Catch Basin Filter Installation #1
Project Limits: Irvine Business Complex and Woodbury/Stonegate Community
Project Number: 15-IRVN-ECP-3763
Type of Work (TOW): Environmental Cleanup
TOW Description: Other
Project Description: Installation of catch basin filters for existing storm drain system.

FUND NAME	PERCENT	ESTIMATED COST	PROJECTED COST	NOTES
Other	100.00	$46,669	$46,669	Gas Tax, City Local Funds (10-year pledge for O&M totaling $66,667)
		$46,669	**$46,669**	

Project Phase	17/18	18/19	19/20	20/21	21/22	22/23	23/24	Estimated Cost	Projected Cost
E	$0	$0	$0	$0	$0	$0	$0	$0	$0
R	$0	$0	$0	$0	$0	$0	$0	$0	$0
C/I	$0	$0	$0	$0	$0	$0	$0	$0	$0
O&M	$6,667	$6,667	$6,667	$6,667	$6,667	$6,667	$6,667	$46,669	$46,669
	$6,667	**$6,667**	**$6,667**	**$6,667**	**$6,667**	**$6,667**	**$6,667**	**$46,669**	**$ 46,669**

Measure M

Seven Year Capital Improvement Program (Sorted by Project Name)
Fiscal Years 2017/2018 through 2023/2024

Agency: Irvine
Project Name: Circulation Phasing Report
Project Limits: Citywide
Project Number: N/A
Type of Work (TOW): Administration
TOW Description: Transportation planning/engineering studies
Project Description: Collection of traffic counts and preparation of the Circulation Phasing Analysis Report.

FUND NAME	PERCENT	ESTIMATED COST	PROJECTED COST	NOTES
M2 Fairshare	0.00	$0	$0	
Other	12.24	$180,000	$180,000	SDC-Circ
Unfunded	87.76	$1,290,000	$1,290,000	Gas Tax, M2 Fairshare, SDC-Circ
		$1,470,000	**$1,470,000**	

Project Phase	17/18	18/19	19/20	20/21	21/22	22/23	23/24	Estimated Cost	Projected Cost
E	$180,000	$250,000	$180,000	$250,000	$180,000	$250,000	$180,000	$1,470,000	$1,470,000
R	$0	$0	$0	$0	$0	$0	$0	$0	$0
C/I	$0	$0	$0	$0	$0	$0	$0	$0	$0
O&M	$0	$0	$0	$0	$0	$0	$0	$0	$0
	$180,000	**$250,000**	**$180,000**	**$250,000**	**$180,000**	**$250,000**	**$180,000**	**$1,470,000**	**$ 1,470,000**

Agency: Irvine
Project Name: Circulation Program / Project Development
Project Limits: N/A
Project Number: N/A
Type of Work (TOW): Administration
TOW Description: Transportation planning/engineering studies
Project Description: Environmental studies, feasibility studies, and preliminary engineering phases of project work for circulation related CIP and transportation projects.

FUND NAME	PERCENT	ESTIMATED COST	PROJECTED COST	NOTES
M2 Fairshare	0.00	$0	$0	
Unfunded	100.00	$1,500,000	$1,500,000	Gas Tax, M2 Fairshare, SDC-Circ
		$1,500,000	**$1,500,000**	

Project Phase	17/18	18/19	19/20	20/21	21/22	22/23	23/24	Estimated Cost	Projected Cost
E	$0	$250,000	$250,000	$250,000	$250,000	$250,000	$250,000	$1,500,000	$1,500,000
R	$0	$0	$0	$0	$0	$0	$0	$0	$0
C/I	$0	$0	$0	$0	$0	$0	$0	$0	$0
O&M	$0	$0	$0	$0	$0	$0	$0	$0	$0
	$0	**$250,000**	**$250,000**	**$250,000**	**$250,000**	**$250,000**	**$250,000**	**$1,500,000**	**$ 1,500,000**

Measure M

Seven Year Capital Improvement Program (Sorted by Project Name)
Fiscal Years 2017/2018 through 2023/2024

Agency: Irvine
Project Name: Hardscape Rehabilitation Projects
Project Limits: Citywide (ADA, Curbs, Bike Trail Rehab)
Project Number: N/A
Type of Work (TOW): Pedestrian
TOW Description: Reconstruction or rehabilitation of sidewalk
Project Description: Rehabilitation and upgrades to hardscape including access ramps, curbs, gutters, sidewalks and bicycle trails.

FUND NAME	PERCENT	ESTIMATED COST	PROJECTED COST	NOTES
Gas Tax	12.42	$1,361,000	$1,453,101	
Unfunded	87.58	$9,600,000	$10,249,649	Gas Tax, M2 Fairshare, Rehab Reserve
		$10,961,000	**$11,702,751**	

Project Phase	17/18	18/19	19/20	20/21	21/22	22/23	23/24	Estimated Cost	Projected Cost
E	$0	$0	$0	$0	$0	$0	$0	$0	$0
R	$0	$0	$0	$0	$0	$0	$0	$0	$0
C/I	$1,361,000	$1,950,000	$1,325,000	$1,850,000	$1,350,000	$1,775,000	$1,350,000	$10,961,000	$11,702,751
O&M	$0	$0	$0	$0	$0	$0	$0	$0	$0
	$1,361,000	**$1,950,000**	**$1,325,000**	**$1,850,000**	**$1,350,000**	**$1,775,000**	**$1,350,000**	**$10,961,000**	**$ 11,702,751**

Agency: Irvine
Project Name: IBC Sidewalk Improvements
Project Limits: IBC area
Project Number:
Type of Work (TOW): Pedestrian
TOW Description: New sidewalk
Project Description: New sidewalk construction within Irvine Business Complex (IBC)

FUND NAME	PERCENT	ESTIMATED COST	PROJECTED COST	NOTES
Other	100.00	$4,600,000	$4,895,621	IBC Fees
		$4,600,000	**$4,895,621**	

Project Phase	17/18	18/19	19/20	20/21	21/22	22/23	23/24	Estimated Cost	Projected Cost
E	$120,000	$80,000	$80,000	$80,000	$80,000	$80,000	$80,000	$600,000	$600,000
R	$0	$0	$0	$0	$0	$0	$0	$0	$0
C/I	$0	$500,000	$1,500,000	$0	$500,000	$1,500,000	$0	$4,000,000	$4,295,621
O&M	$0	$0	$0	$0	$0	$0	$0	$0	$0
	$120,000	**$580,000**	**$1,580,000**	**$80,000**	**$580,000**	**$1,580,000**	**$80,000**	**$4,600,000**	**$ 4,895,621**

Measure M

Seven Year Capital Improvement Program (Sorted by Project Name)
Fiscal Years 2017/2018 through 2023/2024

Agency: Irvine
Project Name: Irvine Boulevard Signal Synchronization Project
Project Limits: Irvine Blvd between Jamboree Rd to Bake Pwky
Project Number: 17-IRVN-TSP-3875
Type of Work (TOW): Traffic Signals
TOW Description: Coordinate signals within project limits
Project Description: Regional project to synchronize traffic signals within project limits.

FUND NAME	PERCENT	ESTIMATED COST	PROJECTED COST	NOTES
Other	20.00	$94,542	$94,542	Contributions, SDC-Circ
M2 TSSP	80.00	$378,166	$378,166	
		$472,708	**$472,708**	

Project Phase	17/18	18/19	19/20	20/21	21/22	22/23	23/24	Estimated Cost	Projected Cost
E	$371,908	$0	$0	$0	$0	$0	$0	$371,908	$371,908
R	$0	$0	$0	$0	$0	$0	$0	$0	$0
C/I	$0	$0	$0	$0	$0	$0	$0	$0	$0
O&M	$0	$100,800	$0	$0	$0	$0	$0	$100,800	$100,800
	$371,908	**$100,800**	**$0**	**$0**	**$0**	**$0**	**$0**	**$472,708**	**$ 472,708**

Agency: Irvine
Project Name: Irvine Center Drive / Edinger Avenue Signal Synchronization Project
Project Limits: Irvine Center Drive / Edinger Avenue from Newport Ave to Lake Forest Dr
Project Number: 16-IRVN-TSP-3791
Type of Work (TOW): Traffic Signals
TOW Description: Coordinate signals within project limits
Project Description: Regional project to synchronize traffic signals within project limits.

FUND NAME	PERCENT	ESTIMATED COST	PROJECTED COST	NOTES
Other	20.00	$27,360	$27,360	Contributions, SDC-Circ
M2 TSSP	80.00	$109,440	$109,440	
		$136,800	**$136,800**	

Project Phase	17/18	18/19	19/20	20/21	21/22	22/23	23/24	Estimated Cost	Projected Cost
E	$0	$0	$0	$0	$0	$0	$0	$0	$0
R	$0	$0	$0	$0	$0	$0	$0	$0	$0
C/I	$0	$0	$0	$0	$0	$0	$0	$0	$0
O&M	$136,800	$0	$0	$0	$0	$0	$0	$136,800	$136,800
	$136,800	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$136,800**	**$ 136,800**

Measure M

Seven Year Capital Improvement Program (Sorted by Project Name)
Fiscal Years 2017/2018 through 2023/2024

Agency: Irvine
Project Name: iShuttle Route E (Irvine Station - East)
Project Limits: Areas east and south of Irvine Station.
Project Number: 16-OCTA-CBT-3834
Type of Work (TOW): Transit
TOW Description: New Service
Project Description: New shuttle service connecting Irvine Station to areas east and south of the Station.

FUND NAME	PERCENT	ESTIMATED COST	PROJECTED COST	NOTES
M2 Transit - V	84.98	$2,705,984	$2,710,970	
Other	15.02	$478,405	$479,286	Contributions
		$3,184,389	**$3,190,256**	

Project Phase	17/18	18/19	19/20	20/21	21/22	22/23	23/24	Estimated Cost	Projected Cost
E	$0	$0	$0	$0	$0	$0	$0	$0	$0
R	$0	$0	$0	$0	$0	$0	$0	$0	$0
C/I	$754,458	$35,727	$11,111	$11,111	$11,111	$11,111	$11,111	$845,740	$851,607
O&M	$0	$358,549	$370,500	$382,800	$395,600	$408,800	$422,400	$2,338,649	$2,338,649
	$754,458	**$394,276**	**$381,611**	**$393,911**	**$406,711**	**$419,911**	**$433,511**	**$3,184,389**	**$ 3,190,256**

Agency: Irvine
Project Name: iShuttle Route W (Tustin Station - IBC West)
Project Limits: Western part of the Irvine Business Complex.
Project Number: 16-OCTA-CBT-3833
Type of Work (TOW): Transit
TOW Description: New Service
Project Description: New shuttle service connecting Tustin Station to the western part of the Irvine Business Complex.

FUND NAME	PERCENT	ESTIMATED COST	PROJECTED COST	NOTES
M2 Transit - V	84.99	$2,712,258	$2,717,376	
Other	15.01	$479,181	$480,085	IBC - TMP Fees
		$3,191,439	**$3,197,461**	

Project Phase	17/18	18/19	19/20	20/21	21/22	22/23	23/24	Estimated Cost	Projected Cost
E	$0	$0	$0	$0	$0	$0	$0	$0	$0
R	$0	$0	$0	$0	$0	$0	$0	$0	$0
C/I	$754,458	$42,777	$11,111	$11,111	$11,111	$11,111	$11,111	$852,790	$858,812
O&M	$0	$358,549	$370,500	$382,800	$395,600	$408,800	$422,400	$2,338,649	$2,338,649
	$754,458	**$401,326**	**$381,611**	**$393,911**	**$406,711**	**$419,911**	**$433,511**	**$3,191,439**	**$ 3,197,461**

Measure M

Seven Year Capital Improvement Program (Sorted by Project Name)
Fiscal Years 2017/2018 through 2023/2024

Agency: Irvine
Project Name: Jamboree Rd/Barranca Pkwy Intersection Improvement
Project Limits: Intersection of Jamboree Road and Barranca Parkway.
Project Number: 14-IRVN-ICE-3716

Type of Work (TOW): Intersection

TOW Description: Add through lane(s) to intersection

Project Description: Add a 5th northbound through lane on Jamboree and a 3rd eastbound through lane on Barranca.

FUND NAME	PERCENT	ESTIMATED COST	PROJECTED COST	NOTES
Developer	87.86	$2,761,454	$2,761,454	IBC Fees
M2 ICE	12.14	$381,566	$381,566	14-IRVN-ICE-3716
		$3,143,020	**$3,143,020**	

Project Phase	17/18	18/19	19/20	20/21	21/22	22/23	23/24	Estimated Cost	Projected Cost
E	$0	$0	$0	$0	$0	$0	$0	$0	$0
R	$0	$0	$0	$0	$0	$0	$0	$0	$0
C/I	$3,143,020	$0	$0	$0	$0	$0	$0	$3,143,020	$3,143,020
O&M	$0	$0	$0	$0	$0	$0	$0	$0	$0
	$3,143,020	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$3,143,020**	**$ 3,143,020**

Agency: Irvine
Project Name: Jamboree Rd/Main St Intersection Improvement
Project Limits: Intersection of Jamboree Road and Main Street
Project Number: CIP 311205

Type of Work (TOW): Intersection

TOW Description: Add through lane(s) to intersection

Project Description: Intersection improvements including additional 5th NB & SB through lanes.

FUND NAME	PERCENT	ESTIMATED COST	PROJECTED COST	NOTES
Developer	43.99	$2,296,352	$2,296,352	IBC Fees
Unfunded	56.01	$2,923,648	$2,923,648	
		$5,220,000	**$5,220,000**	

Project Phase	17/18	18/19	19/20	20/21	21/22	22/23	23/24	Estimated Cost	Projected Cost
E	$0	$0	$0	$0	$0	$0	$0	$0	$0
R	$0	$0	$0	$0	$0	$0	$0	$0	$0
C/I	$5,220,000	$0	$0	$0	$0	$0	$0	$5,220,000	$5,220,000
O&M	$0	$0	$0	$0	$0	$0	$0	$0	$0
	$5,220,000	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$5,220,000**	**$ 5,220,000**

Measure M

Seven Year Capital Improvement Program (Sorted by Project Name)
Fiscal Years 2017/2018 through 2023/2024

Agency: Irvine
Project Name: Jamboree Road Widening
Project Limits: Jamboree Road, 600 feet north of Main St to Barranca Pkwy
Project Number: 16-IRVN-ACE-3807
Type of Work (TOW): Road Widening
TOW Description: Add 2 lanes to existing roadway in project limits
Project Description: Widen Jamboree Road to provide a 5th northbound and 5th southbound through lane

FUND NAME	PERCENT	ESTIMATED COST	PROJECTED COST	NOTES
Unfunded	100.00	$18,220,000	$18,880,081	SDC, Gas Tax
		$18,220,000	**$18,880,081**	

Project Phase	17/18	18/19	19/20	20/21	21/22	22/23	23/24	Estimated Cost	Projected Cost
E	$0	$0	$0	$0	$0	$0	$0	$0	$0
R	$0	$6,690,000	$0	$0	$0	$0	$0	$6,690,000	$6,837,180
C/I	$0	$0	$11,530,000	$0	$0	$0	$0	$11,530,000	$12,042,901
O&M	$0	$0	$0	$0	$0	$0	$0	$0	$0
	$0	**$6,690,000**	**$11,530,000**	**$0**	**$0**	**$0**	**$0**	**$18,220,000**	**$ 18,880,081**

Agency: Irvine
Project Name: Jeffrey Rd/Alton Pkwy Intersection Improvement
Project Limits: Intersection of Jeffrey Road and Alton Parkway
Project Number: CIP 311406
Type of Work (TOW): Intersection
TOW Description: Add through and right turn lanes to intersection
Project Description: Intersection improvements in accordance with NITM studies including additional 4th SB through lane and de-facto right-turn lane.

FUND NAME	PERCENT	ESTIMATED COST	PROJECTED COST	NOTES
Developer	100.00	$2,200,000	$2,200,000	NITM Fees
Unfunded	0.00	$0	$0	
		$2,200,000	**$2,200,000**	

Project Phase	17/18	18/19	19/20	20/21	21/22	22/23	23/24	Estimated Cost	Projected Cost
E	$0	$0	$0	$0	$0	$0	$0	$0	$0
R	$0	$0	$0	$0	$0	$0	$0	$0	$0
C/I	$2,200,000	$0	$0	$0	$0	$0	$0	$2,200,000	$2,200,000
O&M	$0	$0	$0	$0	$0	$0	$0	$0	$0
	$2,200,000	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$2,200,000**	**$ 2,200,000**

Measure M

Seven Year Capital Improvement Program (Sorted by Project Name)
Fiscal Years 2017/2018 through 2023/2024

Agency: Irvine
Project Name: Jeffrey Rd/ICD Intersection Improvement
Project Limits: Intersection of Jeffrey Road and Irvine Center Drive
Project Number: CIP 311611
Type of Work (TOW): Intersection
TOW Description: Add through and left turn lanes to intersection
Project Description: Intersection improvements in accordance with NITM studies including additional 4th WB & NB through lane, additional 3rd SB left-turn lane and covert SB right-turn lane to 4th SB through lane.

FUND NAME	PERCENT	ESTIMATED COST	PROJECTED COST	NOTES
Developer	100.00	$14,262,000	$14,718,119	NITM Fees
Other	0.00	$0	$0	
Unfunded	0.00	$0	$0	
		$14,262,000	**$14,718,119**	

Project Phase	17/18	18/19	19/20	20/21	21/22	22/23	23/24	Estimated Cost	Projected Cost
E	$0	$203,000	$0	$0	$0	$0	$0	$203,000	$203,000
R	$0	$7,529,000	$0	$0	$0	$0	$0	$7,529,000	$7,694,638
C/I	$0	$0	$6,530,000	$0	$0	$0	$0	$6,530,000	$6,820,481
O&M	$0	$0	$0	$0	$0	$0	$0	$0	$0
	$0	**$7,732,000**	**$6,530,000**	**$0**	**$0**	**$0**	**$0**	**$14,262,000**	**$ 14,718,119**

Agency: Irvine
Project Name: JOST I-5 Bicycle-Pedestrian Bridge
Project Limits: Existing JOST Trail at Cypress Community Park and spans over the I-5
Project Number: CIP 341502
Type of Work (TOW): Bikeways
TOW Description: New bike route
Project Description: Class I Off-Street Bicycle and Pedestrian Bridge (overcrossing) for multi-use / public use.

FUND NAME	PERCENT	ESTIMATED COST	PROJECTED COST	NOTES
Other	6.03	$711,570	$725,633	SDC-Non-Circ
Unfunded	89.83	$10,600,000	$10,809,485	
BCIP	4.14	$488,435	$498,088	
		$11,800,005	**$12,033,205**	

Project Phase	17/18	18/19	19/20	20/21	21/22	22/23	23/24	Estimated Cost	Projected Cost
E	$1,086,115	$0	$0	$0	$0	$0	$0	$1,086,115	$1,086,115
R	$113,890	$0	$0	$0	$0	$0	$0	$113,890	$113,890
C/I	$0	$10,600,000	$0	$0	$0	$0	$0	$10,600,000	$10,833,200
O&M	$0	$0	$0	$0	$0	$0	$0	$0	$0
	$1,200,005	**$10,600,000**	**$0**	**$0**	**$0**	**$0**	**$0**	**$11,800,005**	**$ 12,033,205**

Measure M

Seven Year Capital Improvement Program (Sorted by Project Name)
Fiscal Years 2017/2018 through 2023/2024

Agency: Irvine
Project Name: JOST Trail
Project Limits: Between Walnut Avenue and Barranca Parkway
Project Number:
Type of Work (TOW): Bikeways
TOW Description: New bike route
Project Description: Class I Off-Street bikeway for multi-use / public use.

FUND NAME	PERCENT	ESTIMATED COST	PROJECTED COST	NOTES
Other	100.00	$4,800,000	$4,894,600	SDC-Non-Circ
		$4,800,000	**$4,894,600**	

Project Phase	17/18	18/19	19/20	20/21	21/22	22/23	23/24	Estimated Cost	Projected Cost
E	$378,000	$0	$0	$0	$0	$0	$0	$378,000	$378,000
R	$122,000	$0	$0	$0	$0	$0	$0	$122,000	$122,000
C/I	$0	$4,300,000	$0	$0	$0	$0	$0	$4,300,000	$4,394,600
O&M	$0	$0	$0	$0	$0	$0	$0	$0	$0
	$500,000	**$4,300,000**	**$0**	**$0**	**$0**	**$0**	**$0**	**$4,800,000**	**$ 4,894,600**

Agency: Irvine
Project Name: Laguna Canyon Rd/Lake Forest Dr Intersection Improvement
Project Limits: Intersection of Laguna Canyon Road and Lake Forest Drive
Project Number: N/A
Type of Work (TOW): Intersection
TOW Description: Add left turn lane(s) to intersection
Project Description: Intersection improvements in accordance with NITM studies including re-striping to include a 3rd left-turn lane.

FUND NAME	PERCENT	ESTIMATED COST	PROJECTED COST	NOTES
Developer	100.00	$40,000	$40,880	NITM Fees
		$40,000	**$40,880**	

Project Phase	17/18	18/19	19/20	20/21	21/22	22/23	23/24	Estimated Cost	Projected Cost
E	$0	$0	$0	$0	$0	$0	$0	$0	$0
R	$0	$0	$0	$0	$0	$0	$0	$0	$0
C/I	$0	$40,000	$0	$0	$0	$0	$0	$40,000	$40,880
O&M	$0	$0	$0	$0	$0	$0	$0	$0	$0
	$0	**$40,000**	**$0**	**$0**	**$0**	**$0**	**$0**	**$40,000**	**$ 40,880**

Measure M

Seven Year Capital Improvement Program (Sorted by Project Name)
Fiscal Years 2017/2018 through 2023/2024

Agency: Irvine
Project Name: New Traffic Signals
Project Limits: Citywide
Project Number: N/A
Type of Work (TOW): Traffic Signals
TOW Description: Install new traffic signal and equipment
Project Description: Installation of new traffic signals and equipment at various locations throughout the City.

FUND NAME	PERCENT	ESTIMATED COST	PROJECTED COST	NOTES
Other	10.19	$675,000	$700,938	SDC-Circ
Unfunded	89.81	$5,950,000	$6,178,642	Gas Tax, Grants, HSIP, M2 Fairshare, Reha Reserve, SDC-Circ
		$6,625,000	**$6,879,580**	

Project Phase	17/18	18/19	19/20	20/21	21/22	22/23	23/24	Estimated Cost	Projected Cost
E	$393,000	$500,000	$0	$500,000	$0	$500,000	$0	$1,893,000	$1,893,000
R	$282,000	$0	$0	$0	$0	$0	$0	$282,000	$282,000
C/I	$0	$2,200,000	$750,000	$0	$750,000	$0	$750,000	$4,450,000	$4,704,580
O&M	$0	$0	$0	$0	$0	$0	$0	$0	$0
	$675,000	**$2,700,000**	**$750,000**	**$500,000**	**$750,000**	**$500,000**	**$750,000**	**$6,625,000**	**$ 6,879,580**

Agency: Irvine
Project Name: Protective/Permissive Left-Turn Phasing
Project Limits: Multiple locations
Project Number:
Type of Work (TOW): Traffic Signals
TOW Description: Install new traffic signal and equipment
Project Description: Design and construction for six intersection locations to included implementation of protective/permissive left-turn phasing.

FUND NAME	PERCENT	ESTIMATED COST	PROJECTED COST	NOTES
Other	100.00	$2,000,000	$2,000,000	SDC-Circ
		$2,000,000	**$2,000,000**	

Project Phase	17/18	18/19	19/20	20/21	21/22	22/23	23/24	Estimated Cost	Projected Cost
E	$0	$0	$0	$0	$0	$0	$0	$0	$0
R	$0	$0	$0	$0	$0	$0	$0	$0	$0
C/I	$2,000,000	$0	$0	$0	$0	$0	$0	$2,000,000	$2,000,000
O&M	$0	$0	$0	$0	$0	$0	$0	$0	$0
	$2,000,000	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$2,000,000**	**$ 2,000,000**

Measure M

Seven Year Capital Improvement Program (Sorted by Project Name)
Fiscal Years 2017/2018 through 2023/2024

Agency: Irvine
Project Name: Storm Drain Rehabilitation and Slope Restoration
Project Limits: Storm drains & slopes citywide
Project Number: N/A
Type of Work (TOW): Safety
TOW Description: Improve roadway drainage
Project Description: Rehabilitation, upgrades and retrofits of storm drain systems and slopes citywide including roadway pump station replacements.

FUND NAME	PERCENT	ESTIMATED COST	PROJECTED COST	NOTES
Gas Tax	0.00	$0	$0	
Other	0.00	$0	$0	
Unfunded	100.00	$600,000	$654,981	Gas Tax, M2 Fairshare, Grants, Rehab Reserve
		$600,000	**$654,981**	

Project Phase	17/18	18/19	19/20	20/21	21/22	22/23	23/24	Estimated Cost	Projected Cost
E	$0	$0	$0	$0	$0	$0	$0	$0	$0
R	$0	$0	$0	$0	$0	$0	$0	$0	$0
C/I	$0	$0	$200,000	$0	$200,000	$0	$200,000	$600,000	$654,981
O&M	$0	$0	$0	$0	$0	$0	$0	$0	$0
	$0	**$0**	**$200,000**	**$0**	**$200,000**	**$0**	**$200,000**	**$600,000**	**$ 654,981**

Agency: Irvine
Project Name: Streetscape Rehabilitation
Project Limits: Citywide
Project Number: N/A
Type of Work (TOW): Aesthetics
TOW Description: Landscaping of roadway
Project Description: Rehabilitation of streetscape landscaping and irrigation systems at various locations throughout the City.

FUND NAME	PERCENT	ESTIMATED COST	PROJECTED COST	NOTES
Gas Tax	0.00	$0	$0	
Unfunded	100.00	$5,785,000	$6,252,750	Gas Tax, M2 Fairshare, Grants, Rehab Reserve
		$5,785,000	**$6,252,750**	

Project Phase	17/18	18/19	19/20	20/21	21/22	22/23	23/24	Estimated Cost	Projected Cost
E	$0	$0	$0	$0	$0	$0	$0	$0	$0
R	$0	$0	$0	$0	$0	$0	$0	$0	$0
C/I	$0	$685,000	$1,500,000	$600,000	$1,200,000	$600,000	$1,200,000	$5,785,000	$6,252,750
O&M	$0	$0	$0	$0	$0	$0	$0	$0	$0
	$0	**$685,000**	**$1,500,000**	**$600,000**	**$1,200,000**	**$600,000**	**$1,200,000**	**$5,785,000**	**$ 6,252,750**

Measure M

Seven Year Capital Improvement Program (Sorted by Project Name)
Fiscal Years 2017/2018 through 2023/2024

Agency: Irvine
Project Name: Traffic Signal LED Rehabilitation & Upgrades
Project Limits: Citywide
Project Number: N/A
Type of Work (TOW): Traffic Signals
TOW Description: Replace and upgrade traffic signals and equipment
Project Description: Replacement of LED for signal head indicators and pedestrian countdown timers and upgrades to LED for overhead street name signs and safety lights.

FUND NAME	PERCENT	ESTIMATED COST	PROJECTED COST	NOTES
Gas Tax	0.00	$0	$0	
M2 Fairshare	15.49	$220,000	$234,852	
Unfunded	84.51	$1,200,000	$1,281,011	Gas Tax, M2 Fairshare
		$1,420,000	**$1,515,864**	

Project Phase	17/18	18/19	19/20	20/21	21/22	22/23	23/24	Estimated Cost	Projected Cost
E	$0	$0	$0	$0	$0	$0	$0	$0	$0
R	$0	$0	$0	$0	$0	$0	$0	$0	$0
C/I	$220,000	$200,000	$200,000	$200,000	$200,000	$200,000	$200,000	$1,420,000	$1,515,864
O&M	$0	$0	$0	$0	$0	$0	$0	$0	$0
	$220,000	**$200,000**	**$200,000**	**$200,000**	**$200,000**	**$200,000**	**$200,000**	**$1,420,000**	**$ 1,515,864**

Agency: Irvine
Project Name: Traffic Signal Network Rehabilitation
Project Limits: Citywide
Project Number: N/A
Type of Work (TOW): Systems Management
TOW Description: Upgrade traffic management center to better manage traffic congestion
Project Description: Replacement and/or upgrade of the traffic signal network computer workstations and servers, software license servers, software license renewal, field fiber network switches and video wall equipment to maintain efficient traffic signal operations.

FUND NAME	PERCENT	ESTIMATED COST	PROJECTED COST	NOTES
Gas Tax	21.54	$575,000	$614,544	Fees & Exactions
Unfunded	78.46	$2,095,000	$2,239,079	Gas Tax, M2 Fairshare, Rehab Reserve
		$2,670,000	**$2,853,623**	

Project Phase	17/18	18/19	19/20	20/21	21/22	22/23	23/24	Estimated Cost	Projected Cost
E	$0	$0	$0	$0	$0	$0	$0	$0	$0
R	$0	$0	$0	$0	$0	$0	$0	$0	$0
C/I	$570,000	$125,000	$575,000	$125,000	$575,000	$125,000	$575,000	$2,670,000	$2,853,623
O&M	$0	$0	$0	$0	$0	$0	$0	$0	$0
	$570,000	**$125,000**	**$575,000**	**$125,000**	**$575,000**	**$125,000**	**$575,000**	**$2,670,000**	**$ 2,853,623**

Measure M

Seven Year Capital Improvement Program (Sorted by Project Name)
Fiscal Years 2017/2018 through 2023/2024

Agency: Irvine
Project Name: University Dr/Ridgeline Dr/Rosa Drew Ln
Project Limits: Intersection of Ridgeline Drive and University Drive
Project Number: 14-IRVN-ICE-3715, 16-IRVN-ICE-3808
Type of Work (TOW): Intersection
TOW Description: Add through lane(s) to intersection
Project Description: Intersection improvements including adding a 3rd eastbound through lane.

FUND NAME	PERCENT	ESTIMATED COST	PROJECTED COST	NOTES
Gas Tax	0.00	$0	$0	
M2 ICE	70.00	$1,724,025	$1,800,717	Programmed for FY 19/20
Other	30.00	$738,725	$771,586	SDC-Circ
		$2,462,750	**$2,572,303**	

Project Phase	17/18	18/19	19/20	20/21	21/22	22/23	23/24	Estimated Cost	Projected Cost
E	$0	$0	$0	$0	$0	$0	$0	$0	$0
R	$0	$0	$0	$0	$0	$0	$0	$0	$0
C/I	$0	$0	$2,462,750	$0	$0	$0	$0	$2,462,750	$2,572,303
O&M	$0	$0	$0	$0	$0	$0	$0	$0	$0
	$0	**$0**	**$2,462,750**	**$0**	**$0**	**$0**	**$0**	**$2,462,750**	**$ 2,572,303**

Agency: Irvine
Project Name: Venta Spur/SR-133 Bike Bridge
Project Limits: Venta Spur / SR-133
Project Number:
Type of Work (TOW): Bikeways
TOW Description: Planning
Project Description: Grade separated pedestrian/trail path to the Great Park over the SR-133.

FUND NAME	PERCENT	ESTIMATED COST	PROJECTED COST	NOTES
Other	100.00	$6,000,000	$6,348,313	SDC-Non-Cir
		$6,000,000	**$6,348,313**	

Project Phase	17/18	18/19	19/20	20/21	21/22	22/23	23/24	Estimated Cost	Projected Cost
E	$0	$500,000	$0	$0	$0	$0	$0	$500,000	$500,000
R	$0	$500,000	$0	$0	$0	$0	$0	$500,000	$511,000
C/I	$0	$0	$0	$5,000,000	$0	$0	$0	$5,000,000	$5,337,313
O&M	$0	$0	$0	$0	$0	$0	$0	$0	$0
	$0	**$1,000,000**	**$0**	**$5,000,000**	**$0**	**$0**	**$0**	**$6,000,000**	**$ 6,348,313**

Measure M

Seven Year Capital Improvement Program (Sorted by Project Name)
Fiscal Years 2017/2018 through 2023/2024

Agency: Irvine
Project Name: Von Karman Ave / Tustin Ranch Rd Signal Synchronization Project
Project Limits: Von Karman Avenue / Tustin Ranch Road from Campus Drive to Pioneer Way.
Project Number: 16-IRVN-TSP-3792

Type of Work (TOW): Traffic Signals

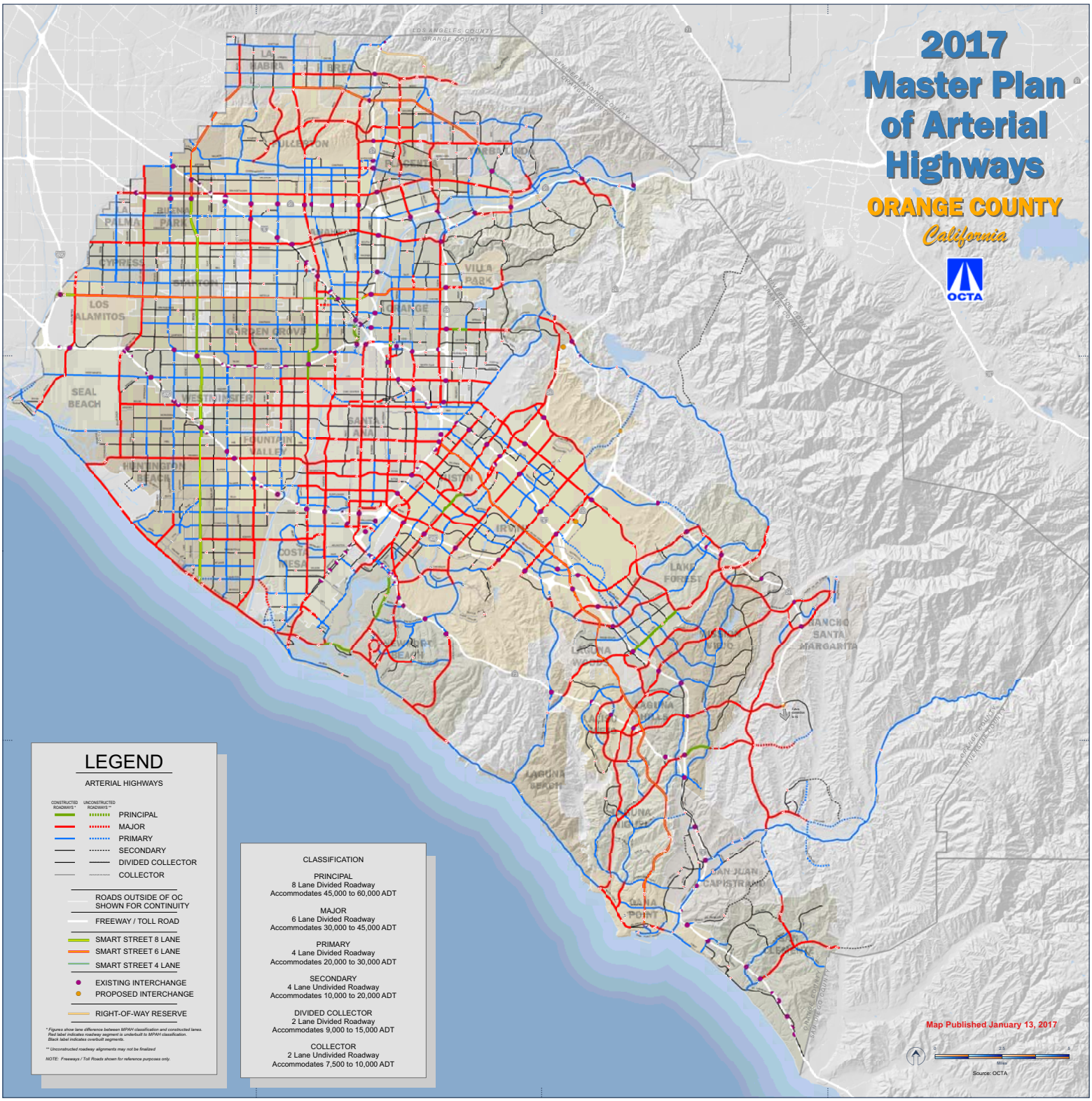
TOW Description: Coordinate signals within project limits

Project Description: Regional project to synchronize traffic signals within project limits.

FUND NAME	PERCENT	ESTIMATED COST	PROJECTED COST	NOTES
Other	20.00	$21,600	$21,600	Contributions, SDC-Circ
M2 TSSP	80.00	$86,400	$86,400	
		$108,000	**$108,000**	

Project Phase	17/18	18/19	19/20	20/21	21/22	22/23	23/24	Estimated Cost	Projected Cost
E	$0	$0	$0	$0	$0	$0	$0	$0	$0
R	$0	$0	$0	$0	$0	$0	$0	$0	$0
C/I	$0	$0	$0	$0	$0	$0	$0	$0	$0
O&M	$108,000	$0	$0	$0	$0	$0	$0	$108,000	$108,000
	$108,000	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$108,000**	**$ 108,000**

Orange County Master Plan for Arterial Highways Map



ATTACHMENT 3

Public Works

1 Civic Center Plaza
Irvine, CA 92606-5207

CITY OF IRVINE
LOCAL SIGNAL SYNCHRONIZATION PLAN

JUNE 2017

ATTACHMENT 4

SECTION ONE

TRAFFIC SIGNAL SYNCHRONIZATION GOALS, POLICIES AND OBJECTIVES

Background

The Regional Traffic Signal Synchronization Program (RTSSP) is a 750-mile area with a signal synchronization network of approximately 2,000 signals. The goals of the program are to improve traffic flow on Orange County streets by implementing multi-agency signal coordination. By focusing on corridor based improvements for synchronization, all agencies within the jurisdiction of the corridor are encouraged to collaborate in implementing coordination plans that would reduce travel time and stops. Many of the agencies would include local municipalities, the Orange County Transportation Authority (OCTA) and the California Department of Transportation (Caltrans).

For more than 20 years, Measure M has been a funding source to address traffic congestion challenges in Orange County. Project P, the Regional Traffic Signal Synchronization Program, is part of Measure M2, which consists of competitive funding for the coordination of traffic signals across jurisdictional boundaries. This requires local jurisdictions to develop and maintain a Local Signal Synchronization Plan that is consistent with the Regional Traffic Signal Synchronization Program.

Signal Synchronization

The City of Irvine has allocated significant financial commitment in supporting traffic signal synchronization. The traffic signal network consists of 353 signalized intersections that are fiber optically interconnected and controlled by the Irvine Traffic Research and Control (ITRAC) Center. Additionally, closed circuit television (CCTV) cameras are operational at 214 locations to assist the ITRAC Center in managing real-time traffic conditions. Due to on-going and planned large scale residential, commercial and industrial development projects, it is projected that the City traffic signal network will grow with new intersections being operational in the next few years. The ITRAC Center manages traffic congestion due to construction and incidents while performing studies, implementation and fine-tuning of the synchronization plans. These adjustments are made to accommodate new signalized intersections and changes in traffic patterns. With Project P funding, the City would be able to develop and maintain new traffic signal synchronization plans along entire corridors that cross jurisdictional boundaries with multiple agencies. The strategy for multiple agencies cooperatively developing and implementing synchronization plans would comparatively provide higher benefits-to-cost ratios than major capital improvement projects such as widening for additional lanes for the same corridors. The lengthy and potential cost prohibitive processes for environmental and right-of-way clearances are not needed for similar synchronization projects. With the reduction in the number of processes, drivers along these corridors will experience the benefits in a timelier manner without significant impact due to construction.

The following arterials have been funded under Project P for multi-agency signal synchronization and construction projects:

- Alton Parkway from Red Hill Avenue to Portola Parkway *
- Bake Parkway from Irvine Center Drive to Portola Parkway
- Barranca Parkway / Muirlands Boulevard from Red Hill Avenue to Robin Circle *
- Culver Drive / Bonita Canyon from Portola Parkway to Jamboree Road *
- Irvine Boulevard from Jamboree Road to Bake Parkway *
- Irvine Center Drive / Edinger Avenue from Newport Avenue to Lake Forest Drive*
- Jamboree Road from Portola Parkway to MacArthur Boulevard *
- Jeffrey Road / University Drive from Portola Parkway to Jamboree Road *
- Lake Forest Drive from Rockfield Boulevard to SR-133
- Newport Coast Drive from Bonita Canyon Drive to Pacific Coast Highway
- Von Karman Avenue / Tustin Ranch Road from Campus Drive to Pioneer Way*

* *City of Irvine is lead agency*

For the local streets within the City of Irvine, the following streets listed below have been re-synchronized by in-house staff with City funds or will be scheduled for their respected fiscal years.

- Harvard Avenue (2015 and 2019)
- Sand Canyon Avenue (2016 and 2020)
- Walnut Avenue (2017)
- Campus Drive (2018)
- Bryan Avenue (2018)
- Michelson Drive (2018)
- Portola Parkway (2019)
- Trabuco Road / Great Park Boulevard (2020)

The City is migrating to the new central traffic control software that manages the traffic signal network. The current system (Actra) is being replaced by Centracs, which is being installed by neighboring jurisdictions that will assist with the coordination of traffic signals across agency boundaries. The new system is anticipated to provide more traffic management options as the City intends for implementation of adaptive control technology along with data aggregate and analytical software on selected corridor segments.

Goals

The City of Irvine supports the Measure M2 Regional Traffic Signal Synchronization Program as a multi-agency, corridor based approach that optimizes the performance of traffic signals based on existing traffic patterns. The City acknowledges local responsibility and control of signal timing and will continue efforts to work with

neighboring agencies to develop acceptable synchronization timing across jurisdictional boundaries. These efforts include, but are not limited to, the following:

- Develop and maintain a Local Signal Synchronization Plan.
- Participate as a lead agency in the development and implementation of multi-agency traffic signal synchronization projects.
- Participate as a partner agency in the development and implementation of multi-agency traffic signal synchronization projects.
- Attend and actively participate in the OCTA scheduled Traffic Forum meetings and regional Traffic Forum workshops.
- Proactively reach out to neighboring agencies and Caltrans to discuss signal synchronization issues.
- Maintain shared maintenance agreements with neighboring jurisdictions.

Multi-jurisdictional signal synchronization projects will be submitted for Measure M2 funding consideration for corridors identified on the map of the City's Local Signal Synchronization Street Routes, which is included in this document. The projects will be developed to be consistent with the OCTA Funding Guidelines for the Regional Traffic Signal Synchronization Program.

As the City grows in population and size, traffic signal synchronization efforts will continue to ensure that the traffic signal network infrastructure provides reliable and effective performance.

SECTION TWO

TRAFFIC SIGNAL SYNCHRONIZATION STREET ROUTES (EXISTING AND PLANNED)

Traffic Signal Synchronization Routes

The attached Exhibit 1 of the Signal Synchronization Street Routes for the City of Irvine, details the classifications of the corridors and streets based upon the Master Plan of Arterials Highways (MPAH) and Project P. The exhibit provides an overview map for the City to determine where funding opportunities can be applied and the priority of the corridors as part of the entire region of Orange County. Majority of the routes are principal, major and primary arterials that are consistent with the Regional Traffic Signal Synchronization Program and are identified as priority corridors to be coordinated. Local routes are shown in the exhibit, noting the corridors that are not part of the Regional Traffic Signal Synchronization Program and are located within the vicinity of the City of Irvine. These routes consists of secondary and collector arterials that are currently coordinated to promote effective local traffic progression.

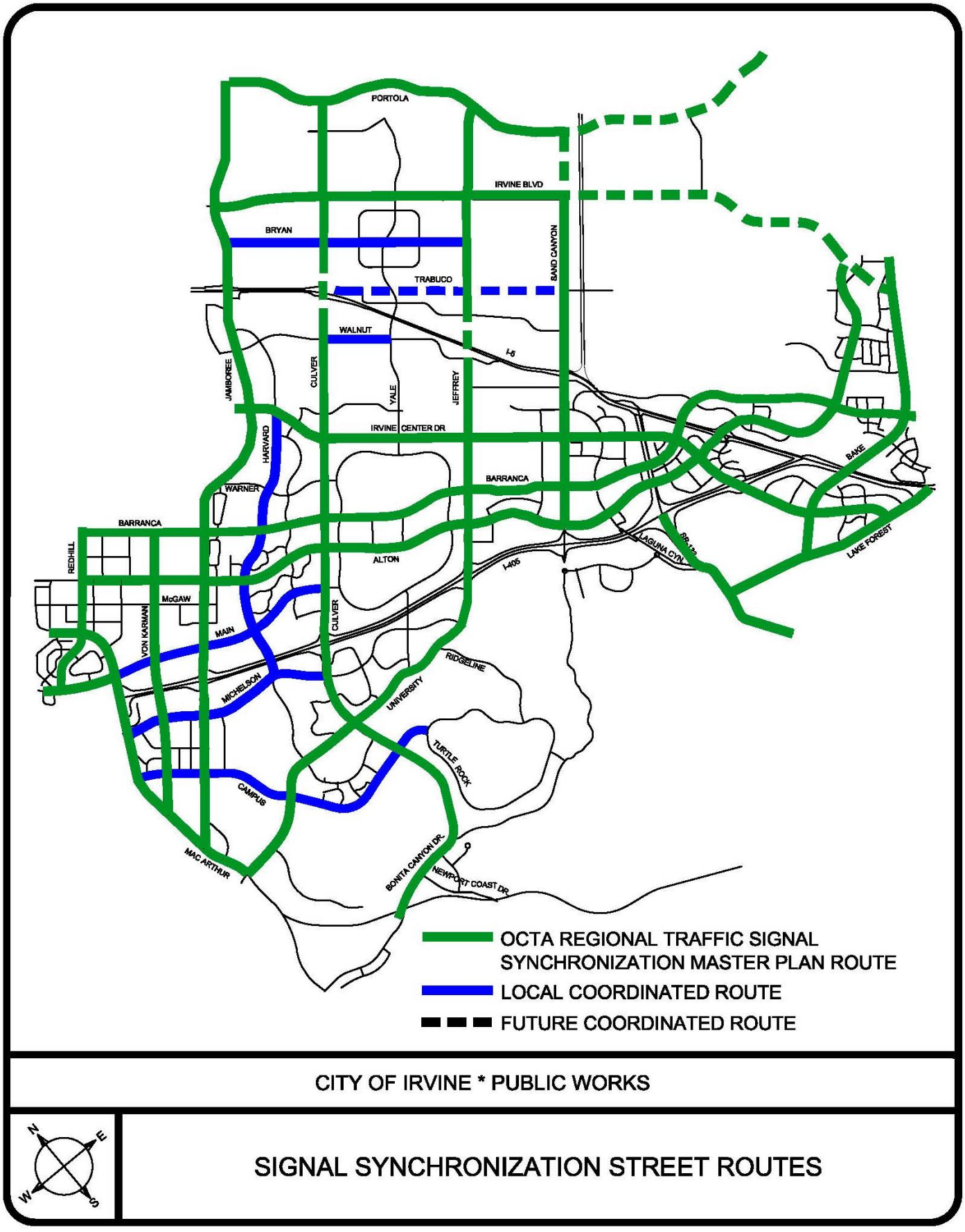


EXHIBIT 1 – City of Irvine Signal Synchronization Street Routes

SECTION THREE
TRAFFIC SIGNAL INVENTORY

TRAFFIC SYNCHRONIZATION LIST (APRIL 2017)

Corridor	Cross-Street Intersection	Cycle Length				Controller Type	Maintenance Responsibility
		AM	MD	PM	WKND		
ALTON (Shaded areas denote intersections owned and maintained by Caltrans)	MILLIKAN	160	140	160	FREE	2070	CITY OF IRVINE
	MURPHY	160	140	160	FREE	2070	CITY OF IRVINE
	HARVARD	120	100	150	120	2070	CITY OF IRVINE
	PASEO WESTPARK	150	140	150	FREE	2070	CITY OF IRVINE
	SAN MARINO	150	140	150	FREE	2070	CITY OF IRVINE
	WEST YALE LOOP	150	140	150	FREE	2070	CITY OF IRVINE
	LAKE	150	130	150	FREE	2070	CITY OF IRVINE
	CREEK	150	130	150	FREE	2070	CITY OF IRVINE
	EAST YALE LOOP	150	130	150	FREE	2070	CITY OF IRVINE
	ROYAL OAKS	150	130	150	FREE	2070	CITY OF IRVINE
	VALLEY OAK	120	120	120	FREE	2070	CITY OF IRVINE
	SAND CANYON	120	120	120	120	2070	CITY OF IRVINE
	HOSPITAL	120	120	120	FREE	2070	CITY OF IRVINE
	LAGUNA CANYON	120	120	120	FREE	2070	CITY OF IRVINE
	JENNER	120	120	120	FREE	2070	CITY OF IRVINE
	TELEMETRY	120	120	120	FREE	2070	CITY OF IRVINE
	BANTING	120	120	120	FREE	2070	CITY OF IRVINE
	PACIFICA	120	120	120	FREE	2070	CITY OF IRVINE
	MERIDIAN	120	120	120	FREE	2070	CITY OF IRVINE
	IRVINE CENTER DRIVE	120	120	120	FREE	2070	CITY OF IRVINE
	GATEWAY	120	120	120	FREE	2070	CITY OF IRVINE
	ENTERPRISE	120	120	120	FREE	170	CALTRANS
	I-5 NB RAMP	120	120	120	FREE	170	CALTRANS
	TECHNOLOGY WEST	120	120	120	FREE	2070	CITY OF IRVINE
	ADA	120	120	120	FREE	2070	CITY OF IRVINE
	TECHNOLOGY EAST	120	110	120	FREE	2070	CITY OF IRVINE
	MUIRLANDS/BARRANCA	120	110	120	FREE	2070	CITY OF IRVINE
	JERONIMO	120	110	120	FREE	2070	CITY OF IRVINE
	HUGHES	120	110	120	FREE	2070	CITY OF IRVINE
	MORGAN	120	110	120	FREE	2070	CITY OF IRVINE
	TOLEDO	120	110	120	FREE	2070	CITY OF IRVINE
	BERTEA	120	110	120	FREE	2070	CITY OF IRVINE
	FAIRBANKS	120	110	120	FREE	2070	CITY OF IRVINE
	FOSTER	120	110	120	FREE	2070	CITY OF IRVINE
BAKE (Shaded areas denote intersections owned and maintained by Caltrans)	IRVINE BLVD	140	120	130	120	2070	CITY OF IRVINE
	CROMWELL	140	120	130	120	2070	CITY OF IRVINE
	TOLEDO	140	120	130	120	2070	CITY OF IRVINE
	JERONIMO	140	120	130	120	2070	CITY OF IRVINE
	MUIRLANDS	140	120	130	120	2070	CITY OF IRVINE
	ROCKFIELD	140	120	130	120	2070	CITY OF IRVINE
	I-405/I-5 SB RAMP	140	120	130	120	170	CALTRANS

TRAFFIC SYNCHRONIZATION LIST (APRIL 2017)

Corridor	Cross-Street Intersection	Cycle Length				Controller Type	Maintenance Responsibility
		AM	MD	PM	WKND		
BAKE	I-405/I-5 NB RAMP	140	120	130	120	170	CALTRANS
	RESEARCH	120	100	120	120	2070	CITY OF IRVINE
BARRANCA / MUIRLANDS (Shaded areas denote intersections owned and maintained by Caltrans)	ARMSTRONG	160	120	160	105	2070	CITY OF IRVINE
	VON KARMAN	160	120	160	105	2070	CITY OF IRVINE
	MILLIKAN	160	140	160	140	2070	CITY OF IRVINE
	CONSTRUCTION CIRCLE S	80	70	80	70	2070	CITY OF IRVINE
	FIRE STATION	80	70	80	70	2070	CITY OF IRVINE
	HARVARD	130	120	120	120	2070	CITY OF IRVINE
	PASEO WESTPARK	150	140	140	105	2070	CITY OF IRVINE
	SANTA ROSA	150	140	140	105	2070	CITY OF IRVINE
	WEST YALE LOOP	150	140	140	140	2070	CITY OF IRVINE
	LAKE	150	70	70	70	2070	CITY OF IRVINE
	CREEK	75	70	70	70	2070	CITY OF IRVINE
	WOODBRIDGE SQUARE	75	70	70	70	2070	CITY OF IRVINE
	LYON	75	70	70	70	2070	CITY OF IRVINE
	EAST YALE LOOP	150	130	130	130	2070	CITY OF IRVINE
	SHADOW OAKS	75	65	75	65	2070	CITY OF IRVINE
	VALLEY OAK	80	80	FREE	120	2070	CITY OF IRVINE
	SAND CANYON	120	80	120	120	2070	CITY OF IRVINE
	LAGUNA CANYON	80	80	120	120	2070	CITY OF IRVINE
	FED EX	80	80	120	60	2070	CITY OF IRVINE
	DISCOVERY / HERCHEL	80	80	120	60	2070	CITY OF IRVINE
	BANTING	80	80	120	60	170	CALTRANS
	PACIFICA	120	80	80	60	2070	CITY OF IRVINE
	I-5 RAMPS	60	80	120	60	170	CALTRANS
	TECHNOLOGY	120	80	120	60	2070	CITY OF IRVINE
	ADA	120	80	120	60	2070	CITY OF IRVINE
	THOMAS	60	80	110	60	2070	CITY OF IRVINE
BONITA CANYON	SHADY CANYON	120	120	120	FREE	2070	CITY OF IRVINE
	TURTLE RIDGE	120	120	120	FREE	2070	CITY OF IRVINE
	MARINERS CHURCH	120	120	120	FREE	2070	CITY OF IRVINE
	NEWPORT COAST	120	120	120	FREE	2070	CITY OF IRVINE
BRYAN	MARKET PLACE	120	100	120	FREE	2070	CITY OF IRVINE
	EL CAMINO NORTH	120	100	120	FREE	2070	CITY OF IRVINE
	RUBICON	120	100	120	FREE	2070	CITY OF IRVINE
	WESTWOOD	120	80	80	FREE	2070	CITY OF IRVINE
	YALE	80	80	80	FREE	2070	CITY OF IRVINE
	EASTWOOD	80	80	80	FREE	2070	CITY OF IRVINE
CAMPUS	MARTIN	120	100	120	FREE	2070	CITY OF IRVINE
	VON KARMAN	100	100	100	FREE	2070	CITY OF IRVINE
	TELLER	80	70	80	FREE	2070	CITY OF IRVINE

TRAFFIC SYNCHRONIZATION LIST (APRIL 2017)

Corridor	Cross-Street Intersection	Cycle Length				Controller Type	Maintenance Responsibility
		AM	MD	PM	WKND		
CAMPUS	CARLSON	80	70	80	FREE	2070	CITY OF IRVINE
	BRIDGE / WEST PELTASON	120	120	120	FREE	2070	CITY OF IRVINE
	STANFORD	120	120	120	FREE	2070	CITY OF IRVINE
	BERKELEY / EAST PELTASON	120	120	120	FREE	2070	CITY OF IRVINE
	CORNELL	120	120	120	FREE	2070	CITY OF IRVINE
	CALIFORNIA	120	100	120	FREE	2070	CITY OF IRVINE
	TURTLE ROCK	FREE	FREE	FREE	FREE	2070	CITY OF IRVINE
CULVER (Shaded areas denote intersections owned and maintained by Caltrans)	FURROW	FREE	FREE	FREE	FREE	2070	CITY OF IRVINE
	SETTLERS / NARROW PATH	FREE	FREE	FREE	FREE	2070	CITY OF IRVINE
	VILLAGE CENTER DRIVE	FREE	FREE	FREE	FREE	2070	CITY OF IRVINE
	PORTOLA	150	FREE	FREE	FREE	2070	CITY OF IRVINE
	MEADOWOOD	150	FREE	75	FREE	2070	CITY OF IRVINE
	VIEWPARK	75	FREE	75	FREE	2070	CITY OF IRVINE
	IRVINE BLVD	150	120	150	120	2070	CITY OF IRVINE
	FLORENCE	150	120	150	120	2070	CITY OF IRVINE
	BRYAN	150	120	150	120	2070	CITY OF IRVINE
	FARWELL	150	120	150	120	2070	CITY OF IRVINE
	TRABUCO	100	80	100	80	170	CALTRANS
	I-5 SB RAMP	100	80	100	80	170	CALTRANS
	SCOTTSDALE	100	80	100	80	2070	CITY OF IRVINE
	WALNUT	150	140	150	140	2070	CITY OF IRVINE
	DEERFIELD	150	140	150	140	2070	CITY OF IRVINE
	IRVINE CENTER DRIVE	150	140	150	140	2070	CITY OF IRVINE
	WARNER	150	140	150	140	2070	CITY OF IRVINE
	BARRANCA	150	140	150	140	2070	CITY OF IRVINE
	ALTON	150	140	150	140	2070	CITY OF IRVINE
	MAIN	150	140	150	140	2070	CITY OF IRVINE
	SAN LEANDRO	150	140	150	140	2070	CITY OF IRVINE
	I-405 NB RAMP	100	100	100	100	170	CALTRANS
	I-405 SB RAMP	100	100	100	100	170	CALTRANS
	MICHELSON	150	140	150	140	2070	CITY OF IRVINE
	SANDBURG	150	140	150	140	2070	CITY OF IRVINE
	UNIVERSITY	150	140	150	140	2070	CITY OF IRVINE
	HARVARD	150	140	150	140	2070	CITY OF IRVINE
	CHUCK KEITH WAY	150	140	150	140	2070	CITY OF IRVINE
	CAMPUS	150	140	150	140	2070	CITY OF IRVINE
	VISTA DEL CAMPO	75	70	75	FREE	2070	CITY OF IRVINE
HARVARD	MOFFETT	80	100	120	FREE	2070	CITY OF IRVINE
	COLUMBUS GROVE	80	100	60	FREE	2070	CITY OF IRVINE
	WARNER	120	100	120	FREE	2070	CITY OF IRVINE
	SWEET SHADE	80	100	60	FREE	2070	CITY OF IRVINE

TRAFFIC SYNCHRONIZATION LIST (APRIL 2017)

Corridor	Cross-Street Intersection	Cycle Length				Controller Type	Maintenance Responsibility
		AM	MD	PM	WKND		
HARVARD	SAN JUAN	60	100	60	80	2070	CITY OF IRVINE
	SAN LEON	120	100	120	80	2070	CITY OF IRVINE
	SAN MARINO / COSTERO AISLE	120	100	120	80	2070	CITY OF IRVINE
	SAN CARLO	60	100	120	80	2070	CITY OF IRVINE
	CORONADO	120	100	120	80	2070	CITY OF IRVINE
	BRIDGE	FREE	FREE	FREE	FREE	2070	CITY OF IRVINE
	MARQUETTE	FREE	FREE	FREE	FREE	2070	CITY OF IRVINE
	CALIFORNIA	FREE	FREE	FREE	FREE	2070	CITY OF IRVINE
IRVINE (Shaded areas denote intersections owned and maintained by Caltrans)	OLD MYFORD	120	100	120	80	2070	CITY OF IRVINE
	MARKET PLACE	120	100	120	80	2070	CITY OF IRVINE
	SR 261 - SB RAMP	60	80	120	80	170	CALTRANS
	SR 261 - NB RAMP	120	80	60	80	170	CALTRANS
	CENTRAL PARK	120	100	120	80	2070	CITY OF IRVINE
	PALO LADO	120	100	120	80	2070	CITY OF IRVINE
	YALE	120	100	120	80	2070	CITY OF IRVINE
	PUEBLO NORTE	120	100	120	80	2070	CITY OF IRVINE
	THE GROVES	120	100	120	80	2070	CITY OF IRVINE
	JEFFREY	120	100	120	80	2070	CITY OF IRVINE
	GROVELAND	80	100	120	FREE	2070	CITY OF IRVINE
	CLASSIC	80	100	120	FREE	2070	CITY OF IRVINE
	SR-133 SB RAMP	FREE	FREE	FREE	FREE	170	CALTRANS
	SR-133 NB RAMP	FREE	FREE	FREE	FREE	170	CALTRANS
	ALLIED	FREE	FREE	FREE	FREE	2070	CITY OF IRVINE
	RIDGE VALLEY	FREE	FREE	FREE	FREE	2070	CITY OF IRVINE
	MODJESKA	FREE	FREE	FREE	FREE	2070	CITY OF IRVINE
	PUSAN	FREE	FREE	FREE	FREE	2070	CITY OF IRVINE
	CHINON	FREE	FREE	FREE	FREE	2070	CITY OF IRVINE
	MERIT	FREE	FREE	FREE	FREE	2070	CITY OF IRVINE
	ALLRED	FREE	FREE	FREE	FREE	2070	CITY OF IRVINE
	ALTON	120	110	120	FREE	2070	CITY OF IRVINE
	FAIRBANKS/MUSICK	FREE	FREE	FREE	FREE	2070	CITY OF IRVINE
	PARKER	FREE	FREE	FREE	FREE	2070	CITY OF IRVINE
IRVINE CENTER	HARVARD	120	100	120	80	2070	CITY OF IRVINE
	HEARTHSTONE	120	100	120	80	2070	CITY OF IRVINE
	DEERWOOD	60	100	60	FREE	2070	CITY OF IRVINE
	YALE	120	100	120	100	2070	CITY OF IRVINE
	FONTAINE	60	100	60	100	2070	CITY OF IRVINE
	JEFFREY	150	130	150	100	2070	CITY OF IRVINE
	IRVINE VALLEY COLLEGE	75	FREE	150	100	2070	CITY OF IRVINE
	ORANGETREE	120	100	120	100	2070	CITY OF IRVINE
	VALLEY OAK	120	100	120	100	2070	CITY OF IRVINE

TRAFFIC SYNCHRONIZATION LIST (APRIL 2017)

Corridor	Cross-Street Intersection	Cycle Length				Controller Type	Maintenance Responsibility
		AM	MD	PM	WKND		
IRVINE CENTER	SAND CANYON	120	100	120	100	2070	CITY OF IRVINE
	ODYSSEY	120	100	120	FREE	2070	CITY OF IRVINE
	LAGUNA CANYON	120	100	120	FREE	2070	CITY OF IRVINE
	DISCOVERY	120	100	120	FREE	2070	CITY OF IRVINE
	CHARTER	120	100	120	FREE	2070	CITY OF IRVINE
	BARRANCA	120	120	120	120	2070	CITY OF IRVINE
	GATEWAY	60	100	60	FREE	2070	CITY OF IRVINE
	SPECTRUM	140	120	140	FREE	2070	CITY OF IRVINE
	PACIFICA	140	120	140	FREE	2070	CITY OF IRVINE
	ENTERPRISE	140	100	140	FREE	2070	CITY OF IRVINE
	405 S/B	140	50	140	FREE	2070	CITY OF IRVINE
	RESEARCH	140	100	140	FREE	2070	CITY OF IRVINE
	HUBBLE	80	100	120	FREE	2070	CITY OF IRVINE
	BAKE	120	100	120	100	2070	CITY OF IRVINE
	MULLER	80	100	120	FREE	2070	CITY OF IRVINE
	TESLA	80	100	120	FREE	2070	CITY OF IRVINE
	SCIENTIFIC	80	100	120	FREE	2070	CITY OF IRVINE
	PROTOCOL	80	100	120	FREE	2070	CITY OF IRVINE
JAMBOREE (Shaded areas denote intersections owned and maintained by Caltrans or City of Tustin)	CHAMPION	120	FREE	FREE	FREE	ASC/2	CITY OF TUSTIN
	TREVINO	120	FREE	FREE	FREE	ASC/2	CITY OF TUSTIN
	IRVINE BLVD	120	110	120	120	ASC/2	CITY OF TUSTIN
	WEST DRIVE	120	110	120	120	ASC/2	CITY OF TUSTIN
	BRYAN	120	110	120	120	ASC/2	CITY OF TUSTIN
	EL CAMINO REAL	120	110	120	120	ASC/2	CITY OF TUSTIN
	MICHELLE	120	110	120	FREE	2070	CITY OF IRVINE
	I-5 NB RAMP	120	110	120	FREE	2070	CALTRANS
	I-5 SB RAMP	120	110	120	FREE	2070	CALTRANS
	WALNUT (N/B)	80	80	90	FREE	2070	CITY OF IRVINE
	WALNUT (S/B)	80	80	90	FREE	2070	CITY OF IRVINE
	BARRANCA	160	140	160	140	2070	CITY OF IRVINE
	BECKMAN	160	140	160	140	2070	CITY OF IRVINE
	ALTON	160	140	160	FREE	2070	CITY OF IRVINE
	MCGAW	160	140	160	140	2070	CITY OF IRVINE
	KELVIN	160	140	160	140	2070	CITY OF IRVINE
	MAIN	160	140	160	140	2070	CITY OF IRVINE
	I-405 NB RAMP	60	50	60	50	170	CALTRANS
	I-405 SB RAMP	60	50	60	FREE	170	CALTRANS
	MICHELSON	160	140	160	140	2070	CITY OF IRVINE
	DUPONT	160	140	160	140	2070	CITY OF IRVINE
	CAMPUS	160	140	160	140	2070	CITY OF IRVINE
	BIRCH	160	140	160	140	2070	CITY OF IRVINE

TRAFFIC SYNCHRONIZATION LIST (APRIL 2017)

Corridor	Cross-Street Intersection	Cycle Length				Controller Type	Maintenance Responsibility
		AM	MD	PM	WKND		
JAMBOREE	FAIRCHILD	160	140	160	FREE	2070	CITY OF IRVINE
	KOLL CENTER	160	140	160	FREE	2070	CITY OF IRVINE
JEFFREY (Shaded areas denote intersections owned and maintained by Caltrans)	BRYAN / LONG MEADOW	120	130	150	130	2070	CITY OF IRVINE
	HIDEAWAY	120	65	150	65	2070	CITY OF IRVINE
	TRABUCO	120	130	150	130	2070	CITY OF IRVINE
	GROVE	120	130	150	130	2070	CITY OF IRVINE
	ROOSEVELT	120	130	150	130	2070	CITY OF IRVINE
	I-5 NB RAMP	60	50	60		170	CALTRANS
	WALNUT	120	130	150	130	2070	CITY OF IRVINE
	THE MEADOWS	120	130	150	65	2070	CITY OF IRVINE
	SMOKETREE	75	130	75	65	2070	CITY OF IRVINE
	IRVINE VALLEY COLLEGE	150	130	150	130	2070	CITY OF IRVINE
	BARRANCA	150	130	150	130	2070	CITY OF IRVINE
	ALTON	150	130	150	130	2070	CITY OF IRVINE
	QUAIL CREEK	150	130	150	130	2070	CITY OF IRVINE
	I-405 NB RAMP	80	100	80	FREE	2070	CALTRANS
	I-405 SB RAMP	80	100	80	FREE	2070	CALTRANS
MACARTHUR (Shaded areas denote intersections owned and maintained by Caltrans)	SR-55 SB RAMP	80	80	80	80	170	CALTRANS
	SR-55 NB RAMP	80	80	80	80	170	CALTRANS
	FITCH	80	80	80	FREE	2070	CITY OF IRVINE
	SKYPARK EAST	120	100	120	FREE	2070	CITY OF IRVINE
	I-405 NB RAMP	80	80	90	80	170	CALTRANS
	I-405 SB RAMP	80	80	120	80	170	CALTRANS
	MICHELSON	120	100	120	FREE	2070	CITY OF IRVINE
	DOUGLAS	60	100	60	FREE	2070	CITY OF IRVINE
	CAMPUS	120	100	120	FREE	2070	CITY OF IRVINE
	FAIRCHILD	FREE	FREE	FREE	FREE	2070	CITY OF IRVINE
MAIN	MCDURMOTT WEST	60	60	60	FREE	2070	CITY OF IRVINE
	EXECUTIVE CIRCLE	120	120	120	FREE	2070	CITY OF IRVINE
	SKYPARK SOUTH	120	120	120	FREE	2070	CITY OF IRVINE
	EXECUTIVE PARK	120	120	120	FREE	2070	CITY OF IRVINE
	MACARTHUR	120	120	120	FREE	2070	CITY OF IRVINE
	MERCANTILE	120	120	120	FREE	2070	CITY OF IRVINE
	GILETTE	120	120	120	FREE	2070	CITY OF IRVINE
	VON KARMAN	120	120	120	FREE	2070	CITY OF IRVINE
	CARTWRIGHT	75	120	120	FREE	2070	CITY OF IRVINE
	SIGLO	75	60	75	FREE	2070	CITY OF IRVINE
	PARK PLAZA/UNION	100	FREE	100	FREE	2070	CITY OF IRVINE
	VENETO	120	100	120	FREE	2070	CITY OF IRVINE
	HARVARD	120	100	120	FREE	2070	CITY OF IRVINE
	SAN MATEO	80	80	80	FREE	2070	CITY OF IRVINE

TRAFFIC SYNCHRONIZATION LIST (APRIL 2017)

Corridor	Cross-Street Intersection	Cycle Length				Controller Type	Maintenance Responsibility
		AM	MD	PM	WKND		
MAIN	PASEO WESTPARK	80	80	80	FREE	2070	CITY OF IRVINE
	WEST YALE LOOP	FREE	FREE	FREE	FREE	2070	CITY OF IRVINE
MICHELSON	DUPONT	100	100	100	FREE	2070	CITY OF IRVINE
	BIXBY	100	100	100	FREE	2070	CITY OF IRVINE
	VON KARMAN	100	100	100	FREE	2070	CITY OF IRVINE
	OBSIDIAN	100	100	100	FREE	2070	CITY OF IRVINE
	TELLER	100	FREE	100	FREE	2070	CITY OF IRVINE
	CARLSON	120	FREE	120	FREE	2070	CITY OF IRVINE
	PRINCE	120	100	60	FREE	2070	CITY OF IRVINE
	LOOP ROAD EAST	60	100	60	FREE	2070	CITY OF IRVINE
	RIPARIAN VIEW	120	100	120	FREE	2070	CITY OF IRVINE
	HARVARD	120	100	120	FREE	2070	CITY OF IRVINE
	PARKSIDE	60	100	60	FREE	2070	CITY OF IRVINE
PORTOLA (Shaded areas denote intersections owned and maintained by Caltrans)	SR 261 - SB RAMP	FREE	FREE	FREE	FREE	170	CALTRANS
	SR 261 - NB RAMP	FREE	FREE	FREE	FREE	170	CALTRANS
	GATE PARK / FORGE	110	FREE	110	FREE	2070	CITY OF IRVINE
	YALE	110	FREE	110	FREE	2070	CITY OF IRVINE
	ORCHARD HILLS	110	FREE	110	FREE	2070	CITY OF IRVINE
	FIRE STATION #55	110	FREE	110	FREE	2070	CITY OF IRVINE
	JEFFREY	110	FREE	110	FREE	2070	CITY OF IRVINE
	BEE CANYON	110	FREE	110	FREE	2070	CITY OF IRVINE
	PARAGON	110	FREE	110	FREE	2070	CITY OF IRVINE
	SAND CANYON	120	120	75	120	2070	CITY OF IRVINE
	ARROWHEAD	FREE	FREE	FREE	FREE	2070	CITY OF IRVINE
	RIDGE VALLEY	FREE	FREE	FREE	FREE	2070	CITY OF IRVINE
	PORTOLA SPRINGS	FREE	FREE	FREE	FREE	2070	CITY OF IRVINE
REDHILL	BARRANCA	160	140	160	105	2070	CITY OF IRVINE
	DEERE	120	120	120	FREE	2070	CITY OF IRVINE
	ALTON	120	120	120	FREE	2070	CITY OF IRVINE
	MCGAW	120	120	120	FREE	2070	CITY OF IRVINE
	MACARTHUR	FREE	120	160	FREE	2070	CITY OF IRVINE
	SKYPARK NORTH	120	120	120	FREE	2070	CITY OF IRVINE
	MAIN	120	120	120	FREE	2070	CITY OF IRVINE
SAND CANYON	SAINTS WAY	120	60	75	60	2070	CITY OF IRVINE
	SPRING MEADOW	120	120	150	120	2070	CITY OF IRVINE
	IRVINE BLVD	120	120	150	FREE	2070	CITY OF IRVINE
	STRATA	120	120	120	120	2070	CITY OF IRVINE
	TOWNGATE	120	120	120	120	2070	CITY OF IRVINE
	TRABUCO	120	120	120	120	2070	CITY OF IRVINE
	ROOSEVELT	120	120	120	120	2070	CITY OF IRVINE
	NIGHT MIST	120	120	120	120	2070	CITY OF IRVINE

TRAFFIC SYNCHRONIZATION LIST (APRIL 2017)

Corridor	Cross-Street Intersection	Cycle Length				Controller Type	Maintenance Responsibility
		AM	MD	PM	WKND		
SAND CANYON (Shaded areas denote intersections owned and maintained by Caltrans)	I-5 NB RAMP	120	120	120	120	2070	CALTRANS
	MARINES WAY	120	120	120	120	2070	CALTRANS
	I-5 SB RAMP	120	120	120	120	2070	CALTRANS
	BURT ROAD	120	120	120	120	2070	CITY OF IRVINE
	OAK CANYON	120	120	120	120	2070	CITY OF IRVINE
	WATER WORKS	120	120	120	120	2070	CITY OF IRVINE
	HOSPITAL	120	120	120	120	2070	CITY OF IRVINE
TRABUCO (Shaded areas denote intersections owned and maintained by Caltrans)	I-5 NB RAMP	FREE	FREE	FREE	FREE	170	CALTRANS
	YALE	120	100	120	FREE	2070	CITY OF IRVINE
	VISIONS	FREE	FREE	FREE	FREE	2070	CITY OF IRVINE
	BAY TREE	FREE	FREE	FREE	FREE	2070	CITY OF IRVINE
	KEYSTONE	120	100	120	FREE	2070	CITY OF IRVINE
UNIVERSITY	MICHELSON	150	130	200	FREE	2070	CITY OF IRVINE
	BERRY PLACE	75	65	100	FREE	2070	CITY OF IRVINE
	RIDGELINE / ROSA DREW	150	130	200	FREE	2070	CITY OF IRVINE
	YALE	150	130	200	FREE	2070	CITY OF IRVINE
	GOLDENGLOW	150	130	200	FREE	2070	CITY OF IRVINE
	SAN JOAQUIN	150	120	200	FREE	2070	CITY OF IRVINE
	HARVARD	150	120	200	FREE	2070	CITY OF IRVINE
	CAMPUS	150	120	200	FREE	2070	CITY OF IRVINE
	MESA	150	120	100	FREE	2070	CITY OF IRVINE
	CALIFORNIA	150	120	100	FREE	2070	CITY OF IRVINE
	MACARTHUR NORTH RAMP	75	80	100	FREE	2070	CITY OF IRVINE
	MACARTHUR SOUTH RAMP	75	80	100	FREE	2070	CITY OF IRVINE
VON KARMAN	ALTON	160	120	160	FREE	2070	CITY OF IRVINE
	MCGAW	120	120	160	FREE	2070	CITY OF IRVINE
	ANCHOR	120	120	120	FREE	2070	CITY OF IRVINE
	MORSE	120	120	120	FREE	2070	CITY OF IRVINE
	QUARTZ	100	100	100	FREE	2070	CITY OF IRVINE
	DUPONT	100	100	100	FREE	2070	CITY OF IRVINE
	MARTIN	100	100	100	FREE	2070	CITY OF IRVINE
WALNUT	MYFORD	80	80	80	FREE	2070	CITY OF IRVINE
	PETERS CANYON	80	80	80	FREE	2070	CITY OF IRVINE
	HARVARD	120	100	120	FREE	2070	CITY OF IRVINE
	FRANCISCAN	120	100	120	FREE	2070	CITY OF IRVINE
	RAVENWOOD	120	100	120	FREE	2070	CITY OF IRVINE
	YALE	120	100	FREE	FREE	2070	CITY OF IRVINE
	WISTERIA	60	FREE	60	FREE	2070	CITY OF IRVINE

Central System (Indicate if multiple systems in use): Multiple - Actra & Centracs
Controller Operator System: SEPAC & ASC/3

SECTION FOUR

TRAFFIC SIGNAL SYNCHRONIZATION SYSTEM AND THREE YEAR PLAN

3-YEAR OUTLOOK
TRAFFIC SIGNAL SYNCHRONIZATION

Funding Needs for Synchronized Operation (Constrained)

Reporting Jurisdiction Expenditures: City of Irvine

Type of Traffic Signal Synchronization Expenditures in Year of Expenditure Dollars

MAINTENANCE

PROJECT	FY17/18	FY18/19	FY19/20	TOTAL
Centracs Software Maintenance	$20,000	$20,000	$20,000	$60,000
Centracs Licenses	$25,000	$25,000	$25,000	$75,000
Signal Controller Upgrade on Synchronized Corridors	$100,000	$25,000	$25,000	$150,000
Subtotal Maintenance	$145,000	$70,000	$70,000	$285,000

CONSTRUCTION

PROJECT	FY17/18	FY18/19	FY19/20	TOTAL
Communications Upgrade	$50,000	$50,000	$50,000	$150,000
Full 8 Phase Video Detection Systems	$300,000	$300,000	$300,000	$900,000
Project P: Irvine Boulevard	$297,526	$80,640	$0	$378,166
Project P: Von Karman/Tustin Ranch Road	$1,691,980	$108,000	$0	$1,799,980
Project P: Irvine Center Drive/Edinger Avenue	$2,143,200	$136,800	$0	$2,280,000
Subtotal Construction	$4,482,706	$675,440	$350,000	$5,508,146

OPERATIONS

PROJECT	FY17/18	FY18/19	FY19/20	TOTAL
Traffic Timing Software Upgrades	$10,000	$20,000	$20,000	$50,000
Turning Counts	$50,000	$70,000	$70,000	$190,000
Data Aggregate and Analytical Software	$100,000	$100,000	$100,000	$300,000
Adaptive Traffic Control System	$175,000	$50,000	$50,000	$275,000
Subtotal Operations	$335,000	$240,000	$240,000	$815,000
	$4,962,706	$985,440	$660,000	$6,6085,146

3-YEAR OUTLOOK
TRAFFIC SIGNAL SYNCHRONIZATION

Funding Needs for Synchronized Operation (Unconstrained)

Reporting Jurisdiction Expenditures: City of Irvine

Type of Traffic Signal Synchronization Expenditures in Year of Expenditure Dollars

MAINTENANCE

PROJECT	FY17/18	FY18/19	FY19/20	TOTAL
Video Detection System	$100,000	$200,000	$300,000	$600,000
Cabinet and Controllers	$500,000	$500,000	$500,000	$1,500,000
Subtotal Maintenance	$600,000	$700,000	$800,000	$2,100,000

CONSTRUCTION

PROJECT	FY17/18	FY18/19	FY19/20	TOTAL
Communication Network Upgrade	$100,000	$300,000	$500,000	$900,000
Project P: Red Hill Avenue	$0	$900,000	$200,000	$1,100,000
Project P: Main Street	$0	$1,200,000	$300,000	$1,500,000
Project P: Jamboree Road	$0	$0	$1,400,000	$1,400,000
Project P: MacArthur Boulevard	$0	$0	$1,700,000	$1,700,000
Subtotal Construction	$100,000	$2,400,000	$4,100,000	$6,600,000

OPERATIONS

PROJECT	FY17/18	FY18/19	FY19/20	TOTAL
Citywide Signal Timing Maintenance	$50,000	$200,000	$300,000	$550,000
Centracs Timing Conversion	$50,000	$50,000	$50,000	$150,000
Upgrade Video Management Software	$500,000	$200,000	$100,000	$800,000
Citywide Data Aggregate and Analytical Software	$500,000	$500,000	$500,000	$1,500,000
Subtotal Operations	$1,100,000	$950,000	$950,000	$3,000,000
	$1,800,000	$4,050,000	$5,850,000	$11,700,000

LSSP IMPLEMENTATION – CANDIDATE SIGNAL SYNCHORNIZATION PROJECTS WITH ESTIMATED COSTS

Reporting Jurisdiction Expenditures: City of Irvine

Include estimated cost for currently uncoordinated corridors, conversion of existing corridors to improve compatibility, and TMC upgrades if appropriate. Do not include equipment that meets current needs but has not yet reached the end of its normal life cycle. This is a build-out budget.

CORRIDOR	IMPROVEMENT SUMMARY	ESTIMATED COST
Bryan Avenue	Replace controllers. Conversion of timing to Centracs. Develop new synchronization plans. Install video detection.	$1,000,000
Culver Drive/Bonita Canyon Drive	Replace controllers. Conversion of timing to Centracs. Develop new synchronization plans. Install video detection.	$2,000,000
Harvard Avenue	Develop new synchronization plans. Install video detection.	$1,200,000
Jamboree Road	Develop new synchronization plans. Install video detection.	$3,500,000
Jeffrey Road	Replace controllers. Conversion of timing to Centracs. Develop new synchronization plans. Install video detection.	$2,000,000
Main Street	Replace controllers. Conversion of timing to Centracs. Develop new synchronization plans. Install video detection.	$2,500,000
MacArthur Boulevard	Replace controllers. Conversion of timing to Centracs. Develop new synchronization plans. Install video detection.	$2,000,000
Michelson Drive	Replace controllers. Conversion of timing to Centracs. Develop new synchronization plans. Install video detection.	$1,500,000
Red Hill Avenue	Replace controllers. Conversion of timing to Centracs. Develop new synchronization plans. Install video detection.	$1,100,000
Trabuco Road	Replace controllers. Conversion of timing to Centracs. Develop new synchronization plans. Install video detection.	$2,000,000
Walnut Avenue	Replace controllers. Conversion of timing to Centracs. Develop new synchronization plans. Install video detection.	$1,000,000
	Total Estimated Cost	$19,800,000

SECTION FIVE

TRAFFIC SIGNAL SYNCHRONIZATION ASSESSMENT REVIEW AND REVISE, AS MAY BE NECESSARY, THE TIMING OF TRAFFIC SIGNALS

Significant timing plan updates and projects completed FY 2014/2015 through 2016/2017

(Do not include periodic refinements performed as part of routine monthly reviews)

Performance Monitoring

Monitoring the performance of traffic signal synchronization plans is an integral part of ensuring that the signal system is operating efficiently. Performance monitoring provides quantifiable information to staff, policy makers and the general public on the signal synchronization operation along arterial corridors. Without regular monitoring, it would be difficult to effectively evaluate and fine-tune existing signal synchronization timing plans, or prioritize new re-timing projects. The City of Irvine currently uses two performance monitoring methods.

Irvine Measures of Operational Effectiveness:

In 1998, the City of Irvine began documenting Measures of Operational Effectiveness (MOE) results to evaluate the effectiveness of traffic signal synchronization on local arterials. To evaluate the MOE, travel time studies are performed annually on corridors during the morning, midday, and afternoon peak periods. Results of the travel time studies are segmented and documented on charts that are compared to the prior year results. A change from the prior year is then identified as a percent value. The City MOE process has proven a valuable performance monitoring tool and is used to prioritize signal synchronization re-timing efforts.

OCTA Corridor Synchronization Performance Index:

For projects funded under the Measure M2 Regional Traffic Signal Synchronization Program (Project P), the OCTA Corridor Synchronization Performance Index (CSPI) methodology is used. This index is calculated from data based on vehicle travel parameters including:

- Average vehicle speed
- Stops per mile
- The ratio of green signals to red signals.

A calculation of the results from each of the categories produces a CSPI score. Depending on the score, the signal synchronization of an arterial would be rated according to one of the following performance levels:

Tier 1 – Very Good Signal Synchronization (CSPI Score $\geq$ 80)
Tier 2 – Good Signal Synchronization (CSPI Score $\geq$ 70 to 80)
Tier 3 – Average Signal Synchronization (CSPI Score $\geq$ 60 to 70
Tier 4 – Below Average Signal Synchronization (CSPI Score $\geq$ 50 to 60)
Tier 5 – Signal Synchronization Needs Improvement (CSPI Score < 50)

As required, CSPI analyses are performed in conjunction with the implementation phase of the six multi-jurisdictional traffic signal synchronization projects that the City has participated since the last LSSP Update in 2014. The projects were funded under

Project P, as seen in the attached Exhibit 2, of the 2016 Corridor Operational Performance for the City of Irvine.

Since 2014

- Alton Parkway from Red Hill Avenue to Portola Parkway (Operation and Maintenance Phase)
- Bake Parkway from Irvine Center Drive to Portola Parkway (Operation and Maintenance Phase)
- Barranca Parkway / Muirlands Boulevard from Red Hill Avenue to Robin Circle (Operation and Maintenance Phase)
- Culver Drive / Bonita Canyon Road from Furrow to Newport Coast Drive (Completed)
- Jamboree Road from Champion to Koll Center (Completed)
- Jeffrey Road from Bryan Avenue / Long Meadow to I-405 (Completed)

As shown on the Traffic Signal Synchronization Assessment, Review, and Revision chart, the CSPI score for each of these arterials increased for certain measured periods. The degree of the score improvement varied depending on the peak periods and direction of travel. The overall performances of the measured corridors were affected by the on-going construction and growth of the City. Jamboree Road and Jeffery Road will be converted over to the new Centracs system within the next two years. Jamboree Road will be a candidate for the future cycles of Project P, while Jeffrey Road will be re-synchronized by in-house staff. The corridors that have performance indexes in the lower tiers as shown in Exhibit 2 are planned for applications for future cycles for Project P.

SIGNAL TIMING REVISIONS (APRIL 2017)

CORRIDOR	CROSS STREET	CYCLE LENGTH							
		AM PEAK		MD PEAK		PM PEAK		WEEKEND PEAK	
		Before	After	Before	After	Before	After	Before	After
ALTON PARKWAY	Red Hill Avenue	120	120	120	120	140	140	FREE	FREE
	Von Karman Avenue	160	160	FREE	120	160	160	FREE	FREE
	Millikan Avenue	160	160	140	140	160	160	FREE	FREE
	Jamboree Road	160	160	140	140	160	160	FREE	FREE
	Murphy Avenue	160	160	140	140	160	160	FREE	FREE
	Harvard Avenue	120	120	100	120	120	150	FREE	FREE
	Paseo Westpark	120	150	100	140	120	150	FREE	120
	San Marino	150	150	140	140	150	150	FREE	FREE
	Culver Drive	150	150	140	140	150	150	FREE	FREE
	West Yale Loop	150	150	140	140	150	150	FREE	FREE
	Lake Road	120	150	100	130	FREE	150	FREE	FREE
	Creek Road	120	150	100	130	FREE	150	FREE	FREE
	East Yale Loop	150	150	130	130	150	150	FREE	FREE
	Jeffrey Road	150	150	130	130	150	150	FREE	FREE
	Royal Oak	150	150	130	130	150	150	FREE	FREE
	Valley Oak	120	120	100	120	120	120	FREE	FREE
	Sand Canyon Avenue	120	120	100	120	120	120	FREE	120
	Hoag Irvine Road	100	120	80	120	100	120	FREE	FREE
	Laguna Canyon Road	100	120	80	120	100	120	FREE	FREE
	Jenner	100	120	80	120	100	120	FREE	FREE
	Telemetry	100	120	80	120	100	120	FREE	FREE
	Banting	100	120	80	120	100	120	FREE	FREE
	Pacifica	100	120	80	120	100	120	FREE	FREE
	Meridian	100	120	100	120	100	120	FREE	FREE
	Irvine Center Drive	120	120	100	120	140	120	FREE	FREE

SIGNAL TIMING REVISIONS (APRIL 2017)

CORRIDOR	CROSS STREET	CYCLE LENGTH							
		AM PEAK		MD PEAK		PM PEAK		WEEKEND PEAK	
		Before	After	Before	After	Before	After	Before	After
ALTON PARKWAY	Gateway Boulevard	FREE	120	100	120	FREE	120	FREE	FREE
	Enterprise Drive	80	120	80	120	80	120	FREE	FREE
	I-5 NB Off-Ramp	80	120	80	120	80	120	FREE	FREE
	Technology Drive West	FREE	120	FREE	120	120	120	FREE	FREE
	Ada	120	120	120	120	120	120	FREE	FREE
	Technology Drive East	120	120	120	110	120	120	FREE	FREE
	Muirlands Boulevard	120	120	120	110	120	120	FREE	FREE
	Jeronimo Road	100	120	100	110	100	120	FREE	FREE
	Hughes	100	120	100	110	100	120	FREE	FREE
	Morgan	100	120	100	110	100	120	FREE	FREE
	Toledo Way	100	120	100	110	100	120	FREE	FREE
	Bertea	100	120	100	110	100	120	FREE	FREE
	Fairbanks	100	120	100	110	100	120	FREE	FREE
	Foster	100	120	100	110	100	120	FREE	FREE
	Irvine Boulevard	100	120	100	110	100	120	FREE	FREE
BAKE PARKWAY	Irvine Center Drive	120	120	100	100	120	120	FREE	100
	Research Drive	80	120	100	120	120	130	80	120
	I-405/I-5 SB Off-Ramp	140	140	100	120	80	130	FREE	120
	I-405/I-5 NB Off-Ramp	70	140	100	120	80	130	FREE	120
	Rockfield Boulevard	140	140	100	120	120	130	100	120
	Muirlands Boulevard	140	140	100	120	120	130	100	120
	Jeronimo Road	140	140	100	120	120	130	100	120
	Toledo Way	140	140	100	120	120	130	100	120
	Cromwell/Calle Entrada	140	140	100	120	120	130	100	120
	Trabuco Road/Irvine Boulevard	140	140	100	120	120	130	100	120

SIGNAL TIMING REVISIONS (APRIL 2017)

CORRIDOR	CROSS STREET	CYCLE LENGTH							
		AM PEAK		MD PEAK		PM PEAK		WEEKEND PEAK	
		Before	After	Before	After	Before	After	Before	After
BARRANCA PARKWAY/ MUIRLANDS BOULEVARD	Red Hill Avenue	120	160	120	140	140	160	FREE	105
	Armstrong Avenue	120	160	120	140	120	160	FREE	105
	Von Karman Avenue/Tustin Ranch Road	120	160	120	140	120	160	FREE	105
	Millikan Avenue/The District	160	160	140	140	160	160	FREE	140
	Jamboree Road	160	160	140	140	160	160	140	140
	Construction Street	80	80	70	70	80	80	70	70
	Fire Station	60	80	100	70	60	80	FREE	70
	Harvard Avenue	120	130	100	120	120	150	80	120
	Paseo Westpark	120	150	100	140	120	150	80	105
	Santa Rosa	75	150	70	140	75	150	70	105
	Culver Drive	150	150	140	140	150	150	140	140
	West Yale Loop	150	150	140	140	150	150	140	140
	Lake Road	80	150	100	70	120	75	80	70
	Creek Road	120	75	100	70	120	75	80	70
	Woodbridge Square	120	75	100	70	120	75	80	70
	Lyon	60	75	100	70	60	75	80	70
	East Yale Loop	FREE	150	130	130	150	150	FREE	130
	Jeffrey Road	FREE	150	130	130	150	150	130	130
	Valley Oak Drive	80	80	100	FREE	80	120	FREE	120
	Sand Canyon Avenue	120	120	100	120	120	120	FREE	120
	Laguna Canyon Road	80	80	80	120	80	120	FREE	120
	Fed Ex	80	80	80	120	80	60	FREE	60
	Herchel/Discovery	80	80	80	120	80	120	FREE	60
	Banting	FREE	80	FREE	120	FREE	120	FREE	60
	Pacifica	120	120	100	80	120	120	FREE	60

SIGNAL TIMING REVISIONS (APRIL 2017)

CORRIDOR	CROSS STREET	CYCLE LENGTH							
		AM PEAK		MD PEAK		PM PEAK		WEEKEND PEAK	
		Before	After	Before	After	Before	After	Before	After
BARRANCA PARKWAY/ MUIRLANDS BOULEVARD	Irvine Center Drive	120	120	100	120	120	120	FREE	120
	I-5 Carpool Ramp	FREE	60	FREE	120	FREE	60	FREE	60
	Technology Drive	80	120	80	120	80	120	FREE	60
	Ada	80	120	80	120	80	120	FREE	60
	Alton Parkway	120	120	100	110	120	120	FREE	120
	Thomas	80	60	80	110	80	60	FREE	60
	Bake Parkway	140	140	100	120	120	130	100	120

*Note: Shaded rows denote locations owned and maintained by Caltrans

TRAFFIC SIGNAL SYNCHRONIZATION ASSESSMENT, REVIEW, AND REVISION

LOCAL AGENCY CORRIDOR			TIMING REVIEWED	DID TIMING REQUIRE AN UPDATE?	TIMING UPDATE RESULTS (if available)							
					Speed Travel		Stops per mile		Greens per red		CSPI Score	
					Before	After	Before	After	Before	After	Before	After
Alton Parkway	**AM**	**EB**	2014	YES	25.5	*30.0*	27.8	*32.50*	17.50	*33.90*	70.8	*96.4*
		WB	2014	YES	22.5	*27.0*	25.9	*31.20*	14.10	*27.60*	62.5	*85.8*
	MD	**EB**	2014	YES	25.5	*30.0*	28.2	*32.10*	18.50	*31.60*	72.2	*93.7*
		WB	2014	YES	24.0	*28.5*	26.1	*31.00*	14.50	*26.60*	64.6	*86.1*
	PM	**EB**	2014	YES	21.0	*28.5*	27.8	*32.40*	17.70	*33.40*	66.5	*94.3*
		WB	2014	YES	21.0	*25.5*	26.1	*30.80*	14.50	*26.00*	61.6	*82.3*
Bake Parkway	**AM**	**NB**	2014	YES	28.3	*31.5*	1.13	*0.92*	2.16	*3.66*	72.5	*90.6*
		SB	2014	YES	30.4	*31.6*	1.11	*0.99*	1.97	*2.77*	74.6	*82.9*
	MD	**NB**	2014	YES	24.8	*31.7*	1.26	*1.04*	1.54	*2.52*	62.0	*80.6*
		SB	2014	YES	28.8	*32.3*	1.04	*0.79*	2.16	*3.46*	75.1	*92.2*
	PM	**NB**	2014	YES	26.3	*32.1*	1.02	*0.77*	2.50	*3.76*	74.2	*96.7*
		SB	2014	YES	28.9	*32.6*	1.16	*0.96*	2.16	*2.86*	73.5	*85.3*
Barranca Parkway/ Muirlands Boulevard	**AM**	**EB**	2014	YES	23.1	*26.1*	1.50	*1.10*	1.40	*2.40*	55.8	*72.2*
		WB	2014	YES	23.8	*25.2*	1.60	*1.30*	1.30	*1.70*	55.9	*63.1*
	MD	**EB**	2014	YES	24.7	*27.3*	1.40	*1.10*	1.50	*2.30*	60.2	*73.1*
		WB	2014	YES	24.2	*29.2*	1.40	*1.10*	1.60	*2.20*	59.6	*74.5*
	PM	**EB**	2014	YES	22.7	*24.4*	1.50	*1.10*	1.30	*2.10*	54.3	*67.7*
		WB	2014	YES	20.4	*22.9*	1.80	*1.10*	1.10	*2.40*	45.6	*67.7*

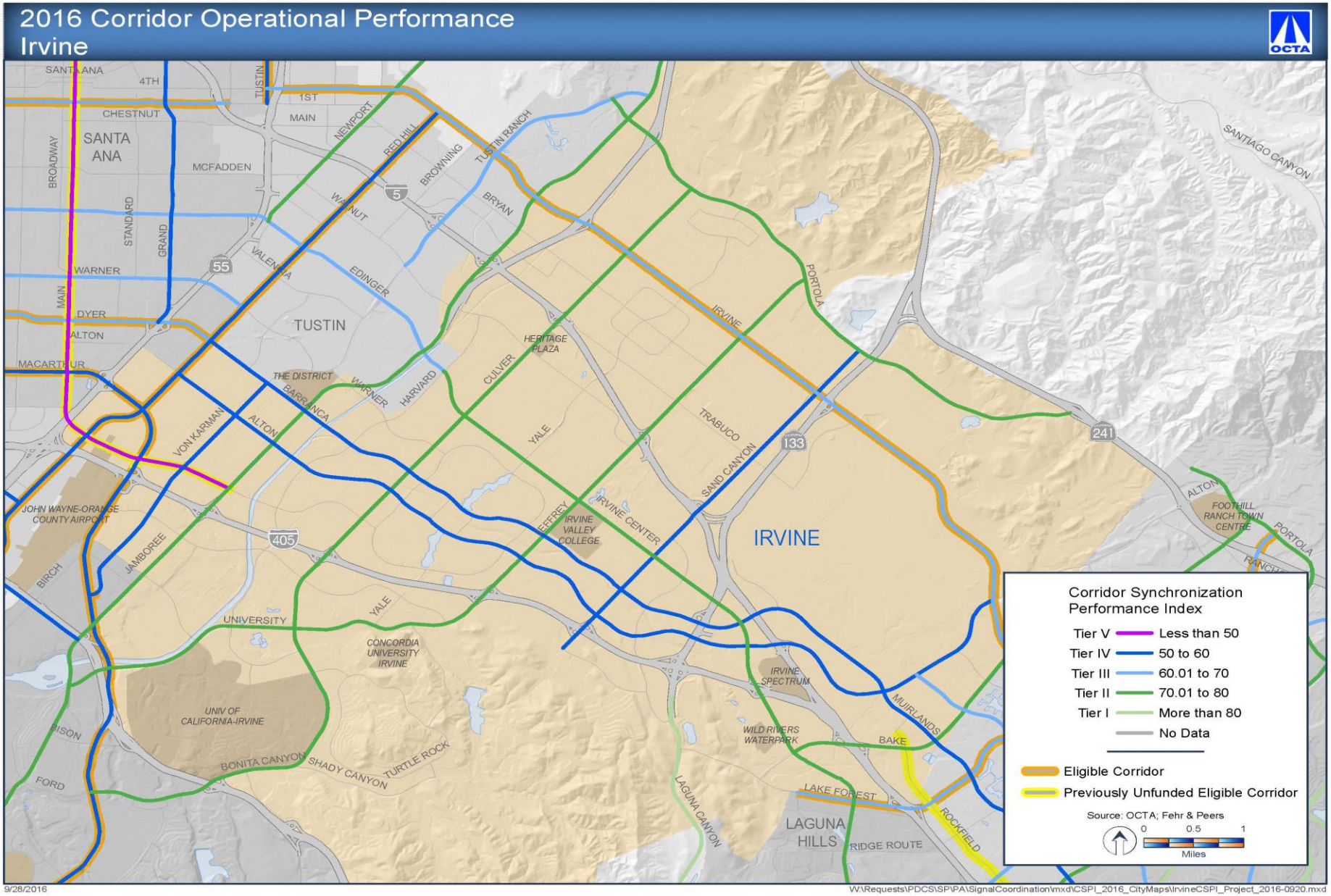


Exhibit 2 – 2016 Corridor Operational Performance for City of Irvine

CITY OF IRVINE

2017 PAVEMENT MANAGEMENT PLAN UPDATE

APRIL 20, 2017

ATTACHMENT 5

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EXECUTIVE SUMMARY

2017 PAVEMENT MANAGEMENT PLAN (PMP) UPDATE

As the City of Irvine continues to show growth with its population, demographics, infrastructure, and maintenance needs, the street network has been running parallel as new developments increase the size of Irvine's pavement infrastructure. As growth continues within the City and regionally, wear and tear on the infrastructure will occur at an ever increasing rate. Pavement aging through annual weathering and increased usage, compounded with the increased cost of performing maintenance add to the yearly operational maintenance of the pavement network. System sustainability can only be achieved through proactive scheduling and the implementation of cost-efficient pavement applications.

In the upcoming years as the City continues to build upon this study through future inspections and maintenance efforts, Irvine pavement data will continue to provide reliable data to enhance the PMP through detailed Orange County Transportation Authority (OCTA) Measure M2 (M2) funding analysis, City specific budgetary reporting and level of service reporting.

The Irvine PMP has been developed to assist City personnel by providing current data on the City's street network and to develop cost-effective maintenance strategies to maintain a desirable level of pavement performance on a network scale, while optimizing the expenditure of limited fiscal resources. The project consisted of analyzing the City's 2015 dataset for quality and usability. In doing this, we generated an updated Capital Improvement Program report that identified recommendations in the operations and maintenance efforts put forth by the City.

All arterial and collector (MPAH) routes were surveyed this past winter consistent with OCTA M2 January 2016 guidelines; as well as 33% of the City's local streets. Additionally, we updated the City's unique Pavement Management – GIS layer that will continue to assist the City in analyzing pavement conditions and other attribute information through the use of ESRI ArcMap.

Bucknam Infrastructure Group reviewed the City's previous maintenance efforts and the current 2017-18 proposed street improvements for pertinent pavement information in order to generate a CIP report that identified recommendations and opportunities for improvement in the current operating and maintenance efforts put forth by the City. The result of these work efforts is this report.

Specifically, our findings and recommendations provide Public Works administrators, managers and field personnel with:

- *PMP report consistent with OCTA M2 guidelines*
- *the present condition status of the pavement network (arterial, collector, residential and industrial streets), as a whole and of any grouping or individual component within the City;*
- *a ranked list of all streets, or segments of streets, by condition within the network;*
- *rehabilitation/maintenance needs of each street segment by year;*

- *an optimized priority maintenance and rehabilitation program based on cost/benefit analysis and various levels of funding;*
- *optimum annual pavement expenditure levels for pavement maintenance for the next seven (7) years;*
- *prediction of the life-cycle performance of the City's pavement network and each individual street section;*
- *updated PMP data to assist the City with GASB 34 reporting; and*
- *pavement condition data and analysis presented in GIS through ESRI ArcMap*

Pavement is a dynamic structure where deterioration is constantly occurring; thus the pavement management system needs to be updated on a regular basis to reflect these changes in pavement conditions, pavement maintenance histories, and maintenance strategies based upon budgetary constraints. This report reflects our findings and recommendations for the PMP and the current state of the City's pavement network. Furthermore, we have recommended detailed funding and maintenance strategies for the arterial/collector and residential networks for next seven (7) years.

FINDINGS AND RECOMMENDATIONS

Through our assessment of historical maintenance performed within the City and through our discussions with City staff the conditional data found across the network clearly shows that the City has applied strong, preventative maintenance strategies over the past decade. Pavement management involves frequent preventative maintenance; as pavement deteriorates through heavy traffic impacts, weathering and time, preventative maintenances (such as slurry seal, stop gap, etc.) have limited benefits. More aggressive maintenance applications have to be used. Our study has shown that key overlay projects will be needed over the next seven years to maintain the network's high level of condition.

Through our analysis of the Irvine PMP we have found and recommend the following items which should be considered for a proactive approach to the PMP and future management of the program:

ARTERIAL / COLLECTOR (MPAH) FINDINGS AND RECOMMENDATIONS

The actual workload requirements identified indicate that the Arterial (MPAH) street network is currently in "very good" condition. To maintain this condition, it is critical that preventive maintenance and overlay activities are funded at the levels identified on page 13 to maintain a "very good" network weighted average PCI value.

Our MPAH findings for conditional data and recommendations for revenue expenditures are shown below:

- The MPAH network has a weighted PCI of 86.0
- The MPAH network consists of 143.2 section miles and 54,490,718 SF of pavement;

- Currently, 5% of the MPAH network (7.7 section miles) qualify for rehabilitation/reconstruction maintenance;

- MPAH maintenance projects should focus on the maintaining the current PCI above a weighted average of 80 over the next 7 years;

- Develop a proactive fiscal and planned approach to identify MPAH overlay projects based on the deterioration modeling within MicroPAVER;

- Maintain the MPAH revenues at the $4.8 Million/year level for the term of the CIP to generate the results identified on page 13; and

- Perform pavement inspections on the MPAH network every two years to build a solid planning model within MicroPAVER to track PCI deterioration; also follows new OCTA guidelines for M2.

LOCAL FINDINGS AND RECOMMENDATIONS

The actual workload requirements identified indicate that the Local street network is currently in "good" condition. To maintain this condition, it is critical that preventive maintenance and overlay activities are funded at the levels identified on page 13 to maintain a "good" network weighted average PCI value. Our Local network findings for conditional data and recommendations for revenue expenditures are shown below:

- The Local network has a weighted PCI of 85.8;

- The Local network consists of 263.0 section miles and 55,392,799 SF of pavement;

- Currently, 9% of the Local network (24.7 centerline miles) qualify for rehabilitation/reconstruction maintenance;

- Local maintenance projects should focus on the maintaining the current PCI above a weighted average of 80 over the next 7 years;

- Develop a proactive fiscal and planned approach to identify arterial overlay projects based on the deterioration modeling within MicroPAVER;

- Maintain the Local revenues at the $6.5 Million/year level for the term of the CIP to generate the results identified on page 13; and

- Perform pavement inspections on the Local network every six years to build a solid planning model within MicroPAVER to track PCI deterioration; also follows new OCTA guidelines for M2.

- The City surveys approximately a third of all Local streets every two years.

Pavement Management Plan Certification

Appendix F:
Pavement Management Plan Certification

The City of Irvine, CA certifies that is has a Pavement Management Plan in conformance with the criteria stated in the Orange County Transportation Authority Ordinance No. 3. This ordinance requires that a Pavement Management Plan be in place and maintained to qualify for allocation of revenues generated from renewed Measure M (M2).

The plan was developed by Bucknam Infrastructure Group, Inc. using MicroPAVER, a pavement management system conforming to American Society for Testing and Materials (ASTM) Standard D6433, and contains, at a minimum, the following elements:

- Inventory of MPAH and Local routes reviewed and updated biennially. The last update of the inventory was completed in March 2017 for the Arterial (MPAH) and March 2017 for the Local streets
- Assessment of the pavement condition for all routes in the system, updated biennially. The last field review of the pavement condition was completed in March 2017.
- Percentage of all sections of pavement needing:
  - Preventive Maintenance = 24%, Rehabilitation = 12%, Reconstruction = 0%
- Budget needs for preventive maintenance, rehabilitation and/or reconstruction of deficient sections of pavement for:
  - Current biennial period $24,324,400 Following biennial period $30,537,300
- Funds budgeted or available for Preventive Maintenance, Rehabilitation and/or Reconstruction.
  - Current biennial period $24,765,000 Following biennial period $40,485,000
- Backlog by year of unfunded rehabilitation, restoration and reconstruction needs (See page 15)
- The Pavement Management Plan is consistent with countywide pavement condition assessment standards as described in the OCTA Countywide Pavement Management Plan Guidelines adopted by the OCTA Board of Directors on May 24, 2010, amended in January, 2016.

*An electronic copy of the Pavement Management Plan with MicroPAVER or StreetSaver compatible files has been or will be submitted with the certification statement.

A copy of this certification is being provided to the Orange County Transportation Authority.

Submitted by:

Manuel Gomez — Name (Print)

City of Irvine — Jurisdiction

Signed

Date

Director of Public Works — Title

Quality Assurance / Quality Control Plan

As required by the Orange County Transportation Authority (OCTA), the City of Irvine must prepare and implement a quality assurance / quality control (QA/QC) plan regarding pavement management inspection as they pertain to MicroPAVER. For the purposes of this report, Bucknam Infrastructure Group (Bucknam) has demonstrated below how our project team implemented QA/QC procedures during the project.

Our QA/QC plan focuses on the how each pavement inspection is performed, what distresses are collected and ensures that it complies with the OCTA guidelines defined within the "Countywide Pavement Management Plan, Guidelines (CPMPG)".

As shown within the OCTA (CPMPG), our staff followed and delivered on the requirements stated on Section 2.4, page 11 which require specific QA/QC data (Items A through G). Additionally, Chapter 3 requires numerous data/deliverables from local agencies for M2 eligibility. All general PCI budgetary report submittals will follow the Chapter 3 guidelines.

In conjunction with the outlined items within the CPMPG Section 2.4 we have summarized our QA/QC procedures below:

a. **Descriptions of condition survey** - Our staff follows the required Condition Survey Protocols (CPMPG, Section 2.1); our staff assesses each pavement section for the minimum distresses outlined within Section 2.1. Additionally, based on the pavement conditions found, we collect all PMP Army Corps of Engineers (ACOE) distresses, if found within the sample sections; for example, if slippage cracking, potholes, etc. are found our survey technicians record the proper information.

b. **How data was collected** - Our surveys follow the OCTA accepted windshield/walking requirements. All sections that our staff surveys are performed through the windshield method, approximately 20% of all sections surveyed were complemented with walking surveys based on unique conditions found. Our staff physically measures the width of every section as well as measure for any square footage adjustment that need to be added or taken away from a sections "true area" (i.e. cul-de-sac, bus pads, street width variances, etc.).

c. **Accuracy required for data collection** - We use a statistical sampling approach for measuring the quality of our field technician's work. In this manner, 10 percent of the original surveys are re-surveyed by a different survey crew than the original, supervised by a field supervisor, and the results are compared to the original surveys. Our QC process involves checking the field crews' work in a "blind study" fashion. Quality control checks are performed at the end of each survey week. This ensures that all field personnel are properly collecting section samples, distress types and distress severities for all street segments.

    - When QA/QC issues are found, our staff documents the issues within the PMP software user interface. If distress types found are not within the 97% accuracy our QA/QC is expanded beyond our minimum 10% resurvey to 20% of the original survey

d. **Data check for accuracy by agency** – As described above our staff re-inspects, as a minimum, 10% of the original survey (OCTA only requires 5%). Per the agencies requests, our staff will submit PCI reports to the agency as project status reports for their review. Agencies will typically review specific pavement sections for PCI accuracy based on recent overlay or slurry seal maintenance; this serves as an initial accuracy check on our surveys (outside Bucknam QC efforts). Additionally, our staff performs "ride-a-long" surveys with local agency staff to build consensus on how our PMP ACOE surveys are performed, recorded and reported on.

e. **Schedule of data submittal** – Pending on the City's last major PMP submittal, Bucknam will assist the agency in submitting the following:

- Master Plan of Arterial Highways (MPAH) routes will be surveyed and reported on at least once every two years
- Local streets will be surveyed at least once every two years (three times within the OCTA six year requirement)
- Corresponding MPAH and local PCI reporting and budgetary reporting will be submitted every two years

f. **Experience of Inspectors** – Bucknam Infrastructure Group, Inc. staff have been trained on the use of MicroPAVER & StreetSaver and the ASTM D6433 segment calibration and inspection practices. Mr. Peter Bucknam (Project Manager) and his team have completed the MicroPAVER Certification of Professional Development courses on an annual basis since 2010.

g. **Field data collection safety procedures** – Bucknam field survey techniques utilize the following procedures:

- All vehicles are properly marked or flagged with appropriate sign markings indicating that a "PAVEMENT SURVEY IS IN PROGRESS"
- All vehicles have the proper amber light beacons placed on the top of the vehicle to allow for proper visibility and line-of-site warning
- Large MPAH routes are surveyed using two field technicians to increase traffic control warning and safety
- While parking or stopping along the survey route, vehicles legally park within the right-of-way or use a parking lot
- All field technicians wear fluorescent vests to warn traffic and pedestrians

On a case-by-case basis, if our staff was responsible for converting a previous PMP database to MicroPAVER or StreetSaver this will be properly notated within our reporting. Our staff will provide examples of how the previous inspections were performed compared to the most recent MicroPAVER based surveys. Bucknam will provide the local agency a copy of our QA/QC plan prior to any pavement inspection work. With approval, our staff will begin the PMP ASTM D6433 based inspections.

Pavement Management Plan

The enclosed Pavement Management Plan and attached reports are in compliance with the OCTA requirements outlined in Chapter 3 of the Countywide Pavement Management Plan Guidelines.

- Pavement Condition Index (PCI) Reports
  - MPAH Map
  - PCI Map
  - PCI Report - A to Z Order
    - Entire Network
    - MPAH roadways
    - Local streets

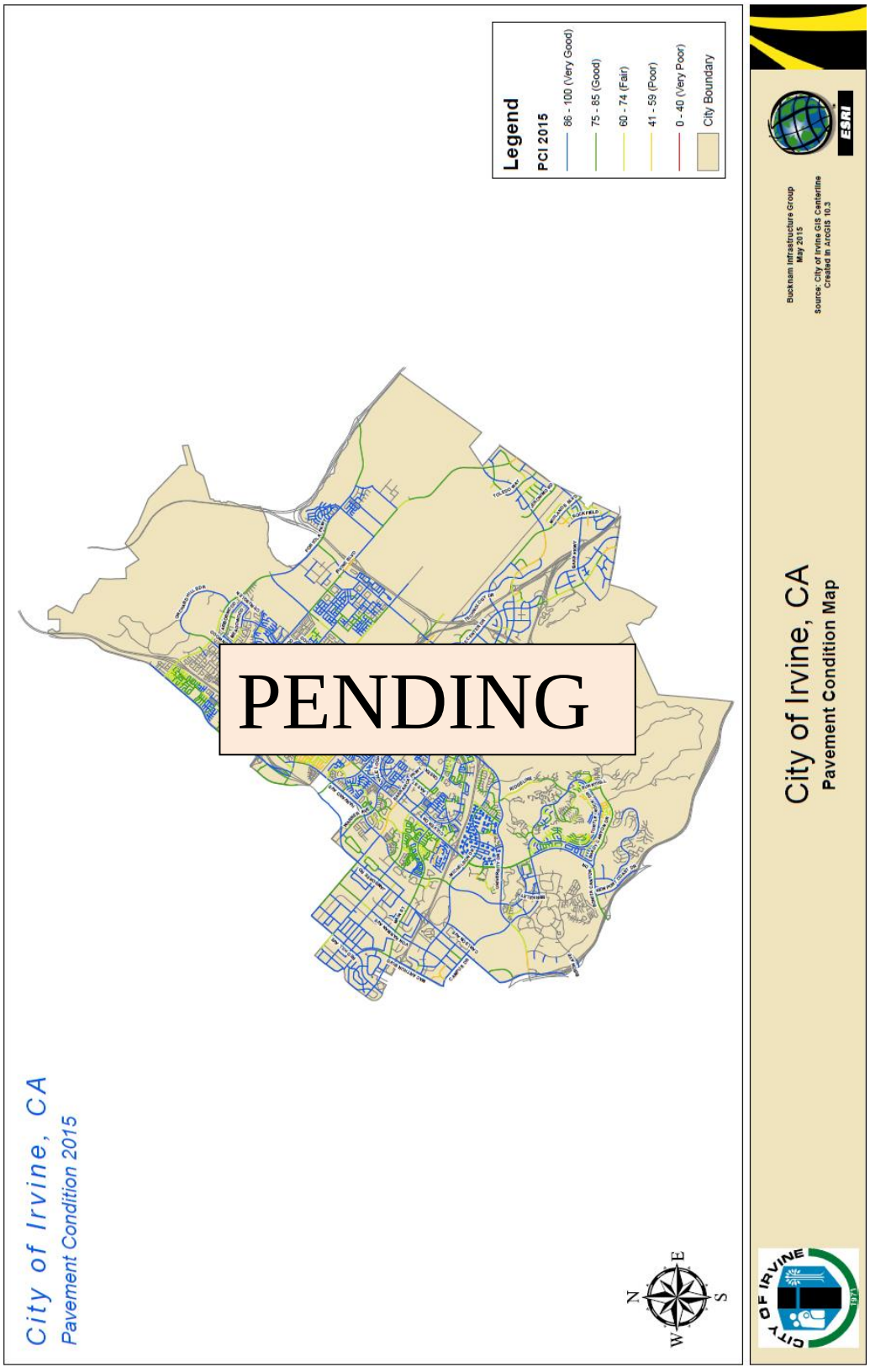
- Projected PCI Under Existing Funding Levels
    - Entire Network
    - MPAH roadways
    - Local streets

- Road Maintenance and Rehabilitation Projections (Seven-Year Projection)

- Alternative Funding Levels required to:
  - Maintain Existing Average Network PCI
  - To Improve Average Network PCI

- Backlog by Fiscal Year

- Center Line Mileage for MPAH, Local Streets and Total Network


Legend
PCI 2015
86 - 100 (Very Good)
75 - 85 (Good)
60 - 74 (Fair)
41 - 59 (Poor)
0 - 40 (Very Poor)
City Boundary
PENDING
City of Irvine, CA
Pavement Condition 2015
N
E
S
W
City of Irvine, CA
Pavement Condition Map
Buckham Infrastructure Group
May 2015
Source: City of Irvine GIS Centerline
Created in ArcGIS 10.3
ESRI
CITY OF IRVINE

Pavement Condition Index Reports

The City of Irvine has included the following reports describing the current condition of our roadway network. The enclosed Pavement Condition Index (PCI) report identifies specific PCI values, inspection dates, and section measurements for all pavement segments within the City's network.

- PCI Report - A to Z Order
  - Entire Network
  - MPAH roadways
  - Local streets

The City of Irvine's weighted pavement condition index (PCI) for the entire network is **85.9**; for the MPAH designated streets the PCI is **86.0**; for the Local streets the PCI is **85.8**.

Current Pavement Conditions for Entire Network (Section Miles)

Condition	PCI Range	MPAH	Locals	Total Mi.	% of Network
Very Good	(86-100)	88.1	170.2	258.3	64%
Good	(75-85)	41.8	55.4	97.2	24%
Fair	(60-74)	10.3	27.5	37.8	9%
Poor	(41-59)	3.0	9.8	12.8	3%
Very Poor	(0-40)	0.0	0.1	0.1	0%
		143.2	**263.0**	**406.2**	

Pavement Network Totals & Historical PCI Trends

Rank	Mileage	SF	Weighted PCI 2017	Weighted PCI 2015	Weighted PCI 2013	Weighted PCI 2010	Weighted PCI 2008
MPAH	143.2	54,490,718	86.0	87.3	86.9	86.4	81.6
Local	251.1	55,392,799	85.8	85.9	79.3	80.0	71.7
Citywide	**394.3**	**109,883,517**	**85.9**	**86.6**	**82.9**	**82.9**	**77.0**

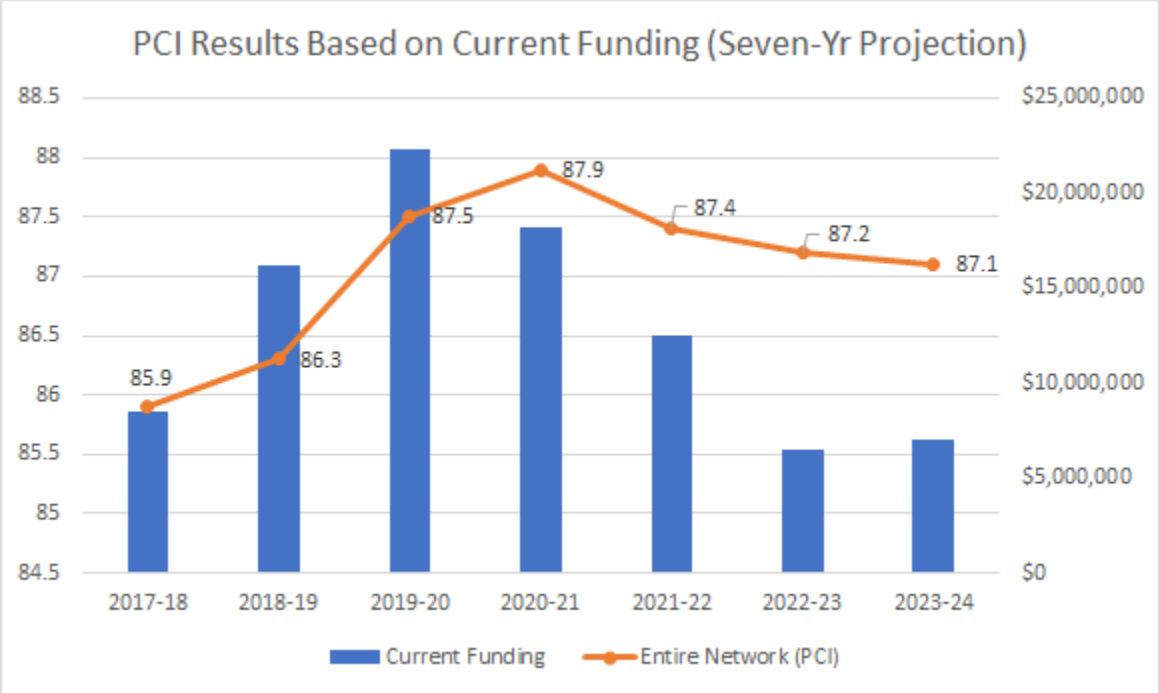
Enclosed is a Pavement Condition Index (PCI) report which identifies specific PCI values, inspection dates, section measurements, and functional classifications.

Projected PCI Under Existing Funding Levels (Seven-Year Projection)

Based on the current projected funding, we have weighed this funding against the conditions found on the network from the most recent survey. We have included summary tables below to demonstrate our PCI findings.

Projected PCI Under Existing Funding (Seven-Year Projection)

FY	Current Funding	Entire Network (PCI)	MPAH	Local
2017-18	$8,535,000	85.9	86.2	85.6
2018-19	$16,230,000	86.3	86.5	86.1
2019-20	$22,335,000	87.5	87.7	87.3
2020-21	$18,150,000	87.9	88.0	87.8
2021-22	$12,550,000	87.4	87.6	87.2
2022-23	$6,500,000	87.2	87.5	86.9
2023-24	$7,000,000	87.1	87.3	86.9
	$91,300,000			



Road Maintenance and Rehabilitation Projections (Seven-Year)

The following report is a section-by-section listing of recommended maintenance and rehabilitation projects laid out by fiscal year. This is a seven-year projection which includes the MPAH and Local Street programs.

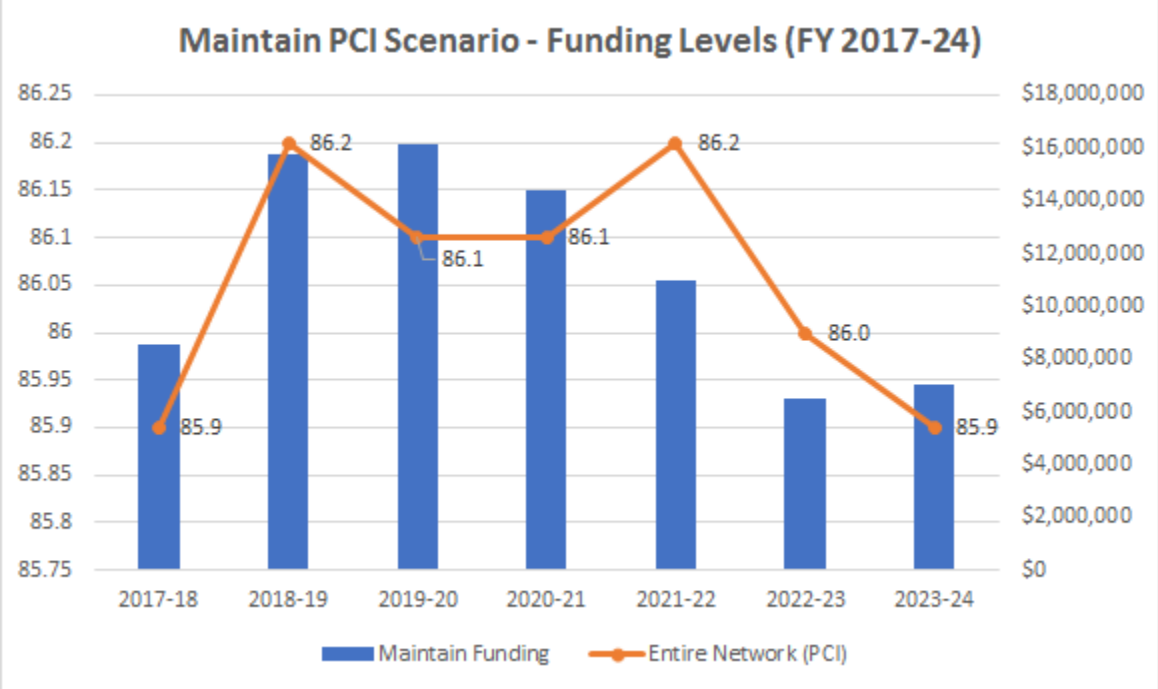
Alternative Funding Levels

By using the City of Irvine's current budgets and maintenance practices the system will develop "section unique" improvements and strategies. Each segment will be tied to a specific fiscal year. As shown in the following pages, we have assessed the budgets that have been projected to meet the maintenance and rehabilitations needed to maximize the City's return on investment. The budget forecasting goal for the Arterial and Local networks focused on:

- Establishing a proactive 7-Year Maintenance & Rehabilitation Program;
- Identify what funding levels are necessary to maintain and/or improve the networks PCI
- Selecting the most cost effective repairs based on City strategies

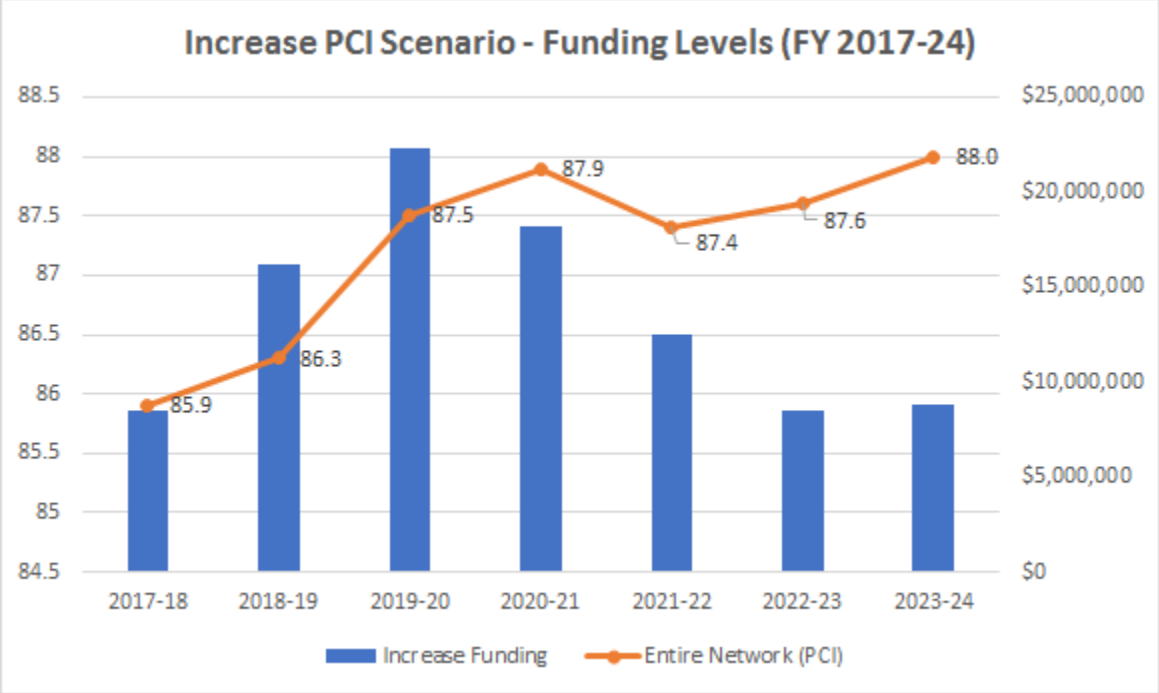
CITYWIDE FUNDING NECESSARY TO MAINTAIN CURRENT PCI

FY	Maintain Funding	Entire Network (PCI)	MPAH	Local
2017-18	$8,535,000	85.9	86.0	85.8
2018-19	$15,789,400	86.2	86.3	86.1
2019-20	$16,173,700	86.1	86.2	86.0
2020-21	$14,363,600	86.1	86.2	86.0
2021-22	$10,984,300	86.2	86.3	86.1
2022-23	$6,500,000	86.0	86.2	85.8
2023-24	$7,000,000	85.9	86.1	85.7
	$79,346,000			



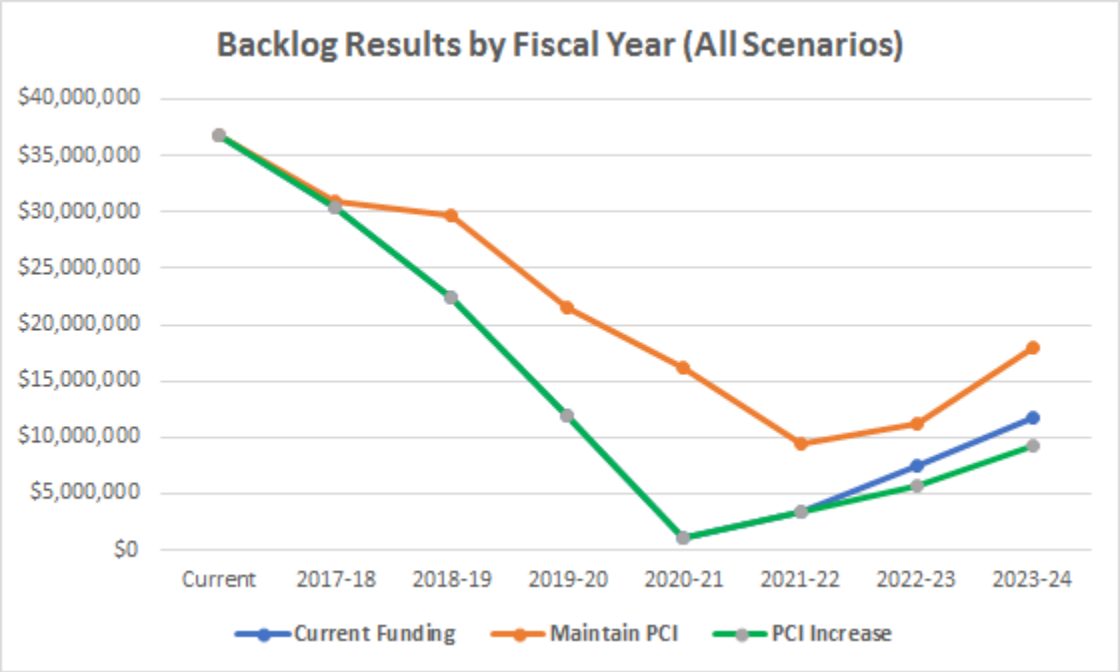
CITYWIDE FUNDING NECESSARY TO INCREASE CURRENT PCI

FY	Increase Funding	Entire Network (PCI)	MPAH	Local
2017-18	$8,535,000	85.9	86.2	85.6
2018-19	$16,230,000	86.3	86.5	86.1
2019-20	$22,335,000	87.5	87.7	87.3
2020-21	$18,150,000	87.9	88.0	87.8
2021-22	$12,550,000	87.4	87.6	87.2
2022-23	$8,500,000	87.6	87.9	87.3
2023-24	$8,800,000	88.0	88.2	87.8
	$95,100,000			



BACKLOG BY FISCAL YEAR (RE: RESTORATION, REHABILITATION, RECONSTRUCTION)

FY	Current Funding	Maintain PCI	PCI Increase
Current	**$36,877,700**	**$36,877,700**	**$36,877,700**
2017-18	$30,351,800	$31,017,500	$30,351,800
2018-19	$22,412,700	$29,755,400	$22,412,700
2019-20	$11,971,000	$21,530,100	$11,971,000
2020-21	$1,033,700	$16,139,700	$1,033,700
2021-22	$3,442,900	$9,474,200	$3,442,900
2022-23	$7,460,000	$11,176,700	$5,748,500
2023-24	$11,743,600	$17,881,300	$9,213,500



Local Match Reduction Reporting

The information, tables, and graphs included in this PMP submittal demonstrate the City Irvine's eligibility for Local Match Reduction.

In order to be eligible for Local Match Reduction of 10%, the following must be submitted:

- Measureable improvement of paved road conditions during the previous reporting period defined as an overall weighted (by area) average system improvement of one PCI point.
- No reduction in the overall weighed (by area) average PCI in the MPAH or local street categories

- or -

- Road pavement conditions during the previous reporting period within the highest twenty percent of the scale for road pavement conditions in accordance with OCTA Ordinance No. 3 (i.e. PCI greater or equal to 75).

The City of Irvine has demonstrated it is **ELIGIBLE** for Local Match Reduction based on the current network weighted PCI of 85.9. Additionally, the City of Irvine projects that the Weighted Average PCI will continue to remain above 75 after the seven-year program, based on current budget projections.

3.6

REQUEST FOR CITY COUNCIL ACTION

MEETING DATE: MAY 9, 2017

TITLE: APPROVAL OF PLANS, SPECIFICATIONS AND CONTRACT DOCUMENTS FOR THE LAKEVIEW SENIOR CENTER OUTDOOR PATIO AND ROSE GARDEN REHABILITATION

Director of Public Works

City Manager

RECOMMENDED ACTION

1. Approve the construction plans, specifications and contract documents for the Lakeview Senior Center Rehabilitation, Capital Improvement Project 361733.

2. Approve the Engineer's Estimate, Construction Contingency and Project Funding Summary.

3. Authorize staff to solicit competitive bids and award the construction contract to the lowest responsive and responsible bidder, in accordance with the City's purchasing policies and procedures, within the approved project budget.

EXECUTIVE SUMMARY

On March 28, 2017 City Council directed staff to seek input on the proposed rehabilitation of the Lakeview Senior Center Patio and Rose Garden from the Irvine Residents with Disabilities Advisory Board (IRDAB) and the Irvine Senior Citizens Council (ISCC). Staff presented the project to the IRDAB and ISCC at its regular scheduled April 2017 meetings. The IRDAB and ISCC recommended City Council approval of this project.

The construction plans, specifications and documents are complete and available for public review in the Public Works department. This project was approved by the City Council with the City's annual funding allocations from the Federal Community Development Block Grant (CDBG) program. The proposed work includes site drainage improvements, replacement of landscaping and upgrades to the outdoor lighting, patio furniture and shade structures. The proposed rehabilitation of the outdoor patio areas will replenish the useful life of the amenities and enhance the public's use and enjoyment of these facilities. A site plan depicting the outdoor areas proposed for rehabilitation is included as Attachment 2.

To minimize construction impacts to the center's operations and to reduce the construction time period, the project specifications allow the contractor to close the patio areas for a period of up to two months to facilitate the required work and to ensure the

safety of the public at the facility during construction. The City's project manager will be in constant communication with the senior center staff to provide ongoing construction updates and information on the progress of the work. Approval of the recommended actions will allow staff to proceed with solicitation of competitive bids for construction and to award a contract to the lowest responsive and responsible bidder in accordance with the City's purchasing policies and procedures within the approved project budget.

COMMISSION/BOARD/COMMITTEE RECOMMENDATION

On April 4, 2017, the Irvine Residents with Disabilities Advisory Board reviewed the construction plans, specifications and contract documents and recommended City Council approval by a vote of 8-0-6 (Board Members Chockalingam, Choi, Constantin, Felix, McLaughlin, Money, Robert and Stern voting in favor; Board Members Drayer, Gibbons, Gustin, Harvey, Jewell and Niggl absent).

On April 20, 2017, the Irvine Senior Citizens Council reviewed the construction plans, specifications and contract documents and recommended City Council approval by a vote of 7-0, with all Board Members present.

ANALYSIS

The existing outdoor patio and rose garden are in need of rehabilitation to address ongoing drainage issues experienced during extended storm periods and to modernize the furniture fixtures, lighting and shade structures. In April 2016, the City Council approved funding for this project with the approval of the annual CDBG and Home Investment Partnerships Funding Program. The proposed improvements include demolition and reconstruction of the patio pavement areas to allow for regrading to slope water away from the building structure. Drainage inlets will be installed to collect storm water and drain it to the landscaped areas in conformance with storm water quality requirements. In addition, the project will replace deteriorated irrigation and landscaping, replace existing outdoor lighting with energy efficient light-emitting diode (LED) fixtures, clean and paint the existing shade structure and patio block walls, and provide outdoor patio heaters, furniture, and umbrellas for the comfort and enjoyment of the facility users.

The construction contract estimate prepared by the consultant design engineer for this project is $490,000. A budget allowance of $122,850 for construction engineering (material and equipment testing, inspection services and surveying) and $98,000 for construction contingency is recommended, as shown in the Project Funding Summary (Attachment 3). The City's construction contracting policies and procedures limit the award of the construction contract by staff to a maximum of 10 percent over the engineer's estimate and restrict the use of the construction contingency only for unforeseen circumstances that may arise necessary to complete the work within the approved project scope and budget.

Staff is seeking City Council approval to proceed with soliciting competitive bids for construction. A copy of the Notice Inviting Bids, Construction Contract, Plans, Specifications, and the proposed Schedule of Work listing the individual bid items for

this project is included as Attachment 4. If approved by the City Council, construction is anticipated to begin in August 2017 with completion by December 2017. During this construction period, the patio will be closed to the public for up to two months to facilitate the demolition and reconstruction of the patio pavement surface areas. Work activity will take place primarily Monday through Friday between the hours of 7 a.m. and 3:30 p.m.

ENVIRONMENTAL REVIEW

Pursuant to Section 4 of the City of Irvine California Environmental Quality Act (CEQA) Procedures and Article 19 of the State of California CEQA Guidelines, the proposed project is categorically exempt from the requirements of CEQA, under State Guideline Section 15301, Class 1(d), Existing Facilities.

ALTERNATIVES CONSIDERED

The City Council could elect not to approve the recommended actions and direct staff to defer the rehabilitation project to a future date or may direct staff to modify any of the elements of the project scope. These alternatives are not recommended because the proposed improvements are consistent with the approved CDBG grant program funding allocation and are needed to address the drainage issues in the patio area. The City Council may also approve the construction plans and related documents, authorize staff to solicit competitive bids and direct staff to bring back the results of the competitive bid process to the City Council for its review and consideration prior to award of the contract.

FINANCIAL IMPACT

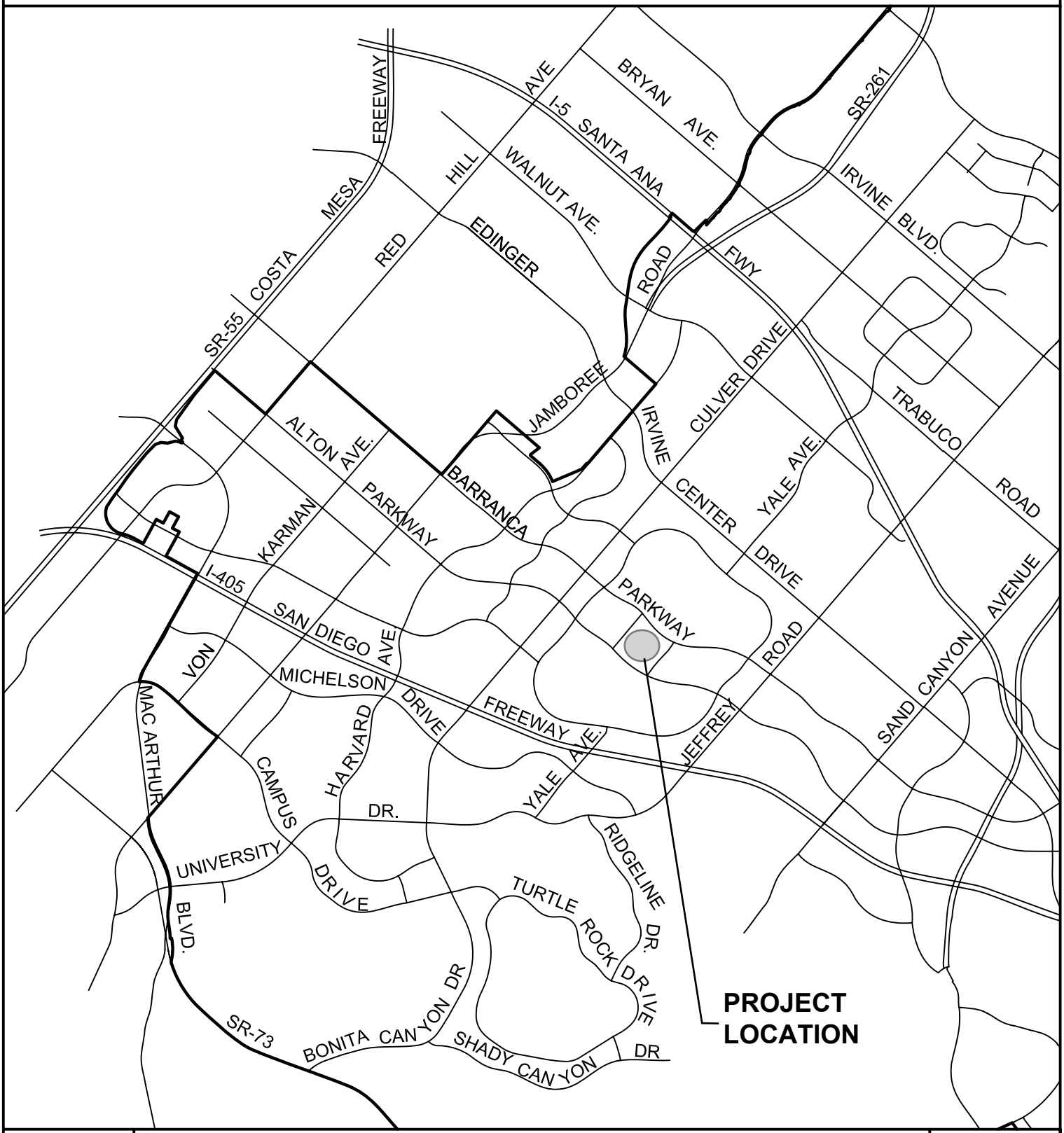
Funding for this project was approved by the City Council with the Fiscal Year 2016-17 Community Development Block Grant and Home Investment Partnerships Program and is available from CDBG funds in CIP 361733. The construction contract estimate prepared by the design engineer is $490,000 for the project. A complete Project Funding Summary for this project is provided in Attachment 3.

REPORT PREPARED BY Kal S. Lambaz, Senior Project Manager

ATTACHMENTS

1. Vicinity Map
2. Site Plan
3. Project Funding Summary
4. Notice Inviting Bids, Construction Contract, Plans, Specifications and Proposed Schedule of Work

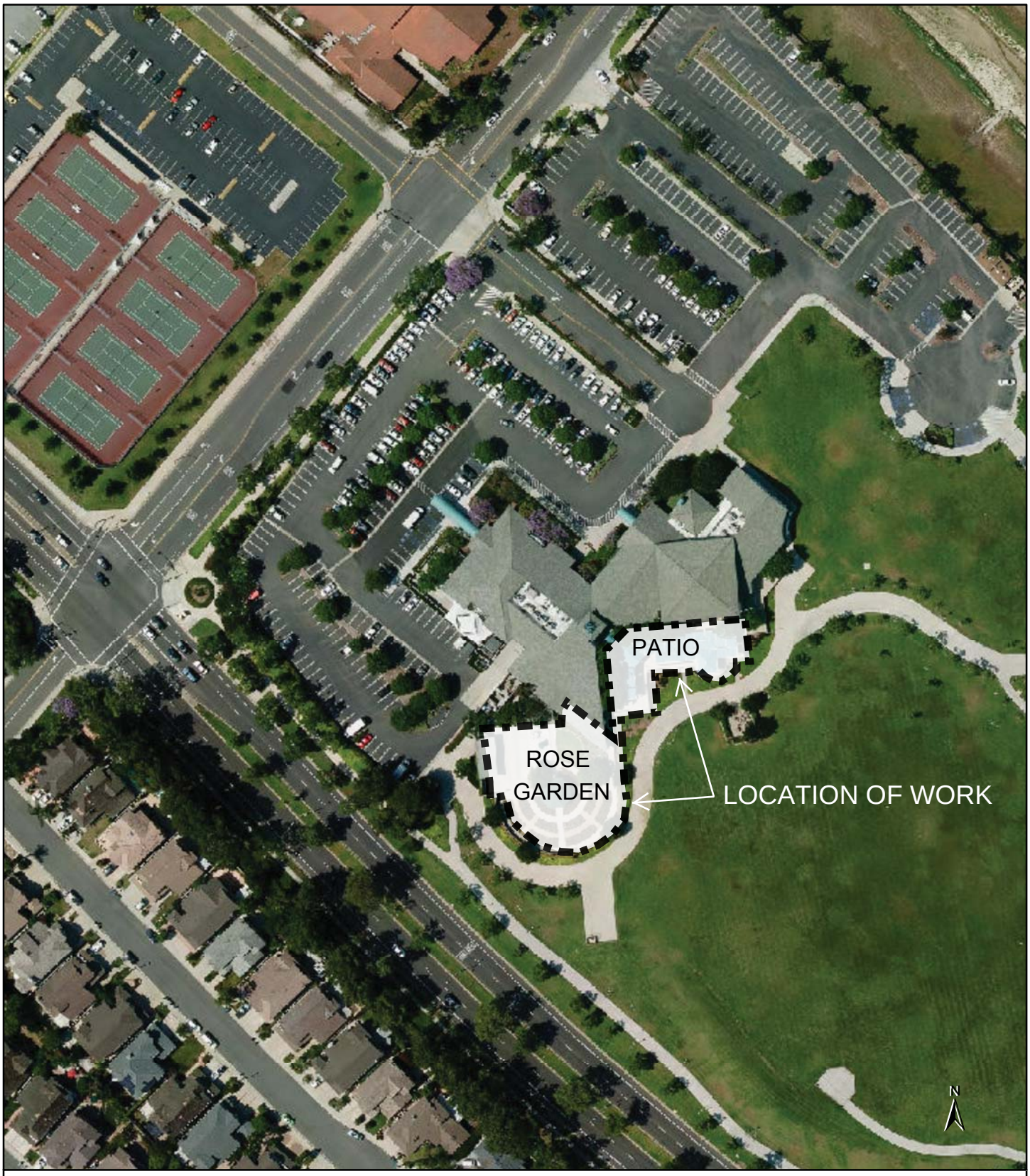
LAKEVIEW SENIOR CENTER REHABILITATION



VICINITY MAP

ATTACHMENT 1

LAKEVIEW SENIOR CENTER OUTDOOR PATIO AND ROSE GARDEN



SITE PLAN

ATTACHMENT 2

Project Funding Summary

Lakeview Senior Center Rehabilitation

CIP 361733

May 9, 2017

Project Expenditures	
Design Engineering	$ 37,000
Construction Contract (Engineer's Estimate)	$ 490,000
Construction Engineering	$ 122,850
Construction Contingency	$ 98,000
Total Estimated Project Cost	**$ 747,850**

Project Funding	
CDBG (Community Development Block Grant)	$ 747,850
Total Funding Available	**$ 747,850**

ATTACHMENT 3

CITY OF IRVINE

ORANGE COUNTY, CALIFORNIA

NOTICE INVITING BIDS, PROPOSAL, CONTRACT AND SPECIAL PROVISIONS FOR

LAKEVIEW SENIOR CENTER REHABILITATION

CIP 361733

BID NO. 17-1236

CITY OF IRVINE
ONE CIVIC CENTER PLAZA
P.O. BOX 19575
IRVINE, CALIFORNIA 92623-9575

PREPARED BY:
CIVIL WORKS ENGINEERS
3151 AIRWAY AVENUE, SUITE T-1
COSTA MESA, CA 92626
714-966-9060

March 2017

LAKEVIEW SENIOR CENTER REHABILITATION
CIP 361733

THE SPECIAL PROVISIONS CONTAINED HEREIN HAVE BEEN PREPARED BY OR UNDER THE DIRECTION OF:

_____	**38798**
MARIE MARSTON, P.E.	R.C.E. No.
CIVIL WORKS ENGINEERS	

APPROVED BY:

_____	**51568**
James M. Houlihan, P. E.	R.C.E. No.
City Engineer	

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CITY OF IRVINE, CALIFORNIA
NOTICE INVITING BIDS
Bid No. 17-1236

NOTICE IS HEREBY GIVEN that sealed bids with online bid prices submitted will be received by the Purchasing Agent of the City of Irvine, California, for furnishing all labor services, materials, tools, equipment, supplies, transportation, utilities and all other items and facilities necessary therefore, as provided in the contract documents for **Lakeview Senior Center Rehabilitation** together with appurtenances thereto, in strict accordance with the Specifications on file at the **Department of Public Works**, 6427 Oak Canyon, Bldg. 1, Irvine, California 92618-5202.

DATE OF OPENING BIDS: Bid prices for each line item of the Schedule of Work must be entered on the BidsOnline system in accordance with the instructions beginning on page 15. All other required documents for the bid proposal packet (pages 12, 17-31) must be received at One Civic Center Plaza, Irvine, California, 92606-5207 no later than XX:XX:XX a.m. on Day of the Week, Month Date, 2017, at which time and place bids will be publicly opened and read aloud. No late bids will be accepted. Hand-delivered or courier-delivered bid packages shall be brought to the RECEPTIONIST for the Purchasing Agent at the reception desk located on the first floor of the Civic Center building at the City of Irvine, located at One Civic Center Plaza, Irvine, California 92606-5207**.** Mailed bids shall be sent to City of Irvine, c/o Purchasing Agent, P.O. Box 19575, Irvine, CA 92623-9575. **All bids shall be submitted in sealed envelopes marked on the outside with "BID NO. 17-1236 FOR LAKEVIEW SENIOR CENTER REHABILITATION, CIP 361733."** If mailed to the Purchasing Agent, include a label on outside of sealed bid **"SEALED BID--Do Not Open with Regular Mail."**

LOCATION OF THE WORK: The work to be performed hereunder is located in the City of Irvine, County of Orange, at 20 Lake Road.

MANDATORY PRE-BID MEETING: There will be a **mandatory** pre-bid meeting on Day of the Week, Month Date, 2017, at X:XX a.m. **at 6427 Oak Canyon, Building 1, Irvine, CA 92618.** Failure to attend will result in your bid being declared non-responsive.

DESCRIPTION OF WORK: The work to be performed shall include, but not be limited to:

Removal of concrete hardscape, construction of new concrete hardscape, storm drain and drainage inlet installation, block wall repair, irrigation and landscaping improvements, shade structure cleaning and painting, block wall cleaning and painting, Removal and replacement of outdoor lighting and other items not mentioned here, but are required by the plans and the Special Provisions. The Engineer's construction cost estimate for the project is above $490,000 (rounded to the nearest ten thousand).

LICENSE REQUIREMENT: **Prime Contractor must possess a valid Class A license.** At the time of submitting the bid, the Bidder shall be licensed as a contractor in accordance with the provisions of California Business and Professions Code Chapter 9, Division 3.

DEBARRED CONTRACTORS: The City of Irvine Municipal Code Section 2-12-101 *et seq.* sets forth procedures to debar Contractors from bidding or performing work on City of

Irvine contracts at any tier, whether prime, subcontractor, etc. Accordingly, certain Contractors have been debarred and are listed on the City's website at www.cityofirvine.org/purchasing. Click on the link which states: "For a list of Debarred Contractors, please click here."

COMPLETION OF WORK AND LIQUIDATED DAMAGES: All work shall be completed in a total of **Forty (40) Working Days** (excluding plant establishment) and **One Hundred Five (105) Working Days** (including plant establishment) from the date specified in the Notice to Proceed. Liquidated damages shall be One Thousand Dollars **($1,700)** per Calendar Day, for each and every Calendar Days delay in finishing the work, except plant establishment work, in excess of the number of Working Days prescribed above and liquidated damages shall be Five Hundred Dollars **($500)** per Calendar Day, for each and every Calendar Days delay in completing the plant establishment work in excess of the number of Working Days prescribed above. In no case will liquidated damages be assessed at more than One Thousand Dollars **($1,700**) per Calendar Day.

AWARD OF CONTRACT: The award of the Contract, if it is awarded, will be to the lowest responsive and responsible Bidder whose bid complies with all the requirements prescribed. The City reserves the right, after opening bids, to reject any or all bids, to waive any informality in a bid, to make awards in the interest of the City, and to reject all other bids.

PROPOSAL GUARANTEE AND BONDS: Each bid proposal packet shall be accompanied by cash, a certified or cashier's check or by a bid bond issued by a surety company, admitted to do business in the State of California, on the form furnished by the Agency as guarantee that Bidder will, if an award is made to him in accordance with the terms of his bid, promptly secure Workers' Compensation insurance, and liability insurance, execute a contract in the required form, and furnish satisfactory bonds for the faithful performance of the contract ("Performance Bond") and for the payment of claims of materialmen and laborers thereunder ("Payment Bond"). Said cash, check or bid bond shall be in an amount of not less than ten percent (10%) of the amount of the bid. The Performance Bond and Payment Bond shall be not less than one hundred percent (100%) of the total amount of the bid price named in the contract. Only bonds issued by companies admitted to do business in the State of California will be accepted in accordance with the Code of Civil Procedure Section 995.311. Failure to submit acceptable Payment Bond and Performance Bond as required shall result in a rejection of the bid and a forfeiture of the Bid Bond.

PREVAILING RATES OF WAGES: **Prevailing wage requirements apply to public works projects with a value exceeding $1,000.00. The definition of "public works" is found at Labor Code Section 1720, *et seq.***

The City is subject to the provisions of law relating to public contracts in the State of California. It is agreed that all provisions of law applicable to public contracts are a part of this Agreement to the same extent as though set forth herein, and will be complied with by Contractor. Contractor shall abide by all applicable Sections of the California Labor Codes including Sections 1770 -1781, *et seq*. In accordance with the provisions of Section 1773 of the California Labor Code, the general prevailing rates of per diem wages and holiday and overtime work in the locality in which the Work is to be performed shall be in accordance with the rates posted on the Department of Industrial Relations website, found at http://www.dir.ca.gov/dirdatabases.html. The Contractor,

and any subcontractor under him, shall pay not less than the specified prevailing rates of wages to all workers employed in the execution of this Agreement.

The City of Irvine reminds all contractors and subcontractors of the adoption of **State of California Senate Bill No. 854 (SB 854),** and encourages them to understand and comply with the requirements as set forth on the Department of Industrial Relations (DIR) website at http://www.dir.ca.gov/Public-Works/PublicWorks.html. All contractors and subcontractors who plan to bid on a public works project (including maintenance work) with a value exceeding $1,000.00 must first be registered and pay an annual fee with the DIR. Effective March 1, 2015, the City will require all contractors and subcontractors to be registered with the DIR prior to submitting a bid on any public works project. Subject to the exceptions set forth in Labor Code Section 1725.5, bids from contractors that are not currently registered will be deemed nonresponsive. Further, effective April 1, 2015, the City will not award a contract to and no contractor or subcontractor will be allowed to work on a City public works project unless they are registered with the DIR pursuant to Labor Code Section 1725.5. Please visit the DIR website for further information.

A contractor or subcontractor shall not be qualified to bid on, be listed in a bid proposal, subject to the requirements of Section 4104 of the Public Contract Code, or engage in the performance of any contract for public work, as defined in this chapter, unless currently registered and qualified to perform public work pursuant to Section 1725.5. It is not a violation of this section for an unregistered contractor to submit a bid that is authorized by Section 7029.1 of the Business and Professions Code or by Section 10164 or 20103.5 of the Public Contract Code, provided the contractor is registered to perform public work pursuant to Section 1725.5 at the time the contract is awarded.

This contract will be funded in whole or in part with federal housing and community development funds. The Federal Labor Standards Provisions, including prevailing wage requirements of the Davis-Bacon and Related Acts will be enforced. A copy of the Federal Wage Decision applicable to this project is included in the Bid Document.

This is project is a public work in the State of California, funded in whole or in part with public funds. Therefore, the higher of the two applicable prevailing wage rates, federal or state, will be enforced. The Contractor's duty to pay State prevailing wages can be found under Labor Code Section 1770 et seq. Labor Code Sections 1775 and 1777.7 outline the penalties for failure to pay prevailing wages and to employ apprentices, including forfeitures and debarment. The State Wage Decision is on file at the City Clerk's office, and is also available online at **http://www.dir.ca.gov/dlsr/**.

APPRENTICESHIP PROGRAM: Attention is directed to Sections 1777.5, 1777.6 and 1777.7 of the California Labor Code and Title 8, California Administrative code, Section 200 et seq. to ensure compliance and complete understanding of the law regarding apprentices.

MINORITY AND WOMEN OWNED BUSINESS: Bidders will be required to document their status as a Minority Business Enterprise (MBE), a Women-owned Business Enterprise (MBE) or a non-MBE/WBE firm. Bidders that are not MBE/WBE firms will be required to make a good faith effort, and to document their efforts to include firms as part of the contract bid.

SECTION 3 STATEMENT: This is a HUD Section 3 construction contract. First

preference will be given to a bidder who provides a reasonable bid and is a qualified Section 3 Business Concern. Second preference will be given to a bidder who provides a reasonable bid and commits to achieving the Section 3 employment, training and subcontracting opportunity goals by submitting a written commitment (Economic Opportunity Plan).

CONFLICT OF INTEREST: In the procurement of supplies, equipment, construction, and services by sub-recipients, the conflict of interest provisions in (State LCA - 24 CFR 85.36 and Non-Profit Organizations – 24 CFR 84.4), OMB Circular A-110, and 24 CFR 570.611, respectively, shall apply. No employee, officer or agent of the sub-recipient shall participate in selection, or in the award or administration of a contract supported by Federal funds if a conflict of interest, real or apparent, would be involved.

LABOR REGULATIONS: The Contractor shall comply with all applicable requirements of the California Labor Code and the City of Irvine Municipal Code.

PLANS AND SPECIFICATIONS: A full set of bid documents consisting of Notice Inviting Bids, Proposal, Contract, Special Provisions and Contract Plans are available for inspection without charge at the Department of Public Works, Project Management Division, City of Irvine Operations Support Facility, 6427 Oak Canyon, Building 1, Irvine, California 92618-5202.

To obtain a copy of the bid documents, please visit the City of Irvine web site at www.cityofirvine.org/purchasing. Click on the "Supplier Registration and Bid Opportunities" link, and review the information about our online system. Next, click on the "BidsOnline" link. If you are not currently registered with the City of Irvine, please click on the "New Vendor Registration" button and then complete the electronic supplier registration to include your Contractors State License information. After registering your firm, click on the "Bid Opportunities" button to view and download the Bid Documents, which include the complete Notice Inviting Bids document. Contractors must register on the City's web site and download the Bid Documents in order to submit a bid. Firms must also check the web site periodically for addenda information as failure to download any and all addenda, and acknowledge in the bid submittal, will result in bid disqualification.

SECURITY FOR COMPLETION OF WORK: The Contract Documents establish a provision for monthly progress payments based upon the percentage of work completed as determined by the Engineer. The City will retain a portion of each progress payment as security for completion of the balance of the work. At the request and expense of the successful bidder, the City will pay the amount so retained upon compliance with the requirements of California Public Contract Code § 22300 and the provisions of the Contract Documents, Special Provisions Subsection 9-3.2.2 pertaining to "Substitution of Securities."

PROJECT ADMINISTRATION: All questions relative to this project prior to opening bids shall be prepared in writing and transmitted to the attention of Kal Lambaz, Senior Project Manager, by facsimile to 949-724-7565 or by email to klambaz@cityofirvine.org with a copy to Brian D. Brown, Senior Buyer, bbrown@cityofirvine.org. Inquiries will not be accepted later than five (5) business days prior to the bid opening date, as this would not allow time to respond to all plan holders. No phone inquiries will be accepted.

CITY OF IRVINE

Published by:
Publication Date:

INSTRUCTION TO BIDDERS, PROPOSAL REQUIREMENTS AND CONDITIONS

1. CONTRACT DOCUMENTS: The Contract Documents shall consist of:

   a) Permits and Agreements

   b) Contract

   c) Addenda

   d) Instructions to Bidders, Proposal Requirements and Conditions

   e) Special Provisions

   f) Contract Plans

   g) Standard Plans

   h) Standard Specifications

   i) Reference Specifications,

   all of which are on file at the City of Irvine in the Public Works Department, Project Management Division, Operations Support Facility, 6427 Oak Canyon, Bldg. 1, Irvine, California, and are hereby referred to and made a part hereof.

2. PROPOSALS: To be considered, bids shall be made in according to the following instructions:

   a) For the convenience of bidders, the “SCHEDULE OF WORK” has been posted on the City’s BidsOnline system. Bidders must enter their unit price information online in accordance with the INSTRUCTIONS FOR ENTERING ELECTRONIC BIDS included herin. Unit prices must be entered online. The extended prices and total bid price will be automatically calculated.

   b) Bids shall be submitted only on bid items stated in the Contract Documents; bids on other bases will not be considered. Bids that do not reference all addenda or that are not submitted on the prescribed forms , and in accordance with the INSTRUCTIONS FOR ENTERING ELECTRONIC BIDS shall be rejected. The completed forms shall be without interlineations or alterations; any such bid shall be declared non-responsive.

   c) Unless called for, additive bids will not be considered.

   d) Pursuant to the provisions of Public Contract Code § 4101 to 4108, inclusive, every Bidder shall set forth in its bid:

      1) The Bidder shall list the name, license number and location of the place or business of each subcontractor performing work in an amount in excess of one-half of one percent (1/2%) of the prime contractor's total bid, or, in the case of bids or offers for the construction of streets or highways, including bridges, in excess of one-half of one percent (1/2%) of the prime contractor's total bid or ten thousand dollars ($10,000), whichever is greater.

      2) The bid item numbers and the percentage of the bid item subcontracted.

e) In the event additive bids are called for and the Bidder intends to use different or additional subcontractors on the additive(s), the Bidder shall fill out additional forms of the list of subcontractors and shall identify such forms with relation to whether they apply to the base or additive bids.

f) If the Bidder fails to specify a subcontractor for any portion of the work to be performed under the contract in excess of one-half of one percent (1/2%) of the Bidder's total bid, or, in the case of bids or offers for the construction of streets or highways, including bridges, in excess of one-half of one percent (1/2%) of the Bidder's total bid or ten thousand dollars ($10,000), whichever is greater, the Bidder agrees to perform that portion of work himself. The successful Bidder shall not, without the consent of the City, either:

   1) Substitute any person, firm or corporation as subcontractor in place of the subcontractor designated in the original bid, or

   2) Permit any subcontract to be assigned or transferred or allow the work to be performed by anyone other than the original subcontractor listed in the bid.

g) Bid proposal packet shall be accompanied by cash, a certified or cashier's check, or an acceptable bid bond on the form furnished by the City for an amount not less than ten percent (10%) of the bid, made payable to the order of the City of Irvine. The cash, check or bid bond shall be a guarantee that the Bidder will enter into a contract and provide all required insurance and bonds if awarded the work; and in case of refusal or failure to enter into the contract, the cash, check or bid bond shall be forfeited. The City will return Bidder's cash, check, or bid bond if the project is not awarded to Bidder.

   Only bonds issued by companies admitted to do business in the State of California will be accepted, in accordance with Code of Civil Procedure § 995.311 and Insurance Code § 12090.

h) Before submitting a bid, bidders shall carefully examine the work site, the Contract Documents and the form of Contract and shall fully inform themselves about all existing conditions and limitations. Bidders shall include in their bids a sum to cover the cost of all work included in the Contract.

i) Bid proposal packet shall be delivered to the office of the Purchasing Agent, City of Irvine, Irvine, California, on or before the day and hour set for the bid opening in the Notice Inviting Bids, in a sealed envelope that bears the title of the Work, Bidder's name, and the words **"BID NO. 17-1236 FOR LAKEVIEW SENIOR CENTER REHABILITATION, CIP 361733."** If mailed to the Purchasing Agent, include a label on the outside of the sealed bid: "SEALED BID--Do Not Open With Regular Mail."

j) A bid shall be considered non-responsive if it does not comply with the requirements set forth in these bid documents. A responsive bid is one that complies with the solicitation in all acceptability and material respects and contains no material defects. A material defect is one that affects price, quality, quantity or delivery terms.

3. WITHDRAWAL OF BIDS: Bids may be withdrawn at any time before the bid deadline, by going back into the BidsOnline system and selecting "Withdraw.".

4. INTERPRETATION OF DRAWINGS AND DOCUMENTS: If any person contemplating submitting a bid for the proposed Contract is in doubt as to the true meaning of any part to the plans and specifications, or other proposed Contract Documents, or finds discrepancies in, or omissions from, the drawings or specifications, he shall submit to the Engineer a written request for all interpretations or corrections thereof. The person submitting the request shall be responsible for its prompt delivery.

   Any interpretation or correction of the proposed documents will be made only by Addendum duly issued, and a copy of such Addendum will be mailed, emailed or faxed to each purchaser of the Bidder's package. The City is not responsible for any other explanations or interpretations of the proposed documents.

5. ADDENDA TO THE CONTRACT DOCUMENTS: Any addenda issued during the time of bidding, or forming a part of the Contract Documents sold to the Bidder for the preparation of his bid, shall be taken into account in the bid and shall be made a part of the Contract.

   Addenda may be issued by the City of Irvine for any reason, including for the purpose of revising the prevailing wage rates or clarifying or correcting the Notice Inviting Bids, Special Provisions, Plans, or Bid.

   Bidders will be notified of such Addenda during the period of advertising, either by mail, facsimile, email, or posting on the Agency's website, provided however, each Bidder shall be solely responsible for obtaining any such Addenda.

   The Bidder shall acknowledge the receipt of Addenda on the form provided in the Bid package. Bids that do not reference all Addenda on the prescribed form shall be rejected as non-responsive.

6. BIDDER RESPONSIVENESS: Failure of the Bidder to provide requested information in a complete and accurate manner shall be considered non-responsive resulting in rejection of the bid. The use of "N/A" or "n/a" in response to any request for information without an explanation as to why that abbreviation is being used may render the bid non-responsive.

7. BIDDER RESPONSIBILITY: Bidders are hereby notified that, in accordance with the City of Irvine Municipal Code § 2-12, the City may make a determination that the Contractor is non-responsible if the hearing officer finds evidentiary support that the Bidder has committed any of the following: (1) violated a term of a contract, present or past, with the City or other entity; (2) committed an act or omission which negatively reflects on the Contractor's quality, fitness, or capacity to perform a contract with the City or any other entity or engaged in a pattern or practice which negatively reflects on the same; (3) committed an act or omission which evidences a lack of business integrity or business honesty; (4) made or submitted a false claim against the City or any other entity; or (5) received a fine or citation for performing work in an unsafe manner; or (6) violated a condition, rule, regulation, permit, or standard applicable to a contract with the City or any other entity. In arriving at his or her determination, the hearing officer may

consider Bidder's past conduct on City projects or on any other public or private projects upon which Bidder performed work.

8. BIDDER DEBARMENT: Bidders are hereby notified that, in accordance with the City of Irvine Municipal Code § 2-12, the City may make a determination that the Bidder shall be debarred if the hearing officer finds evidentiary support that the Bidder has committed any of the following: (1) violated a term of a contract, present or past, with the City or other entity; (2) committed an act or omission which negatively reflects on the Contractor's quality, fitness, or capacity to perform a contract with the City or any entity or engaged in a pattern or practice which negatively reflects on the same; (3) committed an act or omission which evidences a lack of business integrity or business honesty; (4) made or submitted a false claim against the City or any other entity; (5) received a fine or citation for performing work in an unsafe manner; or (6) violated a condition, rule, regulation, permit, or standard applicable to a contract with the City or any other entity. In arriving at his or her determination, the hearing officer may consider past conduct of the Contractor on City projects or on any other public or private projects which Contractor performed work.

9. OPENING BIDS: Bids will be publicly opened and read at the time and place set in the Notice Inviting Bids.

10. BID PROTEST PROCEDURES:

    a) BASIS FOR PROTEST: It is the policy of the City to ensure that free and open competition takes place in all procurement activities. If, in the course of a procurement action, an interested party has reason to believe that these conditions do not exist, the interested party may file a protest in accordance with the provisions of these procedures with the City of Irvine Purchasing Agent requesting a review of the claim and a timely resolution of the issue. Any bidder on a project for which it submitted a timely bid may protest the contract award for that project; however, subcontractors, suppliers or other third parties may not protest contract awards. Moreover, complaints about alleged ambiguity of the bid documents and/or estimates are not appropriate subject matters for bid protests.

    b) BID PROTEST CONTENTS: The bid protest shall be submitted in writing via email to the attention of the Purchasing Agent. The written protest shall include:

        1) The solicitation number and project description.

        2) The name, address, phone number, and email address of the protesting party.

        3) A detailed statement of all the legal and factual grounds for the protest and all relevant, supporting documentation (including all written documentation). The grounds for protest must be fully supported.

        4) Statement of the form of relief requested from the City.

        5) Signature of an authorized representative of the protesting party.

c) DEADLINE TO SUBMIT BID PROTESTS: Bid protests must be filed within five (5) business days after the deadline for receiving bids.

d) WHERE TO FILE: All protests are to be directed to the City of Irvine Purchasing Agent. Protests must be submitted in writing via email to: purchasing@cityofirvine.org. A copy of the email must also be sent to the project manager whose email address is set forth in the bid documents. (A document is considered filed on a particular calendar day when it is received via email by the City of Irvine Purchasing Agent by 5:00 p.m., Pacific Standard Time, on that calendar day.) Although not required, in addition to submitting a protest via email, an original protest letter may be sent via United States Postal Service to: Attn: Purchasing Agent, City of Irvine, P.O. Box 19575, Irvine, CA 92623-9575.

e) BID PROTEST REVIEW: Upon receipt, the Purchasing Agent shall consider the protest and may give notice of the protest and its basis to other persons including bidders involved in or affected by the protest. A protest shall be dismissed for failure to comply with any of the requirements set forth in the "Bid Protest Contents" section above. The Purchasing Agent shall review all material submitted with the protest. No additional material will be accepted for consideration from the protesting party unless specifically requested by the Purchasing Agent. If additional material is requested, it must be submitted by the requested date. The Purchasing Agent shall respond to the protesting party via email within ten (10) business days after receipt of the protest. Final determinations shall be binding, except as otherwise provided below.

f) RECONSIDERATION OF PROTEST DECISION: A protesting party may request the Purchasing Agent's reconsideration of a decision prior to contract award only if one or both of the following conditions are met:

   1) New information becomes available that was not previously known, or could not have been reasonably known, at the time of the original protest; and/or

   2) The Purchasing Agent's decision contains an error of law.

   Any request for reconsideration of a protest decision must be submitted in writing via email to the Purchasing Agent within three (3) business days from the date of issuance of the initial decision. The request must include a detailed explanation of the basis for reconsideration as set forth above. The Purchasing Agent shall respond to the request for reconsideration within seven (7) business days from receipt of the request.

g) CONTRACT AWARD: At its discretion, the City may delay the execution of any proposed agreement pending the resolution of a protest unless one or both of the following conditions are present:

   1) The project or service being procured is urgently required; and/or

   2) Failure to make prompt award will otherwise cause undue harm to the City.

h) REMEDIES: There shall be no limitation on remedies selected by the City. Nothing contained herein shall be considered to either act as a limitation

on the City's choice of remedies or confer any right upon any interested party to a remedy. In determining the appropriate remedy, the City shall consider all the circumstances surrounding the solicitation, the contract selection, and/or the contract award, including, but not limited to: the seriousness of any deficiency found to exist in the contracting process; the effect of the action of the competitive process; any urgency surrounding the contract requirement; and the effect that implementing the remedy will have on the City's overall ability to accomplish its mission. If the City determines that the award or proposed award was not made in accordance with the applicable City statues, regulations, policies, and procedures, the City may, in its sole discretion, grant any of the following or any other remedy it deems appropriate: If pre-award, reject all bids and issue a new solicitation, make a new contractor selection or award a contract consistent with applicable statues, regulations, policies, and procedures; or if post-award, refrain from extending the term of the contract or awarding task orders under an existing task order agreement; or at its sole discretion, take no further action.

11. AWARD OR REJECTION OF BIDS AND EXECUTION OF CONTRACT: The award of the Contract will be as of the date specified in the Notice of Award issued by the City. The award of the Contract shall not constitute a binding obligation on City until the Contract has been lawfully executed by all parties and the Contractor has submitted all required insurance certificates and bonds to the City.

    The Contractor shall not commence work in advance of the execution of the Contract and the delivery of the bonds and insurance certificates, as specified above.

    The award of the Contract, if it is awarded, will be to the responsive and responsible Bidder who submitted the lowest Bid complying with these Proposal Requirements and Conditions and with the Notice Inviting Bids. Such award, if made, will be made within ninety (90) Calendar Days after the opening of the proposals. The ninety (90) Calendar Days period shall be subject to extension for such further period as may be agreed upon in writing between the City and the Bidder(s) concerned. All bids will be compiled on the basis of the estimated quantities of work to be done as shown in the Proposal. However until an award is made, the City of Irvine reserves the right to reject any and all bids or to waive any informality in bids received, if doing so is deemed to best serve the interest of the Agency.

12. CONTRACT AND BONDS: The Contract, which the successful Bidder, as Contractor, will be required to execute, is included in the Contract Documents and should be carefully examined by the Bidder.

    The successful Bidder, simultaneously with his execution of the Contract will be required to furnish a Payment Bond and a Performance Bond. Said bonds shall be in the form of the two (2) sample bonds included in these Contract Documents and based upon conditions specified in the Standard Specifications Section 2-4, "Contract Bonds," and as specified in the Special Provisions and shall be secured from a surety company satisfactory to the City.

Only bonds issued by companies admitted to do business in the State of California will be accepted, in accordance with Code of Civil Procedure § 995.311 and Insurance Code § 12090. Failure to submit acceptable Payment and Performance Bonds as required shall result in rejection of bid and forfeiture of the proposal guarantee.

All alterations, extensions of time, extra and additional work, and other changes authorized by the Contract Documents will be made without securing the consent of the surety or sureties on the Contract bonds.

The Contract shall be signed by the successful Bidder, and delivered to the City together with the Contract bonds within ten (10) days of the date specified in the Notice of Award issued by the City, not including Saturdays, Sundays and legal holidays. The Contractor shall submit insurance certificates electronically in accordance with 7-3 of the Standard Specifications and the Special Provisions. The executed Contract, together with the required bonds, will be filed with the Clerk of the City of Irvine.

Failure of the lowest responsive and responsible Bidder to execute the Contract and file acceptable insurance certificates and bonds as provided herein within ten (10) days of award of the Contract, not including Saturdays, Sundays and legal holidays, shall be just cause for the forfeiture of the bid bond. The successful Bidder may file with the City a written notice, signed by the Bidder or his authorized representative, specifying that the Bidder will refuse to execute the Contract if presented to him. The filing of such notice shall have the same force and effect as the failure of the Bidder to execute the Contract and furnish acceptable certificates of insurance and bonds within the time herein before prescribed.

13. SPECIAL NOTICE: Bidders are required to inform themselves fully of the conditions relating to construction and labor under which the Work will be performed, and the Contractor must employ, so far as possible, such methods and means in the carrying out of this work as will not cause any interruption or interference with any other contractor.

14. BIDDERS INTERESTED IN MORE THAN ONE BID: No person, firm or corporation shall be allowed to make or file or be interested in more than one bid as prime contractor for the same work.

15. BIDS TO BE LEFT ON DEPOSIT: No Bidder may withdraw its bid for a period of ninety (90) Calendar Days after the time set for opening thereof. However, the City will return all proposal guarantees within fifteen (15) days, not including Saturdays, Sundays and legal holidays, after the award of the Contract or rejection of the bids, as the case may be, to respective Bidders whose bids are not accepted.

16. NON-COLLUSION DECLARATION: All Bidders shall submit with their bids an executed non-collusion declaration on the form provided in the bidding documents.

The U.S. Department of Transportation (DOT) provides a toll-free hotline to report bid rigging activities. Use the hotline to report bid rigging, bidder collusion, and

other fraudulent activities. The hotline number is 800-424-9071. The service is available 24 hours 7 days a week and is confidential and anonymous. The hotline is part of the DOT's effort to identify and investigate highway construction contract fraud and abuse and is operated under the direction of the DOT Inspector General.

17. SUBSTITUTIONS: Where the Specifications or drawings specify any material, product, thing, or service by one or more brand names, whether or not "or equal" is added, and a Bidder wishes to propose the use of another item as being equal, he shall request approval therefor as set forth in 4-1.6 of the Standard Specifications and Special Provisions.

18. REPORTING SUSPICIONS OF FRAUD, WASTE, OR ABUSE: Any suspected fraudulent activities, whether it involves a City employee, contractor, subcontractor, or any other participant in a City, State or Federally-funded project, should be reported to the City of Irvine's Ethics and Compliance Hotline at 866-428-1509.

    Suspected fraudulent activities include bid rigging, product substitution, theft, overcharging, false certifications and representations, and the like. Any allegations of bribery, kickbacks, gratuities, and conflicts of interest involving City employees should also be reported to the Ethics and Compliance Hotline.

19. ASSIGNMENT OF CONTRACT: No assignment by the Contractor of any Contract to be entered into hereunder or of any part thereof, or of funds to be received thereunder by the Contractor, will be recognized by the City unless such assignment has had the prior written approval of the City and the surety has been given due notice of such assignment in writing.

20. OTHER REQUIREMENTS: Before entering into a Contract, the Bidder to whom the Contract has been awarded shall satisfy all insurance requirements per Section 7-3 of the Standard Specifications and Special Provisions and such insurance shall be maintained in full force and effect at its own expense during the life of this Contract.

    Upon request, the successful Bidder shall furnish to the City a statement of its financial condition and previous construction experience or such other evidence of his qualifications.

21. LABOR CODE:

    PUBLIC WORKS CONTRACTOR REGISTRATION PROGRAM

    In accordance with State of California Senate Bill No. 854 (SB 854), contractors bidding on and/or engaging in the performance of public works projects (the definition of "public works" is found at Labor Code Section 1720, *et seq.*) shall be registered with the Department of Industrial Relations. By submitting a bid for City of Irvine Public Works project, the contractor acknowledges the above requirements and agrees to maintain a valid Department of Industrial Relations (DIR) Public Works Contractor registration during the term of this project.

a) A contractor or subcontractor shall not be qualified to bid on, be listed in a bid proposal, subject to the requirements of Section 4104 of the Public Contract Code, or engage in the performance of any contract for public work, as defined in this chapter, unless currently registered and qualified to perform public work pursuant to Section 1725.5. It is not a violation of this section for an unregistered contractor to submit a bid that is authorized by Section 7029.1 of the Business and Professions Code or by Section 10164 or 20103.5 of the Public Contract Code, provided the contractor is registered to perform public work pursuant to Section 1725.5 at the time the contract is awarded.

b) Pursuant to Labor Code Section 1771.4, all bidders are hereby notified that this project is subject to compliance monitoring and enforcement by the Department of Industrial Relations.

In addition to the requirement for submittal of certified payroll records to the City, as of April 1, 2015**,** contractors and subcontractors shall furnish electronic certified payroll records to the Labor Commissioner **(State of California, Division of Labor Standards Enforcement).**

Contractors and subcontractors shall be responsible for complying and staying current with all DIR requirements and regulations. More information on SB 854 can be found at http://www.dir.ca.gov/Public-Works/SB854.html

Attention is directed to Labor Code § 1735 of which reads as follows:

> No discrimination shall be made in the employment of persons upon public works because of the race, religious creed, color, national origin, ancestry, physical handicap, medical condition, marital status, or sex of such persons, except as provided in the Government Code §12940, and every contractor for public works violating this section is subject to all the penalties imposed for a violation of this chapter.

The Contractor shall abide by the provisions of the California Labor Code § 1770-1781, *et seq*. In accordance with the provisions of the California Labor Code § 1773, the general prevailing rates of per diem wages and holiday and overtime work in the locality in which the work is to be performed has been obtained from the Director of the Department of Industrial Relations, a copy of which is on file in the office of the City Clerk of the City of Irvine and will be made available to any interested party upon request. The Contractor shall post a copy of the prevailing rate of per diem wages at the job site. The Contractor, and any subcontractor under him, shall pay not less than the specified prevailing rates of wages to all workers employed in the execution of the contract.

Attention is directed to the Federal prevailing wage rate requirements in these Special Provisions. If there is a difference between the prevailing wage rates predetermined by the Secretary of Labor and the general prevailing wage rates determined by the Director of the California Department of Industrial Relations for similar classifications of labor, the Contractor and subcontractors shall pay not less than the higher wage rate. The City will not accept lower State wage rates not specifically included in the federal prevailing wage determinations. This includes “helper” (or other classifications based on hours of experience) or any other

classification not appearing in the federal wage determinations. Where federal wage determinations do not contain the state wage rate determination otherwise available for use by the Contractor and subcontractors, the Contractor and subcontractors shall pay not less than the federal prevailing wage rate which most closely approximates the duties of the employees in question.

Failure to comply with the subject sections will subject the Contractor to penalty and forfeiture provisions of the Labor Code § 1775.

In accordance with of the Labor Code § 1773.1, the Contractor must make travel and subsistence payments to each worker employed in the execution of the Contract.

The City will not recognize any claim for additional compensation because of the payment by the Contractor of any wage rate in excess of the prevailing wage rate set forth in the Contract. The possibility of wage increases is one of the elements to be considered by the Contractor in determining his bid, and will not under any circumstances be considered as the basis of a claim against the City on the Contract.

The Contractor shall familiarize itself with the provisions of the Labor Code § 1777.5 regarding employment of apprentices, and shall be responsible for compliance therewith, including compliance by his subcontractors.

The Contractor and subcontractors shall comply with Labor Code § 1777.6 which stipulates that it shall be unlawful to refuse to accept otherwise qualified employees as registered apprentices solely on the grounds of race, religious creed, color, national origin, ancestry, sex, or age except as provided in Labor Code § 3077, of such employee.

The Contractor and subcontractors shall comply with Labor Code § 1810 and § 1811 which stipulates that eight hours labor constitutes a legal day's work, and § 1812 which stipulates that the Contractor and subcontractors shall keep an accurate record showing the name of and actual hours worked each calendar day and each calendar week by each worker employed by him in connection with the work performed under the terms of the Contract. Failure to comply with these sections of the Labor Code will subject the Contractor to penalty and forfeiture provisions of the Labor Code § 1813.

22. RESERVATION OF RIGHTS:

The City reserves the right to:

a) Disqualify any Bidder in accordance with the instructions herein.

b) Reject any bids, at its discretion, including bids found to be conditional or incomplete, contain irregularities or found to be not responsive to this Instruction to Bidders (ITB.)

c) Investigate the qualifications of any Bidder under consideration.

d) Require confirmation of information furnished by the Bidder.

e) Require additional evidence of Bidder's ability to perform the Work described in this ITB.

f) Contact the submitted references to confirm information provided in the bid.

g) Postpone or cancel the entire ITB or a portion thereof.

h) Postpone the bid opening or award for its own convenience.

i) Award a Contract to other than the apparent low bidder.

j) Award a Contract in part or in combination of items.

k) Issue subsequent ITB.

l) Seek the assistance of outside technical experts to review the bids.

m) Disqualify a bid upon evidence of collusion, with intent to defraud, or other illegal practices on the part of the Bidder.

n) Waive any errors or informalities in any bid to the extent permitted by law.

o) Require bidder to provide proof as to the equality, substitutability, and compatibility of any items proposed as alternates or equals.

p) Determine, at the City's sole discretion, the equality, substitutability, and compatibility of any items proposed as alternates or equals.

q) Exercise any other rights under the City's charter or municipal code.

The City has no obligation to consider any bid unless it is responsive to this ITB and conforming in all respects to the Form of Contract. This ITB does not commit the City to enter into a Contract.

23. This project is funded with federal funds. Contractor should carefully review the Instruction to Bidders and the Federal Requirements of the Special Provisions prior to submitting a bid.

<u>Failure to complete and submit with the bid all the Federal Requirement shall render the bid non-responsive.</u>

BIDDER'S PROPOSAL
CONSTRUCTION
OF
LAKEVIEW SENIOR CENTER REHABILITATION

CIP 361733
BID NO. 17-1236

HONORABLE MAYOR AND MEMBERS OF THE CITY COUNCIL
CITY HALL
IRVINE, CALIFORNIA

THE UNDERSIGNED, HAVING CAREFULLY EXAMINED ALL OF THE CONTRACT DOCUMENTS; PERMITS ISSUED BY JURISDICTIONAL REGULATORY AGENCIES; CONTRACT; CONTRACT ADDENDA; INSTRUCTIONS TO BIDDERS; PROPOSAL REQUIREMENTS AND CONDITIONS; SPECIAL PROVISIONS; THE PLANS (SHEETS 1 THROUGH 12); STANDARD PLANS; STANDARD SPECIFICATIONS; REFERENCE SPECIFICATIONS; AND ALL OTHER INFORMATION PROVIDED BY THE AGENCY FOR THE CONSTRUCTION LISTED ABOVE IN AND FOR THE CITY OF IRVINE, IS FAMILIAR WITH THE CONDITIONS, HAVING PERSONALLY VISITED THE SITE OF THE WORK, AND HEREBY PROPOSES TO FURNISH ALL LABOR, MATERIALS AND EQUIPMENT, AND ALL INCIDENTAL WORK NECESSARY TO DELIVER ALL THE IMPROVEMENTS COMPLETE, IN PLACE AND IN STRICT CONFORMITY WITH THE CONTRACT DOCUMENTS, FOR THE UNIT PRICES NAMED IN THE FOLLOWING SCHEDULE OF WORK AND BID PRICES.

_____
Bidder's Company Name (please print or type)

_____
Signature of Bidder

_____
Print Name

CITY OF IRVINE
LAKEVIEW SENIOR CENTER REHABILITATION
CIP 361733
BID NO. 17-1236

SCHEDULE OF WORK

All applicable sales taxes, State and/or Federal taxes, and any other special taxes, patent rights or royalties are included in the prices quoted in this Proposal.

ITEM NO.	ITEM DESCRIPTION	UNIT	EST. QTY
1	Mobilization	LS	1
2	Water Pollution Control Program	LS	1
3	Remove Concrete Paving	SF	10,620
4	Remove Concrete Curb	LF	256
5	Unclassified Excavation	CY	66
6	Remove CMU Wing Walls, Remove Top 2 Blocks of CMU Wall, Remove Concrete Counter Slab, Repair CMU Wall (2 Blocks)	LS	1
7	4" PCC Hardscape (With 6x6 WWM) and Weakened Plane Joints, Isolation Joints, and Expansion Joints	SF	10,620
8	2" Crushed Miscellaneous Base	CY	66
9	Concrete Curb (8")	LF	520
10	Drainage Outlet	EA	4
11	3" Atrium Grate Inlet	EA	8
12	12"x12" Grate Inlet	EA	8
13	3" PVC Storm Drain Pipe	LF	190
14	4" PVC Storm Drain Pipe	LF	90
15	3" Perforated Sub-drain Pipe	LF	260
16	Weed Abatement (organic)	SF	880
17	Soil Preparation and Fine Grading	SF	880
18	Shrub – 5 gal	EA	100

Bidder's Name: _____

ITEM NO.	ITEM DESCRIPTION	UNIT	EST. QTY
19	Irrigation System	LS	1
20	Wood Mulch (2" depth)	SF	880
21	Landscape Maintenance (65 Working Days)	LS	1
22	Shade Structure Painting	LS	1
23	Rose Garden Block Wall Painting	LS	1
24	Portable Patio Heaters	EA	6
25	Rose Garden Table, Chairs, Umbrella and Umbrella Base Set	EA	4
26	Patio Bench	EA	8
27	Remove and Replace Canopy Security Lighting	EA	11
28	Remove and Replace Flood Lighting	EA	19
29	2 Lounge Chairs and Sofa Set	EA	1

Bidder's Name: _____

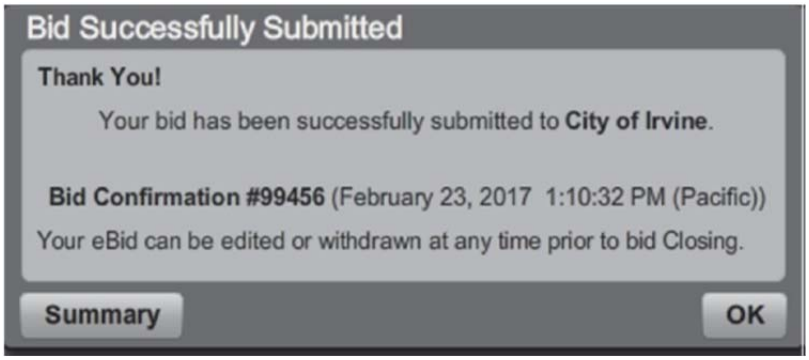
CITY OF IRVINE
LAKEVIEW SENIOR CENTER REHABILITATION
CIP 361733
BID NO. 17-1236

INSTRUCTIONS FOR ENTERING ELECTRONIC BIDS

In order to access the BidsOnline system and ensure successful online submission of your bid prices, follow these steps:

1. Go to https://www.planetbids.com/portal/portal.cfm?CompanyID=15927#
2. On the Vendor Portal page, log into the system (lower right hand corner of screen) with your assigned user name and password. (You must be registered in order to download documents and submit a bid.)
3. Click on "Bid Opportunities" and then on the Bid # and Description that you wish to bid on. The selected bid will open to allow you to access all tabs, documents and the pricing sheet.
4. Click on the “Documents & Attachment” tab to be sure you have downloaded all documents that are part of this bid.
    - *If you have not already downloaded all bid documents, you must download them now, in order to submit your bid. The screen will indicate which documents you've already downloaded.*
5. Click on the tab "Addenda & Emails" to be sure you have read and acknowledged all addenda that have been issued for this bid.
    - *The screen will display "yes" or "no" next to each addendum to indicate whether you have viewed and acknowledged it. If you have not previously acknowledged an addendum, do so now by clicking on the addendum to open and read it, then click on the "Acknowledge" button on the lower left hand corner of screen.*
6. To begin entering your bid, click on "Place eBid" on the lower right corner of the screen. The bid "Terms and Conditions" will pop up with a button for you to click "Accept" to acknowledge your agreement to the terms of the bid.
7. Enter the Respondee information on the “Detail” tab.
8. Go to the "Line Items" tab and enter your unit prices on each line. The system will calculate the extended costs and grand total for you.
9. When you have finished entering all pricing and attachments, click on the "Save" button. This saves your bid as a draft for you to review or revise as needed anytime up to the bid submittal deadline. When you are ready to submit your bid, click the "Submit" button. You will receive a confirming message that looks like this:

Bidder’s Name: _____



Note: E-Bids are sealed and cannot be viewed by the City until the closing date and time. As noted in the screen print above, if you need to withdraw your bid, you may do so any time before the bid deadline, by going back into the system and selecting "withdraw".

Please begin entering your bid in sufficient time to complete and submit it prior to the stated deadline. The official closing time for the bid is determined, and controlled, by the electronic clock in the bid management system. Once the deadline is reached, the system will not allow any bids to be submitted, and any in process that are not completed will be rejected. The amount of time required to enter and submit your bid depends on the complexity of the bid and the processing speed of your server and internet connections.

Bidder's Name: _____

CITY OF IRVINE
LAKEVIEW SENIOR CENTER REHABILITATION
CIP 361733
BID NO. 17-1236

ADDENDA

Bidder acknowledges receipt of addenda to plans, specifications and other Contract Documents listed below, if any, and agrees this Bid Proposal is submitted on the basis of all changes in the work specified herein and said addenda are by this reference made a part hereof.

Addenda to Contract Documents Received:

No.	Date Received
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

If the Bidder does not list all applicable Agency-issued addenda above, the Bid Proposal will be rejected.

Bidder's Name: _____

CITY OF IRVINE
LAKEVIEW SENIOR CENTER REHABILITATION
CIP 361733
BID NO. 17-1236

INFORMATION REQUIRED OF BIDDERS

In determining the lowest "responsible" bidder, consideration will be given to the general competency of the bidder in regard to the work covered by the Bid Proposal. To this end, each proposal shall be supported by a statement of the Bidder's experience on this form. **Failure of the Bidder to provide requested information in a complete and accurate manner shall render the bid non-responsive**. Additionally, the City reserves the right to disqualify or refuse to consider a proposal if a Bidder is determined to be non-responsible in accordance with Irvine Municipal Code § 2-12-103 "Determination of Contractor Non-Responsibility."

The Bidder shall supply the following information. Use additional sheets as necessary.

1. Contact person name:_____ Email:_____

   Address: _____

   Telephone: (___)_____Fax: (___)_____
2. Type of firm (Individual, Partnership, or Corporation): _____
3. State Contractor's License Number and Classification:_____
4. DIR Registration Number: _____ Expiration Date_____
5. Number of years your firm has operated as a contractor: _____
6. Number of years your firm operated under its present business name: _____
7. List the **names and addresses** of all principals or officers authorized to bind your firm.

Name:	**Address:**

8. List any project(s) your firm has **failed to complete** within the last five years due to a termination of contract. For each project, list the type of project, client's name, contact person, current telephone number, email address, and provide a brief description of the grounds for the termination.

   Check appropriate box: None ☐ See list below ☐

Bidder's Name: _____

Type of Project	Client Name	Contact Person	Contact Phone No. and email address
Description:			

Type of Project	Client Name	Contact Person	Contact Phone No. and email address
Description:			

Type of Project	Client Name	Contact Person	Contact Phone No. and email address
Description:			

9. List projects of similar nature to the **Lakeview Senior Center Rehabilitation** your firm is **currently** constructing. For each project, list the type of project, contract amount, client's name, contact person, current telephone number, email address, and a brief description.

Check appropriate box: None ☐ See list below ☐

Type of Project	Contract Amount	Client Name	Contact Person	Contact Phone No. and email address
Description:				

Type of Project	Contract Amount	Client Name	Contact Person	Contact Phone No. and email address
Description:				

Bidder's Name: _____

Type of Project	Contract Amount	Client Name	Contact Person	Contact Phone No. and email address
Description:				

10. List projects of a similar nature to the **Lakeview Senior Center Rehabilitation** your firm has **completed** within the last five years. For each project, list the type of project, contract amount, date of completion, client's name, contact person, current telephone number, email address, and a brief description.

Check appropriate box: None ☐ See list below ☐

Type of Project	Contract Amount	Date of Completion	Client Name	Contact Person	Contact Phone No. and email address
Description:					

Type of Project	Contract Amount	Date of Completion	Client Name	Contact Person	Contact Phone No. and email address
Description:					

Type of Project	Contract Amount	Date of Completion	Client Name	Contact Person	Contact Phone No. and email address
Description:					

Bidder's Name: _____

11. List the name of the person(s) **(A MINIMUM OF ONE)** who inspected the site of the proposed work for your firm.

Name:	**Date of Inspection:**

12. Complete the following in conformance with Labor Code Section 1725.5

Name of Subcontractor	Registered with DIR?	DIR Registration No.
	Yes __ No __	
	Yes __ No __	
	Yes __ No __	
	Yes __ No __	
	Yes __ No __	
	Yes __ No __	
	Yes __ No __	
	Yes __ No __	
	Yes __ No __	
	Yes __ No __	
	Yes __ No __	
	Yes __ No __	

13. If requested by the City, the Bidder shall furnish a notarized financial statement, financial data, or other information and references sufficiently comprehensive to permit an appraisal of its current financial condition or ability to perform the work.

    Failure to furnish information upon request will render the bid nonresponsive.

    All of the above statements regarding Contractor's experience and financial qualifications are submitted in conjunction with the Bid Proposal, as a part thereof, and the truthfulness and accuracy of the information is guaranteed by the Bidder.

Bidder's Name: _____

THE CITY OF IRVINE RESERVES THE RIGHT TO REJECT ALL BIDS

The undersigned understands the contract time limit allotted for the completion of the work required by the Contract is **Forty (40) Working Days** (excluding plant establishment) and **One Hundred and Five (105) Working Days** (including plant establishment.)

The undersigned agrees, if awarded the Contract, to sign the Contract and furnish the necessary insurance certificates and bonds within ten (10) days of the date specified in the Notice of Award of Contract, not including Saturdays, Sundays and legal holidays, and to begin work within ten (10) Working Days from the date specified in the City's Notice to Proceed. Contract time accounting shall begin on the date shown in the Notice to Proceed.

Accompanying this Bid Proposal is **(check appropriate box)**:

☐ **Cash** ☐ **Cashier's Check** ☐ **Certified Check** ☐ **Bid Bond**

Sign Here if Individual:

(Signature) _____

(Print Name) _____

(Address) _____

_____

Affix notary's acknowledgement

Sign Here if Co-Partnership:

Co-Partnership Name of Firm: _____

(Address) _____

_____

Members Signing:

(Signature) _____

(Print Name) _____

(Address) _____

_____

(Signature) _____

(Print Name) _____

(Address) _____

_____

Affix notary's acknowledgement

Sign Here if Corporation:

(Name of Corporation) _____

(Address) _____

_____

Officers of Corporation Signing:

(Signature) _____

(Print Name) _____

(Title) _____

And

(Signature) _____

(Print Name) _____

(Title) _____

If executed by other than President and Secretary of the Corporation, attach a certified copy of resolution authorizing signature on behalf of the Corporation.

Affix notary's acknowledgement

LIST OF SUBCONTRACTORS

The Bidder shall list each subcontractor performing work in an amount in excess of one-half of one percent (1/2%) of the prime contractor's total bid, or, in the case of bids or offers for the construction of streets or highways, including bridges, in excess of one-half of one percent (1/2%) of the prime contractor's total bid or ten thousand dollars ($10,000), whichever is greater. Complete columns (1) and (2) and submit with the bid. Complete columns (3) and (4) and submit with the bid or hand-deliver to the Receptionist for the Purchasing Agent at the reception desk located on the first floor of the Civic Center building at the City of Irvine, located at One Civic Center Plaza, Irvine, California 92606-5207 within 24 hours after the bid opening. Failure to provide complete information in columns (1) through (4) within the time specified shall render the bid non-responsive.

Subcontractors listed must not be debarred from performing the designated work.

BUSINESS NAME and LOCATION (1)	CONTRACTOR LICENSE NUMBER (2)	BID ITEM NUMBERS (3)	PERCENTAGE OF BID ITEM SUBCONTRACTED (4)*

Information must be typed or clearly printed.

*** If you are subcontracting a whole bid item insert one hundred percent (100%), if less insert actual percentage.**

NON-COLLUSION DECLARATION-CONTRACTOR
To be Executed by Bidder and Submitted with Bid
City of Irvine Bid No._____

The undersigned declares:

I am the _____ [title] of _____[company name], the party making the foregoing bid.

The bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation. The bid is genuine and not collusive or sham. The bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid. The bidder has not directly or indirectly colluded, conspired, connived, or agreed with any bidder or anyone else to put in a sham bid, or to refrain from bidding. The bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price of the bidder or any other bidder, or to fix any overhead, profit, or cost element of the bid price, or of that of any other bidder. All statements contained in the bid are true. The bidder has not, directly or indirectly, submitted his or her bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, to any corporation, partnership, company, association, organization, bid depository, or to any member or agent thereof, to effectuate a collusive or sham bid, and has not paid, and will not pay, any person or entity for such purpose.

Any person executing this declaration on behalf of a bidder that is a corporation, partnership, joint venture, limited liability company, limited liability partnership, or any other entity, hereby represents that he or she has full power to execute, and does execute, this declaration on behalf of the bidder.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct and that this declaration is executed on _____[date], at _____[city], _____[state].

_____
Signature

_____
Print Name

FORM OF BID BOND

LAKEVIEW SENIOR CENTER REHABILITATION
CIP 361733

(10% of the Proposal Amount)

KNOW ALL PERSONS BY THESE PRESENTS that we _____ _____ as Principal, and _____ _____ as Surety, are held and firmly bound unto City of Irvine, hereinafter called the City in the sum of _____ Dollars ($_____), for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators and successors, jointly and severally, firmly by these presents.

The conditions of this obligation are such that whereas the Principal submitted to the City a certain Bid Proposal, attached hereto and hereby made a part hereof, to enter into a contract in writing for the **LAKEVIEW SENIOR CENTER REHABILITATION, CIP 361733,** and will furnish all required certificates of insurance and bonds as required by the Contract.

NOW THEREFORE, if said Bid Proposal shall be rejected; or in the alternate, if said Bid Proposal shall be accepted, and the Principal shall execute and deliver a contract in the prescribed Form of Contract, shall deliver certificates evidencing that the required insurance is in effect and shall execute and deliver Performance and Payment Bonds in the forms prescribed, and shall in all other respects perform the Contract created by the acceptance of said Bid Proposal, then this obligation shall be void; otherwise this obligation shall remain in force and effect, it being expressly understood and agreed that the liability of the Surety for any and all default of the Principal hereunder shall be the amount of this obligation as herein stated. In the event suit is brought upon this bond by City and judgment is recovered, Surety shall pay all costs incurred by City in said suit, including a reasonable attorney's fee to be fixed by the court.

The Surety, for the value received, hereby stipulates and agrees that the obligations of said Surety and its bond shall in no way be impaired or affected by an extension of the time within which the City may accept such a Bid Proposal; and said Surety does hereby waive notice of any such extension.

IN WITNESS WHEREOF, the above-bounded parties have executed this instrument this ____ day of _____, 20____, the name of each party being hereto written below and these presents duly signed by each party's undersigned representative, pursuant to authority of its governing body. This bond shall be authenticated by way of notarized acknowledgment, including a copy of the power of attorney, for the Surety.

ATTEST:

(Principal) _____

(Address) _____

_____

(By) _____

(Title) _____

ATTEST:

(Surety) _____

(Address) _____

_____

(By) _____

(Title) _____

FALSE CLAIMS

Bidder shall complete the **False Claims Act Certification** below or in the alternative, provide the information requested under **False Claims Act Violations** below. **Failure to certify or provide the requested information shall render the bid non-responsive.**

"False Claims Act" as used herein is defined as either or both the Federal False Claims Act, 31 U.S.C. § 3729, *et seq*., and the California False Claims Act, Government Code § 12650, et seq.

FALSE CLAIMS ACT CERTIFICATION

I _____ hereby certify that neither
Print name

_____
Contractor name

nor _____
Name of qualifying person licensed by Contractors State License Board

has been determined by a court or tribunal of competent jurisdiction to have violated the False Claims Act as defined above.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

Executed this _____ day of _____ at _____
(Month and year) **(City and State)**

By _____
(Signature of owner, officer, manager or licensee responsible for submission of Bid Proposal)

FALSE CLAIMS ACT VIOLATIONS

With regard to any determinations by a tribunal or court of competent jurisdiction that the False Claims Act, as defined above, has been violated by (1) the Contractor submitting this Bid Proposal or (2) the qualifying person licensed by the State Contractors License Board to perform the work described in this Bid Proposal, shall provide on a separate sheet the following information: (1) the date of the determination of the violation, (2) the identity of the tribunal or court, (3) the identity of the government contract or project involved, (4) the identity of the government department involved, (5) the amount of fine imposed, and (6) any exculpatory information of which the Agency should be aware.

CIVIL LITIGATION AND ARBITRATION HISTORY

Bidder shall provide the certification or information requested below. **Failure to certify or provide such certification or information shall render the bid non-responsive.**

For five (5) years preceding the submittal date of this Bid Proposal, identify civil litigation and arbitration arising out of the performance of a construction contract within the State of California in which the (1) Contractor submitting this bid proposal or (2) the qualifying person licensed by the State Contractors Licensing Board to perform the work described in this Bid Proposal was a named as a party in a lawsuit brought by or against the project owner or any action to confirm, vacate or modify an arbitration award involving an owner.

CIVIL LITIGATION AND ARBITRATION CERTIFICATION

If the Bidder has no civil litigation and arbitration history to report as described above, complete the following:

I _____ certify that neither
Print name

_____
Contractor name

nor _____
Name of qualifying person licensed by Contractors State License Board

has been involved in civil litigation and arbitration as described above.

I declare under penalty of perjury that the foregoing is true and correct.

Executed this _____ day of _____ at _____
(Month and year) **(City and State)**

By _____
(Signature of owner, officer, manager or licensee responsible for submission of Bid Proposal)

Do not include litigation and arbitration which are limited solely to enforcement of mechanics' liens or stop notices. Provide on a separate sheet (1) the name and court case identification number of each case, (2) the jurisdiction in which it was filed, and (3) the outcome of the litigation, e.g. whether the case is pending, a judgment was entered, a settlement was reached, or the case was dismissed.

CRIMINAL CONVICTIONS

Bidder shall provide the certification or information requested below. **Failure to certify or provide such certification or information shall render the bid non-responsive.**

CRIMINAL CONVICTION CERTIFICATION

If the Bidder has no criminal convictions to report as described above, complete the following:

I _____ hereby certify that neither
Print name

_____
Contractor name

nor _____
Name of qualifying person licensed by Contractors State License Board

has been convicted of a criminal violation as described above.

I declare under penalty of perjury that the foregoing is true and correct.

Executed this _____ day of _____ at _____
(Month and year) **(City and State)**

By _____
(Signature of owner, officer, manager or licensee responsible for submission of Bid Proposal)

For the five (5) years preceding the date of this Bid Proposal is due, identify on a separate sheet any criminal conviction in any jurisdiction in the United States for a violation of law arising out of the performance of a construction contract (1) by the Contractor submitting this Bid Proposal or (2) by the qualifying person licensed by the State Contractors License Board to perform the work described in the Bid Proposal.

Provide on the following page labeled “Criminal Convictions Information.” (1) the date of conviction, (2) the name and court case identification number, (3) the identity of the law violated, (4) the identity of the prosecuting agency, (5) the contract or project involved, (6) the punishment imposed, and (7) any exculpatory information of which the Agency should be aware.

VIOLATION OF LAW OR A SAFETY REGULATION

Has the Bidder, any officer of the Bidder, or any employee who has proprietary interest in the Bidder, ever been disqualified, removed, or otherwise prevented from bidding on, or completing a federal, state, or local government project because of a violation of a law or a safety regulation?

☐ **Yes** ☐ **No**

If the answer is yes, explain the circumstances in the following space.

Name of bidder (print)	Signature
Address	State Contractors' License No. & Classification
City Zip Code	Telephone

CONSTRUCTION CONTRACT
FOR CAPITAL IMPROVEMENTS

CITY OF IRVINE

LAKEVIEW SENIOR CENTER REHABILITATION
CIP 361733

This Contract made and entered into this _____ day of _____, 20__, by and between City of Irvine, a municipal corporation of the State of California, hereinafter referred to as "CITY" and _____, hereinafter referred to as "CONTRACTOR."

W I T N E S S E T H:

That the CITY and the CONTRACTOR, for the consideration hereinafter named, mutually agree as follows:

1. The complete Contract includes all of the Contract Documents, which are incorporated herein by this reference, to wit:
    a) Permits and Agreements
    b) Contract
    c) Addenda
    d) Instructions to Bidders, Proposal Requirements and Conditions
    e) Special Provisions
    f) Contract Plans
    g) Standard Plans
    h) Standard Specifications
    i) Reference Specifications

    The Contract Documents are complementary, and that which is required by one shall be as binding as if required by all.

2. CONTRACTOR shall provide and furnish all labor, materials, necessary tools, expendable equipment, and all utility and transportation services required for the following work of improvement: Removal of concrete hardscape, construction of new concrete hardscape, storm drain and drainage inlet installation, block wall repair, irrigation and landscaping improvements, removing and replacing outdoor lighting, shade structure cleaning and painting, block wall cleaning and painting.

3. CONTRACTOR agrees to perform all the said work and furnish all the said materials at his own cost and expense that are necessary to construct and complete in strict conformance with Contract Documents and to the satisfaction of the Engineer, the work hereinafter set forth in accordance with the Contract therefore adopted by the City Council and as prepared by Civil Works Engineers, 3151 Airway Avenue, Suite T-1, Costa Mesa, CA 92626.

4. CITY agrees to pay and CONTRACTOR agrees to accept in full payment for performance of this work of improvement as described, the stipulated sum of _____ **($_____)** the "Contract Price."

   CITY agrees to make progress payments and final payment in accordance with the method set forth in the Special Provisions.

5. CONTRACTOR agrees to commence construction of the work provided for herein within ten (10) Calendar Days after the date specified in the Notice to Proceed, and to continue diligently in strict conformance with Contract Documents and without interruption, and to complete the construction thereof within **Forty (40) Working Days** after the date specified in the Notice to Proceed.

   The CONTRACTOR shall diligently prosecute all the work (including plant establishment) to completion before the expiration of **One Hundred and Five (105) Working Days** from the date specified in the Notice to Proceed.

6. Time is of the essence of this Contract, and it is agreed that it would be impracticable or extremely difficult to ascertain the extent of actual loss or damage which the CITY will sustain by reason of any delay in the performance of this Contract. It is, therefore, agreed that CONTRACTOR will pay as liquidated damages to the CITY the following sum: One Thousand Seven Hundred Dollars ($1,700) per Calendar Day, for each and every Calendar Days delay in finishing the Work except plant establishment work in excess of the number of Working Days prescribed above. The CONTRACTOR shall pay to the CITY the sum of Five Hundred Dollars ($500) per Calendar Day, for each and every Calendar Days delay in completing the plant establishment work in excess of the number of Working Days prescribed above. In no case will liquidated damages be assessed more than One Thousand Seven Hundred Dollars ($1,700) per day. If liquidated damages are not paid, as assessed by the CITY, the CITY may deduct the amount thereof from any money due or that may become due the CONTRACTOR under this Contract in addition to any other remedy available to CITY. By executing this Contract, CONTRACTOR agrees that the amount of liquidated damages is reasonable and shall not constitute a penalty.

7. In accordance with State of California Senate Bill No. 854, CONTRACTOR will maintain and will require all subcontractors to maintain valid and current Department of Industrial Relations (DIR) Public Works Contractor registration during the term of this project. CONTRACTOR shall notify the CITY in writing immediately, and in no case more than twenty-four (24) hours, after receiving any information that CONTRACTOR'S or any of its subcontractor's DIR registration status has been suspended, revoked, expired, or otherwise changed.

8. CONTRACTOR will pay, and will require all subcontractors to pay, all employees on said Contract a salary or wage at least equal to the prevailing salary or wage established for such work as set forth in the wage determinations and wage standards applicable to this work, a copy of which is on file in the office of the City Clerk of the City of Irvine. Federal prevailing wage rates apply for federally funded projects. Travel and subsistence pay shall be paid in accordance with Labor Code § 1773.1.

If there is a difference between the minimum wage rates predetermined by the Secretary of Labor and the general prevailing wage rates determined by the Director of the California Department of Industrial Relations for similar classifications of labor, the CONTRACTOR and subcontractors shall pay not less than the higher wage rate. The CITY will not accept lower State wage rates not specifically included in the Federal minimum wage determinations. This includes "helper" (or other classifications based on hours of experience) or any other classification not appearing in the Federal wage determinations. Where Federal wage determinations do not contain the State wage rate determination otherwise available for use by the CONTRACTOR and subcontractors, the CONTRACTOR and subcontractors shall pay not less than the Federal minimum wage rate which most closely approximates the duties of the employees in question.

9. CONTRACTOR shall be subject to the penalties in accordance with Labor Code of § 1775 for each worker paid (either by him or by any subcontractors under him) less than the prevailing rate described above on the work provided for in this Contract.

10. CONTRACTOR and subcontractors shall comply with Labor Code § 1810 and § 1811 which stipulates that eight hours labor constitutes a legal day's work, and § 1812 which stipulates that the CONTRACTOR and subcontractors shall keep an accurate record showing the name of and actual hours worked each calendar day and each calendar week by each worker employed by him in connection with the work performed under the terms of the Contract. Failure to comply with these sections of the Labor Code will subject the CONTRACTOR to penalty and forfeiture provisions of the Labor Code § 1813.

11. CONTRACTOR will comply with the provisions of Labor Code § 1777.5 pertaining to the employment of apprentices to the extent applicable to this Contract.

12. CONTRACTOR, by executing this Contract, hereby certifies:

> "I am aware of, and will comply with the Labor Code § 3700 by securing payment for, and maintaining in full force and effect for the duration of the contract, complete Workers' Compensation Insurance, and shall furnish a Certificate of Insurance to the Agency before execution of the Contract. The CITY, its officers, or employees, will not be responsible for any claims in law or equity occasioned by failure of the CONTRACTOR to comply with this paragraph."

CONTRACTOR further agrees to require all subcontractors to carry Workers' Compensation Insurance as required by the Labor Code of the State of California.

13. CONTRACTOR shall, concurrent with the execution of this Contract, furnish two bonds approved by the CITY, one in the amount of One Hundred Percent (100%) of the Contract Price, to guarantee the faithful performance of the work "Performance Bond", and one in the amount of One Hundred Percent (100%) of the Contract Price to guarantee payment of all claims for labor and materials furnished

"Payment Bond." This Contract shall not become effective until such bonds are supplied to and approved by the CITY.

14. CONTRACTOR shall, prior to commencing work, furnish certificates evidencing compliance with all requirements of the Contract Documents pertaining to insurance.

15. Any amendments to any of the Contract Documents must be in writing executed by the CONTRACTOR and the CITY. Any time an approval, time extension, or consent of the CITY is required under the Contract Documents, such approval, extension, or consent must be in writing in order to be effective.

16. This Contract contains all of the agreements and understandings of the parties and all previous understandings, negotiations, and contracts are integrated into and superseded by this Contract.

17. In the event that any one or more of the phrases, sentences, clauses, paragraphs, or sections contained in this Contract shall be declared invalid or unenforceable by a valid judgment or decree of a court of competent jurisdiction, such invalidity or unenforceability shall not affect any of the remaining phrases, sentences, clauses, paragraphs, or sections of this Contract which are hereby declared as severable and shall be interpreted to carry out the intent of the parties hereunder.

18. The persons executing this Contract on behalf of the parties hereto warrant that they are duly authorized to execute this Contract on behalf of said parties and that, by so executing this Contract, the parties hereto are formally bound to the provisions of this Contract.

19. This Contract shall be binding upon and shall inure to the benefit of the parties hereto and their respective heirs, personal representatives, successors, and assigns.

20. In performing its obligations and duties under this Contract, each party shall comply with all applicable local, state, and federal laws, regulations, rules, standards and ordinances.

21. In the event any action is brought between the parties hereto relating to this Contract or the breach thereof, the prevailing party in such action shall be entitled to recover from the other party reasonable expenses, attorneys' fees and costs in connection with such action or proceeding.

22. This Contract may be executed by the parties in counterparts, which counterparts shall be construed together and have the same effect as if all of the parties had executed the same instrument.

23. This Contract is to be governed by the laws of the State of California.

IN WITNESS WHEREOF, the said CONTRACTOR and the Director of Public Works, City Manager and City Clerk of the CITY have caused the names of said parties to be affixed hereto, the day and year first above written.

CONTRACTOR

(If Corporation, 2 signatures are required)

By _____

Print Name

Title

By _____

Print Name

Title

CITY OF IRVINE
A Municipal Corporation

Sean Joyce
City Manager of the City of Irvine

Manuel Gomez
Director of Public Works

ATTEST:

Molly McLaughlin
City Clerk

APPROVED AS TO FORM:
RUTAN & TUCKER, LLP

Jeffrey Melching

PERFORMANCE BOND

LAKEVIEW SENIOR CENTER REHABILITATION
CIP 361733

KNOW ALL MEN BY THESE PRESENTS that we _____, as Principal, and _____ as Surety, are held and firmly bound unto City of Irvine, hereinafter called the City in the sum of _____ _____($_____) (this amount being not less than one hundred percent (100%) of the total bid price of the contract awarded by the owner to the Principal), for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators and successors, jointly and severally, firmly by these presents.

The conditions of this obligation are such that whereas the Principal entered into a contract attached hereto, with the City of Irvine.

NOW THEREFORE, if the Principal shall well and truly perform and fulfill all the undertakings, covenants, terms, conditions and agreements of said Contract during the original terms thereof, and any extensions thereof that may be granted by the Owner with or without notice of the Surety, and during the life of any guarantee required under the Contract, and shall also well and truly perform and fulfill all the undertakings, covenants, terms, conditions and agreements of any and all duly authorized modifications of said Contract that may hereafter be made, then this obligation shall be void otherwise this obligation shall remain in full force and effect.

Further, the said Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or modifications of the Contract Documents and/or of the Work to be performed thereunder shall in any way affect its obligations on this bond; and it hereby waives notice of any and all such changes, extensions of time, and alterations or modifications of the contract documents and/or of the work to be performed thereunder.

As a part of the obligation secured hereby and in addition to the face amount specified therefore, there shall be included costs and reasonable expenses and fees, including reasonable attorneys' fees, incurred by the City in successfully enforcing such obligation, and all to be taxed as costs and included in any judgment rendered by a court of law.

IN WITNESS WHEREOF, the above-bounded parties have executed this instrument this ____ day of _____, 20____, the name of each party being hereto written below and these presents duly signed by each party's undersigned representative, pursuant to authority of its governing body. This bond shall be authenticated by way of notarized acknowledgment, including a copy of the power of attorney, for the Surety.

ATTEST:

(Principal) _____

(Address) _____

_____

(By) _____

(Title) _____

ATTEST:

(Surety) _____

(Address) _____

_____

(By) _____

(Title) _____

PAYMENT BOND

LAKEVIEW SENIOR CENTER REHABILITATION
CIP 361733

KNOW ALL MEN BY THESE PRESENTS that we _____, as Principal, and _____ as Surety, are held and firmly bound unto City of Irvine, hereinafter called the City in the sum of _____ _____($_____) (this amount being not less than one hundred percent (100%) of the total bid price of the contract awarded by the owner to the Principal), for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators and successors, jointly and severally, firmly by these presents.

The conditions of this obligation are such that whereas the Principal entered into a contract, attached hereto, with the City of Irvine.

NOW THEREFORE, if the Principal shall promptly make payment to all persons supplying labor and material in the prosecution of the work provided for in said contract, and any and all duly authorized modifications of each contract that may hereafter be made, then this obligation shall be void, otherwise this obligation shall remain in full force and effect.

The condition of this obligation is such that, if said Principal or his subcontractors, or heirs, executors, administrators, successors, or assigns thereof, shall fail to pay any of the persons named in the Civil Code § 9100 for any material used in, upon, for or about the performance of the work contracted to be done, or for any work or labor thereon of any kind, or shall fail to pay any amount due under the Unemployment Insurance Code with respect to work or labor performed by any such claimant or any amount required to be deducted, withheld, and paid over to the Franchise Tax Board from the wages of employees of the Contractor and his subcontractors with respect to such work and labor, then said Surety will pay and, also, in case suit is brought upon the bond, will pay a reasonable attorney's fee to be fixed by the court. This bond shall inure to the benefit of all persons named in the aforesaid Civil Code § 9100 to give a right of action to them or their assigns in any suit brought upon the bond.

Further, the said Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or modification of the Contract Documents or of the Work to be performed thereunder shall in any way affect its obligations on this bond; and it hereby waives notice of any and all such changes, extensions of time, and alterations or modifications of the Contract Documents and/or of the work to be performed thereunder.

IN WITNESS WHEREOF, the above-bounded parties have executed this instrument this ____ day of _____, 20____, the name of each party being hereto written below and these presents duly signed by each party's undersigned representative, pursuant to authority of its governing body. This bond shall be authenticated by way of notarized acknowledgment, including a copy of the power of attorney, for the Surety.

ATTEST:

(Principal) _____

(Address) _____

_____

(By) _____

(Title) _____

ATTEST:

(Surety) _____

(Address) _____

_____

(By) _____

(Title) _____

SPECIAL PROVISIONS

A. THESE ADDITIONS, DELETIONS, AND AMENDMENTS MODIFY THE SPECIFICATIONS IN THE “STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION”, 2015 EDITION AND 2016 SUPPLEMENT.

B. THESE ADDITIONS, DELETIONS, AND AMENDMENTS SHALL TAKE PRECEDENCE IN THE EVENT OF A CONFLICT WITH ANY STANDARD SPECIFICATIONS.

C. AS A CONVENIENCE, THESE ADDITIONS, DELETIONS, AND AMENDMENTS HAVE BEEN ARRANGED IN A FORMAT THAT PARALLELS THE “STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION”, 2015 EDITION AND 2016 SUPPLEMENT.

PART 1 - GENERAL PROVISIONS

SECTION 1 - TERMS, DEFINITIONS, ABBREVIATIONS, UNITS OF MEASURE AND SYMBOLS

REVISE as follows:

1-1 GENERAL. *ADD the following term:*

The word *provide* shall mean furnish and install.

1-2 TERMS AND DEFINITIONS. *MODIFY to ADD the following:*

Acceptance, Final Acceptance – Formal action by the Agency acknowledging the Work is complete.

Agency/Board/City – The City of Irvine, a municipal corporation.

Agency Representative – The person or engineering/architectural firm Agency authorizes to represent it during the performance of the Work by the Contractor and until Final Acceptance. The Agency Representative means the Agency Representative or his assistants.

Calendar Day – The 24-hour day denoted on the calendar.

Calendar Month – The period including the first through the last day of a month.

City – See Agency.

Clarification – Verbal or written interpretation of Contract Documents by the Agency Representative to clarify intent, procedures, materials or processes with no change in contract sum or time.

REPLACE the definition for "Engineer" with the following:

Engineer – The City Engineer acting either directly or through the Agency Representative.

Field Order – Authorization by Agency Representative to proceed with Change Order work after completion of negotiations, but before the issuance of the Change Order.

Laboratory – The laboratory authorized by the Agency or the Agency Representative to test material and work involved in the project.

Major Bid Item – A single Contract item constituting ten percent (10%) or more of the original Contract Price.

Request for Quotation – Contemplated revision of Contract Documents by the Agency requesting detailed information from the Contractor on impacts to contract sum or contract time.

State Standard Specifications – Standard Specifications issued by the State of California, Department of Transportation, 2015.

Traffic Control Devices – All signs, signals, markings, and other devices used to regulate, warn, or guide traffic, placed on, over, or adjacent to a street, highway, pedestrian facility, or bikeway, by authority of the Engineer.

1-3. ABBREVIATIONS

1-3.2 Common Usage. *MODIFY to ADD the following:*

Abbreviation	Word or Words
CSMP	Construction Site Monitoring Program
DBE	Disadvantaged Business Enterprise
ESA	Environmentally Sensitive Area
HMA	Hot Mix Asphalt
NOI	Notice of Intent
SWMP	Storm Water Management Plan
SWRCB	State Water Resources Control Board
WPCP	Water Pollution Control Program
WDID	Waste Discharge Identification Number

DELETE the abbreviation of MUTCD and SUBSTITUTE with the following:

MUTCD	California Manual on Uniform Traffic Control Devices

1-3.3 Institutions. *MODIFY to ADD the following:*

Abbreviation	Word or Words
AI	The Asphalt Institute
AIA	American Institute of Architects
APWA	American Public Works Association
AREMA	American Railway Engineering and Maintenance of Way Association
ASHRAE	American Society of Heating, Refrigerating, and Air Conditioning Engineers
ASME	American Society of Mechanical Engineers
CRSI	Concrete Reinforcing Steel Institute
NFPA	National Fire Protection Association
PCA	Portland Cement Association
SSPC	Steel Structures Painting Council
SSPWC	Standard Specifications for Public Works Construction
UBC	Uniform Building Code, Pacific Coast Building Officials Conference of the International Conference of Building Officials

SECTION 2 - SCOPE AND CONTROL OF THE WORK

REVISE as follows:

2-2 ASSIGNMENT. *MODIFY to ADD the following:*
The performance of the Contract may not be assigned, except upon the written consent of the Agency. Consent will not be given to any proposed assignment that would relieve the original Contractor or its Surety of their responsibilities under the Contract, nor will the Agency consent to any assignment of any part of the Work under the Contract.

Assignment of this Contract shall contain a provision that the funds to be paid to the assignee under the assignment are subject to a prior lien for services rendered or materials supplied for performance of the work called for under the Contract in favor of all persons, firms, or corporations rendering such services or supplying such materials.

2-3 SUBCONTRACTS.

2-3.1 General. *MODIFY to ADD the following:*
If the Contractor subcontracts any part of this Contract, the Contractor shall be as fully responsible to the Agency for the acts and omissions of his subcontractor as he is for the acts and omissions of persons directly employed by him. Nothing contained in the Contract Documents shall create any contractual relationship between any subcontractor and the Agency. The Contractor shall bind every subcontractor to be bound by the terms of the Contract Documents as applicable to his work.

Debarred contractors shall not be employed on the Work pursuant to the provisions of Labor Code § 1777.1 and the City of Irvine Council Ordinance No. 08-10. The Labor Commissioner publishes and distributes a list of contractors ineligible to perform work as a subcontractor on a public works project. This list of debarred contractors is available from the Department of Industrial Relations web site: http://www.dir.ca.gov/dlse/debar.html

A list of individuals, firms and organizations debarred, suspended or who have voluntarily excluded themselves from Federal Procurement and Non-Procurement Programs is maintained by the US General Services Administration. This excluded parties list is available from the website: http://www.sam.gov

In accordance with SB 854, the Contractor and each of its subcontractors shall maintain a valid and current Department of Industrial Relations (DIR) Public Works Contractor registration during the term of this project.

Prior to including a subcontractor's name on the bid, the Contractor shall be responsible for verifying that each of its subcontractors are properly licensed and not debarred from performing the designated work.

This requirement shall be enforced as follows: Noncompliance shall be corrected. Payment for subcontracted work involved will be withheld from progress payments due, or to become due, until correction is made. Failure to comply may result in termination of the Contract.

If any subcontractor or person employed by the Contractor is deemed by the Engineer to be incompetent or to act in an improper manner, at the request of the Engineer, they shall be dismissed immediately from the job and shall not be employed again on the Work.

A copy of each subcontract is required to be filed with the Agency before the subcontractor begins work. Each subcontract shall contain a reference to the Contract between the Agency and the Contractor, and the terms of that Contract and all parts thereof shall be made a part of such subcontract insofar as applicable to the work covered thereby. Each subcontract shall provide for its annulment by the Contractor at the order of the Agency if in the Agency's opinion the subcontractor fails to comply with the requirements of the Contract.

2-3.2 Self Performance. *DELETE in its entirety and SUBSTITUTE with the following:*
The Contractor shall perform, with its own organization, Contract work amounting to at least 15 percent of the Contract Price on building/facility contracts, and at least 50 percent of the Contract Price on all other Public Works contracts except that any designated "Specialty Items" may be performed by subcontract and the amount of any such "Specialty Items" so performed may be deducted from the Contract Price before computing the amount required to be performed by the Contractor with its own organization. "Specialty Items" will be identified by the Agency in the Bid or Proposal. Where an entire item is subcontracted, the value of work subcontracted will be based on the Contract Unit Price. When a portion of an item is subcontracted, the value of work subcontracted will be based on the estimated percentage of the Contract Unit Price. This will be determined from information submitted by the Contractor, and subject to approval by the Engineer.

The provisions in 2-3.2 of these Special Provisions require that the Contractor shall perform with the Contractor's own organization contract work amounting to not less than 50 percent of the original Contract Price is not changed by the Federal Aid requirement specified under "Required Contract Provisions Federal Aid Construction Contracts" of these Special Provisions that the Contractor perform not less than 30 percent of the original contract work with the Contractor's own organization.

2-3.3 Status of Subcontractors. *MODIFY to ADD the following:*
The City will not conduct business with an individual, firm or organization, and the Contractor shall not employ or otherwise use any subcontractor, supplier, or equipment vendor at any tier that is on the City's debarment list, the Department of Industrial Relations debarment list, or on the US General Services Administration "List of Parties Excluded from Federal Procurement and Non Procurement Programs."

2-5 PLANS AND SPECIFICATIONS.

2-5.1 General. *ADD the following after the 2nd paragraph:*
All work of the Contract including, but not limited to, the general nature and character of the work area and conducting of Contractors' operations shall be performed in accordance with the Standard Specifications for Public Works Construction, 2015 edition, and all supplements thereto, except as modified in these Special Provisions and as follows:

> Work to be performed which is directly related to the construction and/or modification of traffic, striping, signing, markings or signals; work within State right of way; and, work which is directly related to the construction of bridges and

bridge appurtenances shall be performed in accordance with the State Standard Specifications, current edition as of bid date.

As applicable, unless modified elsewhere in these Special Provisions, Work of the Contract shall conform to current editions of: Uniform Building, Plumbing, Mechanical Codes; Uniform Fire Code; National Electrical Code; and, City of Irvine amendments thereto.

All work shall be performed in accordance to the Standard Specification for Public Works Construction “Greenbook” (2015 Edition, with all current supplements), the California Building Code (2013 Edition) with City Amendments, the California Electrical Code (2013 Edition) with City Amendments, the California Plumbing Code (2013 Edition) with key amendments, California Green Building Standards Code (2013 Edition), Building Energy Efficiency Standards (2013 Edition), California Playground Safety Regulations; All City of Irvine Codes & Ordinances, City of Irvine’s Grading Manual, City of Irvine’s Standards and Design Manual; City of Irvine’s Park/Public Facility Standards; City of Irvine’s Construction Site Security Requirements, Americans with Disabilities Act (ADA), Chapter 11B Title 24 of the California Code of Regulations; California Public Contract Laws; these Specifications, Attachments, and the Construction Drawings, and all applicable requirements.

DELETE last paragraph in its entirety and SUBSTITUTE with the following:

If the Contractor, either before commencing work or in the course of the work, finds any discrepancy between the Specifications and the Plans or between either of them and the physical conditions at the site of the work or finds any error or omission in any of the Plans or in any survey, the Contractor shall promptly notify the Agency of such discrepancy, error, or omission. If the Contractor observes that any plans or specifications are at variance with any applicable law, ordinance, regulation, order, or decree, he shall promptly notify the Agency in writing of such conflict.

The Agency, on receipt of any such notice, will investigate the circumstances and give appropriate instructions to the Contractor. Until such instructions are given, any work done by the Contractor after its discovery of such an error, discrepancy, or conflict that is directly or indirectly affected by such error, discrepancy, or conflict, will be at its own risk and it shall bear all cost arising therefrom.

The Agency will provide, free of charge, three (3) copies of Plans and Special Provisions for the Contractor and one (1) copy of Plans and Special Provisions for each subcontractor listed in the Bidder's Proposal. Any Plans or Special Provisions required by the Contractor/subcontractor in addition to the above can be provided by Agency at Contractor's expense. The Contractor shall keep one set of Plans and Special Provisions in good order and available to the Agency Representative at the site of the Work.

2-5.2 Precedence of Contract Documents. *DELETE the order of precedence and SUBSTITUTE with the following*:

a) Permits and Agreements

b) Change Orders and/or Supplemental Agreements; whichever occurs last

c) Contract

d) Addenda
e) Instructions to Bidders, Proposal Requirements and Conditions
f) Bid/Proposal
g) Special Provisions
h) Contract Plans
i) Standard Plans
j) Standard Specifications
k) Reference Specifications

ADD:

2-5.2.1 Interpretation of Plans and Specifications. Figured dimensions on Plans shall govern, but work not dimensioned shall be as directed. Work not particularly shown or specified shall be the same as similar parts that are shown or specified. Specifications shall govern as to materials, workmanship, and installation procedures. Plans and Specifications requiring higher quality material or workmanship shall prevail. In the event of any discrepancy between any drawings and the figures thereon, the figures shall be taken as correct. In the event of any doubt or question arising respecting the true meaning of the Specifications, reference shall be made to Engineer whose decision thereon shall be final.

2-5.3 Submittals.

2-5.3.1 General. *MODIFY to ADD the following:*
The review period begins a new upon each submittal or resubmittal.

In providing specified submittals, the Contractor certifies that they are complete in all respects and all materials, equipment, and other work shown thereon conforms to the Contract Documents.

Where a manufactured item is designed or engineered by the manufacturer, fabricator, subcontractor, consultant or designee, the drawings and supporting calculations shall be stamped and signed by an engineer registered by the State of California executing the design within the scope of his registration. Unless otherwise accepted by the Engineer, data shall be submitted only by the prime Contractor. Data that, in the opinion of the Engineer, are incomplete or have not been checked by the prime Contractor or are illegible will be considered as not complying with the Contract requirements and will be returned to the Contractor for resubmittal in the proper form. The City may make this determination at any time during the review period.

Data shall be submitted in a format similar to the arrangement of the applicable section(s) of the Specifications unless otherwise specified. Any submittal not following the format specified, and not conforming to the requirements listed below, will be returned for resubmittal without review.

a) Data shall include drawings and descriptive information in sufficient detail to show the kind, size, arrangement, and operation of component materials and devices, the external connections, anchorages, and supports required, performance characteristics, dimensions needed for installation and correlation

with other materials and equipment, and all additional information as required in the detailed section(s) of the Contract Documents. Identify field dimensions; show relation to adjacent or critical features, work or products.

b) Calculations to support the adequacy of the design in meeting specified performance ratings or requirements shall be submitted when required by the Specifications.

c) Each drawing or data sheet shall be clearly marked with the name of the project, the Contractor's name, and references to applicable Specification paragraphs and Plan sheets. Submittals containing multiple drawings or data sheets shall be collated prior to submittal for review.

d) Data sheets, catalog cuts or drawings showing more than the particular item under consideration shall be marked to cross out all but the applicable information. Submit only pertinent pages; mark each copy of standard printed data to identify pertinent products, referenced to Specification Section and Article number. Show reference standards, performance characteristics, and capacities; wiring and piping diagrams and controls; component parts; finishes; dimensions; and required clearances.

e) Data submitted shall include drawings showing wiring and/or pipe layouts. Any changes proposed by the Contractor shall be stated in a cover letter and essential details of such changes shall be clearly shown in the data submitted.

f) Present in a clear and thorough manner. Title each drawing with project name and number; identify each element of drawings by reference to sheet number and detail, schedule, or room number of Contract Documents.

g) Provide manufacturer's preparation, assembly and installation instructions.

h) Submit full range of manufacturer's standard finishes except when more restrictive requirements are specified, indicating colors, textures, and patterns, for Engineer's selection.

i) Submit samples to illustrate functional characteristics of products, including parts and attachments. Label each sample with identification required for transmittal letter. Approved samples which may be used in the Work are indicated in the Specification section.

j) Provide field samples of finishes for the Work, at location acceptable to Agency Representative, as required by individual Specifications section. Install each sample complete and finished. Finishes in place that have been accepted by the Agency Representative may be retained in completed work.

Submittals shall be accompanied by a letter of transmittal listing the contents of the submittal. Drawings shall show the name of the project, the name of the Contractor, and, if any, the names of suppliers, manufacturers, and subcontractors. Shop drawings shall be submitted with sufficient time for Agency's review and in orderly sequence in accordance with the progress schedule to cause no delay in prosecution of the Work. Drawings shall be submitted on 11"x17" or 24"x36" sheet sizes only. Any submittal not accompanied by such a transmittal, or where all applicable items on the form are not complete, will be returned for resubmittal.

A separate letter of transmittal shall be used for each specific item or class of materials or equipment for which a submittal is required. Transmittal of shop drawings on various

items using a single letter of transmittal will be permitted only when the items taken together constitute a manufacturer's "package" or are so functionally related that expediency indicates review of the group or package as a whole. Submittals transmitted by facsimile will not be accepted.

The Agency will return any submittal sent (1) without a transmittal letter, (2) with an incomplete form, or (3) by facsimile.

The Contractor shall assign a unique sequential number to each submittal package, which shall be clearly written in the space provided on the transmittal letter. This number shall be used in all correspondence to the Agency when referencing to a particular submittal. The Contractor shall be responsible for ensuring the same submittal number is not assigned to different submittal packages.

Resubmittals shall incorporate the original submittal number followed by the revision number (i.e., the first resubmittal of submittal #1 is numbered 1R1, the second 1R2, etc.). The Agency will return improperly numbered submittals without review. The Contractor shall indicate on the transmittal letter that either no exceptions to the Contract Documents are taken or deviations are submitted. All deviations indicated shall be listed on the transmittal letter and the Contractor shall be solely responsible for any omitted deviations. If any deviations are omitted, the Agency will return the submittal and the engineering data without review for resubmittal. Any consequences from the resulting delay shall be fully borne by the Contractor.

The Engineer's review of the Contractor's submittals will cover only general conformity to the Contract Documents. The Engineer's acceptance of drawings returned marked NO EXCEPTION TAKEN or RESUBMITTAL NOT REQUIRED (CORRECTIONS ARE NOTED) shall not constitute a blanket approval of dimensions, qualities, and details of the materials, equipment, device, or item shown, and does not relieve the Contractor from any responsibility for errors, omission or deviations from conforming to the Contract Documents. The Agency reserves the right to subsequently reject any previously accepted equipment, material, and/or construction method that deviates from the Contract Documents. When the drawings and data are returned marked CORRECT AND RESUBMIT, the corrections shall be made as noted thereon and as instructed by the Engineer, resubmittal shall be made in the same manner as the original submittal.

If the Engineer rejects the submittals, the Contractor is responsible for any subsequent time delays at no additional compensation from the Agency. Subject to these requirements, drawings and data, after final processing by the Engineer, shall become a part of the Contract Documents, and the work shown or described thereby shall be performed in conformity therewith unless otherwise required by the Engineer. In the event of conflict between accepted submittals and the other Contract Documents, the most stringent requirements shall apply unless the Agency has agreed in writing to less stringent requirements in response to a deviation listed on a submittal letter of transmittal.

No portion of the work requiring a submittal shall be commenced until the submittal has been reviewed by the Engineer and returned to the Contractor with a notation indicating that resubmittal is not required.

The review by the Engineer is only of general conformance with the design concept of the project, and general compliance with the Contract Documents and shall not be construed as relieving the Contractor of these full responsibilities for providing materials, equipment, and work required by the Contract; the proper fitting and construction of the Work; the accuracy and completeness of the submittals; selecting fabrication processes and techniques of construction; and performing the Work in a safe manner.

2-6 WORK TO BE DONE. *ADD the following after the 1st paragraph:*
The Contractor shall leave the Work area in a neat condition. Any work not shown in the Plans or Specifications but necessary to complete the Work according to law and governmental codes and regulations shall be performed by the Contractor as if in the Plans and Specifications.

The Contractor shall remove and dispose of all structures, debris, or other obstructions of any character necessary to accommodate the Work. Where such obstructions consist of improvements not required by law to be removed by the Agency thereof, all such improvements shall be removed, maintained, and permanently replaced by the Contractor at his expense.

2-8 RIGHT OF WAY. *DELETE the 1st sentence and SUBSTITUTE with the following:*
Rights of way, easements, agreements, licenses, or rights of entry (all referred to as right of way) for the Work have been provided by the Agency. Temporary right-of-way to construct one or more portions of the Work may also have been acquired by the Agency. If temporary right of way was acquired, the documents or their contractual terms and obligations are included in the Contract Documents. The Contractor shall comply with all the terms and obligations related to the physical use of the temporary right of way and its eventual return of the property to the owner. The Contractor shall schedule the Work that may include landscape establishment, maintenance periods, and final acceptance within the temporary right of way to start and finish within the time allotted in each temporary right of way agreement. Should the Work be delayed through no fault of the Agency, the Contractor shall be responsible for all costs incurred by the Agency to extend use of the temporary right of way.

MODIFY to ADD the following:

Work in the public right of way shall be done in accordance with the requirements of the permit issued by the public agency in whose right of way the Work is located in addition to conforming to the Contract Documents. If a permit or traffic control plan is not required, the Work shall conform to the standards set forth in the MUTCD.

The Contractor shall not allow his employees to use private property for any reason or to use water or electricity from such property without providing the City written permission from the owner. The Contractor shall comply with all applicable federal, state and local laws, ordinances, codes and regulations in performing any work or doing any activity on lands outside the public rights of way.

The Contractor shall hold harmless, indemnify, and defend the Agency, the Agency Representative and each of their officers, employees, and agents from all claims or suits for damages occasioned by such work or activity, whether done according to this section and with permission from the Agency or in violation of this section without

permission from the Agency. To the maximum extent permitted by law, all obligations of the Contractor stated in 7-3.2 shall apply in the case of any such claims or suits.

The Contractor shall comply with City of Irvine Municipal Code § 5-9-521 Construction Site and Vacant Property Security, and be fully responsible for locating and obtaining permission to use equipment yards or material storage site(s). The Contractor shall assume full responsibility and costs for property rental, site preparation, maintenance and cleanup in a manner satisfactory to the City and the property owner.

If, through the failure of the Agency to acquire or clear right of way, the Contractor sustains loss which could not have been avoided by the judicious handling of forces, equipment and plant, the Contractor will be paid an amount as the Engineer may find to be a fair and reasonable compensation for such part of the Contractor's actual loss as, in the opinion of the Engineer, was unavoidable, determined as follows:

Compensation for idle time of equipment will be determined in the same manner as determinations are made for equipment used in the performance of extra work paid for as provided in 3-3 with the following exceptions:

a) The right of way delay factor for each classification of equipment shown in the State of California, Department of Transportation publication entitled “Equipment Rental Rates and Labor Surcharge,” current edition at the time of bid opening will be applied to such equipment rental rate.

b) The time for which such compensation will be paid will be the actual normal working time during which such delay condition exists, but in no case will exceed eight (8) hours in any day.

c) The days for which compensation will be paid will be the Calendar Days, excluding Saturdays, Sundays and legal holidays, during the existence of such delay.

Actual loss shall be understood to include no items of expense other than idle time of equipment and necessary payments for idle time of men, cost of extra moving of equipment, and cost of longer hauls. Compensation for idle time of equipment will be determined, as provided herein, and compensation for idle time of men will be determined as provided in 3-3.

If the performance of the Contractor's work is delayed as a result of the failure of the City to acquire or clear right of way, an extension of time determined pursuant to the provisions in 6-6 will be granted.

2-9 SURVEYING.

2-9.2 Survey Service. *DELETE the 1st sentence in the 1st paragraph and SUBSTITUTE with the following:*
The Agency will engage a licensed land surveyor or civil engineer registered in the State of California to perform surveying and calculations required by the Work of this Contract. All survey requests and directions to the survey team will be handled through the Agency Representative.

DELETE the last sentence in the 1st paragraph and SUBSTITUTE with the following:

Staking will be in accordance with Chapter 12 “Construction Surveys” of the State of California, Department of Transportation “Survey Manual.” A copy of the Manual is available at http://www.dot.ca.gov/hq/row/landsurveys/SurveysManual/12_Surveys.pdf.

Any construction stakes required in addition to those listed in the “Survey Manual”, or any re-staking required by loss of stakes, or additional costs encountered by significant delays or conditions which cause the use of more difficult survey methods during field operations and which are, in the judgment of the Agency, caused by interference of Contractors' operations, equipment or materials, shall be paid for by the Contractor at the hourly rate schedule of the Agency's surveying firm. Costs shall be deducted from any monies due or to become due the Contractor and any delays due to the replacement or restoration of stakes shall be the responsibility of the Contractor.

The Contractor shall submit to the Agency Representative a completed City of Irvine construction staking form with an assigned sequential number, description of specific items, locations and date required, together with supplemental drawings and/or data as necessary to facilitate surveying as required.

ADD:

2-9.5 Conformity with Contract Documents. The Work shall conform to the lines, grades, dimensions, tolerances, and material and equipment requirements shown on the Contract Documents. Although measurement, sampling, and testing may be considered evidence as to such conformity, the Engineer shall be the sole judge as to whether the work or materials deviate from the Contract Documents and his decision as to any allowable deviations therefrom shall be final.

If specific lines, grades, and dimensions are not shown on the Plans, those furnished by the Engineer shall govern.

2-10 AUTHORITY OF BOARD AND ENGINEER. *MODIFY to ADD the following:*
The Contractor is subject to the provisions of Government Code § 8546.7, which provides that this Contract and related documents are subject to the examination and audit of the State Auditor, at the request of the Agency or as part of any audit of the Agency, for a period of three (3) years after final payment under the Contract.

The Agency reserves the right to audit the Contractor’s books, records, and documents related to the Contractor’s performance and the Contractor’s compliance with all of the terms and conditions of this Contract at any time. Upon request by Agency, Contractor shall prepare and submit to Agency any reports concerning Contractor's performance of the services rendered under this Contract. With 72 hours advance written notice delivered to Contractor, Agency shall have access to the books, records and documents of Contractor related to Contractor's performance of this Contract in the event any audit is requested.

All drawings, documents, and other materials prepared by Contractor in the performance of this Contract:

a) Shall be the property of Agency and shall be delivered at no cost to Agency upon request of Agency or upon the termination of this Contract, and

b) Are confidential and shall not be made available to any individual or entity without prior written approval of the Agency.

2-11 INSPECTION. *DELETE in its entirety and SUBSTITUTE with the following:*
Inspection of the Work will be conducted by an Agency Representative and will include monitoring and enforcing compliance of materials, equipment, installations, workmanship, methods and requirements of the Contract Documents.

The Agency Representative shall, at all times, have safe access to the Work during construction and shall be furnished with every reasonable facility for ascertaining full knowledge respecting the progress, workmanship, and character of materials and equipment used and employed in the Work.

Whenever the Contractor varies the work hours in which inspection is required, the Contractor shall give at least two (2) Working Days written notice to the Agency Representative so that inspection may be made.

All installations which are to be backfilled or otherwise covered will be inspected by the Agency Representative prior to backfilling or covering. The Contractor shall give the Agency Representative a minimum of two (2) days advance notice prior to backfilling or covering any part of the Work.

Work or materials concealed or performed without the prior notice specified above, will be subject to such tests or exposure as may be necessary to prove to the satisfaction of the Engineer, that all materials used and the work done are in strict conformity with the Contract Documents. All labor and equipment necessary for exposing and testing shall be furnished and paid for by the Contractor. The Contractor shall replace, without additional cost to the Agency, any materials or work damaged by exposure or testing.

Defective work shall be made good at the Contractor's expense including any unsuitable materials and equipment that may have been previously inspected by the Agency Representative, and/or that payment therefore has been included in an estimate for payment.

Inspection of the Work shall not relieve the Contractor of the obligation to fulfill all requirements of the Contract.

All submittals and correspondence between the Agency and the Contractor, related to inspection of the Work of this Contract, shall be directed to the Engineer.

ADD:

2-11.1 Inspection Requirements. The Contractor shall notify the Agency Representative a minimum of 48 hours before inspection is required.

a) Unless specified elsewhere in the Special Provisions, inspection of the Work will be provided by the Agency between the hours of 7:00 a.m. and 3:30 p.m., Monday through Friday, exclusive of Agency holidays. Any inspections requested by or made necessary as a result of the actions of the Contractor beyond the hours stated above shall be paid for by the Contractor at the prevailing rate of 1-1/2 times the regular hourly wage rate, plus 21% for overhead costs.

The Contractor shall submit a request to the Engineer for approval, a minimum five (5) Calendar Days, in advance of inspections requested by or made necessary as a result of the actions of the Contractor on Saturdays, Sundays or Agency and/or Federal holidays. The Contractor shall pay for these inspections at the prevailing rate of 1-1/2 times for Saturdays and 2 times the regular hourly wage rate for Sundays or Agency and/or Federal holidays plus associated overhead costs.

For purposes of this section, the following holidays are observed by the Agency:

New Year's Day
Martin Luther King Jr. Day
Presidents' Day
Memorial Day
Independence Day
Labor Day
Veterans Day
Thanksgiving Day
Day after Thanksgiving
Christmas Eve
Christmas Day

A construction calendar showing the days that each of the above holidays will be observed is available upon request from the Engineer.

b) The Contractor shall telephone the designated Agency Representative at least two (2) Working Days prior to starting construction or resuming construction following suspension of the Work for any reason.

Prior to commencing any work on the Contract, the Contractor shall submit a completed Inspection Overtime Permit form provided by the City of Irvine.

c) In addition to any inspection required by Codes and/or Ordinances or Contract Documents, Contractor shall notify the Engineer a minimum of 2 days prior to the permanent concealment of any materials or work. The following list is typical but not all inclusive of such required inspections:

1) Foundation/subgrade material, footing and slab beds
2) Reinforcing for concrete, masonry and plaster
3) Contact surface of concrete forms
4) Concrete and masonry surfaces
5) Piping and conduit
6) Finish grade prior to paving, seeding or planting
7) All soil mixes prior to installation
8) All chemicals and amendments prior to installation or application

2-12 SPECIAL NOTICES. *MODIFY to ADD the following:*
Any notice required or given by one party to the other under the Contract shall be in writing and shall be dated and signed by the party giving such notice or by a duly authorized representative of such party. Any such notices shall not be effective for any purpose whatsoever, unless served in the following manner:

a) If the notice is given to the Agency, by personal delivery or by depositing the same in the United States mail, enclosed in a sealed envelope addressed to the Agency, postage prepaid and registered.

b) If the notice is given by the Engineer to the Contractor by personal delivery to said Contractor or to his authorized representative or by depositing the same in the United States mail, enclosed in a sealed envelope addressed to said Contractor at his regular place of business or such other address as may have been established for the conduct of the work under this Contract, postage prepaid and registered.

c) If notice is given to the surety or any other person by personal delivery to said surety or other person, or by depositing the same in the United States mail, enclosed in a sealed envelope addressed to such surety or person at the address of said surety or person last communicated by him to the party giving the notice, postage prepaid and registered.

ADD:

2-13 CORRESPONDENCE. Unless specified otherwise or requested by the Engineer, the use of facsimile (fax) machines or internet email for the transmittal of routine correspondence, including submittals, shall not be allowed. The City will allow the use of fax machines or internet email for urgent matters such as notification of change of conditions. Unless otherwise allowed by the Engineer, all faxes or internet email shall be directed to the Engineer. The fax number and internet email address for the Engineer will be provided at the pre-construction meeting. Faxes or internet email received after 2:00 p.m. shall be considered as being received the following working day. All faxes or internet email shall be followed up with a paper copy that is mailed to the Engineer on the same day the fax or internet email is forwarded. The Engineer will not accept any illegible faxed or internet email correspondence.

ADD:

2-14 CONTRACT COORDINATION. The Contractor shall coordinate scheduling, submittals, and the Work to assure efficient and orderly sequence of installation of construction elements, with provisions for accommodating items to be installed later.

In addition to weekly progress meetings, as required by the Agency, the Contractor shall hold coordination meetings and pre-installation conferences with Agency Representatives and subcontractors to assure coordination of Work.

Should the Agency exercise partial Acceptance or beneficial occupancy of premises, the Contractor shall coordinate access to site to complete work or to correct defective work and work not in strict conformance with Contract Documents to minimize disruption of Agency's activities.

SECTION 3 - CHANGES IN WORK

REVISE as follows:

3-1 CHANGES REQUESTED BY THE CONTRACTOR.

3-1.1 General. *ADD the following after the 1st paragraph:*
The Contractor may initiate changes by submitting a written Change Order Request to the Engineer containing:

a) Description of the proposed changes.

b) Statement of the reason for making the changes.

c) Reference applicable specifications sections and specific plans in support of the request.

d) Statement of the effect on the Contract Price and Contract time.

e) Statement of the effect on the work of separate subcontractors.

f) Documentation supporting any change in Contract Price or Contract time as appropriate.

3-2 CHANGES INITIATED BY THE AGENCY.

3-2.1 General. *DELETE in its entirety and SUBSTITUTE with the following:*
The Agency may issue a Change Order for modifications of Work including, but not limited to, the Plans, Specifications, character, quantity or time of Work. Change Orders shall be in writing and state the dollar value of the change or establish the method of payment, and any adjustment in the Contract time of completion.

The Engineer may order minor changes in the Work not involving an increase or decrease in the contract amount, nor involving a change in the time for completion but consistent with the purposes for which the works are being constructed. If the Contractor believes that any order for minor changes in the work involves changes in the Contract Price or time of completion, the Contractor shall not proceed with the minor changes so ordered and shall immediately, upon the receipt of such order, notify the Engineer in writing of his estimate of the changes in the Contract Price and time of completion he believes to be appropriate.

No payment for changes in the Work will be made and no change in the time of completion by reasons of changes in the Work will be made, unless the changes are covered by a written Change Order approved by the Agency in advance of the Contractor's proceeding with the changed work.

Once a Change Order is finalized and executed by both parties, the Contractor waives its right to seek any additional compensation for the work covered by the Change Order or any project impacts. The Contractor agrees that all Change Orders constitutes full payment for the work covered by the Change Orders, including all direct and indirect overhead expenses.

Notwithstanding any other provision in the Contract Documents, the Agency’s issuance of a Change Order shall not constitute a waiver by the Agency of, or preclude the Agency in any way from, asserting any claim with respect to the same, including but not limited to, a

claim of breach of contract or claim that the issued Change Order covers work included in the scope of Work set forth in the Contract Documents for which the Contractor was not entitled to any additional funds.

A Change Order is approved when the Agency signs the Change Order.

A Contract Change Order approved by the Engineer may be issued to the Contractor at any time. Should the Contractor disagree with any terms or conditions set forth in an approved Contract Change Order not executed by the Contractor, the Contractor shall proceed with the Change Order work in accordance with 3-5 of the Standard Specifications, and submit a written protest to the Engineer within fifteen (15) days after the receipt of the approved Contract Change Order. The protest shall state the points of disagreement citing the Specification references, quantities and costs involved. If a written protest is not submitted, payment will be made as set forth in the approved Contract Change Order, and that payment shall constitute full compensation for all work included therein or required thereby. Unprotested approved Contract Change Orders will be considered as executed Contract Change Orders.

The Engineer may initiate changes by submitting a Request for Quotation to Contractor. Such request will include detailed description of the change, products, and location of the change in the Work, supplementary or revised Plans and Specifications. Such request is for information only and is not an instruction to execute the changes, or to stop work in progress.

The Contractor shall support each quotation for a lump-sum proposal, and for each unit price that has not previously been established, with sufficient substantiating data to allow Engineer to evaluate the quotation.

On request, the Contractor shall provide additional data to support time and cost computations, labor required, equipment required, products required, recommended source of purchase and unit cost, and quantities required, taxes, insurance and credit for work deleted from Contract, similarly documented, justification for any change in Contract time.

The Contractor shall support each claim for additional costs, and for work done on a time-and-material/force account basis, with documentation as required for a lump-sum proposal, plus additional information as follows:

a) Name of the Agency Representative who ordered the work, and date of the order.

b) Dates and times work was performed, and by whom.

c) Time record, summary of hours worked, and hourly rates paid.

d) Receipts and invoices for equipment used, listing dates and times of use, products used, listing of quantities, and subcontracts.

In lieu of a Request for Quotation, the Engineer may issue a written Field Order for the Contractor to proceed with a change for subsequent inclusion in a Contract Change Order. Authorization will describe changes in the Work, both additions and deletions, with attachments of revised Contract Documents to define details of the change and will designate the method of determining any change in the Contract Price and any change in Contract time. Agency Representative will sign and date the Field Order as authorization for the Contractor to proceed with the changes. Contractor may sign and date the Field

Order to indicate agreement with the terms therein. Contractor shall proceed with the work so ordered prior to actual receipt of an approved Contract Change Order.

3-2.2 Contract Unit Prices.

3-2.2.1 General. *ADD the following after the 2nd paragraph:*
In the case of such an increase or decrease in a Major Bid Item, the use of this basis for the adjustment of payment will be limited to that portion of the change, which together with all previous changes to that item, is not in excess of twenty-five percent of the total cost of such item based on the original quantity and Contract Unit Price.

3-2.2.2 Increases of More than 25 Percent. *MODIFY to ADD the following:*
If payment for units of a bid item that exceeds125 percent of the price shown on the Bid Item List is less than $5,000 at the unit price, the Engineer may not adjust the unit price unless asked to do so in writing by the Contractor.

3-2.4 Agreed Prices. *ADD the following after the 1st sentence:*
Agreed prices shall be negotiated before commencement of the changed work.

3-3 EXTRA WORK.

3-3.2.1 General. *DELETE in its entirety and SUBSTITUTE with the following:*
When the price for the extra work cannot be agreed upon prior to the commencement of the work, the Agency will pay for the extra work based on the accumulation of costs as provided herein.

3-3.2.2.3 Tool and Equipment Rental. *DELETE in its entirety 2nd paragraph and SUBSTITUTE with the following:*
The rates to be used for determining equipment rental costs shall be those rates listed for such equipment in the State of California, Department of Transportation (Caltrans) publication entitled “Equipment Rental Rates and Labor Surcharge”, which is in effect on the date upon which the work is accomplished, regardless of ownership and any rental or other agreement entered into by the Contractor, if such may exist, for the use of such equipment. If it is deemed necessary by the Engineer to use equipment not listed in the said publication, the Engineer will establish a suitable rental rate for such equipment. The Contractor may furnish any cost data, which might assist the Engineer in the establishment of such rental rate. Equipment Rental Rates and Labor Surcharge publication is available from Caltrans at http://www.dot.ca.gov/hq/construc/equipmnt.html. Rental time will not be allowed while equipment is inoperative due to breakdowns.

Operators of rented equipment will be paid for as provided in 3-3.

3-3.2.3 Markup.

3-3.2.3.1 Work by Contractor. *DELETE in its entirety and SUBSTITUTE with the following:*
The following percentages will be added to the Contractor’s costs as determined under 3-3.2.2 and shall constitute the markup for all overhead, increase in Contractor’s bonds, administrative expenses and profit on work by the Contractor:

a) Labor 20%

b) Materials 15%

c) Equipment Rental 15%

d) Other Items and Expenditures 15%

3-3.2.3.2 Work by Subcontractor. *DELETE in its entirety and SUBSTITUTE with the following:*
When any part of the extra work is performed by a subcontractor, of any tier, the markup established in 3-3.2.3.1 shall be applied to the subcontractor's actual cost of such work. Contractor markup on subcontractor work shall be limited to five percent.

No payment shall be made for any item not set forth in 3-3.2.3.1 and 3-3.2.3.2, including without limitation, Contractor's overhead, general administrative expense, supervision or damages claimed for delay in prosecuting the remainder of the work.

This provision shall not be construed to preclude the recovery of damages by the Contractor stemming from delay for which the Agency is responsible, which is unreasonable under the circumstances involved, and which was not within the contemplation of the Agency and the Contractor.

3-3.3 Daily Reports by Contractor. *ADD the following after the 1st sentence:*
The Contractor shall notify the Agency Representative at the beginning of each day when extra work is in progress. No payment will be made for work not verified by the Agency Representative.

SECTION 4 - CONTROL OF MATERIALS

REVISE as follows:

4-1 MATERIALS AND WORKMANSHIP.

4-1.1 General. *ADD the following before the 1st sentence in the 1st paragraph:*
The Contractor shall furnish all materials required to complete the Work, except materials that are designated in the Special Provision to be furnished by the Agency.

ADD:

4-1.1.1 Contractor Equipment and Plants. Only equipment and plants suitable to produce the quality of work and materials required will be permitted to operate on the project. Such equipment and plants shall be maintained in a good state of repair during the process of the Work. No obsolete or badly worn equipment and plants shall be used. Manufacturer's ratings shall not be exceeded.

Plants shall be designed and constructed in accordance with general practice for such equipment and shall be of sufficient capacity to ensure a production rate of sufficient material to carry to completion within the time limit(s) specified in the Contract Documents, if any.

The Contractor, when ordered by the Engineer, shall remove unsuitable equipment from the work site and discontinue the operation of unsatisfactory plants and equipment.

ADD:

4-1.1.2 Adoption or Revision Date for Standards, Codes, and Tests. Whenever reference is made to a standard, code, specification, or test and the designation representing the date of adoption or latest revision thereof is omitted, it shall mean the latest revision of such standard, code; specification or test in effect on the day of the Notice Inviting Bids is dated.

In accordance with the Public Contract Code § 3400, the Contractor shall submit data substantiating requests for substitution of “equal” items within thirty-five (35) days of Contract award or before ten percent of the Contract Working Days have expired, whichever is less. This time is included in the number of Working Days allowed for the completion of the Work. The Engineer’s decision regarding the acceptability of the substitution is final.

Materials, equipment, and supplies provided shall, without additional charge to Agency, fully conform with all applicable local, State and Federal safety laws, rules and regulations, and orders, and it shall be the Contractor's responsibility to provide only such materials, equipment, and supplies notwithstanding any omission in the Contract Documents therefore on that particular material, equipment or supply as specified.

4-1.3 Inspection Requirements. *ADD the following before the 1st paragraph:*
Materials to be used in the Work will be subject to inspection and tests by the Engineer. The Contractor shall furnish without charge such samples as may be required. The Contractor shall furnish the Engineer a list of his sources of materials and the locations at which such materials will be available for inspection a minimum of twenty (20)

Calendar Days in advance of their intended use. The Engineer may inspect, sample or test materials at the source of supply or other locations, but such inspection, sampling or testing will not be undertaken until the Engineer is assured by the Contractor of the cooperation and assistance of both the Contractor and the supplier of the material. The Contractor shall assure that the Engineer has free access at all times to the material to be inspected, sampled or tested. It is understood that such inspections and tests, if made at any point other than the point of incorporation in the Work, in no way shall be considered as a guarantee of acceptance of such material nor of continued acceptance of material presumed to be similar to that upon which inspections and tests have been made, and that inspection and testing performed by the Agency shall not relieve the Contractor or his suppliers of responsibility for quality control.

Manufacturers' warranties, guarantees, instruction sheets and parts lists, which are furnished with certain articles or materials incorporated in the Work, shall be delivered to the Engineer before acceptance of the Contract Work.

Reports and records of inspections made and tests performed when available at the site of the Work, may be examined by the Contractor.

4-1.3.1 General. *MODIFY to ADD the following:*
The Engineer may inspect the production of material, or the manufacture of products at the source of supply. Plant inspection, however, will not be undertaken until the Engineer is assured of the cooperation and assistance of both the Contractor and the material producer. The Engineer shall have free entry at all times to such parts of the plant as concerns the manufacture or production of the materials. Adequate facilities shall be furnished free of charge to make the necessary inspection. The Agency assumes no obligation to inspect materials at the source of supply.

4-1.4 Test of Materials. *MODIFY to ADD the following:*
The Contractor shall furnish the Agency Representative with a list of his sources of materials in sufficient time to permit proper inspection and testing of materials to be furnished for such listed sources in advance of their use. The Contractor shall furnish without charge such samples as may be required.

Inspection and tests will be made by the Agency Representative or his designated representative, but it is understood that such inspections and tests, if made at any point other than the point of incorporation in the work, in no way shall be considered as guarantee of acceptance of such materials nor of continued acceptance of materials, presumed to be similar to that upon which inspection and tests have been made.

Tests of materials will be made in accordance with commonly recognized procedures of technical organizations and such special procedures as prescribed in the Contract Documents. Materials will be sampled and tested at such times during the process of the Work as deemed desirable by the Engineer, the Contractor shall cooperate in obtaining the samples.

ADD:

4-1.4.1 Testing Laboratory. The Contractor shall employ and pay for services of an independent testing laboratory, subject to approval by the Agency, to perform other testing and inspections services required by the Contract Documents.

Prior to start of Work, the Contractor shall submit his testing laboratory name, address and telephone number, and names of full-time registered engineer and responsible officer.

Employment of testing laboratories will in no way relieve Contractor of its obligation to perform the Work in accordance with Contract Documents.

Laboratory field technicians employed by the Agency shall have no authority to release, revoke, alter, or enlarge on requirements of Contract Documents, or to approve, accept or stop any portion of the Work.

The Contractor shall:

a) Cooperate with laboratory personnel, provide access to work, arrange access to manufacturer's operations.

b) Provide the laboratory with preliminary representative samples of materials to be tested, in required quantities.

c) Furnish copies of mill test reports.

d) Provide casual labor and facilities for access to work being tested; obtain and handle samples at the site; facilitate inspections and tests; provide facilities for the laboratory's exclusive use for storage and curing of test samples.

e) Coordinate requests for testing through the Agency Representative. Notify Agency Representative a minimum of three (3) Working Days in advance of operations to allow for assignment of personnel and scheduling of tests.

f) Pay for additional laboratory inspections, sampling and testing required for Contractor's convenience and when initial tests indicate that work does not comply with Contract Documents.

g) When required by the Contract Documents, submit manufacturer’s certificate, executed by responsible officer, certifying that the product(s) meet or exceed specified requirements. Provide certification in duplicate.

4-1.6 Trade Names or Equals. *MODIFY to ADD the following:*
The Contractor shall submit products list in accordance with the following:

a) Within the time specified in 4-1.1.2 of the Standard Specifications and these Special Provisions, transmit number of copies Contractor needs plus four (4) of a list of major products which are proposed for installation, including name of manufacturer. Tabulate products by specification section number, title and article number.

b) For products specified only by reference standards, give manufacturer, trade name, model or catalog designation, and reference standards.

c) The Engineer will reply in writing, stating whether there is reasonable objection to listed items. Failure to object to a listed item shall not constitute a waiver of requirements of Contract Documents.

The following limitations shall apply to substitutions:

a) During the bidding period, Instructions to Bidders govern times for submitting requests for substitutions under requirements specified in this Subsection.

b) Requests for substitutions of products will be considered only within the time period specified in the Contract Documents. Subsequent requests will be considered only in the case of product unavailability or other conditions beyond control of Contractor. Material delivery schedules will not be considered justification for substitution.

c) Substitutions will not be considered when indicated on shop drawings or product data submittals without separate formal request or when requested directly by subcontractor or supplier, or when acceptance will require substantial revision of Contract Documents.

d) Substitute products shall not be ordered or installed without written acceptance by the Engineer.

e) Only one request for substitution for each product line will be considered. When substitution is not accepted, provide specified product.

f) The Engineer will determine acceptability of substitutions.

Requests for substitutions shall conform to the following:

a) Submit separate request for each substitution. Document each request with complete data substantiating compliance of proposed substitution with requirements of Contract Documents.

b) Identify product by specifications section and article numbers. Provide manufacturer's name and address, trade name or product, and model or catalog number. List fabricators and suppliers, as appropriate.

c) Give itemized comparison of proposed substitution with specified product, listing variations, and reference to specifications section and article numbers.

d) Give cost data comparing proposed substitution with specified product, and amount of net change to Contract sum.

e) List availability of maintenance services and replacement materials.

f) State effect of substitution on construction schedule, and changes required in other work or products.

Request for substitution constitutes a representation that Contractor has investigated proposed product and has determined that it is equal to or superior in all respects to specified product. The Contractor shall provide the same warranty for the substitution as for the specified product, shall coordinate installation of accepted substitute, making such changes as may be requested for Work to be complete in all respects, certifies that cost data presented is complete and includes all related costs under this Contract and waives claims for additional costs related to substitution which may later become apparent. The Contractor shall submit the number of copies the Contractor needs plus four of request for substitution. For accepted products, submit shop drawings, product data and samples, and tests conducted in accordance with 2-5.3.

ADD:

4-1.10 Agency-Furnished Materials. Materials which are listed as Agency-furnished materials in the Special Provisions will be available to the Contractor free of charge.

The Contractor shall submit a written request to the Engineer for the delivery of Agency-furnished material at least fifteen (15) Working Days in advance of the date of its intended use. The request shall state the quantity and the type of each material.

The locations at which Agency-furnished materials will be available to the Contractor free of charge will be designated in the Special Provisions. In those cases, the materials shall be hauled to the site of the Work by the Contractor at the Contractor's expense, including any necessary loading and unloading that may be involved. If the locations are not designated in the Special Provisions, the Agency-furnished materials will be furnished to the Contractor free of charge at the site of the Work. In either case, all costs of handling and placing Agency-furnished material shall be considered as included in the price paid for the contract item involving the Agency-furnished material.

The Contractor shall be responsible for Agency-furnished materials furnished to the Contractor, and shall pay all demurrage and storage charges. Agency-furnished materials, once furnished, delivered, or picked-up by the Contractor, that are lost or damaged from any cause whatsoever shall be replaced by the Contractor at the Contractor's expense. The Contractor shall be liable to the Agency for the cost of replacing Agency-furnished materials, and those costs may be deducted from any monies due or to become due the Contractor. All Agency-furnished material that is not used on the Work shall remain the property of the Agency, and the Contractor shall arrange with the Agency Representative for delivery back to the Agency at Contractor’s expense.

SECTION 5 - UTILITIES

REVISE as follows:

ADD:

5-0 GENERAL. For purposes of this Section 5, the terms referenced below are defined as follows:

An “unidentified” underground main or trunk line utility is one that is not indicated at all on the Plans, and a “misidentified” underground main or trunk line utility is one that is not indicated on the Plans with reasonable accuracy (a “misidentification”). An underground main or trunk line utility is indicated on the Plans with reasonable accuracy unless its actual location is substantially and materially different from that indicated on the Plans.

The term “rearrangement” of utilities means the relocation, alteration, reinstallation, and/or reconstruction of utilities (including removal of existing utilities incidental thereto) as necessary in order to accommodate the Work. Whenever in this Section 5 reference is made to any one or more of these rearrangement activities, such reference shall be deemed to include all other such activities as required in order to accommodate the Work.

5-1 LOCATION. *MODIFY to ADD the following:*
A list of utility companies that have facilities located within or near the construction area is included in the Special Provisions. The Engineer has endeavored to determine the existence of utility substructures at the site of the Work by reviewing the records of the owners of known utilities in that vicinity and consulting with those owners, and based on that information has indicated on the Plans those utility substructures (except for service connections) that may affect the Work.

The Contractor acknowledges that the utility information provided on the Plans and Special Provisions has not been verified and may not be accurate or complete. Except as expressly provided in this Section 5, the Contractor may not rely upon such utility information and the City assumes no responsibility for its accuracy or completeness. Changed conditions within the scope of 3-4 do not include utilities.

The Contractor shall determine the exact location (both horizontal and vertical), type and size of all existing utilities, including service connections, prior to commencing work which could result in damage to such utilities or could otherwise affect or be affected by such utilities or interfere with the service they provide. Where underground main distribution conduits such as water, gas, sewer, electric power, telephone or cable television are shown on the Plans, the Contractor shall assume that every adjacent property parcel will be served by a service connection for each type of utility shown. The Contractor shall do such investigation, research, surveys and potholing as the Contractor deems necessary to make such determinations. The Contractor shall immediately notify the Engineer as to any utility discovered by it which is in a different position than indicated on the Plans or is not indicated at all on the Plans.

The Contractor's cost of locating any unidentified or misidentified underground main or trunk line utility will be paid for as an addition to the Work in accordance with Section 3; provided, however, that the Contractor will not be entitled to such additional compensation if the existence and location (with reasonable accuracy) of such utility was (or should have been) known to the Contractor as of the date on which the Bids were due or could

otherwise have been inferred at that time from the presence of visible facilities such as buildings, meters, junction boxes or identifying markers. The cost of locating all other utilities shall be considered as included in prices in the Bid for other items of the Work.

The information regarding underground and internal utilities and appurtenances which the Contractor is required to record in the Record Documents as specified in 7-16 shall include (but not be limited to) the accurate locations of underground utilities determined pursuant to this 5-1 and remaining in place, as well as utilities rearranged by either the Contractor or the utility owners.

At least two (2) Working Days prior to commencing any excavation, the Contractor shall contact the regional notification center (Underground Service Alert of Southern California [USA] at 1-800-422-4133) to obtain an inquiry identification number. The Contractor shall comply in all respects with California Government Code § 4216 *et seq.*

Caltrans is not required by Section 4216 *et seq.* to become a member of the regional notification center. The Contractor shall contact Caltrans for the location of its subsurface installations. In addition, the Contractor shall be aware that non-pressurized sewer lines, non-pressurized storm drains, and other non-pressurized drain lines are not required by § 4216 *et seq.* to be marked by the respective owners. The Contractor shall contact those utility owners as necessary to locate their subsurface installations.

The Contractor shall request the City of Irvine Traffic Operations Division at 949-724-7649 to locate any existing traffic signal conductors and interconnect within the construction area before performing Work that may affect or be affected by the existing facilities.

Except as expressly provided in this Section 5 with respect to unidentified or misidentified underground main or trunk line utilities, the failure of any utility company to accurately mark its facilities shall not be justification for a time extension or for additional compensation from the City.

The Contractor shall obtain photographs of all markings made by its forces as well as all USA markings. All such photographs shall show the subject markings in relation to one or more identifiable landmarks that will remain in place after completion of the Work and completion of any utility removal and/or rearrangement work in the vicinity.

The right is reserved to governmental agencies and to the owner of utilities to enter at any time upon any street, alley, right of way, or easement for the purpose of maintaining and making repairs to their property.

5-1.2 Payment. *DELETE in its entirety and SUBSTITUTE with the following:*
Payment for utility location by the Contractor shall be included in the various items of work and no additional compensation will be allowed therefor.

5-2 PROTECTION. *DELETE in its entirety and SUBSTITUTE with the following:*
The Contractor shall not interrupt the service function or disturb the support of any utility without authority from the utility owner or direction from the Engineer. Valves, switches, vaults, and meters shall be maintained readily accessible for emergency shutoff.

Where protection is required to ensure support of utilities potentially impacted by the Work, the Contractor shall, unless otherwise specified on the Plans or in the Special Provisions, furnish and place the necessary protection and support.

Any additional cost incurred by the Contractor for protecting and supporting an unidentified underground main or trunk line utility or resulting from the misidentification of an underground main or trunk line utility will be paid for as an addition to the Work in accordance with Section 3, unless such utility's existence and location (with reasonable accuracy) was (or should have been) known to the Contractor as of the date on which the Bids were due or could otherwise have been inferred at that time from the presence of visible facilities such as buildings, meters, junction boxes or identifying markers. The cost of protecting and supporting all other utilities shall be considered as included in prices in the Bid for other items of the Work.

The Contractor shall immediately notify the Engineer and the utility owner if any utility is disturbed or damaged in the course of the Work. The Contractor shall, if directed by the Engineer, restore, repair or replace any such disturbed or damaged utility.

For any unidentified or misidentified underground main or trunk line utility that is disturbed or damaged in the course of the Work, the cost of restoration, repair or replacement incurred by the Contractor, if not made necessary by the Contractor's failure to perform its obligations pursuant to the Contract Documents (including without limitation Section 5-1) or to otherwise exercise reasonable care, will be paid for as an addition to the Work in accordance with Section 3. Except where additional compensation is allowed pursuant to this paragraph, all utilities disturbed or damaged in the course of the Work shall be restored, repaired or replaced at the Contractor's cost and expense, either by the utility owner or by the Contractor.

To the maximum extent permitted by law, all obligations of the Contractor stated in 7-3.2 shall apply in the case of any claims or liabilities (as defined therein) that may be asserted or claimed by any person or entity arising out of any disturbance or damage to utilities caused by the act or omission of the Contractor, whether or not such utilities are accurately marked either on the Plans or by the utility owner in the field, and whether or not there is concurrent active or passive negligence on the part of City and/or City Personnel, but excluding any such claims or liabilities arising from the sole active negligence or willful misconduct of City or City Personnel. All claims and liabilities for which the Contractor is responsible pursuant to this paragraph are sometimes referred to herein as "Utility Damage Claims."

When placing concrete around or contiguous to any non-metallic utility installation, the Contractor shall at its expense:

a) Furnish and install a 2-inch (50 mm) cushion of expansion joint material or other similar resilient material; or

b) Provide a sleeve or other opening which will result in a 2-inch (50 mm) minimum-clear annular space between the concrete and the utility; or

c) Provide other acceptable means to prevent embedment in or bonding to the concrete.

Where concrete is used for backfill or for a structure which would result in embedment, or partial embedment, of a metallic utility installation; or where the coating, bedding or other

cathodic protection system is exposed or damaged by the Contractor's operations, the Contractor shall notify the Engineer, shall arrange to secure the advice of the affected utility owner regarding the procedures required to maintain or restore the integrity of the system, and shall implement such procedures at the Contractor's expense.

5-4 RELOCATION. *DELETE in their entirety 2nd and 3rd paragraphs and SUBSTITUTE with the following:*

If utilities are found to interfere with the Work after award of the Contract, such utilities will be rearranged by the respective utility owners, or the Engineer may order the Contractor to perform such rearrangement, as an addition to the Work in accordance with Section 3. Alternatively, the Engineer may order changes in the Work to avoid such interference, in accordance with Section 3. All work by the Contractor on utilities shall be done to the reasonable satisfaction of the utility owner as well as complying with the requirements of the Contract Documents.

When the Plans or Special Provisions provide for the Contractor to rearrange a utility as part of the Work, all costs for such work shall be considered included in the Bid for the items of work necessitating such work. However, if an underground main or trunk line utility to be rearranged by the Contractor is misidentified in the Plans, any additional cost incurred by the Contractor for such work resulting from the misidentification shall be treated as an addition to the Work in accordance with Section 3, unless the utility's location (with reasonable accuracy) was (or should have been) known to the Contractor as of the date on which the Bids were due or could otherwise have been inferred at that time from the presence of visible facilities such as buildings, meters, junction boxes or identifying markers. Except as provided in this paragraph, the Contractor shall not be entitled to any additional compensation on account of inaccuracies in the Plans with respect to rearrangements of utilities that are included in the Work.

Temporary or permanent rearrangement of utilities requested by the Contractor for its convenience shall be its responsibility and the Contractor shall make all arrangements necessary for such work and bear all related costs. The Contractor shall not be entitled to any additional compensation on account of any such utilities or work.

ADD the following at the beginning of the last paragraph:

The provisions of this paragraph are subject to the provisions of the previous paragraph. Where the Plans or Special Provisions provide for the Contractor to rearrange any service connections, such work is considered included in the Bid for the items of work necessitating such work.

5-5 DELAYS DUE TO UTILITY CONFLICTS. *DELETE in its entirety and SUBSTITUTE with the following:*

The construction schedule developed in accordance with 6-1 shall allow adequate time for the necessary protection, removal and rearrangement of utilities by either the utility owner or the Contractor, as applicable. For work to be performed by a utility owner, the construction schedule shall allow for the time period required by the utility owner for such work. The Contractor shall notify the Engineer in writing of any subsequent changes in the construction schedule which will affect the time available for protection, removal, or rearrangement of utilities, and shall obtain the Engineer's approval of such changes.

The Contractor will not be entitled to any extensions of the Contract time or compensation for damages incurred due to delays attributable to utilities at the site of the Work except as otherwise provided in 6-6.1 or as provided below. Delays described below will not be considered delays for which the City is responsible within the meaning of 6-6.3.

a) Subject to 6-6.2 and 6-6.4, the Contractor shall be entitled to an extension of the Contract time to the extent that any delay in the Work is directly attributable to an unidentified underground main or trunk line utility or the misidentification of an underground main or trunk line utility in the Plans, unless the utility's location (with reasonable accuracy) was (or should have been) known to the Contractor as of the date on which the Bids were due or could otherwise have been inferred at that time from the presence of visible facilities such as buildings, meters, junction boxes or identifying markers. If the Contractor is entitled to such a time extension, the Contractor also shall be entitled to compensation for idle time of equipment on account of such delay, determined by the Engineer in the same manner as determinations are made for equipment used in the performance of Extra Work in accordance with Section 3. The Contractor shall not be entitled to any other compensation or damages on account of such delay.

b) The Contractor may be given an extension of time (but no additional compensation) for unforeseen delays attributable to failure of a utility owner to complete utility rearrangement work within the time period reasonably scheduled for such work in the construction schedule, or to timely complete utility rearrangement work which the Contract Documents indicate will be completed in advance of the Contractor's construction operations.

The Contractor shall not be entitled to any time extension or additional compensation for any delays or losses described in 5-5: (a) to the extent resulting from the Contractor’s actions or omissions or which could have been avoided by any reasonable means, such as the judicious handling of forces, equipment or plant, or (b) arising in connection with utilities being rearranged for the Contractor's convenience. The determination of what damages the Contractor could have avoided will be made by the Engineer.

The Contractor shall immediately notify the Engineer of any delays to the Contractor's operations described in 5-5. Delays described in 5-5 are not considered right of way delays within the scope of 2-8.

ADD:

5-7 CONTRACTOR RESPONSIBILITIES.
The Contractor shall:

a) Cooperate with utility personnel; provide access to work site.

b) Coordinate Work of the Contract with affected utilities. All USA markings shall be removed after completion of the work for which the markings were provided, and before Agency’s Acceptance and/or approval of the Work.

c) Asphalt concrete pavement not overlaid or slurry sealed as part of the project bid items which is damaged by trenching, potholing or where the contractor otherwise damages pavement shall be slurry sealed after the pavement section is repaired. “Perpendicular” street cuts shall be slurry sealed ten (10) feet each side of the cut and for “longitudinal” cuts shall be slurry sealed from pavement lane to pavement lane line for the entire damaged area or as directed by the Agency Representative. Type I slurry shall be used on non-arterial streets and

Type II slurry shall be used on arterial streets. Damaged traffic striping, legends and markers shall also be replaced if damaged. “Patchwork” application of slurry shall be avoided by joining closely grouped areas of slurry applications. Compensation for this requirement shall be considered as included in the prices paid for the related items of work and no additional compensation will be allowed therefor.

ADD:

5-8 PERMANENT UTILITIES. Contractor shall contact and make all arrangements with utility owners and coordinate all provisions for installation and connection of all permanent utilities that are necessary for the Work, such as, but not limited to, natural gas, electricity, water, sewer, and telephone. All costs for such installation and connection, as well as costs for operating permanent utilities prior to acceptance of the Work by the Agency, shall be considered as included in the prices in the Bid for the related items of work.

SECTION 6 - PROSECUTION, PROGRESS AND ACCEPTANCE OF THE WORK

REVISE as follows:

6-1 CONSTRUCTION SCHEDULE AND COMMENCEMENT OF WORK. *DELETE in its entirety and SUBSTITUTE with the following:*
The Contractor shall begin the Work on or before the date stipulated in the Notice to Proceed and shall diligently prosecute the Contract to completion within the time limit provided in the Contract.

The Contractor shall notify the Engineer of his intent to begin work at least two (2) Working Days prior to the start of any work.

The Contractor may, upon written approval from the Agency, begin work in advance of the date in the Notice to Proceed; however, no work shall be started in advance of the complete execution of the Contract and acceptance of the Contractor's construction schedule by the Agency. The Agency may, but shall not be required to, provide access to the site prior to the date specified in the Notice to Proceed.

Unless specified elsewhere in these Special Provisions, within ten (10) days after execution of the Contract, the Contractor shall deliver to the Agency Representative a construction progress schedule employing the critical path method, in a form satisfactory to the Engineer, showing the proposed dates of commencement and completion of each item of the Work and the anticipated amount of each monthly payment that will become due the Contractor in accordance with the progress schedule.

The schedule format shall be as follows:

a) Prepare schedules as horizontal bar chart with separate bar for each portion of work or operation in accordance with approved schedule of values, identifying first workday of each week. Allow space for updating.

b) Sequence of Listings: Chronological order of the start of each item of work.

c) Sheet Size: Multiple of 8-1/2 x 11 inches.

d) Provide a two week look-ahead schedules (updated weekly).

The content of the schedules shall:

a) Show complete sequence of construction by activity, with dates for beginning and completion of each element of construction. Include any special sequencing specified in the Contract Documents.

b) Show lane closures notifications and lane closure dates.

c) Provide sub-schedules to define major and significant portions of entire schedule.

d) Show accumulated percentage of completion of each item, and total percentage of Work completed as of first day of each month.

e) Provide separate schedule of dates for product procurement and delivery dates, shop drawing submittals and equipment installation. Show decision dates for selection of finishes, if applicable.

f) Show delivery dates for Agency-furnished products, if applicable.

g) Show the critical path.

Revisions to schedules shall:

a) Indicate progress of each activity to date of submittal, and projected completion date of each activity.

b) Identify activities modified since previous submittal, major changes in scope, and other identifiable changes.

c) Provide written report to define any problem areas, anticipated delays, and impact on schedule. Report corrective action taken, or proposed, and its effect.

d) Revise periodically as directed by the Agency Representative. Failure to comply with directive will be considered as grounds to delay progress payment.

e) Show the revised critical path.

Required submittals:

a) Submit initial schedules within ten (10) days after execution of the Contract. If requested, resubmit required revisions within seven (7) days of request.

b) Submit an update schedule on or before the first day of each month, beginning one month after the initial schedule as outlined in (a) above. If requested, resubmit required revisions within seven (7) days of request.

c) Submit four (4) copies of schedules to Agency Representative.

d) Submit under transmittal letter.

Contractor shall:

a) Distribute copies of current schedules to job site file subcontractors, suppliers and other concerned parties.

b) Instruct recipients to promptly report, in writing, problems anticipated by projections shown in schedules.

Payment for conforming to these requirements shall be included in the various items of work and no additional compensation will be allowed therefor.

6-2 PROSECUTION OF THE WORK.

ADD:

6-2.1 Time of Completion and Forfeiture Due to Delay. The Contractor shall complete the Work called for under the Contract within the time set forth in the Special Provisions.

In accordance with Government Code § 53069.85, Contractor agrees to forfeit and pay to the Agency the amount per day set forth in the Contract for each and every day of delay which shall be deducted from any payments due or to become due the Contractor.

The Agency has endeavored to identify all areas of the site which may contain hazardous waste, as defined by Health and Safety Code § 25117, and unless otherwise noted said hazardous waste in these areas has been mitigated. However, the parties expressly acknowledge the possibility of the existence of further hazardous waste not previously identified. If, during the course of his work, the Contractor encounters any

such hazardous waste, he shall promptly notify the Agency through its designated representative. If the material is indeed “hazardous waste” pursuant to Health and Safety Code § 25117, the Agency has the option to have the mitigation work performed by the Contractor or by a separate contract from the work being performed. If the Contractor performs said mitigation work, the cost will be paid for as an addition to the work in accordance with Section 3. To the maximum extent permitted by law, the Agency shall not be liable for any damages beyond an appropriate time extension for delays occasioned by the existence of hazardous waste conditions contemplated herein.

No forfeiture due to delay shall be made because of any delays in the completion of the work due to unforeseeable causes beyond the control and without the fault or negligence of the Contractor (including but not restricted to acts of nature or of the public enemy, acts of the government, acts of the Agency, or acts of another contractor in the performance of a contract with the Agency, fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes, and unusually severe weather). Any such delays, except for acts of the Agency, shall not entitle the Contractor to any additional compensation. The sole remedy of the Contractor shall be an extension of time obtained in accordance with this section.

The Contractor shall, within ten (10) Calendar Days from the beginning of any such delay, notify the Agency Representative in writing of the cause of delay, whereupon the Agency Representative will ascertain the facts and extent of the delay and extend the time for completing the Work if, in his judgment, the findings of the fact justify such an extension, and the Agency Representative’s findings of facts thereon shall be final and conclusive.

ADD:
6-2.2 Order of Work Requirements. When required by these Special Provisions or the Plans, the Contractor shall follow the sequence of operations and restrictions as set forth therein.

The Work shall be performed in conformance with the staging of construction shown on the Plans and indicated below. Subject to approval by the Engineer, non-conflicting work in subsequent stages may proceed concurrently with work in preceding stages, provided satisfactory progress is maintained in the preceding stages of construction. The Engineer’s approval of any Contractor-requested modifications to the order of work or staging of the work shall not be grounds for a Change Order request or time extension request by the Contractor. If the Contractor deviates from the specified order of work or the staging plans, it does so at its own risk and shall assume all time impacts and cost associated with such deviations.

The Contractor shall not close the patio areas ahead of physical start of construction, and shall open the patio areas immediately upon completion of the hardscape and wall repair and as determined by the Engineer.

The order of work described below is not intended to include all work items necessary to complete a particular construction stage and serves to only summarize the order of major work items.

a) Site Demolition

b) Site Drainage and Utility Modifications/Improvements

c) Site Concrete Hardscape and Wall Repair

d) Clean, Repair and Paint Shade Structure

e) Clean, Seal and Paint Block Walls

6-3 SUSPENSION OF THE WORK.

6-3.1 General. *DELETE in its entirety and SUBSTITUTE with the following:*
The Engineer shall have the authority to suspend the Work wholly or in part, for any time period as the Engineer deems necessary in the interest of Agency, for Agency's convenience, or due to the failure on the part of the Contractor to carry out orders given, or to perform any provision of the Contract. The Contractor shall immediately comply with the written order of the Engineer to suspend the Work wholly or in part. The suspended work shall be resumed as ordered or approved in writing by the Engineer.

Resumption of work shall be predicated on receipt of the following from the Contractor:

a) A revised schedule showing each task yet to be accomplished and the time line to accomplish each – until final completion.

b) The work force projections attached to each task listed per workweek.

c) The cost expenditures attached to each task summarized per each workweek.

d) Lien releases from each subcontractor, supplier, and vendor to which the Contractor has requested materials, equipment or any other service recognizing the payments received.

e) An Income and Expense Statement projecting how the Contractor will finance the reminder of the project.

Such suspension shall be without liability to the Contractor on the part of the Agency except as otherwise specified in 6-6.3. For purposes of 6-6.3, delays resulting from suspensions ordered by the Engineer due to the failure on the part of the Contractor to carry out orders given, or to perform any provision of the Contract, shall not be delays for which the Agency is responsible.

In the event that a suspension of Work is ordered as provided above, the Contractor, at the Contractor's expense, shall do all the work necessary to provide a safe, smooth, and unobstructed passageway through construction for use by public traffic during the period of that suspension as provided in 7-10, and as specified in these Special Provisions. In the event that the Contractor fails to perform the work above specified, the Agency will perform that work and, if the suspension is due to Contractor's failure to carry out orders given or to perform any provision of the Contract, the cost thereof will be deducted from monies due or to become due the Contractor.

If a suspension of work is ordered by the Engineer, in accordance with this subsection, the days on which the suspension order is in effect shall be considered working days if those days are working days within the meaning of the definition set forth in 6-7.2.

The suspension of Work shall not relieve the Contractor of the responsibilities as set forth in the Contract Documents.

6-4 TERMINATION OF THE CONTRACT FOR DEFAULT. *ADD the following:*
In the event this Contract is terminated for grounds which are later determined not to justify a termination for breach, such termination shall be deemed to constitute a Termination of the Contract for Convenience pursuant to 6-5.

6-5 TERMINATION OF THE CONTRACT FOR CONVENIENCE. *DELETE in its entirety and SUBSTITUTE with the following:*
The Agency reserves the right to terminate the Contract at any time upon a determination by the Engineer that termination of the Contract is in the best interest of the Agency.

If the Agency elects to terminate the Contract, the termination of the Contract and the total compensation payable to the Contractor shall be governed by the following:

a) The Engineer will issue the Contractor a signed written notice, specifying that the Contract is to be terminated. Upon termination of the Contract, the Contractor will be relieved of further responsibility for damage to the Work (excluding materials) as specified in 4-1.2 of the Standard Specifications, 7-16 of these Special Provisions and, except as otherwise directed in writing by the Engineer, the Contractor shall:

    1) Stop all work under the Contract except that specifically directed to be completed prior to Acceptance.

    2) Perform work the Engineer deems necessary to secure the project for termination.

    3) Remove equipment and plant from the site of the Work.

    4) Take action that is necessary to protect materials from damage.

    5) Notify all subcontractors and suppliers that the Contract is being terminated and that their contracts or orders are not to be further performed unless otherwise authorized in writing by the Engineer.

    6) Provide the Engineer with an inventory list of all materials previously produced, purchased or ordered from suppliers for use in the Work and not yet used in the Work, including its storage location, and such other information as the Engineer may request.

    7) Dispose of materials not yet used in the Work as directed by the Engineer. It shall be the Contractor's responsibility to provide the Agency with good title to all materials purchased by the Agency hereunder, including materials for which partial payment has been made as provided in 9-3.2 and with bills of sale or other documents of title for those materials.

    8) Subject to the prior written approval of the Engineer, settle all outstanding liabilities and all claims arising out of subcontracts or orders for materials terminated hereunder. To the extent directed by the Engineer, the Contractor shall assign to the Agency all the right, title and interest of the Contractor under subcontracts or orders for materials terminated hereunder.

    9) Furnish the Engineer with the documentation required to be furnished by the Contractor under the provisions of the Contract including, on projects

as to which Federal funds are involved, all documentation required under the Federal requirements included in the Contract.

10) Take other actions directed by the Engineer.

b) Acceptance of the contract as hereinafter specified shall not relieve the Contractor of responsibility for damage to materials. The Contractor shall continue to be responsible for damage to materials after issuance of the Notice of Termination, except as follows:

1) The Contractor's responsibility for damage to materials for which partial payment has been made as provided in 9-3.2 and for materials furnished by the Agency for use in the Work and unused shall terminate when the Engineer certifies that those materials have been stored in the manner and at the locations the Engineer has directed.

2) The Contractor's responsibility for damage to materials purchased by the Agency subsequent to the issuance of the notice that the Contract is to be terminated shall terminate when title and delivery of those materials has been taken by the Agency.

When the Engineer determines that the Contractor has completed the Work under the Contract directed to be completed prior to termination and such other work as may have been ordered to secure the project for termination, the Engineer will formally accept the Contract, and immediately upon and after the acceptance by the Engineer, the Contractor will not be required to perform any further work thereon.

c) Termination of the Contract shall not relieve the surety of its obligation for any just claims arising out of the work performed.

d) Where Agency terminates the Contract for Agency’s convenience and not due to the fault of Contractor, the total compensation to be paid to the Contractor shall be determined by the Engineer based on the following:

1) The reasonable cost to the Contractor, without profit, for all work performed under the contract, including mobilization, demobilization and work done to secure the project for termination. In determining the reasonable cost, deductions will be made for the cost of materials to be retained by the Contractor, amounts realized by the sale of materials, and for other appropriate credits against the cost of the work. When, in the opinion of the Engineer, the cost of a contract item of work is excessively high due to costs incurred to remedy or replace defective or rejected work, the reasonable cost to be allowed will be the estimated reasonable cost of performing that work in compliance with the requirements of the Plans and Specifications and the excessive actual cost shall be disallowed.

2) A reasonable allowance for profit on the cost of the work performed as determined under part (1) above, provided the Contractor establishes to the satisfaction of the Engineer that it is reasonably probable that the Contractor would have made a profit had the Contract been completed and provided further, that the profit allowed shall in no event exceed 4 percent of the cost.

3) The reasonable cost to the Contractor of handling material returned to the vendor, delivered to the Agency or otherwise disposed of as directed by the Engineer.

4) A reasonable allowance for the Contractor's administrative costs in determining the amount payable due to termination of the Contract.

All records of the Contractor and the Contractor's subcontractors, necessary to determine compensation in conformance with the provisions in this Section 6-5, shall be open to inspection or audit by representatives of the Agency at all times after issuance of the notice that the Contract is to be terminated and for a period of 3 years, thereafter, and those records shall be retained for that period.

After acceptance of the Work by the Agency, the Engineer may make payments on the basis of interim estimates pending issuance of the final estimate in conformance with the provisions in 9-3.2 and 9-4, when, in the Engineer's opinion, the amount thus paid, together with all amounts previously paid or allowed, will not result in total compensation in excess of that to which the Contractor will be entitled. All payments, including payment upon the final estimate shall be subject to deduction for prior payments and amounts, if any, to be kept or retained under the provisions of the Contract.

THE PROVISIONS IN THIS SECTION 6-5 SHALL BE PHYSICALLY INCLUDED IN ALL SUBCONTRACTS.

6-6.2 Extension of Time. *DELETE in its entirety and SUBSTITUTE with the following:*
The Agency may extend the time fixed for completion of the Work under the Contract from time to time. All applications for extensions of time shall be in writing and shall be filed with the Agency before the expiration of the original time fixed in the Contract or as previously extended.

An extension of time may be granted by the Agency after the expiration of the time originally fixed in the Contract or as previously extended, and the extension so granted shall be deemed to commence and be effective from the date of such expiration. Any extension of time shall not release the sureties upon any bond required under the Contract nor effect forfeitures due to delay.

No extension of time will be granted for delays that are not on the critical path.

6-8.1 Completion. *DELETE in its entirety and SUBSTITUTE with the following:*
When the Contractor considers the Work, or a designated portion of Work, if specified in the Contract Documents, is complete, the Contractor shall submit a written request to the Engineer for inspection. By submittal of such request, Contractor certifies that:

a) Contract Documents have been reviewed by the Contractor.

b) Work has been completed in accordance with Contract Documents and is ready for inspection.

c) Equipment and systems have been tested, adjusted/balanced and are fully operational.

The Contractor shall submit the request a minimum of five (5) Working Days in advance of requested inspection date. Contractor shall be responsible for allowing sufficient time

during the Contract period to complete inspections and make any corrections. Each day beyond the time prescribed to complete the Contract will be subject to assessment of liquidated damages in accordance with 6-9.

Should Agency Representative's inspection find Work incomplete, Agency Representative will notify the Contractor in writing, listing observed deficiencies. The Contractor shall remedy listed deficiencies immediately and send a request for final inspection. Failure of the Contractor to remedy deficiencies may, at the Agency's option, result in reinspection(s) of the work to identify additional deficiencies, if any. Agency's costs associated with reinspection(s) are subject to provisions of 6-8.2.

When the Agency confirms Work is complete and, closeout submittals, as referred to in 6-8.3 have been provided, Agency Representative will notify Contractor of date of completion on the Weekly Statement of Working Days.

ADD:

6-8.4 Reinspections. Should status of completion of Work require reinspection(s) by Agency due to failure of the Contractor to make corrections on initial inspection, Agency may deduct the amount of compensation for reinspection services from final payment to Contractor. Observed deficiencies in excess of ten (10) will be reason for reinspection.

Inspections initiated at the request of the Agency will not be subject to provisions of this Subsection.

ADD:

6-8.5 Closeout Submittals.
Contractor shall submit:

a) Project Record Documents clearly marked with all changes to Plans within thirty (30) Calendar Days of Final Acceptance
b) Operation and Maintenance Data
c) Warranties and Bonds
d) Spare Parts and Maintenance Materials, as specified
e) Evidence of Payment and Release of Stop Payment Notices
f) Other data and materials as may be required in the Contract Documents

6-9 LIQUIDATED DAMAGES. *DELETE in its entirety and SUBSTITUTE with the following:*
Liquidated damages shall be as specified in the Contract.

SECTION 7 - RESPONSIBILITIES OF THE CONTRACTOR

REVISE as follows:

7-1 THE CONTRACTOR'S EQUIPMENT AND FACILITIES.

7-1.1 General. *MODIFY to ADD the following:*
The Contractor shall render its machinery and equipment inoperable at all times except during actual construction. The Contractor shall be responsible for construction means, controls, techniques, sequences, procedures and construction safety.

ADD:

7-1.1.1 Equipment. Contractor shall stencil or stamp at a clearly visible location on each piece of equipment, except hand tools, an identifying number and:

a) On compacting equipment, its make, model number, and empty gross weight that is either the manufacturer's rated weight or the scale weight.

b) On meters and on the load-receiving element and indicators of each scale, the make, model, serial number, and manufacturer's rated capacity.

The Contractor shall submit a list describing each piece of equipment and its identifying number before commencement of the Work.

Upon request, the Contractor shall submit manufacturer's information that designates portable vehicle scale capacities.

The Contractor's measuring devices shall be tested and approved under California Test 109 in the Agency's presence or by any of the following:

a) County Sealer of Weights and Measures

b) Certified Scale Service Agency

c) Division of Measurement Standards Official

7-1.2 Temporary Utility Services. *DELETE in its entirety and SUBSTITUTE with the following:*
The Contractor shall, at its own expense, make all arrangements to furnish, install and maintain temporary water, electricity, telephone, and sanitary facilities for construction needs throughout construction period. Materials may be new or used, but must be adequate for the purposes intended, and must not violate requirements of applicable codes, specifications or standards.

The Contractor shall maintain systems to provide continuous services, modify, and extend services, as work progress requires. The Contractor shall completely remove temporary materials and equipment when construction needs can be met by use of permanent utility facilities.

The Contractor shall clean and repair damage caused by installation or use of temporary facilities, restore existing facilities used for temporary services to original or better condition, and restore permanent facilities used for temporary services to original condition.

For water, the Contractor shall:

a) Provide adequate supply of water suitable for construction usage and needs.

Water Source: Irvine Ranch Water District (IRWD)

a) Obtain meter, inspections and approvals prior to use of existing system.
b) Comply with IRWD requirements.

Conservation:

a) Minimize water use whenever possible.
b) Maintain watering equipment in good working order.
c) Repair leaks promptly.

When necessary to maintain pressure, provide temporary pumps, tanks and compressors.

For electricity, the Contractor shall:

a) Provide portable power plants and/or connection to existing system for construction needs.
b) Source of existing power: Southern California Edison Company (SCE). Prior to connecting to existing system:
    1) Obtain permit from City of Irvine, Community Development Department for installation of temporary power pole and/or system.
    2) Arrange for required inspections and coordinate temporary meter installation with City and SCE.

For sanitary facilities, the Contractor shall:

a) Furnish and maintain portable toilet units in a clean, operable and sanitary condition for use by construction personnel.
b) Place units in conformance with applicable laws, codes and regulations.

Pay all fees and charges for applications, non-City permits and inspections, installations, temporary meters, utility usage, service charges, maintenance, removals and restoration.

Contractor shall use standard products of service companies. At Contractor's option with prior approval by the Agency, patented specialty devices may be used, when in compliance with applicable codes and service company requirements.

7-2.3 Payroll Records. *MODIFY to ADD the following:*
The Contractor and all its subcontractors shall submit to the City and the Labor Commissioner (Division of Labor Standards Enforcement) certified payroll records every Friday until Notice of Completion is filed and recorded.

7-3 INSURANCE.

7-3.1 General. *MODIFY to ADD the following:*
Without limiting Contractor's indemnification obligations, the Contractor shall not commence work until he procures and maintains, at his sole cost and for the duration of

this Contract, insurance coverage as provided below, against all claims for injuries against persons or damages to property which may arise from or in connection with the performance of the Work hereunder by Contractor, its agents, representatives, employees, and/or subcontractors. In the event that Contractor subcontracts any portion of the Work in compliance with 2-3 of the Standard Specifications and Special Provisions, the Contract between the Contractor and such subcontractor shall require the subcontractor to maintain the same policies of insurance that the Contractor is required to maintain pursuant to 7-3.

Insurance policies shall be deemed not be in compliance if they include any limiting provision or endorsement that has not been submitted for approval in accordance with 7-3.

The Contractor's insurance shall be "occurrence" rather than "claims made" insurance, except for Professional Liability insurance, which may be for claims made and shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.

The insurance coverage required for General Liability, Automobile Liability and Contractor's Pollution Liability shall contain the following provisions or be endorsed to provide the following:

The Contractor shall name as additional insured the City of Irvine**,** their elected officials, officers, employees, volunteers, boards and representatives shall be additional insured with regard to liability and defense of suits or claims arising out of the performance of the Contract.

Additional Insured Endorsements shall not:

a) Be limited to "Ongoing Operations"
b) Exclude "Contractual Liability"
c) Restrict coverage to the "Sole" liability of contractor
d) Contain any other exclusion contrary to the Contract

This insurance shall be primary and any other insurance, deductible, or self-insurance available to the insured added by endorsement shall be in excess of and shall not contribute with this insurance.

The Contractor shall immediately report all claims to its insurance carrier and acknowledge receipt within thirty (30) Calendar Days.

No officer, employee, or agent of the Agency, Agency Representative, the Engineer, or their consultants shall be personally responsible for any liability arising under or by virtue of the Contract.

To the maximum extent permitted by law, Contractor shall hold harmless, indemnify, and defend the City of Irvine, their representatives and each of their officers, employees, and agents from and against any and all actions, suits, claims, demands, judgments, attorney's fees, costs, damages to persons or property, losses, penalties, obligations, expenses or liabilities (herein "claims" or "liabilities") that may be asserted or claimed by any person or entity arising out of the willful or negligent acts, errors or omissions of Contractor, its employees, agents, representatives or subcontractors in the performance of any tasks or services for or on behalf of Agency, whether or not there is concurrent active or passive negligence on the part of Agency and/or Agency Personnel, but excluding such claims or

liabilities arising from the active negligence or willful misconduct of Agency or Agency Personnel. In connection therewith:

a) Contractor shall defend any action or actions filed in connection with any such claims or liabilities, and shall pay all costs and expenses, including attorney's fees incurred in connection therewith.

b) Contractor shall promptly pay any judgment rendered against Agency or any Agency Personnel for any such claims or liabilities.

c) In the event Agency and/or any Agency Personnel is made a party to any action or proceeding filed or prosecuted for any such damages or other claims arising out of or in connection with the negligent performance or a failure to perform the work or activities of Contractor, Contractor shall pay to Agency any and all costs and expenses incurred by Agency or Agency Personnel in such action or proceeding, together with reasonable attorney's fees and expert witness fees. So much of the money due to the Contractor under and by virtue of the Contract as shall be considered necessary by the Agency may be retained by the Agency until disposition has been made of such actions or claims for damages as aforesaid.

Any deductibles or self-insured retentions must be declared to and approved by Agency prior to the execution of this Contract by Agency. Prior to commencing work, the Contractor will provide the Agency, in accordance with 7-3, written confirmation of the deductible for each insurance coverage required by this contract or in the case of no deductible.

DELETE 4th paragraph and SUBSTITUTE with the following:
All policies shall be endorsed to state that coverage shall not be suspended, voided, cancelled, reduced in coverage or in limits, non-renewed, or materially changed for any reason, without thirty (30) days prior written notice thereof given by the insurer to Agency by U.S. mail, or by personal delivery, except for nonpayment of premiums, in which case ten (10) days prior notice shall be provided.

In lieu of this endorsement, the Contractor shall either:

a) Submit a letter, signed by the insurance agent or broker, certifying that he/she shall notify the City should the coverage be suspended, voided, cancelled, reduced in coverage or in limits, non-renewed, or materially changed for any reason, without thirty (30) days prior written notice thereof given by the insurer to Agency by U.S. mail, or by personal delivery, except for nonpayment of premiums, in which case ten (10) days prior notice shall be provided; or

b) Submit evidence that the insurance premium has been paid in full for the life of the policy.

The City project title or description MUST be included in the “Description of Operations” box on the certificate.

Certificate Holder:
City of Irvine
c/o EXIGIS Risk Management Services
P.O. Box 4668 - ECM #35050
New York, NY 10163-4668

The City's insurance certificate tracking services provider, EXIGIS, LLC, will send Contractor an email message providing instructions for submitting insurance certificates and endorsements.

7-3.2 General Liability Insurance. *DELETE the 2nd paragraph and SUBSTITUTE with the following:*
General Liability (including premises, operations and mobile equipment, products and completed operations, broad form property damage including completed operations, explosion, collapse and underground hazards, contractual liability, personal injury, independent contractors' liability): with a minimum limit of Two Million Dollars ($2,000,000) for each occurrence (combined single limit for bodily injury and property damage). Minimum limit of Two Million Dollars ($2,000,000) aggregate for products–completed operations and with a minimum limit of Four Million Dollars ($4,000,000) general aggregate. This general aggregate limit shall apply separately to the Contractor's work under this Contract.

Products-Completed Operations: Contractor shall procure and submit evidence of insurance in accordance with 7-3 of the Standard Specifications and these Special Provisions for a period of at least three (3) years from the time that all Work under this Contract is completed.

7-3.3 Workers' Compensation Insurance. *MODIFY to ADD the following:*
Workers' Compensation and Employer's Liability: Workers' Compensation Insurance in an amount required by the laws of the State of California (Statutory Limits). Employer's Liability Insurance with a minimum limit of One Million Dollars ($1,000,000) per occurrence.

In the event Contractor has no employees requiring Contractor to provide Workers' Compensation Insurance, Contractor shall so certify to Agency in writing prior to Agency's execution of this Contract. Agency and Agency Personnel shall not be responsible for any claims in law or equity occasioned by failure of the Contractor to comply with this section or with the provisions of law relating to Workers' Compensation.

If Contractor is providing on-site staffing services, then the Workers' Compensation insurance shall include an Alternative Employers Endorsement.

ADD:

7-3.5 Contractor's Pollution Liability. Contractors Pollution Liability Insurance covering all of the contractor's operations to include onsite and offsite coverage for bodily injury, property damage, defense costs, cleanup costs, coverage for offsite disposal facilities with minimum limits of Five Million Dollars ($5,000,000) each loss and Ten Million Dollars ($10,000,000) in the aggregate.

Prior to commencing work, the Contractor shall provide the City the names and locations of disposal facilities for approval by the City.

7-3.8 Self-Insurance. Self-insurance will be subject to the Agency's review and prior approval. If the Contractor uses any form of self-insurance, it shall submit:

a) A notice of election to self-insure.

b) The coverages for which self-insurance applies.

c) The amount of self-insurance.

d) Declaration under the penalty of perjury by a certified public accountant certifying the accountant has applied Generally Accepted Accounting Principles (GAAP) guidelines and the Contractor has sufficient funds or other resources to cover the self-insurance amounts.

e) Copy of its commercial general liability policy and its excess policy, including the declarations page, all amendments, riders, endorsements and other modifications in effect at the time of contract execution, for those amounts not covered by self-insurance.

Self-insurance programs and self-insured retentions in insurance policies are subject to separate annual review and approval by the Agency of evidence of the Contractor's financial capacity to respond. Additionally, self-insurance programs or retentions must provide the Agency with at least the same protection from liability and defense of suits as would be afforded by first-dollar insurance.

7-5 PERMITS. *DELETE in its entirety and SUBSTITUTE with the following:*

7-5 PERMITS AND LICENSES. Except as otherwise specified in the Special Provisions, the Contractor shall procure all permits and licenses, pay all charges and fees, and give all notices necessary and incidental to the due and lawful prosecution of the Work. These permits and licenses shall be obtained in sufficient time to prevent delays to the Work. The Contractor shall maintain a copy of all permits on the site. The Contractor shall furnish the Agency with copies of permits and licenses within one (1) Working Day of obtaining them. The Contractor shall comply with all rules and regulations included in permits. Should the Contractor fail to conform to said rules and regulations, the Agency reserves the right to perform the work necessary to conform to the rules and regulations and the cost of such work will be deducted from any monies due or to become due to the Contractor.

The Contractor and all subcontractors shall obtain within five (5) Calendar Days of executing the Contract, a current City of Irvine Business License and maintain such license(s) throughout the term of the Contract.

In the event that the Agency has obtained permits, licenses or other authorizations applicable to the Work, the Contractor shall obtain a rider, pay all fees and comply with the provisions of said permits, licenses and other authorizations.

7-6 THE CONTRACTOR'S REPRESENTATIVE. *DELETE the 3rd sentence in the 1st paragraph and SUBSTITUTE with the following:*
Said authorized representative shall be present at the site of the Work at all times while Work is actually in progress on the Contract. When Work is not in progress and during periods when Work is suspended, arrangements acceptable to the Agency Representative shall be made for any emergency work, which may be required.

ADD the following after the last sentence of the 1st paragraph:

Whenever the Contractor or his authorized representative is not present on any particular part of the Work where it may be desired to give direction, orders will be given by the Agency Representative, which shall be received and obeyed by the superintendent or

supervisor who may have charge of the particular work in reference to which the orders are given.

The Agency reserves the right to approve the Contractor's Superintendent. Once approved, the Superintendent shall remain on the project for the duration of the project so long as he is in the employment of the Contractor.

7-7 COOPERATION AND COLLATERAL WORK. *DELETE in its entirety 4th paragraph and SUBSTITUTE with the following:*
Nothing in the Contract shall be interpreted as granting to the Contractor exclusive occupancy of the site of the project. The Contractor must ascertain to his own satisfaction the scope of the project and the nature of any other contracts that have been or may be awarded by the Agency in the construction of the project, to the end that the Contractor may perform this Contract in the light of such other constraints, if any.

The Contractor shall not cause any unnecessary hindrance or delay to any other contractor working on or adjacent to the project. If the performance of any Contract for the project is likely to be interfered with by the simultaneous performance of some other contract or contracts, the Engineer will decide which contractor shall cease work temporarily and which contractor shall continue or whether the work under the contracts can be coordinated so that the Contractors may proceed simultaneously. On all questions concerning conflicting interest of Contractors performing related work, the decision of the Engineer shall be binding upon Contractors concerned. The Agency, the Engineer, the Agency Representative, and each of their officers, employees, and agents shall not be responsible for any damages suffered or extra costs incurred by the Contractor resulting directly or indirectly from the award of performance or attempted performance of any other contract or contracts on the project or caused by a decision or omission of the Engineer respecting the order of precedence in the performance of the contracts.

If, through acts of neglect on the part of the Contractor, any other contractor or any subcontractor shall suffer loss or damage on the Work, the Contractor agrees to settle with such other contractor or subcontractor by agreement or arbitration, if such other contractor or subcontractor will so settle. If such other contractor or subcontractor shall assert any claim against the Agency, the Engineer, the Agency Representative, or their consultants on account of any damage alleged to have been so sustained, the Agency will notify the Contractor. To the maximum extent permitted by law, all obligations of the Contractor stated in 7-3.2 shall apply in the case of the assertion of any such claims or liabilities against the Agency, the Engineer, the Agency Representative and each of their officers, employees, and agents against any such claim.

ADD:

7-7.1 Coordination. It is anticipated that work by other contractors, utility companies and City of Irvine forces will be underway adjacent to or within the limits of this project during progress of the Work on this contract.

It is anticipated that construction projects may be in progress concurrently with this project.

The Contractor shall coordinate his operations with the operations of other contractors during stage construction, traffic shifts, opening of new lanes, closing of lanes, roads or ramps, detours, traffic signal facilities, shared irrigation facilities for landscaped areas

and during any other operation that may affect or have influence on adjacent projects including, but not limited to, those identified in this subsection.

7-8 WORK SITE MAINTENANCE. *MODIFY to ADD the Following:*
Section 7-8 includes specifications for performing work site maintenance, including spill prevention and control, material management, waste management, water pollution control and nonstormwater management.

Projects are required to comply with the City of Irvine Resolution No. 07-18, which establishes requirements for recycling and diversion of construction and demolition waste.

The Contractor shall implement effective handling, storage, usage, and disposal practices to control material pollution and manage waste and nonstormwater at the job site before they come in contact with storm drain systems and receiving waters.

Linear sediment barriers must comply with 7-8.6.2 of the Standard Specifications and the Contract Special Provisions.

ADD:

7-8.1.1 Construction Cleaning. The Contractor shall:

a) Initiate and maintain a daily program to prevent accumulation of debris on-site and along access roads and haul routes. Maintain areas under Contractor's control free of waste materials, debris, weeds 6” high, and rubbish. Maintain site in a clean and orderly condition.

b) Provide suitable covered containers for deposit of debris and rubbish. Dispose of accumulation of extraneous materials, prohibit overloading of trucks to prevent spillages on access and haul routes and provide daily inspection of haul routes to enforce requirements.

c) The Contractor shall supply self-loading motorized street sweepers equipped with a functional water spray system as part of his daily program.

d) Schedule at a minimum, weekly collection and disposal of debris. Provide additional collections and disposals of debris whenever the weekly schedule is inadequate to prevent accumulation.

The Contractor shall remove debris from closed or remote spaces prior to closing the space, control cleaning operations to minimize dust and other particulates and immediately remove clay and earth which adhere to the paved surface of the roadway. Remove by hand scraping, washing, sweeping, and/or other method(s) which will leave a clean non-skid surface without impairing, injuring or loosening the surface.

The Contractor shall remove waste materials, debris, vegetation, other rubbish, and non-recyclable materials as required by the Contract Documents, and dispose of off-site in an approved disposal site or recycling center.

Unless otherwise specified in the Special Provisions, all concrete, asphalt, aggregate or sand base material, cement block, trees, shrubs, bushes, and all other recyclable material generated during cleaning, demolition, clearing and grubbing or other phases of the work is to be disposed of at appropriate recycling centers. The Contractor shall be responsible

for removing reinforcing steel, wood, or other deleterious materials as required by the recycling center for acceptance of recycled materials. The Contractor shall supply proof of disposal at a recycling center. The proof of disposal shall include verification of tonnage by certified weigh masters tickets. If weigh masters tickets are not feasible, the Contractor and Agency Representative shall estimate the tonnage prior to disposal at the recycling centers.

Known recycling centers:

Ewles Materials
16081 Construction Circle West
Irvine

The Contractor is required to control dust throughout the life of the Contract. The control may be required by job conditions or Agency Representative. In any case, the Contractor shall use water or other means to control the dust. No chemical agents may be used without written authorization from the Agency. The Contractor shall be solely responsible for safety problems, accidents or any other complications or claims arising from inadequate dust control.

No separate payment will be made for any work performed or material used to control dust resulting from the Contractor's performance of the Work, or by public traffic, either inside or outside the right of way. Full compensation for such dust control will be considered as included in the price paid for the various items of work involved.

No separate payment will be made for any work performed or material used in cleaning the project. Full compensation for such cleaning shall be considered as included in the price paid for the various items of work involved and no additional compensation will be allowed therefor.

ADD:

7-8.1.2 Final Cleaning. The Contractor shall execute cleaning prior to inspection for completion of the Work. The Contractor shall use materials which will not create hazards to health or property, and which will not damage surfaces, remove debris from and otherwise clean exposed-to-view surfaces, remove temporary protection and labels not required to remain, clean finishes free of foreign substances, remove waste, debris, and surplus materials from site. Clean grounds; remove stains, spills, and foreign substances from paved areas and sweep clean, clean other exterior surfaces and where applicable:

a) Clean transparent and glossy materials to a polished condition; remove foreign substances. Polish reflective surfaces to a clear shine.

b) Vacuum clean carpeted and similar soft surfaces.

c) Clean resilient and hard surface floors.

d) Clean surfaces of equipment; remove excess lubrication.

e) Clean plumbing fixtures to a sanitary condition.

f) Clean permanent filters of ventilating equipment and replace disposable filters when units have been operated during construction; in addition, clean ducts,

blowers, and coils when units have been operated without filters during construction.

g) Clean light fixtures and lamps.

h) Remove waste, foreign matter, and debris from roofs, gutters, areaways, and drainage systems.

ADD:

7-8.4.3 Material Management.

7-8.4.3.1 General. The Contractor shall minimize or eliminate discharge of material into the air, storm drain systems, and receiving waters while taking delivery of, using, or storing the following materials:

a) Hazardous chemicals, including acids, lime, glues, adhesives, paints, solvents, and curing compounds

b) Soil stabilizers and binders

c) Fertilizers

d) Detergents

e) Plaster

f) Petroleum materials, including fuel, oil, and grease

g) Asphalt and concrete components

h) Pesticides and herbicides

The Contractor's employees trained in emergency spill cleanup procedures must be present during the unloading of hazardous materials or chemicals.

The Contractor shall use less hazardous materials if practicable.

The following activities must be performed at least 100 feet from concentrated flows of stormwater, drainage courses, and inlets if within the floodplain and at least 50 feet if outside the floodplain, unless otherwise authorized:

a) Stockpiling materials

b) Storing pile-driving equipment and liquid waste containers

c) Washing vehicles and equipment in outside areas

d) Fueling and maintaining vehicles and equipment

7-8.4.3.2 Material Storage. If materials are stored by the Contractor, he shall:

a) Store liquids, petroleum materials, and substances listed in 40 CFR 110, 117, and 302 and place them in secondary containment facilities as specified by USDOT for storage of hazardous materials.

b) Ensure that secondary containment facilities are impervious to the materials stored there for a minimum contact time of 72 hours.

c) Cover secondary containment facilities during nonworking days and whenever precipitation is forecasted. Secondary containment facilities must be adequately ventilated.

d) Keep secondary containment facilities free of accumulated rainwater or spills. After precipitation, or in the event of spills or leaks, collect accumulated liquid and place it into drums within 24 hours. Handle the liquid as hazardous waste in accordance with subsection 7-8 of the Standard Specifications and these Special Provisions.

e) Not store incompatible materials, such as chlorine and ammonia, in the same secondary containment facility.

f) Store materials in their original containers with the original material labels maintained in legible condition. Immediately replace damaged or illegible labels.

g) Ensure that secondary containment facilities have the capacity to contain precipitation from a 24-hour-long, 25-year storm, plus 10 percent of the aggregate volume of all containers or the entire volume of the largest container within the facility, whichever is greater.

h) Store bagged or boxed material on pallets. Protect bagged or boxed material from wind and rain during nonworking days and whenever precipitation is forecasted.

i) Provide sufficient separation between stored containers to allow for spill cleanup or emergency response access. Storage areas must be kept clean, well-organized, and equipped with cleanup supplies appropriate for the materials being stored.

j) Repair or replace perimeter controls, containment structures, covers, and liners as necessary. Inspect storage areas before and after precipitation and at least weekly during other times.

7-8.4.3.3 Stockpile Management. The Contractor shall minimize stockpiling of materials at the job site.

The Contractor shall implement water pollution control practices within 72 hours of stockpiling material or before a forecasted storm event, whichever occurs first. If stockpiles are being used, do not allow soil, sediment, or other debris to enter storm drains, open drainages, and watercourses.

Active and inactive soil stockpiles must be:

a) Covered with soil stabilization material or a temporary cover

b) Surrounded with a linear sediment barrier

Stockpiles of asphalt concrete and PCC rubble, HMA, aggregate base, or aggregate sub base must be:

a) Covered with a temporary cover

b) Surrounded with a linear sediment barrier

Stockpiles of pressure-treated wood must be:

a) Placed on pallets

b) Covered with impermeable material

Stockpiles of cold mix asphalt concrete must be:

a) Placed on an impervious surface

b) Covered with an impermeable material

c) Protected from stormwater run-on and runoff

The Contractor shall control wind erosion year round.

The Contractor shall repair or replace linear sediment barriers and covers as needed to keep them functioning properly. Whenever sediment accumulates to 1/3 of the linear sediment barrier height, remove the accumulated sediment.

7-8.5.3 Spill Prevention and Emergency Response Plan.

ADD:

7-8.5.3.1 Spill Prevention and Control. The Contractor shall keep material or waste storage areas clean, well-organized, and equipped with enough cleanup supplies for the material being stored.

The Contractor shall implement spill and leak prevention procedures for chemicals and hazardous substances stored on the job site. Whenever the Contractor spills or leaks chemicals or hazardous substances at the job site, he is responsible for all associated cleanup costs and related liability.

The Contractor shall report minor, semi significant, and significant or hazardous spills to the WPC manager and the WPC manager must notify the Engineer immediately.

As soon as it is safe, the Contractor shall contain and clean up spills of petroleum materials and sanitary and septic waste substances listed under 40 CFR, parts 110, 117, and 302.

ADD:

7-8.5.3.2 Minor Spills. Minor spills consist of quantities of oil, gasoline, paint, or other materials that are small enough to be controlled by a first responder upon discovery of the spill.

The Contractor shall clean up a minor spill using the following procedures:

a) Contain the spread of the spill

b) Recover the spilled material using absorption

c) Clean the contaminated area

d) Dispose of the contaminated material and absorbents promptly and properly

ADD:

7-8.5.3.3 Semi Significant Spills. Semi significant spills consist of spills that can be controlled by a first responder with help from other personnel.

The Contractor shall clean up a semi significant spill immediately using the following procedures:

a) Contain the spread of the spill.

b) On paved or impervious surfaces, encircle and recover the spilled material with absorbent materials. Do not allow the spill to spread widely.

c) If the spill occurs on soil, contain the spill by constructing an earthen dike and dig up the contaminated soil for disposal.

d) If the spill occurs during precipitation, cover the spill with 10-mil plastic sheeting or other material to prevent contamination of runoff.

e) Dispose of the contaminated material promptly and properly.

ADD:

7-8.5.3.4 Significant or Hazardous Spills. Significant or hazardous spills consist of spills that cannot be controlled by job site personnel.

The Contractor shall immediately notify qualified personnel of a significant or hazardous spill and take the following steps:

a) Do not attempt to clean up the spill until qualified personnel have arrived.

b) Notify the Engineer and follow up with a report.

c) Obtain the immediate services of a spill contractor or hazardous material team.

d) Notify local emergency response teams by dialing 911 and county officials by using the emergency phone numbers retained at the job site.

e) Notify the California Emergency Management Agency State Warning Center at 916-845-8911.

f) Notify the National Response Center at (800) 424-8802 regarding spills of Federal reportable quantities under 40 CFR 110, 119, and 302.

g) Notify other agencies as appropriate, including:

    1) Fire Department
    2) Public Works Department
    3) Coast Guard
    4) Highway Patrol
    5) City Police or County Sheriff's Department
    6) Department of Toxic Substances
    7) California Division of Oil and Gas
    8) Cal/OSHA
    9) Regional Water Resources Control Board

The Contractor shall prevent a spill from entering stormwater runoff before and during cleanup activities and shall not bury or wash the spill with water.

ADD:

7-8.5.4 Waste Management.

7-8.5.4.1 Paint Waste. The Contractor shall clean water-based and oil-based paint from brushes or equipment within a contained area in a way that does not contaminate soil, receiving waters, or storm drain systems. Handle and dispose of the following as

hazardous waste: paints, thinners, solvents, residues, and sludges that cannot be recycled or reused. When thoroughly dry, dispose of the following as solid waste under: dry latex paint, paint cans, used brushes, rags, absorbent materials, and drop cloths.

7-8.5.4.2 Concrete Waste. The Contractor shall use practices to prevent the discharge of asphalt concrete, PCC, and HMA waste into storm drain systems and receiving waters.

The Contractor shall collect and dispose of asphalt concrete, PCC, and HMA waste at locations where:

a) Concrete material, including grout, is used.

b) Concrete dust and debris result from demolition.

c) Saw cutting, coring, grinding, grooving, or hydro-concrete demolition creates a residue or slurry.

d) Concrete trucks or other concrete-coated equipment is cleaned at the job site.

7-8.5.4.3 Sanitary and Septic Waste. The Contractor shall not bury or discharge wastewater from a sanitary or septic system anywhere at the site of Work. A sanitary facility discharging into a sanitary sewer system must be properly connected and free from leaks. The Contractor shall place a portable sanitary facility at least 50 feet away from storm drains, receiving waters, and flow lines.

The Contractor shall comply with local health agency provisions if using an on-site disposal system.

7-8.5.4.4 Liquid Waste. The Contractor shall use practices that will prevent job-site liquid waste from entering storm drain systems and receiving waters. Liquid wastes include the following:

a) Drilling slurries or fluids

b) Grease-free and oil-free wastewater and rinse water

c) Dredgings, including liquid waste from cleaning drainage systems

d) Liquid waste running off a surface, including wash or rinse water

e) Other nonstormwater liquids not covered by separate permits

The Contractor shall hold liquid waste in structurally sound, leak-proof containers, such as roll-off bins or portable tanks.

Liquid waste containers must be of sufficient quantity and volume to prevent overflow, spills, and leaks.

The Contractor shall store containers at least 50 feet from moving vehicles and equipment.

The Contractor shall remove and dispose of deposited solids from sediment traps in accordance with 7-8 of the Standard Specifications and these Special Provisions. Liquid waste may require testing to determine hazardous material content before disposal.

The Contractor shall dispose of drilling fluids and residue.

If an authorized location is available within the job site, fluids and residue exempt under 23 CA Code of Regs § 2511(g) may be dried by evaporation in a leak-proof container. The Contractor shall dispose of the remaining solid waste in accordance with 7-8 of the Standard Specifications and these Special Provisions.

ADD:

7-8.5.5 Nonstormwater Management.

7-8.5.5.1 Water Control and Conservation. The Contractor shall manage water used for work activities in a way that will prevent erosion and the discharge of pollutants into storm drain systems and receiving waters. Obtain authorization before washing anything at the job site with water that could discharge into a storm drain system or receiving waters. Report discharges immediately.

The Contractor shall implement water conservation practices if water is used at the job site. Inspect irrigation areas. Adjust watering schedules to prevent erosion, excess watering, or runoff. Shut off the water source to broken lines, sprinklers, or valves and repair breaks within 24 hours. Reuse water from waterline flushing for landscape irrigation if practicable. Sweep and vacuum paved areas. Do not wash paved areas with water.

The Contractor shall direct runoff water, including water from water line repair, from the job site to areas where it can infiltrate into the ground. Do not allow runoff water to enter storm drain systems and receiving waters. Do not allow spilled water to escape filling areas for water trucks. Direct water from off-site sources around the job site if practicable. Minimize the contact of off-site water with job site water.

7-8.5.5.2 Illicit Connection and Illegal Discharge Detection and Reporting. Before starting work, the Contractor shall inspect the job site and the job site's perimeter for evidence of illicit connections, illegal discharges, and dumping. After starting work, inspect the job site and perimeter on a daily schedule for illicit connections and illegal dumping and discharges.

Whenever illegal connections, discharges, or dumping are discovered, The Contractor shall notify the Engineer immediately, should take no further action unless ordered and assume that unlabeled or unidentifiable material is hazardous.

The Contractor shall look for the following evidence of illicit connections, illegal discharges, and dumping:

a) Debris or trash piles
b) Staining or discoloration on pavement or soils
c) Pungent odors coming from drainage systems
d) Discoloration or oily sheen on water
e) Stains and residue in ditches, channels, or drain boxes
f) Abnormal water flow during dry weather
g) Excessive sediment deposits

h) Nonstandard drainage junction structures

i) Broken concrete or other disturbances at or near junction structures

7-8.5.5.3 Vehicle and Equipment Cleaning. The Contractor shall limit vehicle and equipment cleaning or washing at the job site except for what is necessary to control vehicle tracking or hazardous waste. The Contractor shall notify the Engineer before cleaning vehicles and equipment at the job site with soap, solvents, or steam and contain and recycle or dispose of resulting waste under 7-10.4.4. The Contractor shall not use diesel to clean vehicles or equipment and minimize the use of solvents.

The Contractor shall clean or wash vehicles and equipment in a structure equipped with disposal facilities. The Contractor may wash vehicles in an outside area if the area is:

a) Paved with asphalt concrete, HMA, or PCC

b) Surrounded by a containment berm

c) Equipped with a sump to collect and dispose of wash water

The Contractor shall use as little water as practicable whenever washing vehicles and equipment with water and hoses used must be equipped with a positive shutoff valve.

The Contractor shall discharge liquid from wash racks to a recycling system or to another authorized system. Remove liquids and sediment as necessary.

7-8.5.5.4 Vehicle and Equipment Fueling and Maintenance. If practicable, the Contractor shall perform maintenance on vehicles and equipment off-site.

If fueling or maintenance must be done at the job site, the Contractor shall assign a site or sites, and obtain authorization before using them. The Contractor shall minimize mobile fueling and maintenance activities. The Contractor's fueling and maintenance activities must be performed on level ground in areas protected from stormwater run-on and runoff.

The Contractor shall use containment berms or dikes around fueling and maintenance areas. Keep adequate quantities of absorbent spill-cleanup material and spill kits in the fueling or maintenance area and on fueling trucks. The Contractor shall dispose of spill-cleanup material and kits immediately after use and use drip pans or absorbent pads during fueling or maintenance.

The Contractor shall not leave fueling or maintenance areas unattended during fueling and maintenance activities. The Contractor's fueling nozzles must be equipped with an automatic shutoff control. The Contractor shall use equipment with vapor-recovery fueling nozzles where required by the Air Quality Management District, secure nozzles in an upright position when not in use and shall not top off fuel tanks.

The Contractor shall recycle or properly dispose of used batteries and tires.

If leaks cannot be repaired immediately, the Contractor shall remove the vehicle or equipment from the job site.

7-8.5.5.5 Material and Equipment Used Over Water. The Contractor shall place drip pans and absorbent pads under vehicles and equipment used over water, keep an adequate supply of spill-cleanup material with vehicles and equipment, place drip pans or plastic sheeting under vehicles and equipment on docks, barges, or other surfaces over water whenever vehicles or equipment will be idle for more than one (1) hour.

The Contractor shall furnish watertight curbs or toe boards on barges, platforms, docks, or other surfaces over water to contain material, debris, and tools and shall secure material to prevent spills or discharge into the water due to wind.

The Contractor shall report discharges to receiving waters immediately upon discovery and shall submit a discharge notification.

7-8.5.5.6 Structure Removal Over or Adjacent to Water. The Contractor shall not allow demolished material to enter storm drain systems and receiving waters, use authorized covers and platforms to collect debris, use attachments on equipment to catch debris during small demolition activities and empty debris-catching devices daily and dispose of debris in accordance with 7-8 of the Standard Specifications and these Special Provisions.

7-8.5.5.7 Paving, Sealing, Saw Cutting, Grooving, and Grinding Activities. The Contractor shall prevent material from entering storm drain systems and receiving waters including:

a) Cementitious material
b) Asphaltic material
c) Aggregate or screenings
d) Saw cutting, grooving, and grinding residue
e) Pavement chunks
f) Shoulder backing
g) Methacrylate
h) Sandblasting residue

The Contractor shall cover drainage inlets and use linear sediment barriers to protect downhill receiving waters until paving, sealing, saw cutting, grooving, and grinding activities are completed and excess material has been removed and cover drainage inlets and manholes during the application of seal coat, tack coat, slurry seal, or fog seal.

Whenever precipitation is forecasted, the Contractor shall limit paving, saw cutting, and grinding to places where runoff can be captured.

The Contractor shall not start seal coat, tack coat, slurry seal, or fog seal activities whenever precipitation is forecasted during the application and curing period and shall not excavate material from existing roadways during precipitation.

The Contractor shall use a vacuum to remove slurry immediately after slurry is produced and shall not allow the slurry to run onto lanes open to traffic or off the pavement.

The Contractor shall collect the residue from PCC grooving and grinding activities with a vacuum attachment on the grinding machine. The Contractor shall not leave the residue on the pavement or allow the residue to flow across pavement.

The Contractor shall not coat asphalt trucks and equipment with substances that contain soap, foaming agents, or toxic chemicals.

The Contractor shall park paving equipment over drip pans or plastic sheeting with absorbent material to catch drips if the paving equipment is not in use.

7-8.5.5.8 Thermoplastic Striping and Pavement Markers. The Contractor shall not preheat, transfer, or load thermoplastic within 50 feet of drainage inlets and receiving waters.

The Contractor shall not unload, transfer, or load bituminous material for pavement markers within 50 feet of drainage inlets and receiving waters.

The Contractor shall collect and dispose of bituminous material from the roadway after removing markers.

7-8.5.5.9 Pile Driving. The Contractor shall keep spill kits and cleanup materials at pile driving locations; park pile driving equipment over drip pans, absorbent pads, or plastic sheeting with absorbent material; protect pile driving equipment by parking on plywood and covering with plastic whenever precipitation is forecasted.

The Contractor shall store pile driving equipment on level ground and protect it from stormwater run-on when not in use. Use vegetable oil instead of hydraulic fluid if practicable.

7-8.5.5.10 Concrete Curing. The Contractor shall not overspray chemical curing compounds and shall not allow runoff of curing compounds.

The Contractor shall minimize the drift by spraying as close to the concrete as practicable, cover drainage inlets before applying the curing compound, and minimize the use and discharge of water by using wet blankets or similar methods to maintain moisture when concrete is curing.

7-8.5.5.11 Concrete Finishing. The Contractor shall collect and dispose of water and solid waste from high-pressure water blasting, collect and dispose of sand and solid waste from sandblasting. Before sandblasting, the Contractor shall cover drainage inlets within 50 feet of sandblasting, and shall minimize the drift of dust and blast material by keeping the nozzle close to the surface of the concrete. If the character of the blast residue is unknown, the Contractor shall test it for hazardous materials and dispose of it properly.

The Contractor shall inspect containment structures for concrete finishing for damage before each day of use and before forecasted precipitation and remove liquid and solid waste from containment structures after each work shift.

7-8.5.5.12 Sweeping. The Contractor shall sweep by hand or mechanical methods, such as vacuuming, and shall not use methods that use only mechanical kick brooms.

The Contractor shall sweep paved roads at construction entrance and exit locations and paved areas within the job site:

a) During clearing and grubbing activities
b) During earthwork activities
c) During trenching activities
d) During pavement structure activities
e) When vehicles are entering and leaving the job site
f) After soil-disturbing activities
g) After observing off-site tracking of material
h) As deemed necessary by the Engineer

The Contractor shall monitor paved areas and roadways within the project and sweep within:

a) 1 hour whenever sediment or debris is observed during activities that require sweeping.
b) 24 hours whenever sediment or debris is observed during activities that do not require sweeping.

The Contractor shall remove collected material, including sediment, from paved shoulders, drain inlets, curbs and dikes, and other drainage areas, may stockpile collected material at the job site, and shall dispose of collected material at least once per week if stockpiled.

The Contractor shall keep dust to a minimum during street sweeping activities and use water or a vacuum whenever dust generation is excessive or sediment pickup is ineffective.

The Contractor shall remove and dispose of trash collected during sweeping.

7-8.5.5.13 Dewatering. Dewatering consists of discharging accumulated stormwater, groundwater, or surface water from excavations or temporary containment facilities.

The Contractor shall perform dewatering work as specified for the work items involved, such as temporary active treatment system or dewatering and discharge.

If dewatering and discharging activities are not specified under a work item and the Contractor performs dewatering activities, he shall:

a) Conduct dewatering activities under the Caltrans' *Field Guide for Construction Site Dewatering*.
b) Ensure that any dewatering discharge does not cause erosion, scour, or sedimentary deposits that could impact natural bedding materials.
c) Discharge the water within the project limits if approved by the Engineer. Dispose of the water if it cannot be discharged within project limits due to site constraints or contamination.

d) Not discharge stormwater or nonstormwater that has an odor, discoloration other than sediment, an oily sheen, or foam on the surface.

e) Notify the Engineer immediately upon discovering any such condition.

7-8.6 Water Pollution Control.

ADD:

7-8.6.1.1 Definitions and Abbreviations.

Active and inactive areas: (1) Active areas have soil disturbing work activities occurring at least once within 15 days, and (2) Inactive areas are areas that have not been disturbed for at least 15 days.

BMPs: Best Management Practices are water pollution control practices.

Construction phase: Construction phases are (1) Highway Construction including work activities for building roads and structures, (2) Plant Establishment including maintenance on vegetation installed for final stabilization, and (3) Suspension where work activities are suspended and areas are inactive.

NAL: Numeric Action Level.

NEL: Numeric Effluent Limit.

Normal working hours: The hours the Contractor normally works on this project.

Preparation Manual: The Caltrans' "Storm Water Pollution Prevention Plan and Water Pollution Control Program Preparation Manual."

QSD: Qualified SWPPP Developer.

QSP: Qualified SWPPP Practitioner.

Qualified rain event: A qualified rain event is a storm that produces at least 0.5 inch of precipitation with a 48 hour or greater period between storms.

REAP: Rain Event Action Plan.

SAP: Sampling and Analysis Plan.

SSC: Suspended Sediment Concentration.

SWRCB: State Water Resources Control Board.

WPC: Water Pollution Control.

WPC Manager: The Contractor's Water Pollution Control Manager. The WPC Manager implements water pollution control work described in the SWPPP and oversees revisions and amendments to the SWPPP.

7-8.6.1.2 Summary. Section 7-8.6 includes general specifications for preventing, controlling, and abating water pollution in streams, waterways, and other bodies of water.

Information on forms, reports, and other documents can be found in the following Caltrans manuals:

a) *Field Guide for Construction Site Dewatering*

b) *Storm Water Pollution Prevention Plan (SWPPP) and Water Pollution Control Program (WPCP) Preparation Manual*

c) *Construction Site Best Management Practices (BMP) Manual*

d) *Construction Site Monitoring Program (CSMP) Guidance Manual*

For the above-referenced manuals, go to the Caltrans' Web site for the Division of Construction, Storm Water and Water Pollution Control at (Informationhttp://www.dot.ca.gov/hq/construc/stormwater/) or the Caltrans' publication distribution unit.

The Contractor shall not start job site activities until:

a) The WPCP or SWPPP, in accordance with 7-8.6.3 of the Special Provisions, is authorized.

b) The waste discharge identification number is issued if the project requires a SWPPP.

c) WPCP or SWPPP review requirements have been fulfilled. If the RWQCB requires time for review, allow 30 days for the review.

If the Contractor operates a Contractor-support facility, the Contractor shall protect stormwater systems or receiving waters from the discharge of potential pollutants by using water pollution control practices.

Contractor-support facilities include:

a) Staging areas

b) Storage yards for equipment and materials

c) Mobile operations

d) Batch plants for PCC and HMA

e) Crushing plants for rock and aggregate

f) Other facilities installed by the Contractor for his, such as haul roads

Discharges from manufacturing facilities, such as batch plants and crushing plants, must comply with the general waste discharge requirements for *Order No. 97-03-DWQ, NPDES General Permit No. CAS000001*, issued by the State Water Resources Control Board for "*Discharge of Storm Water Associated with Industrial Activities Excluding Construction Activities*" and referred to herein as "General Industrial Permit." For the General Industrial Permit, go to the Web site for the State Water Resources Control Board.

If the Contractor operates a batch plant to manufacture PCC, HMA, or other material or a crushing plant to produce rock or aggregate, the Contractor shall obtain coverage under the General Industrial Permit. The Contractor must be covered under the General Industrial Permit for batch plants and crushing plants located:

a) Outside of the job site

b) Within the job site that serve 1 or more contracts

If the Contractor obtains or disposes of material at a noncommercially operated borrow or disposal site, the Contractor shall prevent water pollution due to erosion at the site

during and after completion of his activities. Upon completion of his work, the Contractor shall leave the site in a condition such that water will not collect or stand therein.

The Agency does not pay for water pollution control practices at Contractor-support facilities and noncommercially operated borrow or disposal sites.

7-8.6.1.3 Submittals. Within 48 hours after the conclusion of a storm event resulting in a discharge, after a nonstormwater discharge, or after receiving a written notice or an order from the RWQCB or another regulatory agency, the Contractor's WPC manager must submit the following information:

a) Date, time, location and nature of the activity and the cause of the notice or order

b) Type and quantity of discharge

c) Water pollution control practices in use before the discharge or before receiving the notice or order

d) Description of water pollution control practices and corrective actions taken to manage the discharge or cause of the notice

The Contractor shall submit water pollution control training records for all employees and subcontractors who will be working at the job site as an informational submittal that includes the training subjects, training dates, ongoing training, and tailgate meetings with the submittal. The Contractor shall submit records for:

a) Existing employees within 5 business days of obtaining SWPPP or WPCP authorization

b) New employees within 5 business days of receiving the training

c) Subcontractor's employees at least 5 business days before a subcontractor starts work

At least Five (5) business days before operating any Contractor-support facility, the Contractor shall submit:

a) A plan showing the location and quantity of water pollution control practices associated with the Contractor-support facility

b) A copy of the notice of intent approved by the RWQCB and the WPCP or SWPPP approved by the RWQCB if the Contractor will be operating a batch plant or a crushing plant under the General Industrial Permit

7-8.6.1.4 Quality Control and Assurance.

Training

The Contractor shall employees must receive water pollution control training before starting work at the job site.

For the Contractor's project managers, supervisory personnel, subcontractors, and employees involved in water pollution control work:

a) The Contractor shall provide stormwater training in the following subjects:

    1) Water pollution control rules and regulations

    2) Implementation and maintenance for:

(a) Temporary soil stabilization

(b) Temporary sediment control

(c) Tracking control

(d) Wind erosion control

(e) Material pollution prevention and control

(f) Waste management

(g) Nonstormwater management

b) The Contractor shall conduct weekly training meetings covering:

1) Deficiencies and corrective actions for water pollution control practices
2) Water pollution control practices required for work activities during the week
3) Spill prevention and control
4) Material delivery, storage, usage, and disposal
5) Waste management
6) Nonstormwater management procedures

Training for personnel who collect water quality samples must include:

a) CSMP review
b) Health and safety review
c) Sampling simulations

7-8.6.1.5 Water Pollution Control Manager.

General

The Contractor's WPC manager must be a QSP if the project requires a WPCP. The Contractor's WPC manager must be a QSD if the project requires a SWPPP.

The Contractor shall assign one (1) WPC manager to implement the WPCP or SWPPP, whichever is applicable for the project.

Qualifications

The Contractor's QSD must:

a) Have completed the stormwater management training described in the Caltrans' Web site for the Division of Construction, Storm Water and Water Pollution Control Information
b) Be registered or certified for at least one of the following:

1) California registered civil engineer
2) California registered professional geologist or engineering geologist
3) California licensed landscape architect
4) Professional hydrologist registered through the American Institute of Hydrology

5) Certified Professional in Erosion and Sediment Control (CPESC)™ registered through Enviro Cert International, Inc.

6) Certified Professional in Storm Water Quality (CPSWQ)™ registered through Enviro Cert International, Inc.

7) Professional in erosion and sediment control registered through the National Institute for Certification in Engineering Technologies (NICET)

The Contractor's QSP must comply with the qualifications for a QSD or must:

a) Have completed the storm water management training described in the Caltrans' Web site for the Division of Construction, Storm Water and Water Pollution Control Information

b) Be certified for at least one of the following:

1) Certified Erosion, Sediment and Storm Water Inspector (CESSWI)™ registered through Enviro Cert International, Inc.

2) Certified Inspector of Sediment and Erosion Control (CISEC) registered through CISEC, Inc.

Responsibilities

The Contractor's WPC manager must:

a) Be responsible for water pollution control work

b) Be the primary contact for water pollution control work

c) Oversee:

1) Maintenance of water pollution control practices

2) Inspections of water pollution control practices identified in the SWPPP or WPCP

3) Inspections and reports for visual monitoring

4) Preparation and implementation of REAPs

5) Sampling and analysis

6) Preparation and submittal of:

(a) NAL exceedance reports

(b) NEL violation reports

(c) SWPPP annual certification

(d) Annual reports

(e) BMP status reports

a) Oversee and enforce hazardous waste management practices, including spill prevention and control measures

b) Have authority to mobilize crews to make immediate repairs to water pollution control practices

c) Ensure that all employees have current water pollution control training

d) Implement the authorized SWPPP or WPCP

e) Amend the SWPPP or WPCP if required

f) Be at the job site within 2 hours of being contacted

g) Have the authority to stop construction activities damaging water pollution control practices or causing water pollution

7-8.6.1.6 Construction.

General

The Contractor shall install facilities and devices used for water pollution control practices before performing work activities. The Contractor shall install soil stabilization materials for water pollution control practices in all work areas that are inactive and before storm events.

The Contractor shall repair or replace water pollution control practices within 24 hours of discovering any damage, unless a longer period is authorized.

The Agency will not pay for the cleanup, repair, removal, disposal, or replacement of water pollution control practices due to improper installation or the Contractor's negligence.

The Contractor shall retain a printed copy of the authorized WPCP or SWPPP at the job site at all times.

Monitoring

The Contractor shall monitor the National Weather Service's forecast on a daily basis. For the National Weather Service's forecast, go to the Web site for the National Weather Service.

Inspections

The Contractor shall use the *Stormwater Site Inspection Report* form for documenting site inspections.

The Contractor's WPC manager must oversee:

a) Inspections of water pollution control practices identified in SWPPP or WPCP:
    1) Before a forecasted storm event
    2) After a qualifying rain event that produces site runoff
    3) At 24-hour intervals during extended storm events
    4) On a predetermined schedule of at least once a week

b) Daily inspections of:
    1) Storage areas for hazardous materials and waste
    2) Hazardous waste disposal and transporting activities
    3) Hazardous material delivery and storage activities

c) Inspections of:
    1) Vehicle and equipment cleaning facilities:
        (a) Daily if vehicle and equipment cleaning occurs daily

(b) Weekly if vehicle and equipment cleaning does not occur daily

2) Vehicle and equipment maintenance and fueling areas:

(a) Daily if vehicle and equipment maintenance and fueling occurs daily

(b) Weekly if vehicle and equipment maintenance and fueling does not occur daily

3) Vehicles and equipment at the job site for leaks and spills on a daily schedule. Verify that operators are inspecting vehicles and equipment each day of use.

4) Demolition sites within 50 feet of storm drain systems and receiving waters daily.

5) Pile driving areas for leaks and spills:

(a) Daily if pile driving occurs daily

(b) Weekly if pile driving does not occur daily

6) Temporary concrete washouts:

(a) Daily if concrete work occurs daily

(b) Weekly if concrete work does not occur daily

7) Paved roads at job site access points for street sweeping:

(a) Daily if earthwork and other sediment or debris-generating activities occur daily

(b) Weekly if earthwork and other sediment or debris-generating activities do not occur daily

(c) Within 24 hours of precipitation forecasted by the National Weather Service

8) Dewatering work:

(a) Daily if dewatering work occurs daily

(b) Weekly if dewatering work does not occur daily

9) Temporary active treatment system:

(a) Daily if temporary active treatment system activities occur daily

(b) Weekly if temporary active treatment system activities do not occur daily

10) Work over water:

(a) Daily if work over water occurs daily

(b) Weekly if work over water does not occur daily

Deficiencies

Whenever the Contractor or the Engineer identify a deficiency in the implementation of the authorized WPCP or SWPPP, The Contractor shall correct the deficiency:

(a) Immediately, unless a later date is authorized

(b) Before precipitation occurs

The Agency may correct the deficiency and deduct the cost of correcting the deficiency from payment if the Contractor fails to correct the deficiency by the agreed date or before the onset of precipitation.

7-8.6.2 Best Management Practices (BMPs). *MODIFY to ADD the following:*
BMPs shall be maintained and/or added based on the REAP and any exceedances of Numeric Action Levels (NALs) and Numeric Effluent Limitations (NELs). The Contractor shall make any necessary changes to the SWPPP and implement additional BMPs that will result in effluent levels below that of NALs.

7-8.6.3 Storm Water Pollution Prevention Plan (SWPPP). *DELETE in its entirety and SUBSTITUTE with the following:*

7-8.6.3 Water Pollution Control Plan (WPCP).

7-8.6.3.1 General.

Summary

The Contractor shall prepare a water pollution control plan that includes developing and implementing the WPCP, providing a WPC manager, conducting water pollution control training, and monitoring, inspecting and correcting water pollution control practices.

The Contractor may assign a QSP other than the WPC manager to develop the WPCP.

Submittals

Within 7 days after Contract approval:

a) The Contractor shall submit two (2) copies of his WPCP for review. The Engineer provides comments and specifies the date when the review stopped if revisions are required.

b) The Contractor shall resubmit a revised WPCP within 7 days of receiving the Engineer's comments. The Agency's review resumes when the complete WPCP has been resubmitted.

c) When the Engineer authorizes the WPCP, the Contractor shall submit an electronic copy and 3 printed copies of the authorized WPCP.

d) If the RWQCB requires review of the authorized WPCP, the Engineer submits the authorized WPCP to the RWQCB for its review and comment.

e) If the Engineer orders changes to the WPCP based on the RWQCB's comments, the Contractor shall amend the WPCP within 3 business days.

The WPCP must comply with the Caltrans' *Storm Water Pollution Prevention Plan (SWPPP) and Water Pollution Control Plan (WPCP) Preparation Manual* and must:

a) Show the location of disturbed soil areas, water bodies, and water conveyances

b) Describe the work involved in the installation, maintenance, repair, and removal of temporary water pollution control practices

c) Show the locations and types of water pollution control practices that will be used for:

1) Stormwater and nonstormwater in areas outside the job site but related to work activities, including:
    (a) Staging areas
    (b) Storage yards
    (c) Access roads
2) Activities or mobile activities related to all NPDES permits
3) Contractor-support facilities

d) Show the locations and types of temporary water pollution control practices that will be used in the work for each construction phase

e) Show the locations and types of water pollution control practices that will be installed permanently under the Contract

f) Include a schedule showing when:
    1) Work activities will be performed that could cause the discharge of pollutants into stormwater
    2) Water pollution control practices associated with each construction phase will be implemented
    3) Soil stabilization and sediment control practices for disturbed soil areas will be implemented

g) Include a copy of any permits obtained by the Agency, including Fish & Game permits, US Army Corps of Engineers permits, RWQCB 401 certifications, aerially deposited lead variance from the Department of Toxic Substance Control, aerially deposited lead variance notification, and RWQCB waste discharge requirements for aerially deposited lead reuse

The Contractor shall amend the WPCP whenever:

a) Changes in work activities could affect the discharge of pollutants

b) Water pollution control practices are added by Change Order work

c) Water pollution control practices are added at the Contractor's discretion

d) Changes in the quantity of disturbed soil are substantial

e) Objectives for reducing or eliminating pollutants in stormwater discharges have not been achieved

f) Project receives a written notice or order from the RWQCB or any other regulatory agency

The Contractor shall allow the same review time for amendments to the WPCP as for the original WPCP.

7-8.6.3.2 Construction. The Contractor shall manage work activities in a way that reduces the discharge of pollutants to surface waters, groundwater, and separate municipal storm sewer systems.

The Contractor shall monitor and inspect water pollution control practices at the job site.

The Contractor shall notify the Engineer within 6 hours whenever any of the following occurs:

a) The Contractor identifies discharges into receiving waters or drainage systems that are causing or could cause water pollution

b) The Contractor receives a written notice or order for the project from the RWQCB or any other regulatory agency

The Contractor shall continue WPCP implementation during any suspension of work activities.

The Contractor is responsible for delays and must pay all costs associated with submitting a SWPPP due to his actions that result in one of the following:

a) 1 or more acres of soil disturbance on projects without an Erosivity Waiver

b) More than 5 acres of soil disturbance on projects with an Erosivity Waiver

c) Failure to comply with the schedule for soil disturbing activities for projects with an Erosivity Waiver if the delays void the Erosivity Waiver

7-8.6.3.3 Payment. Payment for WATER POLLUTION CONTROL PROGRAM (WPCP) shall be per the Lump Sum (LS) price bid and shall include full compensation for furnishing all labor, materials, tools, equipment to perform all the work involved in 7-8.6, including preparing and modifying a WPCP, permitting fees, Agency filing and processing, furnishing, installing, maintaining and removing BMPs, monitoring and reporting, and all incidentals for doing all the work involved as described herein or as otherwise required by the permit process, and shall be included in the contract lump sum price in the bid. No additional compensation shall be allowed therefor.

Payment will be issued by the Agency as follows:

a) 25% - upon WPCP approval.

b) 25% - upon installation of project BMPs

c) 50% - to be paid monthly as a percentage of the total working days expended for monitoring, maintenance, testing, reporting and all other requirements as outlined in these Special Provisions.

7-8.6.4 Dewatering. *MODIFY to ADD the following:*

Submittals

Before the Contractor starts dewatering, he shall submit a dewatering and discharge work plan. The dewatering and discharge work plan must include:

a) Title sheet and table of contents

b) Description of dewatering and discharge activities detailing locations, quantity of water, equipment, and discharge point

c) Estimated schedule for dewatering and discharge start and end dates of intermittent and continuous activities

d) Discharge alternatives, such as dust control or percolation

e) Visual monitoring procedures with inspection log

f) Copy of written approval to discharge into a sanitary sewer system at least 5 business days before starting discharge activities

The Contractor shall submit the following informational submittals:

a) MSDS at least 5 business days before material is used or stored

b) Monthly inventory records for material used or stored

The Contractor shall submit written approval from the local health agency, city, county, and sewer district before discharging from a sanitary or septic system directly into a sanitary sewer system.

7-8.6.5 Payment. *DELETE in its entirety and SUBSTITUTE with the following:*
Payment for implementation and maintenance of BMPs and dewatering shall be included in the Contract Unit Price paid for WPCP.

ADD:

7-8.7 Drainage Control. The Contractor shall maintain drainage within and through the work areas. Earth dams will not be permitted in paved areas. Temporary dams of sandbags, asphaltic concrete, or other acceptable material will be permitted when necessary. Such dams shall be removed from the site as soon as their use is no longer necessary.

The Contractor shall ensure that storm and drainage water does not pond due to the temporary blockage of existing drainage facilities. To this end, the Contractor shall provide temporary works that allow for the passage of storm and drainage water in a manner equivalent to the existing drainage system.

No separate payment will be made for any work performed or material used in drainage control. Full compensation for such controls shall be considered as included in the price paid for the various items of work involved and no additional compensation will be allowed therefor.

ADD:

7-8.8 Graffiti Control. Throughout all phases of Work, including suspension of Work, and until final acceptance, the Contractor shall keep Work, all equipment, field offices, storage facilities, fences, signs, and other facilities free of graffiti. Within twenty-four (24) hours after notification by the Agency Representative, graffiti shall be water blasted and cleaned to original surface or repainted if previously painted.

No separate payment will be made for any work performed or material used in graffiti control. Full compensation for such cleaning shall be considered as included in the price paid for the various items of work involved and no additional compensation will be allowed therefor.

7-9 PROTECTION AND RESTORATION OF EXISTING IMPROVEMENTS. *ADD the following before the 1st paragraph:*
Material shown on the Plans or designated in the Special Provisions which is to be salvaged or used in the reconstructed work and which has been damaged or destroyed as a result of the Contractor's operations, shall be repaired or replaced by the Contractor at his expense.

ADD:

7-9.1 Preservation of Property. The Contractor shall exercise due care to avoid injury to existing improvements or facilities, utility facilities, adjacent property, and trees and shrubbery that are not to be removed.

All damage done to existing improvements by the Contractor shall be repaired by him to the satisfaction of the Engineer. Where sidewalks, curbs or gutters are to be repaired, the repairs shall be made by removing and replacing the damaged section back to the nearest scoring lines.

All trees and shrubbery that are not to be removed, and pole lines, fences, signs, survey markers and monuments, buildings and structures, conduits, pipelines under or above ground, sewer and waterlines, all highway or street facilities, and any other improvements of facilities within or adjacent to the work shall be protected from injury or damage, and the Contractor shall provide and install suitable safeguards to protect such objects from injury or damage. If such objects are injured or damaged by reason of the Contractor's operation, they shall be replaced or restored at the Contractor's expense to a condition as good as when the Contractor entered upon the work or as good as required by the Plans and Specifications if any such objects are a part of the work being performed.

The fact that any such pipe or other underground facility is not shown on the Plans shall not relieve the Contractor of his responsibility under this article. It shall be the Contractor's responsibility to ascertain the existence of any underground improvement or facilities which may be subject to damage by reason of his operations.

In addition to any requirements imposed by law, the Contractor shall shore up, brace, underpin, and protect as may be necessary, all foundations and other parts of all existing structures adjacent to and adjoining the site of the work which are in any way affected by the excavations or other operations connected with the performance of the Work.

Whenever any notice is required to be given by the Agency or the Contractor to any adjacent or adjoining landowner or other party before commencement of any work, such notice shall be given by the Contractor.

ADD:

7-9.2 Video Recording and Photographing of Pre-existing Conditions. The Contractor shall video record and photograph pre-existing conditions of the project site prior to any construction activities such as, but not limited to:

a) Property markers
b) Right of way and easement conditions
c) Utility markings and USA markings
d) Existing property damages
e) Survey conditions
f) Pavement conditions, markings, and striping
g) Adjacent property conditions

h) Sidewalk, median, curb, and gutter conditions

i) Safety conditions

j) Unusual conditions or equipment

k) Existing landscape conditions (including vegetation and irrigation) along the project limit.

The Contractor shall submit recordings/photographs on CD, DVD or USB media to the Engineer no later than (five) 5 Working Days after Notice to Proceed.

Payment for video recording and photographing services shall be included in the various Bid Items and no additional compensation will be allowed therefor.

7-10.4.1.2 Work Site Safety Official. *MODIFY to ADD the following:*
Failure by the Contractor to provide the required Work Site Safety Official shall be grounds for the Agency to direct the cessation of all work activities and operations at no cost to the Agency until the Contractor is in compliance.

ADD:

7-10.4.1.3 Emergencies. Unusual conditions may arise on the Work which will require that immediate and unusual provisions be made to protect the public from danger or loss or damage to life and property, due directly or indirectly to the prosecution of the Work, and it is part of the service required of the Contractor to make such provisions and to furnish such protection.

The Contractor shall use such foresight and shall take such steps and precautions as his operations make necessary to protect from danger or damage, or loss of life or property, which would result from the interruption or contamination of public water supply, irrigation or other public service, or from failure or partly completed work.

Whenever, in the opinion of the Engineer, an emergency exists against which the Contractor has not taken sufficient precaution for the safety of the public or the protection of utilities or of adjacent structures or property which may be injured by process of construction on account of such neglect; and whenever in the opinion of the Engineer, immediate action shall be considered necessary in order to protect public or private, personal or property interest, or prevent likely loss of human life or damage on account of the operations under the Contract, then and in that event the Agency may provide suitable protection to said interest by causing such work to be done and material to be furnished as, in the opinion of the Agency Representative may seem reasonable and necessary.

The cost and expense of said labor and material, together with the cost and expense of such repairs as may be deemed necessary, shall be borne by the Contractor, and if he shall not pay said cost and expense upon presentation of the bills therefor, duly certified by the Agency Representative, then said cost and expense will be paid by the Agency and shall thereafter be deducted from any amounts due, or which may become due to the Contractor. Failure of the Agency, however, to take such precautionary measure, shall not relieve the Contractor of his full responsibility for public safety.

The foregoing provisions are in addition to and not in limitation of any other rights or remedies available to the Agency.

7-10.4.2.1 General. *DELETE in its entirety 2nd paragraph and SUBSTITUTE with the following:*
The Contractor shall submit to the Engineer, as a condition of obtaining City issued permits and in advance of excavation, a permit from the Division of Occupational Safety and Health pursuant to Chapter 6 (commencing with Section 6500) of Part 1 of Division 5 of the Labor Code along with a detailed plan showing the design of shoring, bracing, sloping or other provisions to be made for worker protection from the hazard of caving ground during the excavation of any trench or trenches five (5) feet or more in depth. The plan shall be prepared by a registered civil or structural engineer. As a part of the plan, a notice shall be included stating that the registered civil or structural engineer certifies that the plan complies with the CAL/OSHA Construction Safety Orders. A copy of the plan and permit shall be submitted to the Engineer.

In accordance with generally accepted construction practices, the Contractor shall be solely and completely responsible for conditions on the job site, including safety of all persons and property during performance of the Work, and the Contractor shall fully comply with all local, county, state and federal laws, rules, regulations, and orders relating to safety of the public and workers.

The Contractor shall hold harmless, indemnify, and defend the Agency, the Engineer, the Agency Representative and each of their officers, employees, and agents from civil or criminal penalties resulting from a failure to comply with applicable safety laws, rules, regulations and orders. To the maximum extent permitted by law, all obligations of the Contractor stated in 7-3.2 shall apply in the event of any such failure to comply with applicable safety laws, rules, regulations or orders.

The duty, if any, of the Agency Representative to conduct construction review or inspection of the Contractor's performance is not intended to include review or inspection of the adequacy of the Contractor's safety measures in, on, or near the construction site.

7-11 PATENT FEES AND ROYALTIES. *DELETE in its entirety and SUBSTITUTE with the following:*
The Contractor shall assume all costs arising from the use of patented materials, equipment, devices, or processes used on or incorporated in the Work and shall hold harmless, indemnify, and defend the Agency, the Engineer, the Agency Representative and each of their officers, employees, and agents from all claims, suits or actions of every nature for or on account of the use of any patented materials, equipment devices, or processes. To the maximum extent permitted by law, all obligations of the Contractor stated in 7-3.2 shall apply in the case of any such claim, suit or action.

7-13 LAWS TO BE OBSERVED. *DELETE in its entirety and SUBSTITUTE with the following:*
The Contractor shall keep itself fully informed of all existing and future State and National laws and County and Municipal ordinances and regulations which in any manner affect those engaged or employed in the Work or the materials used in the Work or which in any way affect the conduct of the Work and of all such order and decrees of bodies or tribunals having any jurisdiction or authority in the Plans, Specifications, or Contract for the Work in relation to any such law, ordinance, regulation, order or decree, he shall forthwith report the same to the Agency Representative in writing.

The Contractor shall at all times observe and comply with and shall cause all its agents, employees, and subcontractors to observe and comply with all such existing and future laws, ordinances, regulations, orders, and decrees even though such requirements may not be specifically mentioned in the specifications or shown on the Plans, and shall hold harmless, indemnify, and defend the Agency, the Engineer, the Agency Representative and each of their officers, employees, and agents against any claim or liability arising from or based on the violation of any such law, ordinance, regulation, order, or decree, whether by itself, its employees, its agents, or its subcontractors. To the maximum extent permitted by law, all obligations of the Contractor stated in 7-3.2 shall apply in the case of any such claim or liability.

As a material part of this Contract, Contractor's and subcontractors' owners and employees agree to be bound by and adhere to the Federal Department of Transportation (DOT) regulations found in Title 49 CFR 382. All Contractor's and subcontractors' owners and employees who are required to hold commercial licenses and/or who are in safety sensitive positions shall be subject to the provisions of the DOT regulations.

ADD:

7-14.1 Property Rights in Materials. Nothing in the Contract shall be construed as vesting in the Contractor any right of property in the materials used after they have been attached or affixed to the Work or the soil, or after payment has been made for materials delivered to the site of the Work, or stored subject to or under the control of the Agency.

ADD:

7-14.2 Warranty of Title. No materials, supplies or equipment for the Work under this Contract shall be purchased subject to any chattel mortgage or under a conditional sale contract or other agreement by which an interest therein or any part thereof is retained by the seller or supplier. The Contractor warrants clear and good title to all materials, supplies, and equipment installed and incorporated in the Work and agrees upon completion of all Work to deliver the premises together with all improvements and appurtenances constructed or placed thereon by him to the Agency free from any claims, liens, encumbrances, or charges and further agrees that neither he nor any persons, firm, or corporation furnishing any material or labor for any work covered by the Contract shall have any right to a lien upon the premises or any improvement or appurtenance thereon, provided that this shall not preclude the Contractor from installing metering devices or other equipment of utility companies or of municipalities, the title of which is commonly retained by the utility company or the municipality. Nothing contained in this article, however, shall defeat or impair the right of such persons furnishing materials or labor under any bond given by the Contractor for their protection, or any right under any law permitting such persons to look to funds due the Contractor in the hands of the Agency.

ADD:

7-15 CONTRACTOR’S RESPONSIBILITY FOR THE WORK. Until Acceptance of the Work, the Contractor shall have the responsibility, charge and care of the Work and of the materials to be used therein (including materials for which it has received partial payment or materials which have been furnished by the Agency) and shall bear the risk of injury, loss or damage to any part thereof by the action of the elements or from any other cause, whether arising from the execution or from the non-execution of the Work.

The Contractor shall rebuild, repair, restore, and make good all injuries, losses, or damages to any portion of the work or the material occasioned by any cause before its completion and acceptance and shall bear the expense thereof. Where necessary to protect the work or materials from damage, the Contractor shall at his expense provide suitable drainage and erect such temporary structures as are necessary to protect the work or materials from damage. The suspension of the work from any cause whatever shall not relieve the Contractor of his responsibility for the work and materials as herein specified. If ordered by the Agency Representative, the Contractor shall at his expense properly store materials which have been partially paid for by the Agency or which have been furnished by the Agency. Such storage by the Contractor shall be on behalf of the Agency, the Agency shall at all times be entitled to the possession of such materials, and the Contractor shall promptly return the same to the site of the work when requested. The Contractor shall not dispose of any of the materials so stored, except on written authorization from the Agency.

In an emergency affecting the safety of life or property, including adjoining property, the Contractor, without special instructions or authorizations, is authorized to act at his discretion to prevent such threatened loss or injury, and he shall so act as though instructed to do so by the Agency.

ADD:

7-16 PROJECT RECORD DOCUMENTS.

7-16.1 Maintenance of Documents and Samples. The Contractor shall maintain one record copy of:

a) Contract Drawings
b) Specifications
c) Addenda
d) Change Orders and Other Modifications to the Contract
e) Reviewed Shop Drawings, Product Data, and Samples
f) Field Test Records
g) Construction Schedules
h) Manufacturer's Certificates

The Contractor shall maintain documents in clean, dry, legible condition and not used for construction purposes.

The Contractor shall keep Record Documents and samples accessible for inspection by Agency Representative. Applications for partial payment will not be approved if the Record Documents are not kept current. The Agency Representative must so verify prior to submittal of each Application for Payment.

ADD:

7-16.2 Recording. The Contractor shall record changes to the plans and discoveries of buried objects at the Work on Record Documents with red ball-point pen, label each Document “PROJECT RECORD” in large printed letters, record information concurrently with construction progress, not conceal any work until required information is recorded and

legibly mark each item on Contract Drawings and Shop Drawings to record actual construction, including:

a) Measured depths of elements in relation to fixed datum point
b) Measured horizontal and vertical locations of underground utilities and appurtenances, referenced to permanent surface improvements
c) Measured locations of internal utilities and appurtenances concealed in construction, referenced to visible and accessible features of construction
d) Field changes of dimension and detail
e) Changes made by Contract modifications
f) Details not on original Contract Drawings
g) Previously unknown buried objects

The Contractor shall legibly mark each item to record actual construction, including:

a) Manufacturer, Trade Name, and Catalog Number of each product actually installed, particularly optional items and substitute items
b) Changes made by Addenda or modifications

The Contractor shall maintain other documents per requirements of individual specifications sections.

7-16.3 Submittals. At Contract closeout the Contractor shall deliver Record Documents and samples as specified in 7-16.1. Request for final payment will not be approved until all Record Documents have been delivered.

The submittals shall be transmitted with cover letter with signature of Contractor or authorized representative, listing date, project title and number and number and title of each Record document.

SECTION 8 - FACILITIES FOR AGENCY PERSONNEL

DELETE in its entirety, not part of this project.

SECTION 9 - MEASUREMENT AND PAYMENT

REVISE as follows:

9-2 LUMP SUM WORK. *DELETE 2nd paragraph in its entirety.*

ADD:

9-2.1 Detailed Schedule. The Contractor shall furnish the Agency a cost break-down for all contract lump sum items. Cost break-down tables shall be submitted to the Agency Representative for acceptance within fifteen (15) days after award of Contract. Cost break-down tables will be approved, in writing, by the Agency Representative before any partial payment will be made for the applicable items involved.

The Contractor shall determine the quantities required to complete the Work shown on the Plans. The quantities and their values shall be included in the cost break-downs submitted to the Agency Representative for approval. The Contractor shall be responsible for the accuracy of the quantities and values used in the cost break-downs submitted for approval.

The sum of the amounts for the line items of work listed in each cost break-down table for each lump sum item shall be equal to the contract lump sum price bid. Overhead and profit shall be included in each individual line item of work listed in a cost break-down table.

No adjustment in compensation will be made in the contract lump sum prices due to differences between the quantities shown in the cost break-downs furnished by the Contractor and the quantities required to complete the Work as shown on the plans and as specified in the Special Provisions.

Individual line item values in the approved cost break-down tables will be used to determine partial payments during the progress of the Work and as the basis for calculating an adjustment in compensation for the contract lump sum items due to changes in line items of work ordered by the Engineer. When the total of ordered changes to line items of work increases or decreases the lump sum price bid by more than twenty-five percent , the adjustment in compensation for the applicable lump sum item will be determined in the same manner specified for increases and decreases in the total pay quantity of an item of work in Section 3 of the Standard Specifications and the Special Provisions.

9-3 PAYMENT.

9-3.1 General. *ADD the following at the end of the 2nd paragraph:*
The cost of items of work not listed in the “Schedule of Work and Prices” in the Bidders Proposal shall be considered to be included in the cost of the other work that is listed and no additional compensation will be allowed therefor.

When an item of work is designated as (F) or (S-F) in the “Schedule of Work and Prices”, the estimated quantity for that item of work shall be the final pay quantity, unless the dimensions of any portion of that item are revised by the Engineer, or the item or any portion of the item is eliminated. If the dimensions of any portion of the item are revised, and the revisions result in an increase or decrease in the estimated quantity

of that item of work, the final pay quantity for the item will be revised in the amount represented by the changes in the dimensions. If a final pay item is eliminated, the estimated quantity for the item will be eliminated. If a portion of a final pay item is eliminated, the final pay quantity will be revised in the amount represented by the eliminated portion of the item of work.

The estimated quantity for each item of work designated as (F) or (S-F) in the "Schedule of Work and Prices" shall be considered as approximate only, and no guarantee is made that the quantity which can be determined by computations, based on the details and dimensions shown on the Plans, will equal the estimated quantity. No allowance will be made in the event that the quantity based on computations does not equal the estimated quantity.

In case of discrepancy between the quantity shown in the "Schedule of Work and Prices" for a final pay item and the quantity or summation of quantities for the same item shown on the Plans, payment will be based on the quantity shown in the "Schedule of Work and Prices."

ADD:

9-3.1.1 Application for Payment. The Contractor shall use the City of Irvine Certified Invoice for Progress Payment Form; furnished to the Contractor.

The Contractor shall type the required information, follow the schedule of work and bid prices in accepted Bidder's proposal for unit price contract, execute certification by signature of an authorized officer, use data on accepted Schedule of Values for lump sum work, provide dollar value in each column for each line item for portion of work performed, list each authorized Change Order number and dollar amount and adjusted Contract Price, and obtain the Agency Representative concurrence on invoiced amounts prior to submittal for payment.

The Contractor shall follow the following submittal procedures: Submit original and one (1) copy of each Application for Payment at times stipulated in 9-3.2; submit under transmittal letter; include submittal date, project title and number and submit updated Progress Schedule with Application for verification of progress. Incomplete application for payment will be rejected.

When Agency Representative requires substantiating information, the Contractor shall submit data justifying line item amounts in question.

The Contractor shall provide one copy of data with cover letter for each copy of submittal, show application number and date, and line item by number and description.

9-3.2 Partial and Final Payment. *DELETE in their entirety 1st and 2nd paragraphs and SUBSTITUTE with the following:*
Payment for services will be made monthly on approved invoices, with payment terms of net thirty (30) days upon receipt of invoice. The Contractor shall submit invoices within fifteen (15) days from the end of each month on the form (Certified Invoice For Progress Payment) provided by the Agency. This estimate shall include the value of the total amount of the work completed by the Contractor during the calendar month previous to that in which the estimate is made.

When the Work has been completed to the satisfaction of the Engineer, the Contractor shall make a final estimate of the total amount of work done thereunder and the amount to be paid therefor under the terms of the Contract and shall certify to the Agency the amount of the final estimate. If the Agency finds the Work has been completed according to the Contract, the Agency will accept the work, will file a notice of completion, and will pay the entire sum so found to be due after deducting therefrom all previous payments and all amounts to be retained under the provisions of the Contract and upon receiving signed unconditional releases upon final payment from all subcontractors and material suppliers. All prior progress estimates and payments shall be subject to correction in the final estimate and payment. The project retention release will not be due and payable until the expiration of the 60 days from the date of filing a notice of completion of the Work by the Agency.

Interest penalties are not required on payment delays due to disagreement between the Agency and Contractor over the payment amount or other issues involving contract compliance.

It is mutually agreed between the parties to the Contract that no certificate given or payment made under the Contract shall be conclusive evidence of performance of the Contract and no payment shall be construed to be an acceptance of any defective work or improper materials.

The Contractor further agrees that the payment and acceptance of the final amount due under the Contract shall release the Agency, the Agency Representative, the Engineer, and their consultants from any and all claims or liability arising out of the Contract.

ADD:

9-3.2.1 Agency's Right to Withhold Certain Amounts and Make Application Thereof. In addition to the amount which the Agency may retain under the above article on progress payments, the Agency may withhold a sufficient amount or amounts from any payment otherwise due to the Contractor as in the Agency's judgment may be necessary to cover:

a) Payments which may be past due and payable for just claims against the Contractor or any subcontractors for labor or materials furnished in or about the performance of the Work on the project under this Contract.

b) Estimated or actual costs for correcting defective work not remedied.

c) Amounts claimed by the Agency as forfeiture due to delay or other offsets.

d) Any other amounts the Agency is authorized to withhold under the Contract Documents or under applicable law.

The Agency may apply such withheld amount or amounts to the payment of such claims in its discretion. In so doing, the Agency shall be deemed the agent of the Contractor and any payments so made by the Agency shall be considered as a payment made under the Contract by the Agency to the Contractor, and the Agency shall not be liable to the

Contractor for such payment made in good faith. Such payments may be made without prior judicial determination of the claim or claims. The Agency will render to the Contractor a prior account of such funds disbursed in behalf of the Contractor.

ADD:

9-3.2.2 Substitution of Securities. Upon the Contractor's request, the Agency will make payment of funds withheld from progress payments pursuant to the requirements of Public Contract Code Section 22300 if the Contractor deposits in escrow with a bank acceptable to the Agency, securities eligible for the investment of State funds under Government Code Section 16430 or bank or savings and loan certificates of deposit, upon the following conditions:

a) The Contractor shall bear the expense of the Agency and the Escrow Agent in connection with the escrow deposit made.

b) Securities or certificates of deposit to be placed in escrow shall be of a value at least equivalent to the amounts of retention to be paid to the Contractor pursuant to this section.

c) The Contractor shall enter into an escrow agreement satisfactory to the Agency, such agreement shall include provisions governing inter alia;

    1) The amount of securities to be deposited,

    2) The providing of powers of attorney or other documents necessary for the transfer of the securities to be deposited,

    3) Conversion to cash to provide funds to meet defaults by the Contractor including, but not limited to, termination of the Contractor's control over the Work, stop notices filed pursuant to law, assessment of liquidated damages or other amounts to be kept or retained under the provisions of the Contract,

    4) Decrease in value of securities on deposit, and

    5) The termination of the escrow upon completion of the Contract.

d) The Contractor shall obtain the written consent of the surety of such agreement.

9-3.4 Mobilization *DELETE in its entirety and SUBSTITUTE with the following:*

9-3.4.1 General. Mobilization shall consist of preparatory work and operations including, but not limited to, those necessary for the movement of personnel, equipment, materials and incidentals to the project site necessary for work on the project and for all other work and operations which must be performed or costs incurred including bonds, insurance, and financing prior to beginning work on the various contract items on the project site.

Mobilization shall also include the cost, time and labor to move the necessary construction equipment to and from the job site, supervisory time on the job by the Contractor's personnel to keep the construction site in a safe condition and all other related work as required for all non-working days during the course of construction. Contractor is responsible for securing an adequate storage site for equipment and materials.

The Contractor shall have on the work site at all times, as its agent, a competent English speaking superintendent capable of reading and thoroughly understanding the plans, specifications, other related documents, and directions from Agency's Representative.

9-3.4.2 Measurement and Payment. Mobilization is eligible for partial payment if the Contract includes a bid item for mobilization. Payment for **Mobilization** shall be per the **Lump-Sum (LS)** price bid and shall include obtaining and paying for all permits and business licenses as required from the City of Irvine, State of California and other agencies. The City of Irvine will waive its permit fee. The Contractor shall comply with the requirements specified by each license or permit. No payment for Mobilization will be made until the Contractor's Construction Schedule has been submitted, reviewed and accepted and is current. Progress payments for this item shall be paid in accordance with the percentage completion of the project, and shall include the costs of such mobilization and administration for the entire contract period including construction schedule as specified in these specifications. Payments shall be made upon the basis of the following:

a) When the monthly partial payment estimate of the amount earned, not including the amount earned for mobilization, is 5 percent or more of the original contract amount, 50 percent of the contract item price for mobilization or 5 percent of the original contract amount, whichever is the lesser, will be included in the estimate for payment.

b) When the monthly partial payment estimate of the amount earned, not including the amount earned for mobilization, is 10 percent or more of the original contract amount, the total amount earned for mobilization shall be 75 percent of the contract item price for mobilization or 7.5 percent of the original contract amount, whichever is the lesser, and that amount will be included in the estimate for payment.

c) When the monthly partial payment estimate of the amount earned, not including the amount earned for mobilization, is 20 percent or more of the original contract amount, the total amount earned for mobilization shall be 95 percent of the contract item price for mobilization or 9.5 percent of the original contract amount, whichever is the lesser, and that amount will be included in the estimate for payment.

d) When the monthly partial payment estimate of the amount earned, not including the amount earned for mobilization, is 50 percent or more of the original contract amount, the total amount earned for mobilization shall be 100 percent of the contract item price for mobilization or 10 percent of the original contract amount, whichever is the lesser, and that amount will be included in the estimate for payment.

e) Upon completion of all work on the project, payment of any amount bid for mobilization in excess of 10 percent of the original contract amount shall be paid.

ADD:

9-4 RESOLUTION OF CONSTRUCTION CLAIMS. Any claims submitted by the Contractor against the Agency for Work covered by this Contract in the amount of $375,000 or less shall be subject to the procedures specified in Public Contract Code § 20104, *et seq*.

ADD:

9-5 PROMPT PAYMENT. In addition to requirements specified elsewhere, the following shall also apply: Subsection (f) of Section 20104.50 of the Public Contract Code, Article 1.7 of Part 3 of Division 2.

ARTICLE 1.7

§ 20104.50 Timely progress payments; legislative intent; interest; payment requests:

a) It is the intent of the Legislature in enacting this section to require all local governments to pay their Contractors on time so that these Contractors can meet their obligations. In requiring prompt payment by all local governments, the Legislature hereby finds and declares that the prompt payment of outstanding receipts is not merely a municipal affair, but is instead a matter of statewide concern.

b) It is the intent of the Legislature in enacting this article to fully occupy the field of public policy relating to the prompt payment of local governments' outstanding receipts. The Legislature finds and declares that all government officials, including those in local government, must set a standard of prompt payment that any business in the private sector which may contract for services should look towards for guidance.

c) Any local agency which fails to make any progress payment within 30 days after receipt of an undisputed and properly submitted payment request from a contractor on a construction contract shall pay interest to the contractor equivalent to the legal rate set forth in subdivision (a) of Section 685.010 of the Code of Civil Procedure.

d) Upon receipt of a payment request, each local agency shall act in accordance with both of the following:

    1) Each payment request shall be reviewed by the local agency as soon as practicable after receipt for the purpose of determining that the payment request is a proper payment request.

    2) Any payment request determined not to be a proper payment request suitable for payment shall be returned to the Contractor as soon as practicable, but not later than seven days, after receipt. A request returned pursuant to this paragraph shall be accompanied by a document setting forth in writing the reasons why the payment request in not proper.

e) The number of days available to a local agency to make a payment without incurring interest pursuant to this section shall be reduced by the number of days by which a local agency exceeds the seven-day return requirement set forth in paragraph (2) of subsection (c).

f) For purposes of this article:

    1) A "local agency" includes, but is not limited to, a city, including a charter city, a county, and a city and county, and is any public entity subject to this part.

    2) A "progress payment" includes all payments due Contractors, except that portion of the final payment designated by the Contract as retention earnings.

    3) A payment request shall be considered properly executed if funds are available for payment for the payment request, and payment is not delayed due to an audit inquiry by the financial officer of the local agency.

g) Each local agency shall require that this article, or a summary thereof, be set forth in the terms of any contract subject to this article.

PART 2 - CONSTRUCTION MATERIALS

Materials not specifically mentioned in the sections that follow should comply with the appropriate section within SSPWC 200.

SECTION 210 – PAINT AND PROTECTIVE COATINGS

REVISE as follows:

210-1.4 Paint Materials. *ADD the following:*

Surface to be Painted	Finished Surface Product and Color
Shade Structure Roof Panels	Dunn Edwards 14-305-100907/Green Weiser PTG Syn-Lustro
Shade Structure Columns and Frame Structure	Dunn Edwards Syn-Lustro 10A Alkyd Gloss Enamel Pure White
Rose Garden Block Walls	Dunn Edwards EVSH30-2 Evershield Exterior Eggshell Paint Swiss Coffee

210-1.5 Paint Systems. *ADD the following to Table 210-1.5:*

Surface to be Painted	Pre-Treatment/ Surface Preparation	Primer	Finish Coats
Shade Structure Roof Panels	Power Tool Cleaning per Section 310-2.4 and currently accepted typical construction practices	Rust-Oleum 03550 Zinsser High Hide Cover Stain Primer	Dunn Edwards 14-305-100907/Green Weiser PTG Syn-Lustro
Shade Structure Columns and Frame Structure	Power Tool Cleaning per Section 310-2.4 and currently accepted typical construction practices	Rust-Oleum 03550 Zinsser High Hide Cover Stain Primer	Dunn Edwards Syn-Lustro 10A Alkyd Gloss Enamel
Rose Garden Block Walls	Commercial Cleaning per Section 310-2.5.1 and currently accepted typical construction practices	Dunn Edwards ESPR00-1 Eff-Stop Premium	Dunn Edwards EVSH30-2 Evershield Exterior Eggshell Paint

ADD:

SECTION 218 – PROJECT FURNISHINGS

218-1 PATIO HEATERS

218-1.1 General Requirements. The new patio gas heaters shall be in accordance with, or approved equal:

Product: Portable, commercial grade outdoor propane heater with 20lb propane tank

Available at: Patioproductsusa.com
Style: BROMIC Heating, Tungsten Smart Heat
Contact Chris Raulinaitis
(916) 836-3782
Chris.raulinaitis@patioproductsusa.com
Quoted price: $1,374.16+Tax Each

Contractor shall also provide new filled 20lb propane tanks.

218-2 PATIO TABLE, CHAIRS & UMBRELLA SET

218-2.1 General Requirements. The new patio table, chairs and umbrella set shall be in accordance with, or approved equal:

Tables, Umbrellas, 4 Chair Set, Lounge Chairs and Sofa (with cushions)

Available at: Outdoor Design Studio
951-600-4888
jen@outdoordesignstudio.com
Newport by SOL DURA
See attached quote for quantity and pricing.

218-3 PATIO BENCH

218-3.1 General Requirements. The new patio bench shall be in accordance with, or approved equal:

Product: 8’ long fixed position bench

Available at: Du Mor Site Furnishings
800-598-4018
www.DuMor.com
Bench 88
Style: S-2 Surface Mount
Recycled Plastic – Cedar color
2 arm rests – Textured Grey color

PART 3 - CONSTRUCTION METHODS

Construction methods not specifically mentioned in the sections that follow should comply with the appropriate section within SSPWC 300.

SECTION 300 – EARTHWORK

300-1.3.2 (c) Requirements. Concrete Curb, Walk, Gutters, Cross Gutters, Driveway, and Alley Intersections. *MODIFY to ADD the following:*
Remove Concrete Paving. Existing concrete paving shall be sawcut and removed at the locations and to the dimensions shown on the plans and per section 300-1 of the Standard Specifications.

Any damage caused by the Contractor to improvements to be protected in place shall be repaired or replaced to original condition at no cost to the City.

The Contractor shall protect all existing drainage pipes, structures, and other existing improvements, not designated to be removed, in-place and intact.

At all times the Contractor shall provide a safe and walkable temporary walkways with a minimum width of 36” clearance adjoining excavated areas for wheelchair and pedestrians to travel around construction areas. If such clearance is not possible, barricading, plating, filling, or other measures shall be required.

Remove Concrete Curb. Existing concrete curb shall be sawcut and removed at the locations and to the dimensions shown on the plans and per section 300-1 of the Standard Specifications.

The removal of curb shall not result in any damage to adjoining curb or other improvements unless indicated on the plans. Any damage to adjacent improvements will be repaired at the Contractor’s expense.

300-1.4 Payment. *MODIFY to ADD the following:*
Remove Concrete Paving. Payment for the removing concrete paving per the preceding requirements shall be per the unit price bid per square foot and shall be considered full compensation for furnishing all labor, materials, tools, equipment and other related work as required for completing the work, including removal and proper disposal of existing improvements. No additional compensation shall be allowed therefor.

Remove Concrete Curb. Payment for all the preceding requirements shall be per the unit price bid per linear foot and shall be considered full compensation for furnishing all labor, materials, tools, equipment and other related work as required for completing the work, including removal and disposal of existing improvements. No additional compensation shall be allowed therefor.

REVISE as follows:

300-4.1 General. *MODIFY to ADD the following:*

Fill should consist of approved earth materials free of trash debris, roots, vegetation, or other deleterious material.

300-4.2 Preparation of Placement Areas.
DELETE the last part of the 2nd sentence and SUBSTITUTE with the following:
. . . to a relative compaction of at least 90 percent.

SECTION 303 – CONCRETE AND MASONRY CONSTRUCTION

303-4 MASONRY PREPARATION
303-4.1 Concrete Block Masonry.

ADD:
Remove CMU Wing Walls, Remove Top 2 Blocks of CMU Wall, Remove Concrete Counter Slab, Repair CMU Wall (2 Blocks). The Contractor shall follow the plans on these items being careful not to damage the remainder of the wall or surrounding and adjacent improvements. Any damage to portions of the wall to remain in place shall be kept free of damage. Should the Contractor damage the portions of existing wall to remain in place, then Contractor shall reconstruct that portion in a similar manner to match the surrounding wall and top layers including block, rebar, mortar and other materials as required. No additional payment will be made for any wall reconstructed due to Contractor carelessness.

Drainage Outlet. During the coring of the existing wall for the purpose of subdrainage, care shall also be taken to limit the size of the core to the size of the pipe being installed. Should breakage occur during the coring or a larger area be cored than the size of the pipe, then the Contractor shall repair the block wall in a manner satisfactory to the Engineer and at no additional payment.

SECTION 303-5 – CONCRETE CURBS, WALKS GUTTERS, CROSS GUTTERS, ALLEY INTERSECTIONS, ACCESS RAMPS, AND DRIVEWAYS

ADD:
The concrete class shall be 560-C-3250. The 2 inches of crushed miscellaneous base (CMB) required under the concrete hardscape shall be compacted to 95 percent relative compaction.

SECTION 306 – OPEN TRENCH CONDUIT CONSTRUCTION

ADD:
306-14 MEASUREMENT

306-14.8 Drainage Inlet. Drainage inlets will be measured as shown in the Bid.

306-14.9 Drainage Outlet. Drainage outlets will be measured as shown in the Bid.

306-15 PAYMENT
306-15.10 Drainage Inlet. Payment for drainage inlets will be made at the Contract Unit Price for each as shown on the Plan, complete in-place. The Contract Unit Price

shall include, but not limited to, furnishing all materials, tools, equipment, labor, and all other work required to construct the inlet complete in-place and no additional compensation will be allowed therefor.

306-14.9 Drainage Outlet. Payment for drainage outlets will be made at the Contract Unit Price for each as shown on the Plan, complete in-place. The Contract Unit Price shall include, but not limited to, furnishing all materials, tools, equipment, labor, concrete splash block, fabric, 4"-6" riprap, wall coring, and all other work required to construct the outlet complete in-place and no additional compensation will be allowed therefor.

SECTION 310 – PAINTING

ADD:
310-5.6 Painting Shade Structure
310-5.6.1 Paint. Unless otherwise specified, required painting shall consist of a primer coat and two finish costs, or as specified by the Engineer.

310-5.6.2 Preparation of Surfaces. Surfaces designated to be painted shall be cleaned in accordance with the products identified in Section 210-1.5 above, SSPC 310, and currently accepted construction practices. All surfaces must be cured, clean, dry, and free from dirt, dust, rust, stains, grease, oil, mildew, wax, efflorescence, bond-breakers, and other contaminants. Remove all loose, peeling, or chalky paint by sanding, scraping, or other appropriate methods. Repair all cracks, holes, and other surface imperfections with a suitable patching material. Repaired surfaces should then be sanded smooth and dusted clean. Glossy surfaces should be dulled to provide a roughened surface for good adhesion.

310-5.6.3 Application of Paint. Surfaces designated to be painted shall have paint applied in conformance with SSPC 310-5. Skips, gaps, thin areas, or other deficiencies in any one coat of paint shall be corrected before the succeeding coat is applied.

The surface of any paint coat being covered shall be free of deleterious material before additional paint is applied.

Paint shall be applied in accordance with manufacturer's recommendations.

310-5.6.4 Payment. Payment shall be made at the contract unit price per lump sum for shade structure painting and shall be considered full compensation for furnishing labor, materials, tools, equipment, and incidentals, including preparing surfaces, applying base coats, protection of existing improvements, and painting the structure complete in place, as shown on the plans, as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer, and no additional compensation will be allowed therefor.

310-5.7 Painting Rose Garden Block Wall
310-5.7.1 Paint. Unless otherwise specified, required painting shall consist of a sealer, a primer coat and two finish costs.

310-5.7.2 Preparation of Surfaces. Surfaces designated to be painted shall be cleaned in accordance with 210-1.5, SSPC 310, and currently accepted construction

practices. All surfaces must be cured, clean, dry, and free from dirt, dust, rust, stains, grease, oil, mildew, wax, efflorescence, bond-breakers, and other contaminants. Remove with one of the chemical cleaning methods identified by SSPC-SP1. Acid etch with Rust-Oleum 108 Cleaning & Etching Solution (ASTM D 4260-83). Surfaces with mold and mildewed areas should be cleaned with an alkaline cleaning solution and rinsed with water. If any mold or mildew remains on the surface, clean further with one quart of household bleach added to a gallon of water. Rinse with clean water. Severely mildewed areas should be cleaned with a chlorinated cleansing powder and thoroughly rinsed with water.

Remove all loose, peeling, or chalky paint by sanding, scraping, or other appropriate methods. Repair all cracks, holes, and other surface imperfections with a suitable patching material. Repaired surfaces should then be sanded smooth and dusted clean. Glossy surfaces should be dulled to provide a roughened surface for good adhesion. Commercial detergents and abrasive blasting may be necessary to prepare the surface. Fill bug holes, air pockets, and other voids with a cement patching compound. Remove all loose mortar and foreign material from block. Surface must be free of laitance, concrete dust, dirt, form release agents, moisture curing membranes, loose cement, and hardeners.

310-5.7.3 Application of Paint. Skips, gaps, thin areas, or other deficiencies in any one coat of paint shall be corrected before the succeeding coat is applied.

The surface of any paint coat being covered shall be free of deleterious material before additional paint is applied.

Paint shall be applied in accordance with manufacturer's recommendations.

310-5.7.4 Payment. Payment shall be made at the contract unit price per lump sum for rose garden block wall painting and shall be considered full compensation for furnishing labor, materials, tools, equipment, and incidentals, including preparing surfaces, applying base coats, protection of existing improvements, and painting the wall complete in place, as shown on the plans, as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer, and no additional compensation will be allowed therefor.

ADD:

SECTION 315 – PROJECT FURNISHINGS AND LIGHTING

315-1 PATIO HEATERS

315-1.1 General Requirements. The Contractor shall furnish, deliver, assemble and test each heater. The Contractor will furnish a new and filled propane tank as part of the patio heater unit.

Any defects will result in the unit being returned and replaced with a completely new unit. All product information and warranty information will be provided to the City at the conclusion of the project.

315-1.2 Payment. Payment shall be made at the contract unit price per each heater including filled propane tank and shall be considered full compensation for furnishing

labor, materials, delivery, tools, equipment, testing, installing, and incidentals, as shown on the plans, as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer, and no additional compensation will be allowed therefor.

315-2 PATIO TABLE, CHAIRS, UMBRELLA AND UMBRELLA BASE SET

315-2.1 General Requirements. The Contractor shall furnish, deliver, assemble and test each table, chair, umbrella and umbrella base set.

Any defects will result in the unit being returned and replaced with a completely new unit. All product information and warranty information will be provided to the City at the conclusion of the project.

315-2.2 Payment. Payment shall be made at the contract unit price per each patio table, 4 chairs, umbrella and umbrella base set and shall be considered full compensation for furnishing labor, materials, delivering, tools, equipment, testing, installing and incidentals, as shown on the plans, as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer, and no additional compensation will be allowed therefor.

315-3 PATIO BENCH

315-3.1 General Requirements. The Contractor shall furnish, deliver, assemble and securely install each bench.

Any defects will result in the unit being returned and replaced with a completely new unit. All product information and warranty information will be provided to the City at the conclusion of the project.

315-3.2 Payment. Payment shall be made at the contract unit price per each bench and shall be considered full compensation for furnishing labor, materials, delivering, tools, equipment, and incidentals, as shown on the plans to assemble and securely install in place, as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer, and no additional compensation will be allowed therefor.

315-4 PATIO LIGHTING

315-4.1 Remove and Replace Canopy Security Lighting. The Contractor shall remove the existing Lithonia HPS lighting and shall furnish, deliver, assemble and securely install each with Enertron 300LED8X6-35-S to replace existing.

Any defects will result in the unit being returned and replaced with a completely new unit. All product information and warranty information will be provided to the City at the conclusion of the project.

315-4.1.1 Payment. Payment shall be made at the contract unit price per each **Remove and Replace Canopy Security Lighting** and shall be considered full compensation for furnishing labor, materials, delivery, tools, equipment, and incidentals, as shown on the plans to assemble and securely install in place, as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer, and no additional compensation will be allowed therefor.

315-4.2 Remove and Replace Flood Lighting. The Contractor shall remove the existing BEGA lighting and shall furnish, deliver, assemble and securely install each with Enertron 620LED8X6-35-GS to replace existing.

Any defects will result in the unit being returned and replaced with a completely new unit. All product information and warranty information will be provided to the City at the conclusion of the project.

315-4.2.1 Payment. Payment shall be made at the contract unit price per each **Remove and Replace Flood Lighting** and shall be considered full compensation for furnishing labor, materials, delivery, tools, equipment, and incidentals, as shown on the plans to assemble and securely install in place, as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer, and no additional compensation will be allowed therefor.

315-2 Lounge Chairs and Sofa Set

315-2.1 General Requirements. The Contractor shall furnish, deliver, assemble and test each lounge chairs and sofa set.

Any defects will result in the unit being returned and replaced with a completely new unit. All product information and warranty information will be provided to the City at the conclusion of the project.

315-2.2 Payment. Payment shall be made at the contract unit price per each Lounge Chairs and Sofa Set and shall be considered full compensation for furnishing labor, materials, delivering, tools, equipment, testing, installing and incidentals, as shown on the plans, as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer, and no additional compensation will be allowed therefor.

PART 6 – TEMPORARY TRAFFIC CONTROL

SECTION 600 – ACCESS

ADD:

600-4 CONSTRUCTION PARKING CONTROL. The Contractor shall control vehicular parking to preclude interference with public traffic or parking, access by emergency vehicles, owners operations, or construction operations, and monitor parking or construction personnel private vehicles by maintaining free vehicular access to and through parking areas and prohibit parking on or adjacent to access roads, or in non-designated areas.

ADD:

600-5 SITE ACCESS. When entering or leaving roadways carrying public traffic, contractors' equipment, whether empty or loaded, shall in all cases yield to public traffic.

The Contractor shall comply with the following City of Irvine truck route restrictions:

DESIGNATED TRUCK ROUTES - ORD. NO. 92-09

Name of Street	Portion Designated
a) Alton Parkway	Sand Canyon Avenue to Irvine Boulevard
b) Bake Parkway	Rockfield Boulevard to easterly City limit
c) Barranca Parkway	Red Hill Avenue to Jamboree Road
d) Campus Drive	Jamboree Road to MacArthur Boulevard
e) Irvine Boulevard	Culver Drive to Jeffrey Road
f) Irvine Boulevard	Alton Parkway to easterly City limit
g) Jamboree Road	Warner Avenue to MacArthur Boulevard
h) Laguna Canyon Road	Alton Parkway to State Route 133
i) Laguna Freeway (133)	
j) MacArthur Boulevard	Daimler Street. to Campus Drive
k) MacArthur Boulevard	Jamboree Road to Ford Road
l) Main Street	Jamboree Road to westerly City limit
m) Red Hill Avenue	Barranca Parkway to San Diego Fwy. (I-405)
n) Rockfield Boulevard	Bake Parkway to easterly City limit
o) Sand Canyon Avenue	San Diego Fwy. (I-405) to northerly City limit
p) San Diego Fwy. (I-405)	
q) Santa Ana Fwy. (I-5)	

RESTRICTED ROUTES, SEVEN TON (14,000 POUNDS) GROSS WEIGHT - ORD. NOS. 92-09 AND 98-16

Name of Street	Portion Designated

a)	Campus Drive	Jamboree Road to University Drive
b)	Culver Drive	Santa Ana Fwy. (I-5) to northerly City limit
c)	Jeffrey Road	Irvine Center Drive to Santa Ana Fwy. (I-5)
d)	Jeronimo Road	Goodyear to 400 feet westerly of Bake Pkwy.
e)	Toledo Way	Goodyear to 400 feet westerly of Bake Pkwy.
f)	Trabuco Road	400 feet easterly of the northbound Santa Ana Freeway off-ramp near Culver Drive and the easterly City limits
g)	Walnut Avenue	Harvard Avenue to Culver Drive
h)	Harvard Avenue	Walnut Avenue to Irvine Center Drive

THREE TON (6,000 POUNDS) GROSS WEIGHT - ORD. NO. 92-09

	Name of Street	Portion Designated
a)	Bonita Canyon Road/Shady Canyon	Newport Coast Drive to Sunnyhill
b)	Culver Drive	Michelson Drive to Bonita Canyon Road
c)	University Drive	Ridgeline Drive to Harvard Avenue

PART 8 - LANDSCAPE AND IRRIGATION MATERIALS

SECTION 800 – MATERIALS

800-1 LANDSCAPE MATERIALS.

800-1.1 Topsoil.

800-1.1.1 General. *ADD the following after the last paragraph:*

The Contractor is required to have soil testing by Wallace Laboratory, or approved equal, for Soils Recommendations and apply amendments after demolition.

Agronomic Soils Report

A. After completion of rough grading and prior to soil preparation, the Contractor shall provide the testing of planting soils and composted organic humus materials by an independent agronomic soils testing laboratory that is a member of the California Association of Agricultural Labs. Representative soil samples shall be taken in the field and a written report shall be prepared by the soil scientist that shall include recommendations for soil amendments, preplant fertilization, hydromulch slurry, and post-maintenance fertilization program.
B. Soil preparation specifications shall be prepared based on the test results and recommendations and must be approved by the Engineer and City Landscape Supervisor prior to soil preparation.
C. Soil tests shall be performed after soil preparation to confirm that soil preparation was performed in compliance with preplant soils report and specifications. Compliance of Contractor's work with soil preparation specifications shall be determined solely by the City.

800-1.2 Soil Fertilizing and Conditioning Materials

800-1.2.3 Commercial Fertilizer. *DELETE entire section and SUBSTITUTE with the following:*

Commercial fertilizer for back fill mix shall be free-flowing material delivered in unopened sacks. Material which becomes caked or otherwise damaged shall not be used. Exact composition and type of fertilizer to be determined by the agronomic soils test and will be supplied by the Contractor at no additional cost to the City. Organic/JTM Complete is the city's preferred fertilizer.

JTM fertilizer application applied at the following rates:

For pre-plant landscape application (Turf and Groundcover)	Apply 30 pounds per 1000 square feet		
Container Size	1 gallon	5 gallon	15 gallon
Application Rates	2 oz.	6 oz.	19 oz.

800-1.2.4 Organic Soil Amendment. *DELETE entire section and SUBSTITUTE*

with the following:
Organic Soil Amendment for back fill mix shall be Type 1. Nitrogen Stabilized Organic soil amendment shall be redwood sawdust free of shavings or particles of other woods such as fir or pine, supplied in bulk and 0.5% nitrogen stabilized by standard techniques. An acceptable substitute is nitrogen stabilized fir or cedar sawdust ground to 0-1/4" particle size and 1.0% nitrogen stabilized.

800-1.2.5 Mulch. *DELETE entire section and SUBSTITUTE with the following:*
Contractor shall install 2" thick layer of mulch in all planter areas. Install mulch per Irvine standard plan #601, 602, 606, and 607. Mulch to be installed after the planting of shrubs.

The Contractor shall maintain a 6" clear "no-mulch" zone around the base of each new and existing shrub and tree.

Mulch to be "Forest Floor" (0-2"), or approved equal:

A. Available from: Tierra Verde Industries, 7982 Irvine Boulevard, Irvine, CA 92618. Phone: 714-786-9558.

B. Product shall be woodchips ½" to 3" in length, meet State Standard Specifications Section 20-2.08 for Mulch, contain only toxic free mineral based colorant, and contain reused **City of Irvine Green Waste**.

C. The Contractor shall submit one sample of mulch materials for City approval.

D. The Engineer has the right to reject all samples and request additional samples until a suitable mulch material is approved.

800-1.4 Plants. *ADD the following:*
Contractor shall provide 1-year guarantee for all shrubs.

800-1.4.1 General. *DELETE entire subsection and SUBSTITUTE with the following:*
Shrubs and ground covers shall be grown by an established nursery having been in the business of growing shrubs and ground covers a minimum of five (5) years. At the option of the Engineer, plants shall be inspected and tagged at the nursery prior to shipment to the planting site. Shrubs shall be of the specified type and size, selected from high quality, well-shaped nursery stock. Plant names indicated or listed in the "Plant Legend" on the Plans, conform to the approved names given in "An Annotated Checklist of Woody Ornamental Plants in California, Oregon, and Washington, Manual 4091", published by the University of California (1979), and in accordance with American Nurseryman standards. Except for names not covered therein, the established custom of the nursery shall be followed. Condition of plants shall be in accordance with the California State Department of Agriculture's regulations for nursery inspections, rules, and grading and shall be symmetrical, typical for variety and species, sound, healthy, vigorous, free from plant disease, insect pests, or their eggs, and shall have healthy normal root systems, well filling their containers, but not to the point of being root bound.

Plants shall not be pruned prior to delivery, except as authorized by the City. The size

of the plants shall correspond with that normally expected for species and variety of commercially available nursery stock, or as specified on the Plans. The minimum acceptable size of all plants, measured before pruning with the branches in normal position, shall conform to the measurements, if any, specified on the Plans. Plants larger in size than specified may be used with the approval of the City, but the use of larger plants shall not serve as the basis for a change order. All plant material shall be subject to the inspection and acceptance of the City before planting. A representative number of plants as determined by the City may be inspected for size and condition of root growth, insects, injuries and defects. Plants not accepted are to be removed from the site immediately and replaced with suitable plants. The City reserves the right to reject entire lots of plants represented by defective samples. The contractor shall provide a plant material order invoice to the Engineer at the preconstruction meeting.

800-1.6 Miscellaneous Landscape Materials. *ADD the following Subsection:*
800-1.6.1 General.
Whenever a material or process is delineated or specified by patent, proprietary name or process, or manufacturer's name, such specifications are used for the purpose of facilitating the description of material or process desired. Approved equals are acceptable as approved by the engineer. Suppliers and manufacturer's directions, specifications and recommendations will be followed in all cases where the materials used furnish directions and cover points not delineated on the Plans or in the Specifications. The specifications only indicate the quality and workmanship to be performed rather than a detailed description of the performance of the work. In the event of any discrepancies between the Plans or Specifications, the final decision as to which will be followed shall be made by the Engineer. In the event the installation is contradictory to the direction of the Engineer, the installation shall be rectified by the Contractor at no additional cost to the City.

All workmanship and materials incorporated shall be the best available grade of their respective kind. Provide a sample of each material specified. Accepted samples may be used in the Work. Submit three (3) sets of a type written list of materials as specified to the Engineer within twenty-one (21) days after award of contract. This list shall give the name, material number, and the manufacturer, and shall be accompanied by cut sheets or reproductions of catalog pages for all of the material to be installed. Approval of substitutions will not relieve the Contractor from complying with the requirements of the Contract Documents, Plans and Specifications. Pay at Contractor's sole expense for all changes caused by approved substitution which affect other items of work.

800-1.6.2 Herbicide.
Organic herbicide for weed abatement shall be Suppress EC, or approved equal.

800-1.6.3 Pre-emergent.
Pre-emergent weed control material shall be organic.

800-2 IRRIGATION SYSTEM MATERIALS.
800-2.1.1 General. *ADD the follow in Subsection:*
All materials supplied for this project shall be new and free from any defects. All defective materials shall be replaced immediately at no additional cost to City. After award of contract and before any irrigation system materials are delivered to the job site, submit to the Engineer a complete list of all irrigation systems, materials, or processes proposed to be furnished and installed as part of this Contract. Show

manufacturer's name and catalog number for each item, furnish complete catalog cuts and technical data; furnish the manufacturer's recommendations as to the method of installation. No substitutions will be allowed without prior written acceptance by the Engineer. Manufacturer's warranties shall not relieve the Contractor of liability under the guarantee. Such warranties shall only supplement the guarantee. If the Contractor wishes to substitute any equipment or materials for equipment or materials listed on the irrigation Drawings and Specifications, it may do so by providing the following information to the Engineer for approval:

- Provide a written statement indicating the reason for making the substitution.
- Provide catalog cut sheets, technical data, and performance information for each substitute item.
- Provide in writing the difference in installed price if the item is accepted.

800-2.1.2 Description.
The contractor shall furnish all materials as specified in the plans and specifications and turn over a fully functional irrigation system complete with programming as coordinated by the City and accommodating for the new irrigation controllers within the new landscape.

Additionally, the contractor shall be responsible for repairing any landscape damaged or removed for the purpose of installation of the irrigation.

All irrigation materials provided and installed shall be specifically designed and manufactured for use within reclaimed irrigation systems.

800-2.1.3 Plastic Pipe for Use with Solvent Weld Socket or Threaded Fittings. *DELETE 2nd Paragraph and REPLACE with the following:*

All pressure supply lines downstream of the strainer assembly unit shall be Schedule 40 solvent weld PVC 1-1/2” or smaller and Class 315 solvent weld PVC for 2” or larger. Piping shall conform to ASTM 1785. All non-pressure lines downstream of the remote control valve shall be Schedule 40 solvent weld PVC conforming to ASTM D1785. Pipe shall be marked continuously with manufacturer's name, nominal pipe size, schedule or class, PVC type and grade, National Sanitation Foundation approval, Commercial Standards designation, and date of extrusion. All plastic pipe shall be extruded of an improved PVC virgin pipe compound in accordance with ASTM D2241 or ASTM D1785.

All solvent weld PVC fittings shall be standard weight Schedule 80 and shall be injection molded of an improved virgin PVC fitting compound. Slip PVC fittings shall be the "deep socket" bracketed type. Threaded plastic fittings shall be injection molded. All tees and ells shall be side gated.

All fittings shall conform to ASTM D2466. All threaded nipples shall be standard weight Schedule 80 with molded threads and shall conform to ASTM D1785.

All solvent cementing of plastic pipe and fittings shall be a two-step process, using primer and solvent cement applied per the manufacturer's recommendations. Cement shall be of a fluid consistency, not gel-like or ropy. Solvent cementing shall be in conformance with ASTM D2564 and ASTM D2855. When connection is plastic to metal, female adapters shall be hand tightened, plus one turn with a strap wrench. Joint

compound shall be non-lead base Teflon paste, tape, or approved equal.

800-2.2.4 Remote Control Valves. *DELETE entire section and SUBSTITUTE with the following:*

Automatic control valves shall be of the manufacturer, size, and type indicated on the Plans. Automatic control valves shall be electrically operated.

800-2.2.7 Valve Boxes. *DELETE entire subsection and SUBSTITUTE with the following:*
All valve boxes shall be green in color. Green lids with purple tags will be allowed. Contractor shall special order green valve box lids to conform to IRWD requirements and shall include the words “RECYCLED WATER – DO NOT DRINK” and shall have the international symbol conveying the same warning.

Valve boxes shall be fabricated from a durable, weather-resistant plastic material resistant to sunlight and chemical action of soils. The valve box cover shall be secured with a hidden latch mechanism or bolts. The cover and box shall be capable of sustaining a load of 1,500 pounds. Valve box extensions shall be by the same manufacturer as the valve box.

Automatic control valve boxes shall be eighteen inch by twelve inch by twelve inch (18"x12"x12") rectangular size. Valve box covers shall be marked "RCV" with the valve identification number "heat branded" onto the cover in two inch (2”) high letters / numbers.

Gate valve and quick coupler valve boxes shall be ten inch (10") circular size. Valve box covers shall be marked with either "GV" or "QCV" "heat branded" onto the cover in two inch (2”) high letters.

800-2.4 Sprinkler Equipment. *DELETE entire section and SUBSTITUTE with the following:*
Irrigation heads and nozzles shall be of the manufacturer, size, type, with radius of throw, operating pressure, and discharge rate indicated on the Plans. Irrigation heads and nozzles shall be used as indicated on the Plans.

SECTION 800-3 ELECTRICAL MATERIALS.
800-3.2.2 Conductors. *DELETE entire section and SUBSTITUTE with the following:*
Remote control wire shall be direct-burial AWG-UF type, size as indicated on the Drawings, and in no case smaller than 14 gauge. Connections shall be Scotchlok 3M DBY Direct Bury Splice Kit per city std. plan 516. Kit shall include a Scotchlok Y Spring connector, a Polypropylene tube prefilled with waterproof sealing gel. Ground wires shall be white in color. Control wires shall be red (where two or more controllers are used, the control wires shall be a different color for each controller. These colors shall be noted on the "Record Drawings" Plans located on controller door). The Contractor shall provide 4 spare control wires per City of Irvine Landscape Manual, Section V Irrigation Specifications (under Products and Installation, item 24, item c).

800-3.3 Controller Unit. *DELETE entire section and SUBSTITUTE with the following:*
The Controller units are existing.

SECTION 801 INSTALLATION

REVISE as follows:

801-1 GENERAL *Add the following after last paragraph:*
All landscape and irrigation installation items not modified by these Special Provisions shall be as specified by The City of Irvine Landscape Manual and Standard Plans located on the internet at the following addresses: **Landscape Standard Plans**

http://www.cityofirvine.org/development-engineering/landscape-standard-plans

And > Landscape Manual Sections V though XI

http://legacy.cityofirvine.org/civica/filebank/blobdload.asp?BlobID=10399

801-1 GENERAL
801-2 EARTHWORK AND TOPSOIL PLACEMENT.
801-2.2.1 General. *DELETE entire section and SUBSTITUTE with the following:*
Demolition and removal of existing site debris as shown on the plans shall include application of organic herbicide, Suppress EC, or approved equal.

The weed abatement program shall proceed upon the removal of all existing weeds and growth from the planting areas. Water all areas four (4) times daily for fourteen (14) consecutive days and until weed seeds have germinated. Cease watering for three (3) days. Spray Supress EC to eradicate the germinated weeds. Allow herbicide to kill all weeds. Rake or hoe off all dead weeds to a depth of 1/4 inch below the surface of the soil. Re-water four (4) times daily for fourteen (14) consecutive days until new growth appears. Reapply herbicide with a dye indicator. Remove weeds after herbicide has had sufficient time to kill.

801-2.2.2 Fertilizing and Conditioning Procedures. *ADD the following after the last paragraph:*
Fertilizing and soil amendment guidelines under agronomic soils testing shall be used for bidding purposes for planting areas, however, Contractor shall amend it as necessary per the soils test report at no additional cost to the City.

801-2.3 Finish Grading. *DELETE 2nd paragraph and ADD the following after the last paragraph:*
Finish grades are existing having been previously established the contractor shall maintain the existing finished grade elevations. Finish grading will only be required in raking out/feathering spoils from planting installations.

801-4 PLANTING.
801-4.1 General. *ADD the following after the last paragraph:*

Prior to excavation for planting or placing of stakes, locate all utilities, electric cables, conduits, underground irrigation lines, heads, valves and valve control wires, and all utility lines so that proper precautions may be taken not to damage such improvements. In the event of a conflict between utilities and plant locations, promptly

notify the Engineer who will arrange for one or the other to be relocated. If contractor fails to follow this procedure it shall repair all damages resulting from the work at contractor's sole expense. Plant materials shall be furnished in the quantities and/or spacing as shown or noted for each location, and shall be of the species, kinds, sizes, etc., as symbolized, and/or described in the Plant Legend, as indicated on the Plans. Verify all sizes and quantities on the Plans. Promptly report any discrepancy to the Engineer.

Any plant material or any development materials specified by trade name or equal, shall be according to these Plans and Specifications. Installation and use of substitute items shall not be made until the Contractor is in receipt of written approval from the Engineer. Substitution proposals for plant material must be accompanied by written proof of non- availability within a five hundred mile radius of the project site for material originally specified and proof that material was ordered in a timely manner upon award of contract. Regularly water all nursery stock in containers and place them in a cool area protected from sun and drying winds. Do not allow plants to dry out before or while being planted. Keep exposed roots moist by means of wet sawdust, peat moss or burlap at all times during planting operations. Do not expose roots to the air except while being placed in the ground. Wilted or diseased plants, whether in place or not, will not be accepted and shall be replaced at the Contractor's sole expense. Moisten prepared surface immediately prior to installing plant material. Install plant material immediately after delivery to site, within 24 hours after delivering to prevent deterioration. Hand water landscaped areas immediately after installation with a minimum of 1" of water.

801-4.5 Tree and Shrub Planting. *DELETE 4th paragraph and REPLACE with the following:*
In the event that underground construction work or obstructions are encountered in the planting operation, alternate locations for plant material will be selected by the City. Operation shall be done at no extra cost to the City. The following material shall be thoroughly blended and used as a backfill mix:

6 parts by volume on-site soil

4 parts by volume Organic Amendment 1 lbs. 16-20-0 per cubic yard of mix

2 lbs. Iron Sulfate per cubic yard of mix

The actual material and amounts, as determined by the agronomic soils test, shall be supplied by the Contractor at no additional cost to the City. No mixing for individual planting holes is permitted. Mix planting soil prior to backfilling and stockpile at the site. Iron sulfate shall not contact cement surfaces because severe staining could occur; repair or replace stained cement at Contractor's sole cost. Remove all plants from their containers and set so that, when settled, they bear the same relation to the required grade as they bore to the natural grade before being transplanted. Set the directed amount of plant fertilizer to be used with each plant on the top of the root ball so the required fertilizer amount to be used in each hole can be easily verified and approved by the Engineer. Improper planting may delay the maintenance period and extend working days causing liquidated damages. Planting holes shall be compacted with no more than 1" settlement from finished grade.

801-4.10 Mulch. *ADD the following Subsection:*

All shrubs and ground cover areas shall be mulched after planting with 2 inches of mulch. Maintain a 6 inch clear "no-mulch" zone around the base of each tree and

shrub.

801-5 IRRIGATION SYSTEM INSTALLATION.

801-5.1 General. *ADD the following after the last paragraph:*

Prior to all work of this Section, carefully inspect the installed work of all other trades and verify that all such work is complete to the point where this installation may properly commence. Verify that irrigation system may be installed in strict conformance with all pertinent codes and regulations, the original design, the referenced standards, and the manufacturer's recommendations. In the event of discrepancy, immediately notify the Engineer.

Do not proceed with installation in areas of discrepancy until all discrepancies have been resolved. Before starting work, carefully check all grades to determine that work may safely proceed, keeping within the specified material depths with respect to finish grade.

The Engineer will approve final grades before work on this Section will be allowed to begin. Make all necessary measurements in the field to ensure precise fit of items in accordance with the original design. Coordinate the installation of all irrigation materials with all other work.

All scaled dimensions are approximate. Check and verify all size dimensions prior to proceeding with work under this Section. Exercise extreme care in excavating and working near existing utilities. Repair damages to utilities, which are caused by Contractor's operations or neglect, at no additional cost to City. Prior to installation, stake out all pressure supply lines, routing and location of sprinkler heads, valves, and automatic controller. Layout irrigation system and make minor adjustments required due to differences between site and Drawings. Where piping is shown on Drawings under paved areas, but running parallel and adjacent to planted areas, install the piping in the planted areas. Connections to, or the installation of, the water supply shall be at the locations shown on the Drawings. Minor changes caused by actual site conditions shall be made at no additional expense to the City.

Existing irrigation equipment to be replaced including valves and spray heads shall be salvaged and delivered to the City.

Verify and be familiar with the locations, size and detail of points of connection provided as the source of water and connection to the irrigation system. Irrigation design is based on the available static water pressure shown on the Drawings. Verify static water pressure on the project prior to the start of construction. Should a discrepancy exist, notify the Engineer's authorized representative prior to beginning construction. Prior to cutting into the soil, locate all cables, conduits, sewer septic tanks, and other utilities as are commonly encountered underground and take proper precautions not to damage or disturb such improvements. If a conflict exists between the obstacles and the proposed work, promptly notify the Engineer who will arrange for relocations. Proceed in the same manner if a rock layer or any other such conditions are encountered. Protect all existing utilities and features to remain on and adjacent to the project site during construction. Repair, at its sole cost, all damage resulting from its operations or negligence.

The Agency Representative shall have, at all times, safe access to the Work. Where the Specifications require work to be tested by the Contractor, it shall not be covered over until accepted by the Engineer. Notify the Engineer, a minimum of 48 hours in

advance of where and when the work is ready for testing. Should any work be covered without testing or acceptance, it shall be, if so ordered, uncovered at the Contractor's sole expense. Inspections will be required for the following at a minimum:

- System layout
- Pressure test irrigation main line (Six hours at 125 PSI) lateral lines (2 hours at 100 psi).
- Coverage test of irrigation system
- Final inspection prior to start of maintenance period
- Final acceptance

Work that fails testing and is not accepted will be re-tested. Hourly rates and expenses of the Engineer for re-inspection or re-testing will be paid by the Contractor at no additional expense to City.

Use all means necessary to protect irrigation system materials before, during, and after installation and to protect the installation work and materials of all other trades. In the event of damage, immediately make all repairs and replacements necessary to the acceptance of the Engineer and at no additional cost to the City. Exercise care in handling, loading, unloading, and storing plastic pipe and fittings under cover until ready to install. Transport plastic pipe only on a vehicle with a bed long enough to allow the pipe to lay flat to avoid undue bending and concentrated external load. Dispose of waste, trash, and debris in accordance with applicable laws and ordinances and as prescribed by authorities having jurisdiction. Do not bury waste material and debris on the site. Burning of trash and debris will not be permitted. Remove and dispose of rubbish and debris generated by his work and workmen at frequent intervals or when ordered to do so by the Engineer. At the time of completion the entire site will be cleared of tools, equipment, rubbish and debris which shall be disposed of off-site in a disposal area that is fully and legally licensed.

Temporary Repairs: The City reserves the right to make temporary repairs as necessary to keep the irrigation system in operating condition. The exercise of this right by the City shall not relieve the Contractor of his responsibilities under the terms of the guarantee as herein specified.

Supply the following items:

- Two (2) wrenches for disassembly and adjustment of each type of sprinkler head used in the irrigation system.
- Two (2) 30-inch sprinkler keys for manual operation of control valves.
- One (1) valve box cover key.
- Four (4) extra sprinkler heads of each size and type.

The above equipment shall be turned over to the Engineer at the final inspection.

At the time of the pre-maintenance period inspection, the Engineer and governing agencies will inspect the work and, if not accepted, prepare a list of items to be completed by the Contractor. At the time of the post-maintenance period or final inspection the work will be re-inspected and final acceptance will be in writing by the Engineer. The City Engineer shall have final authority on all portions of the

work.

801-5.3 Irrigation Pipeline Installation.
801-5.3.1 General. *ADD the following after the last paragraph:*

Excavations shall be straight with vertical sides, even grade, and support pipe per City Landscape Standard Plan No. 501. Trenching excavation shall follow layout indicated on Drawings to the depths below finished grade and as noted. Where lines occur under paved areas, these dimensions shall be considered below subgrade. Provide minimum cover of 24 inches on pressure supply lines. Provide minimum cover of 24 inches for control wires. Provide minimum cover of 12 inches for non-pressure lines. Backfill material on all lines shall be the same as adjacent soil free of debris, litter, and rocks over 1/2 inch in diameter. Backfill shall be tamped in 4-inch layers under the pipe and uniformly on both sides for the full width of the trench and the full length of the pipe. Backfill materials shall be sufficiently damp to permit thorough compaction, free of voids. Backfill shall be compacted to 90% relative compaction and shall conform to adjacent grades. Flooding in lieu of tamping is not allowed. Under no circumstances shall truck wheels be used to compact backfill. Provide sand backfill a minimum of 6 inches over and under all piping under paved areas.

Piping under existing pavement may be installed by jacking, boring, or hydraulic driving. No hydraulic driving is permitted under asphalt pavement. Cutting or breaking of existing pavement is not permitted. Carefully inspect all pipe and fittings before installation, removing dirt, scale, burrs, and reaming. Install pipe with all markings up for visual inspection and verification.

Remove all dented and damaged pipe sections. All lines shall have a minimum clearance of 6 inches from each other and 12 inches from lines of other trades. Parallel lines shall not be installed directly over each other. In solvent welding, use only the specified primer and solvent cement and make all joints in strict conformance with the manufacturer's recommended methods including wiping all excess solvent from each weld. Allow solvent welds at least 15 minutes setup time before moving or handling and 24 hours curing time before filling. PVC pipe shall be installed in a manner, which will provide for expansion and contraction as recommended by the pipe manufacturer. Center load all plastic pipe prior to pressure testing. All threaded plastic-to-plastic connections shall be assembled using Teflon tape or Teflon paste. For plastic-to-metal connections, work the metal connections first. Use a non-hardening pipe dope an all threaded plastic-to-metal connections, except where noted otherwise. All plastic-to-metal connections shall be made with plastic female adapters.

801-5.4 Installation of Valves, Valve Boxes, and Special Equipment. *ADD the following after the last paragraph:*

Automatic control valves shall be installed in the approximate locations indicated on the Drawings. Valves shall be installed in shrub areas whenever possible. Install all valves as indicated in the detail drawings. Valves to be installed in valve boxes shall be installed one valve per box.

801-5.5.1 General. *ADD the following after the last paragraph:*

Irrigation heads shall be installed as indicated on the Drawings. Riser nipples shall be of the same size as the riser opening in the sprinkler body. Install all assemblies specified herein according to the respective detail Drawings or Specifications, using best standard practices.

801-5.6 Automatic Control System Installation. *ADD the following after the last paragraph:*
All Automatic Irrigation valves shall be connected to the existing irrigation controllers.

Three (3) sets of laminated 11”x17” new controller charts and 8.5”x11” data sheets shall be provided for all irrigations systems.

801-5.7.3 Sprinkler Coverage Test. *ADD the following after the last paragraph:*
Coverage testing shall be performed for overhead irrigation.

Adjust valves, align heads, and check the coverage of each system prior to coverage test. If it is determined by the Engineer that additional adjustments or nozzle changes will be required to provide proper coverage, make all necessary changes or adjustments prior to any planting. The entire system shall be operating properly before any planting operations commence.

Do not allow or cause any of the work of this Section to be covered up or enclosed until it has been observed, tested and accepted by the Engineer. Notify the Engineer a minimum of 48 hours in advance where and when the work is ready for testing. When the sprinkler system is completed, perform a coverage test of each system in its entirety to determine if the water coverage for the planted areas is complete and adequate in the presence of the Engineer.

801-5.7.4 Operational Test. *ADD the following after the last paragraph:*
Furnish all materials and perform all work required to correct any inadequacies of coverage due to deviations from the Plans, or where the system has been willfully installed as indicated on the Drawings when it is obviously inadequate, without bringing this to the attention of the Engineer. This test shall be accepted by the Engineer and accomplished before starting any planting. Final inspection will not commence without record Drawings as prepared by the Contractor. During the maintenance period adjust and maintain the irrigation system in a fully operational condition providing complete irrigation coverage to all intended plantings. Clean-up shall be made as each portion of the work progresses. Refuse and excess dirt shall be removed from the site, all walks and paving shall be broomed, and any damage sustained on the work of others shall be repaired to original conditions.

801-6 MAINTENANCE AND PLANT ESTABLISHMENT. *DELETE entire section and SUBSTITUTE with the following:*

Landscape maintenance and plant establishment period shall be a minimum of ninety (90) calendar days after “Date of Acceptance of Installation” of all planting areas. Request in writing from the Engineer, notification of the date of the start of the maintenance and planting establishment period. At the acceptance of all planting areas, request in writing from the Engineer notification of the date of the completion of the maintenance period. The maintenance period shall not officially begin or end without written notification from the Engineer. Construction fencing shall remain until after the maintenance period is complete or as directed by the Engineer. Maintain all planted areas on a continuous basis as they are completed during the progress of the work and during the establishment and maintenance period, and shall continue to maintain them until final acceptance in accordance with the following.

- Water, weed, fertilize, edge, prune, spray as necessary to promote a

healthy growing condition. Maintain lawn at a mowing height recommended by the city. All planted areas shall be kept free of debris and weeds. Keep project neat and attractive throughout the maintenance period.

- Apply herbicides for weed control, as needed or directed by City, in accordance with manufacturer's instructions and applicable laws and regulations. Pre-emergent herbicide shall be required in all planter, shrub and ground cover areas. Remedy damage resulting from the use of herbicides.
- Exterminate rodents and insects as required and in accordance with applicable laws and regulations. Remedy damage from use of insecticides.
- Adjust the irrigation system to sufficiently saturate root zone without rotting trees, shrubs, and ground cover. Do not exceed IRWD allocation.
- Repair or replace any damaged item caused by vehicles, vandals, rabbits, rodents, bicycles, or foot traffic during the maintenance period.
- Fertilize with "JTM Complete" at 30 lbs./1,000 s.f. at the beginning and end of the maintenance period (twice) or as indicated by the agronomic soils test.

  All inspections herein specified shall be made by the City. Request inspection at least forty-eight (48) hours in advance of the time the inspection is required. Requested inspections, subsequently canceled without twenty-four (24) hours-notice, will be billed to the Contractor.

Inspection is required for, and not necessarily limited to, the following parts of the work.

- Incorporation of soil amendments and fine grading.
- Prior to digging plant pits for shrubs.
- During backfilling of plant pits with amended backfill.
- Final inspection at the end of the maintenance period.
- Irrigation Inspection / Coverage Test prior to planting.

801-8 PAYMENT. *After the last paragraph, ADD the following:*

Payment for **Weed Abatement** shall be made at the contract unit price per square foot and shall be considered full compensation for furnishing labor, materials, tools, equipment, and incidentals, and for doing all work involved in furnishing and installing, complete in place, as shown on the plans, as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer, and no additional compensation will be allowed therefor.

Payment for **Soil Preparation & Fine Grading** shall be made at the contract unit price per square foot and shall be considered full compensation for furnishing labor, materials, tools, equipment, and incidentals, and for doing all work involved in furnishing and installing, complete in place, as shown on the plans, as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer, and no additional compensation will be allowed therefor.

Payment for **Shrub – 5 gallon** shall be made at the contract unit price per each and shall be considered full compensation for furnishing labor, materials, tools,

equipment, and incidentals, and for doing all work involved in furnishing and installing, complete in place, as shown on the plans, as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer, and no additional compensation will be allowed therefor.

Payment for **Irrigation System** shall be made at the contract lump sum price and shall be considered full compensation for furnishing labor, materials, tools, equipment, and incidentals, and for doing all work involved in furnishing and installing, complete in place, as shown on the plans, as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer, and no additional compensation will be allowed therefor.

Payment for **Wood Mulch – 2" Depth** shall be made at the contract unit price per square foot and shall be considered full compensation for furnishing labor, materials, tools, equipment, and incidentals, and for doing all work involved in furnishing and installing, complete in place, as shown on the plans, as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer, and no additional compensation will be allowed therefor.

Payment for **(65) Sixty Five Working Day Maintenance Period** shall be made at the contract lump sum price and shall be considered full compensation for furnishing labor, materials, tools, equipment, and incidentals, and for doing all work involved in furnishing and installing, complete in place, as shown on the plans, as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer, and no additional compensation will be allowed therefor.

801-8 GUARANTEE. *ADD the following Subsection:*
The guarantee shall be valid unless existing equipment utilized on the project fails within the guarantee period. Should any problem with the irrigation system be discovered within the guarantee period the Contractor shall correct it within ten (10) calendar days after receipt of written notice from City(and at no additional expense to City). When the nature of the repairs, as determined by the City, constitute an emergency (i.e. broken pressure line) the City may proceed to make repairs at the Contractor's expense. Any and all damages to existing improvement resulting either from faulty materials or workmanship, or from the necessary repairs to correct same, shall be repaired to the satisfaction of the owner by the Contractor, all at no additional cost to the City. Guarantee shall be submitted on Contractors own letterhead as follows:

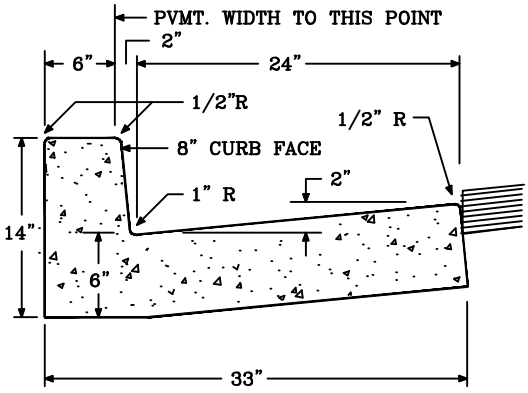
GUARANTEE FOR SPRINKLER IRRIGATION SYSTEM
We hereby guarantee that the sprinkler irrigation system we have furnished and installed is free from defects in materials and workmanship, and the work has been completed in accordance with the Drawings and Specifications, ordinary wear and tear and unusual abuse, or neglect excepted. We shall repair or replace any defective material during the period of one year after date of filing of the Notice of Completion and also repair or replace any damage resulting from the repairing or replacing of such defects at no additional cost to the owner. We shall make such repairs or replacements within 10 calendar days following written notification by the owner. In the event of our failure to make such repairs or replacements within the time specified after receipt of written notice from owner, we authorize the owner to proceed to have said repairs or replacements made at our expense and we will pay the costs and charges therefore upon demand.

APPENDIX A

STANDARD PLANS

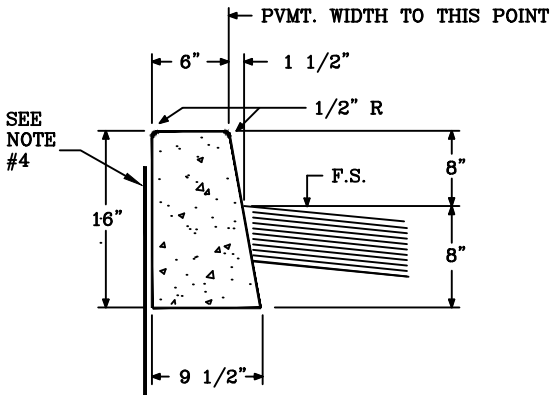
Copies of the following agency standard plans and/or details referenced by the plans and Specifications are attached hereto and are made a part of these Special Provisions.

AGENCY	STD. PLAN NO.	DESCRIPTION
City of Irvine	200	Concrete Curbs and Gutters
City of Irvine	500	Pipe & Wire Trenching
City of Irvine	501	Sleeve Trenching
City of Irvine	510	Angle remote Control Valve
City of Irvine	516	Wire Connector
City of Irvine	601	Shrub Planting



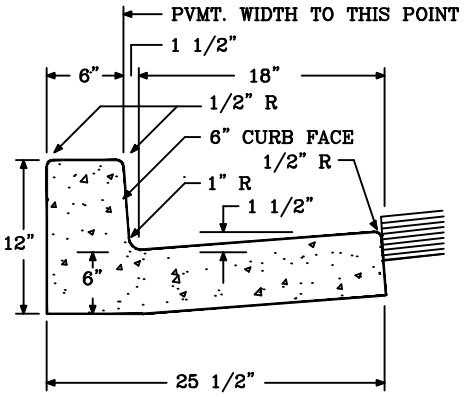
CONC. PER L.F. = .0645 CU. YDS.
1 CU. YD. = 15.5 L.F.

TYPE "A-2"



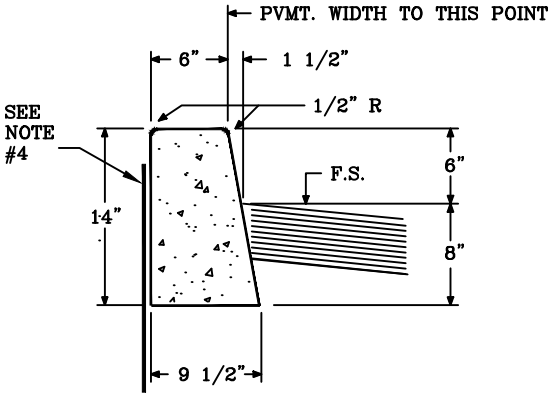
CONC. PER L.F. = .0319 CU. YDS.
1 CU. YD. = 31.3 L.F.

TYPE "B-8"



CONC. PER L.F. = .0505 CU. YDS.
1 CU. YD. = 19.8 L.F.

TYPE "D"



CONC. PER L.F. = .0279 CU. YDS.
1 CU. YD. = 35.8 L.F.

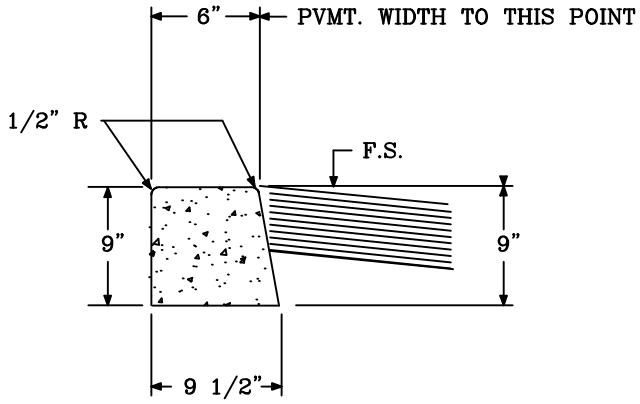
TYPE "B-6"

CONCRETE CURBS AND GUTTERS

MARK CARROLL, R.C.E. 31515
CITY OF IRVINE - CITY ENGINEER

AUGUST 2013
DATE

STD. PLAN 200



CONC. PER L.F. = .0161 CU. YDS.
1 CU. YD. = 62.1 L.F.

TYPE "C-6"

NOT TO BE USED ON PUBLIC STREET R/W

NOTES :

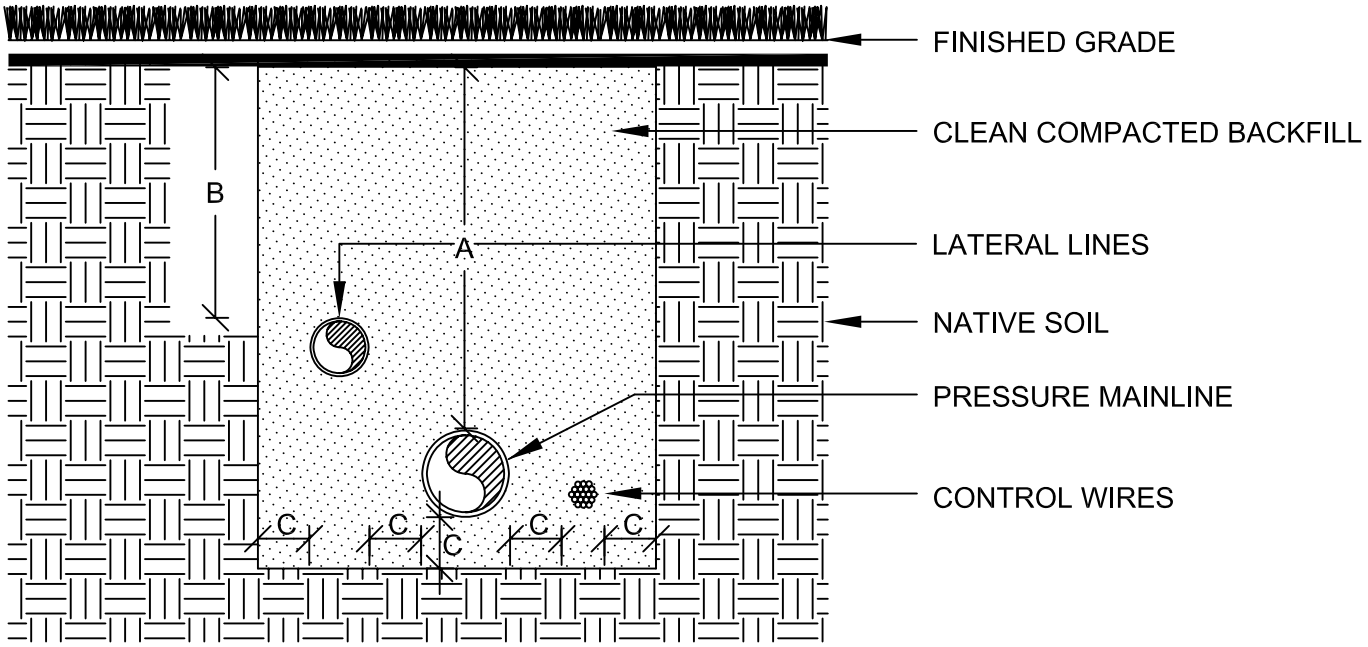
1. ALL CURBS AND GUTTERS SHALL BE PORTLAND CEMENT CONCRETE. CONTROL
2. WEAKENED PLANE JOINTS PURSUANT TO SECTION 303-5.4.3 OF THE GREENBOOK (EXCEPTION: MAX. 10 FOOT INTERVALS)
3. PAVEMENT SHALL BE 3/8 INCH HIGHER THAN EDGE OF GUTTER ON TYPE "A-2" AND TYPE "D".
4. MOISTURE BARRIERS SHALL BE REQUIRED IN ACCORDANCE WITH STD. PLAN No. 222.

CONCRETE CURBS AND GUTTERS

MARK CARROLL, R.C.E. 31515
CITY OF IRVINE - CITY ENGINEER

AUGUST 2013
DATE

STD. PLAN 200



DIMENSION	A	B	C
1/2" TO 2 1/2" IN SIZE	18"	12"	4"
3" TO 6" IN SIZE	24"		4"

SECTION VIEW - N.T.S.

NOTE:

ALL PLASTIC PIPING SHALL BE SNAKED WITHIN TRENCH.

BUNDLE WIRING AND WRAP WITH TAPE AT TEN FOOT INTERVALS.

ALL MAINLINE PIPING TO BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS' INSTALLATION SPECIFICATIONS.

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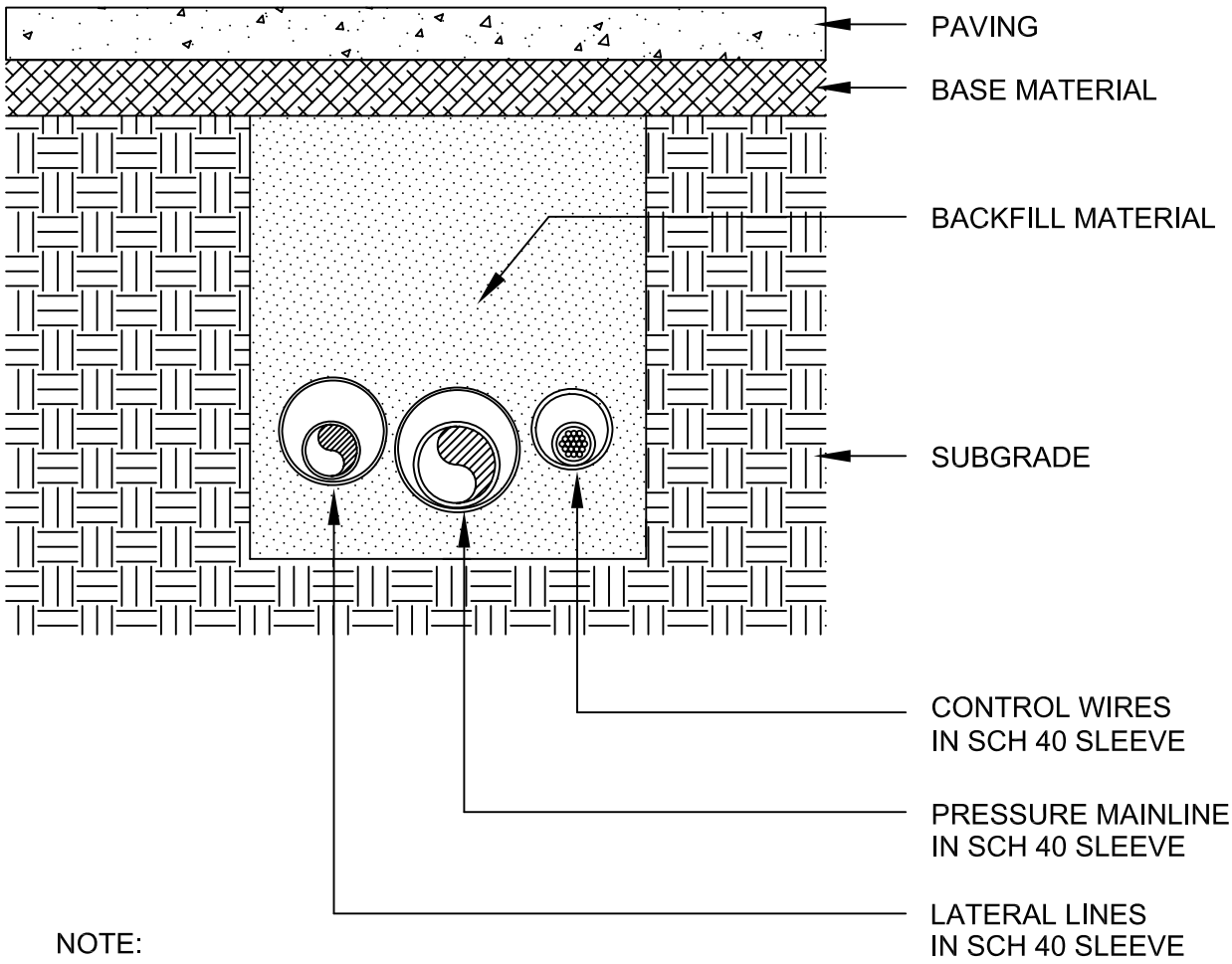
REVISIONS	CITY OF IRVINE	STANDARD PLAN NO.
	PIPE AND WIRE TRENCHING	500
	Approved by: Mark L. Carroll R.C.E. 31515 City Engineer — Date: 6-22-09	159 Sheet 1 of 1



NOTE:

ALL PIPING TO BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS' INSTALLATION SPECIFICATIONS.

ALL MAINLINE, LATERAL LINES, AND CONTROL WIRES SHALL BE SLEEVED BELOW ALL HARDSCAPE ELEMENTS WITH SCH 40 PVC, 2 TIMES THE DIAMETER OF THE PIPE OR WIRE BUNDLE WITHIN.

DEPTH OF SLEEVES, BACKFILL, AND COMPACTION OF TRENCH SHALL BE IN ACCORDANCE WITH STANDARD PLAN NO. 223 FOR CROSSINGS OF STREETS AND SHALL BE IN ACCORDANCE WITH STANDARD PLAN NO. 500 FOR CROSSINGS OF PARKING LOTS, SIDEWALKS, OR OTHER HARDSCAPE ELEMENTS.

HORIZONTAL DIMENSION BETWEEN SLEEVES SHALL BE A MINIMUM OF 4 INCHES.

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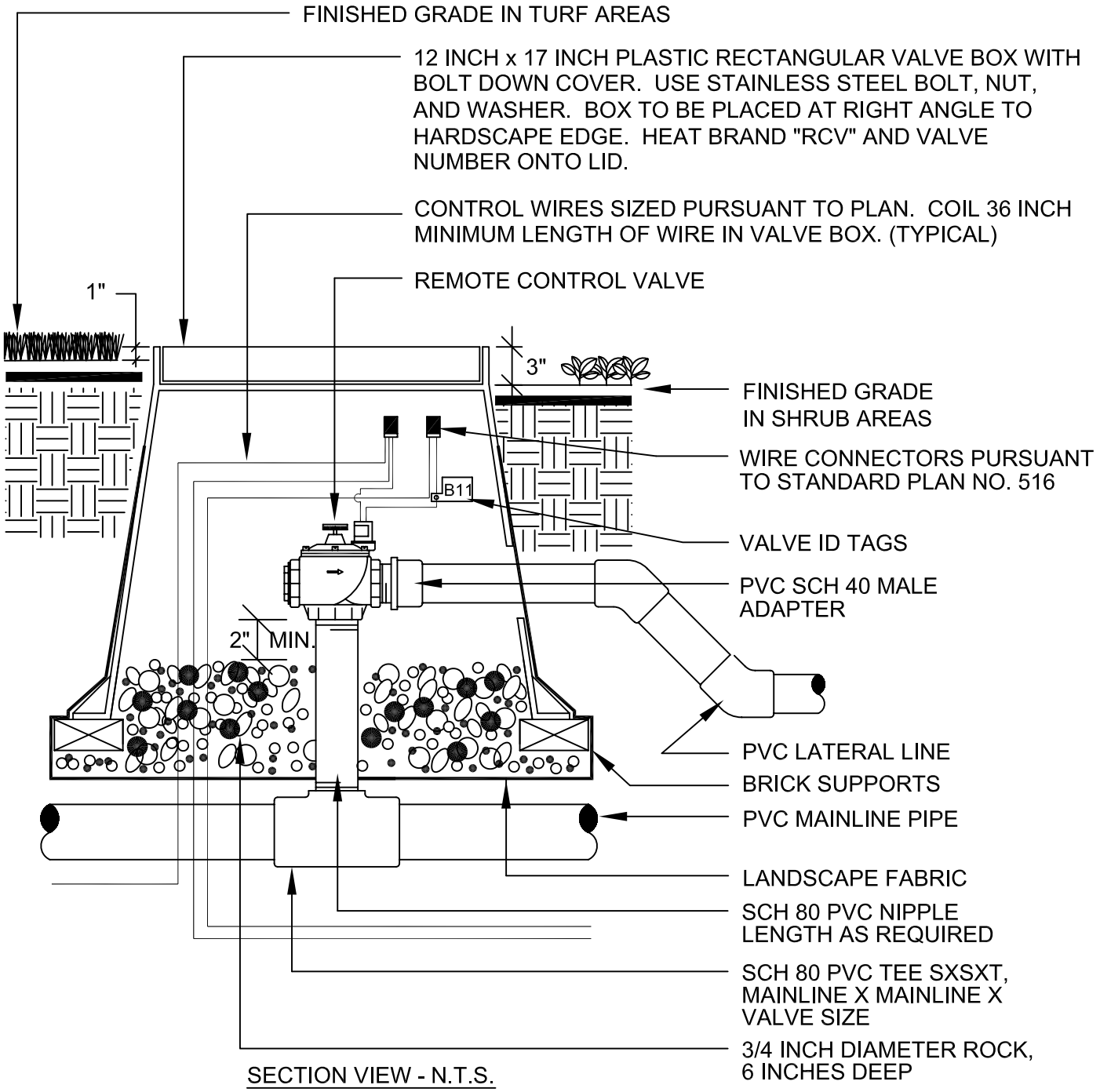
REVISIONS	CITY OF IRVINE	STANDARD PLAN NO.
	SLEEVE TRENCHING	501
	Approved by: Mark L. Carroll R.C.E. 31515, City Engineer — Date: 6-22-09	160 Sheet 1 of 1



SECTION VIEW - N.T.S.

NOTE:

INSTALL CONTROL VALVES A MINIMUM OF TWO FEET APART IN SHRUB AREAS UNLESS OTHERWISE NOTED.

INSTALL CHRISTY'S MODEL #3800 RECLAIMED WATER IDENTIFICATION NAME PLATES TO THE LID OF EACH RECLAIMED WATER VALVE BOX.

USE TEFLON TAPE ON THREADED FITTINGS.

WRAP LANDSCAPE FABRIC AROUND SIDES AND BOTTOM OF BOX TO COVER ALL OPENINGS.

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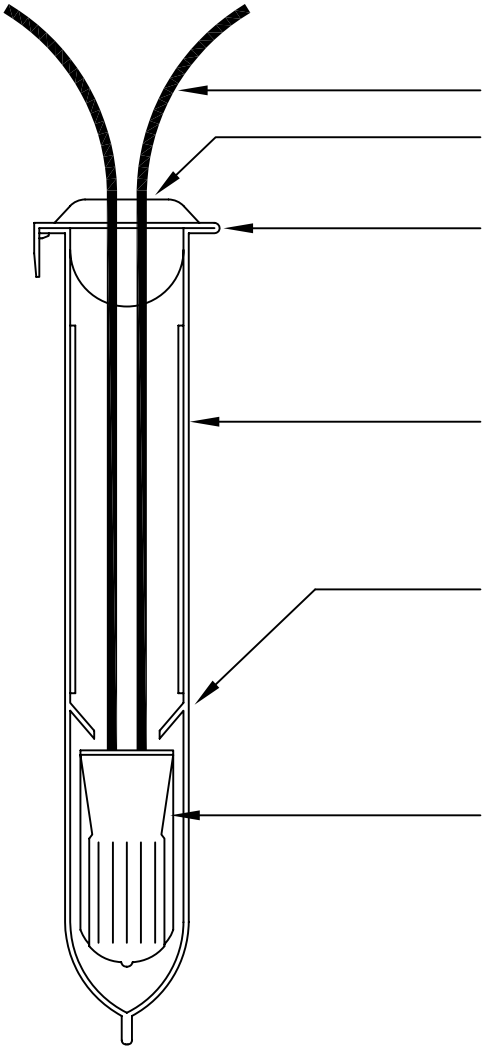
REVISIONS	CITY OF IRVINE	STANDARD PLAN NO.
	ANGLE REMOTE CONTROL VALVE	510
	Approved by: Mark L. Carroll R.C.E. 31515 City Engineer — Date: 6-22-09	161 Sheet 1 of 1



LOW VOLTAGE WIRES, 3 MAXIMUM

WIRES PASS THROUGH GROOVES IN TUBE LID TO ALLOW LID TO CLOSE

CLOSE TUBE LID AFTER WIRE IS INSERTED INTO TUBE

POLY TUBE PRE-FILLED WITH WATERPROOF GEL

LOCK TABS PREVENT WIRE REMOVAL ONCE CONNECTOR IS INSERTED

SCOTCHLOK ELECTRICAL SPRING CONNECTOR. WIRES SHALL BE PRE-STRIPPED OF 1/2 INCH OF THE INSULATION PRIOR TO INSERTION INTO THE CONNECTIOR. TWIST CONNECTOR ON TO WIRES TO SEAT FIRMLY.

SCOTCHLOK CONNECTOR AND WIRES INSERTED INTO TUBE UNTIL THE CONNECTOR PASSES LOCK TABS

NOTE:

WIRE CONNECTOR SHALL BE A 3M DBY DIRECT BURY SPLICE KIT.

KIT SHALL INCLUDE A SCOTCHLOK Y SPRING CONNECTOR, A POLYPROPYLENE TUBE, AND A WATERPROOF SEALING GEL. TUBE SHALL BE SUPPLIED PREFILLED WITH GEL.

SPLICE KIT SHALL BE USED TO ELECTRICALLY CONNECT 2 - 3 #14 OR 2#12 PRE-STRIPPED COPPER WIRES. LARGER WIRES OR GREATER QUANTITIES OF WIRES SHALL REQUIRE A LARGER APPROVED WIRE CONNECTION.

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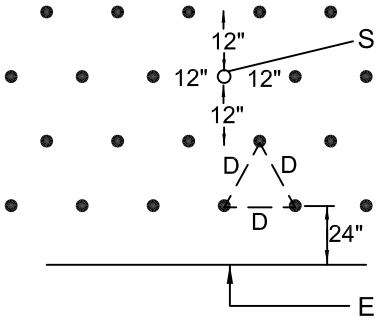
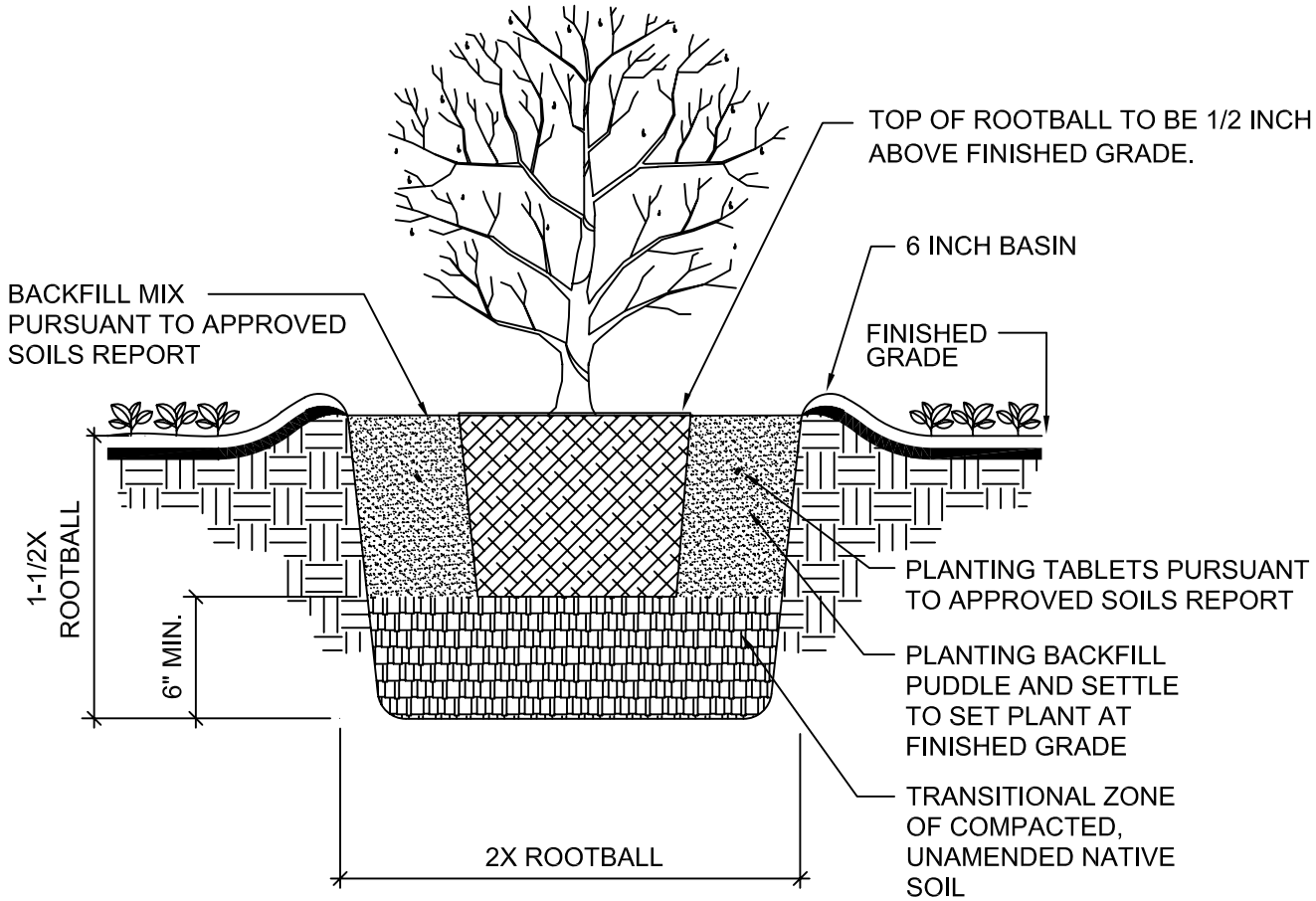
REVISIONS	CITY OF IRVINE	STANDARD PLAN NO.
	WIRE CONNECTOR	516
	Approved by: Mark L. Carroll R.C.E. 31515, City Engineer — Date: 6-22-09	162
		Sheet 1 of 1



NOTE: LOCATE PLANTS SPACED EQUAL DISTANT (D) FROM EACH OTHER AS SHOWN ON PLANTING PLAN AND MINIMUM OF 12" FROM SPRINKLER HEAD.



NOTE: ALL PLANT BASINS SHALL RECEIVE A 2 INCH LAYER OF APPROVED MULCH. MULCH TO BE 6 INCHES AWAY FROM THE SHRUB STEM.

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REVISIONS	CITY OF IRVINE	STANDARD PLAN NO.
	SHRUB PLANTING	601
	Approved by: Mark L. Carroll R.C.E. 31515 City Engineer Date: 6-22-09	Sheet 1 of 1

APPENDIX B

MATERIAL INFORMATION

BROMIC HEATING

TUNGSTEN
SMART-HEAT™ PORTABLE

The pinnacle of portable performance...

The Tungsten Smart-Heat™ Portable heater brings the revolutionary radiant performance of its fixed gas counterpart to an ergonomically designed portable platform. Creating comfort over an area up to three times the size of that serviced by a traditional portable heater while fueled by the same single gas cylinder, this unit utilizes directional heating to evenly, efficiently and effectively service any area it is wheeled into.

GOOD DESIGN Award

reddot award 2015 winner

BROMIC HEATING

TUNGSTEN
SMART-HEAT™ PORTABLE

High-Performance Mesh Screen
The Tungsten's unique front cover scientifically manipulates infrared energy to maximize performance while achieving a superior spread of heat

Exceptional Wind Resistance
The Tungsten's signature mesh screen enables remarkable wind resistance when combined with twin thermocouples, functioning reliably in winds of up to 12km/h or 8mph

Ceramic Efficiency
Slow-release ceramic burners efficiently combust gas to fuel the most environmentally friendly gas-fired heating method available

Strong, Direct Heat
Robust radiant heat output with heater head adjustment for greater positioning versatility

Unrivaled Coverage
Projects comfort evenly across a wide range while reaching deeply into open areas

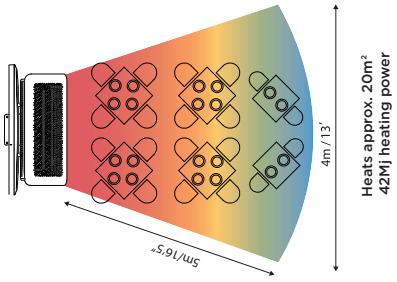
International Acclaim
Distinct difference from traditional portable heaters has earned widespread praise, including accolades such as the Good Design® Award and Red Dot Award

Superior Safety
Patented flame failure and tilt safety technology ensures risk-free operation at all times

One-Touch Ignition
Simply set the gas and push a button; the repetitive spark igniter will do the rest

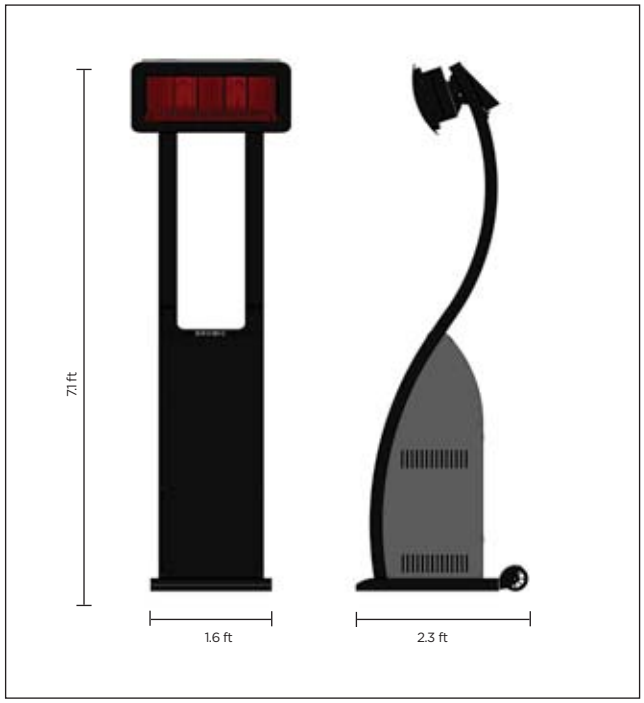
Ergonomic Modular Design
The perfectly balanced body is easily de-constructed for transport or storage while offering superior tilt resistance and effortless movement

HEAT AREA

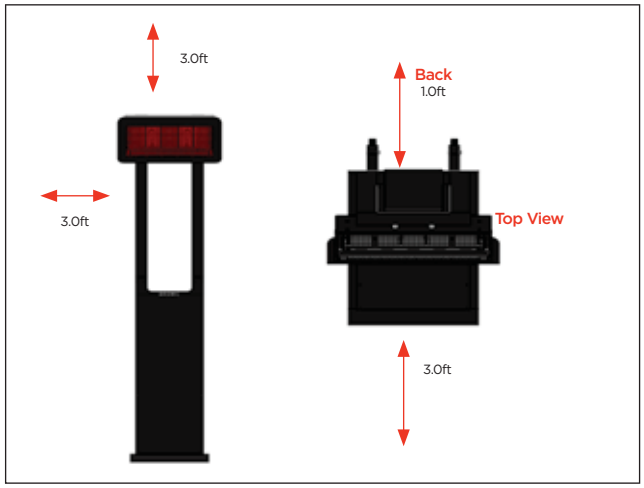


*Heat area dependent on ambient temperature and wind. Optimum conditions experienced at approx 15.5°C/ 60°F & in a low wind covered environment . Table layout indicative only.

DIMENSIONS



MINIMUM INSTALLATION CLEARANCES



SPECIFICATIONS	
Ignition	1.5V Battery activated repetitive spark ignition
Adjustable Heat Output	21,300 BTU – 39,800 BTU
Gas Type	Propane
Gas Supply	Gas Cylinder not included
Weight (excluding cylinder)	123.5 lbs
Safety features	Flame Failure & Anti-Tilt Safety Device
Gas supply pressure	11"wc

International patent pending and design registered by BROMIC HEATING Pty Ltd, a member of the Bromic Group of companies.

LED
LARGE METAL CANOPY

LEADING THE INDUSTRY WITH QUALITY YOU CAN DEPEND ON

300 Series Standard Lens Depth 9”

New Shallow Lens (–S) Depth 6.4”

- Ceiling Mount 12X12 Canopy Vandal Resistant Commercial Grade Fixture 120 – 277 Used Under Canopies Over Walkways In Schools Covering Recessed Holes, Stairwells, Garages, And Malls **UL Wet**

- Textured Bronze Finish Die Cast (A360 Aluminum Ingot) Housing, Chromate Conversion Coating With DuPont Powder For Powder Coat Finishes ¾“ Threaded Hubs For ½“ Conduit Fittings, White Reflector, Gasket Standard, Polycarbonate Lens Molded With GE Lexan Containing UV Stabilizers 243R For Highest Temperature Ratings - White Finish Housing **(-W)** Shallow Lens **(-S)** **Adders:** Photo Cell **(-PC),** Stainless Steel Screws, Opaque White Lens **(-OP)** **Occupancy Sensor (IS)** **Battery Back-Up (BB)**

- **Philips Fortimo LED Panels**, Low - Power LEDs In **A** Single Row Layout, Uniform Pattern, Push In Wire Connectors Enabling Easy Wiring, High Energy Efficiency And Long Lifetime, High Color Rendering (>80 CRI**)** **>90 Available** And Excellent Color Consistency - **Replaceable Panels And Driver -** See Below Lumens Per Color Variations And Color Temperature Options

- **Philips Advance Xitanium LED Driver With SimpleSet** 1% Dim, 0-10V Dimming, Operating Temperature -20°C (-4°F) To +50° (122°F), PF>0.95, THD<15%, 120-277V, Audible Noise<24dB Class A, FCC Title 47 Part 15 Class A

Enertron Model	LED Panels System Watts	Lumens	Driver Voltage	Rated Life Hrs	Dimension D	W1	W2
300LED1X6-50	1X6 = 7W	560	120 - 277V	50K	9”	12”	12”
300LED2X6-50	2X6 = 10W	1120	120 - 277V	50K	9”	12”	12”
300LED3X6-50	3X6 = 14W	1680	120 - 277V	50K	6.4”	12”	12”
300LED4X6-50	4X6 = 17W	2240	120 - 277V	50K	9”	12”	12”
300LED5X6-50	5X6 = 21W	2800	120 - 277V	50K	9”	12”	12”
300LED6X6-50	6X6 = 24W	3360	120 - 277V	50K	9”	12”	12”
300LED7X6-50	7X6 = 28W	3920	120 - 277V	50K	9”	12”	12”
300LED8X6-35-S	8X6 = 31W	4480	120 - 277V	50K	9”	12”	12”
300LED9X6-50	9X6 = 35W	5040	120 - 277V	50K	9”	12”	12”
300LED10X6-50	10X6 = 38W	5600	120 - 277V	50K	9”	12”	12”
300LED11X6-50	11X6 = 42W	6160	120 - 277V	50K	9”	12”	12”
300LED12X6-50	12X6 = 45W	6720	120 - 277V	50K	9”	12”	12”

Lumens Per 1 X 6” Panel = 3000K = 530 Lumens 3500K = 530 Lumens 4000K = 550 Lumens 5000K = 560 Lumens

Specify Color At The End Of Model Number (-50, -40, -35, -30) Lumens Per Color Above

Vertically Integrated Manufacturer
Made In USA

3030-D Enterprise Court
Vista, CA 92081
800-537-7649
Fax 877-708-7777
www.enertron.com

LED
ROUNDED METAL FLOOD

LEADING THE INDUSTRY WITH QUALITY YOU CAN DEPEND ON

620 LED Rounded Meta Flood

- **Architectural Commercial Quality LED Flood** For Security Lighting, Parking Areas, Trees, Signs - On The Ground Or Above 120 -277V UL Wet Rated
- Die Cast Aluminum Housing And Hinged Top Frame Architectural Textured Bronze Powder Coat Finish Over Chromate Conversion Coating, Tempered Flat Glass Lens , Aluminum Reflector **Adders:** Glare Shield**(GS)**, Wire Guard **(-WG)** And Photo Cell **(-PC)**
- **Philips Fortimo LED Panels**, Low - Power LEDs In A Single Row Layout, Uniform Pattern, Push In Wire Connectors Enabling Easy Wiring, High Energy Efficiency And Long Lifetime, High Color Rendering **(>80 CRI) >90 Available** And Excellent Color Consistency - **Replaceable Panels And Driver -** See Below Lumens Per Color Variations And Color Temperature Options
- **Philips Advance Xitanium LED Dri ver With SimpleSet** 1% Dim, 0-10V Dimming, Operating Temperature -20°C (-4°F) To +50° (122°F), PF>0.95, THD<15%, 120-277V, Audible Noise<24dB Class A, FCC Title 47 Part 15 Class A
- ENERpost (3" Round) Available For Mounting In The Ground With ½" Adjustable Knuckle

Model	LED Panels System Watts	Initial Lumens	Driver Voltage	Rated Life Hrs	Dimensions H	W	D
620LED2X6-50	2X6 = 10W	1120	120 - 277V	50K	8.5"	11"	8.62"
620LED3X6-50	3X6 = 14W	1680	120 - 277V	50K	8.5"	11"	8.62"
620LED4X6-50	4X6 = 17W	2240	120 - 277V	50K	8.5"	11"	8.62"
620LED5X6-50	5x6 = 21W	2800	120 - 277V	50K	8.5"	11"	8.62"
620LED6X6-50	6X6 = 24W	3360	120 - 277V	50K	8.5"	11"	8.62"
620LED7X6-50	7X6 = 28W	3920	120 - 277V	50K	8.5"	11"	8.62"
620LED8X6-35	8X6 = 31W	4480	120 - 277V	50K	8.5"	11"	8.62"

Lumens Per 1 X 6" Panel = 3000K = 530 Lumens 3500K = 530 Lumens 4000K = 550 Lumens 5000K = 560 Lumens

Specify Color At The End Of Model Number (-50, -40, -35, -30) Lumens Per Color Above

Vertically Integrated Manufacturer
Made In USA

ENERTRON®
3030-D Enterprise Court
Vista, CA 92081
800-537-7649
Fax 877-708-7777
www.enertron.com

NEWPORT

A SOL DURA PRODUCT

Much like the architectural horizons lined along the beachfront, the Newport has contemporary lines and majestic structure. Paired in a ranch style setting, this rich collection compliments any outdoor setting.

NW-CC NEWPORT CLUB CHAIR
NW-DC NEWPORT DINING CHAIR
NW-DT42 NEWPORT 42’ DINING TABLE

NW-BNCH72 NEWPORT 72” BENCH

INSET NEWPORT RECYCLE CABINETS

SOL DURA

THE NATURAL CHOICE FOR SUSTAINABLE DESIGN

DIST. BY TERRA FURNITURE CITY OF INDUSTRY, CA PH 626 912 8523

OUTDOOR DESIGN STUDIO, INC.
Home of Soldura Products

41606 Date Street #203
Murrieta, CA 92562
951-600-4888

Quote

Date	Quote #
3/24/2017	02547

QUOTE VALID FOR 60 DAYS.

Name / Address	Ship To
City of Irvine Amber Castry 20 Lake Rd. Irvine, CA 92614	

P.O. No.	Terms	Rep	Project
	Please see bottom of page	DC	

Item	Description	Qty	Unit Price	Total
NW-DT42DIA	Newport 42" Dia. Round Dining Table	4	519.00	2,076.00T
NW-DCWA	Newport Dining Arm Chair - 28"W x 23"D x 34.5"H	16	289.00	4,624.00T
UM8091-DWV	Grade A Double Vent Umbrella - Wooden Pole - Sunbrella Fabric Canvas	4	352.00	1,408.00T
BS709	70lb Black Umbrella Base	4	155.00	620.00T
NW-LC	Newport Lounge Chair - 35"W x 29.5"D x 35.5"H	2	629.00	1,258.00T
NW-SOFA6	Newport 6' Sofa - 77"W x 29.5"D x 35.5"H	1	1,189.00	1,189.00T
NW-CUSHSET	Newport Cushion Set - Sunbrella Canvas Pattern Qty 2 sets Lounge Chairs qty 3 sets Sofa	5	196.00	980.00T
Shipping/Freight	Shipping & Freight - Delivery Sales Tax		425.00 7.75%	425.00 942.01

ORDERS ARE ENTERED INTO OUR SYSTEM AT RECEIPT OF P.O. & DEPOSIT

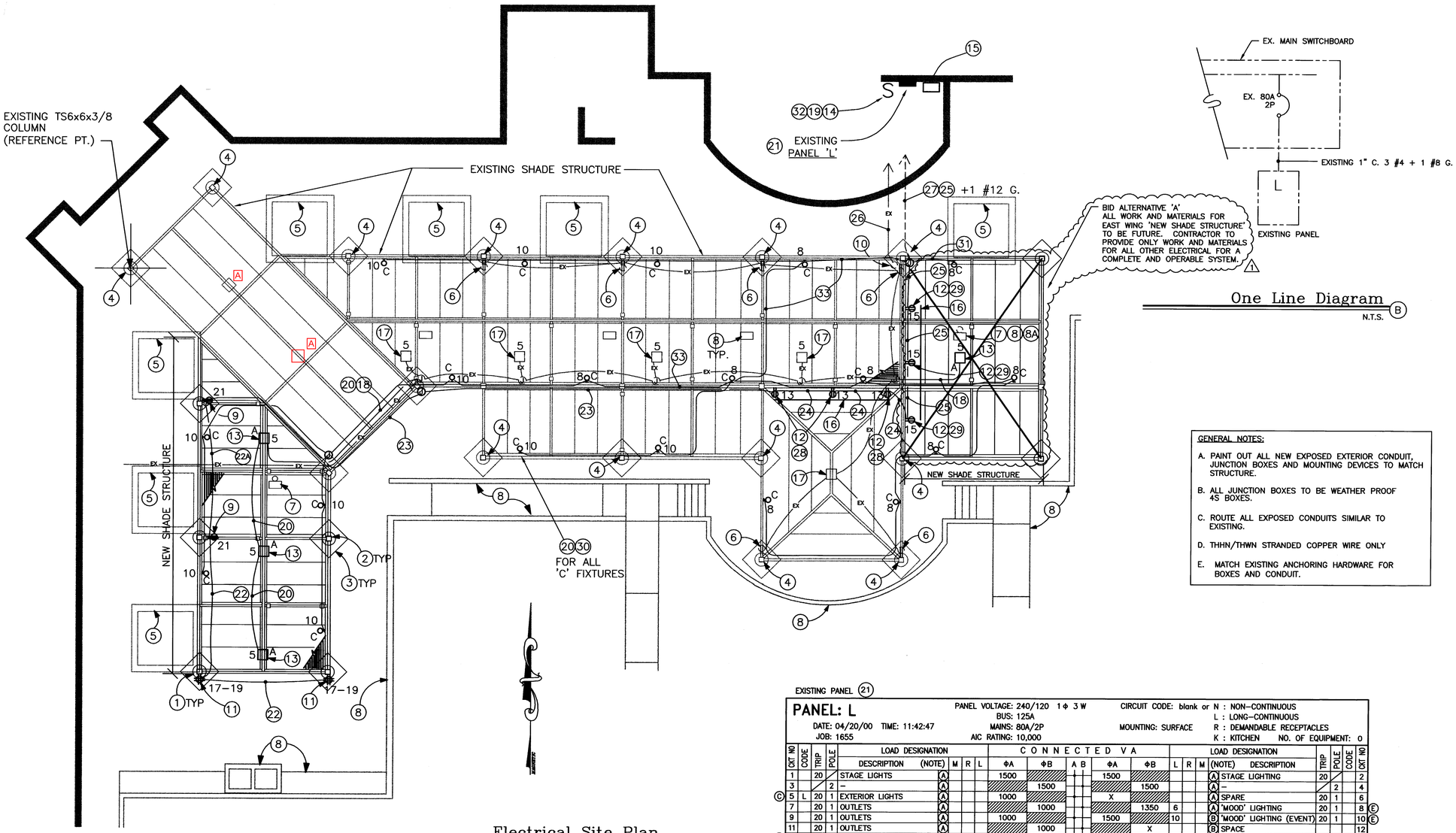
Total $13,522.01

Outdoor Design Studio Inc. (ODS, Inc.) sales order terms and conditions:
For all custom orders $4,999.99 or less ODS, Inc. requires purchase order and payment in full prior to the start of production.
Lead times are confirmed at receipt of purchase order and payment/deposit.
Orders $5,000.00 or greater require purchase order and a 50% non-refundable deposit payment prior the start of production, and remaining 50% payment due prior to shipment.
All orders are subject to hold if final payment is not received, warehouse storage fees may apply.

INSTALLATION BY OTHERS

APPENDIX C

LIGHTING AS-BUILT PLANS



One Line Diagram

N.T.S. (B)

Electrical Site Plan

1/8" = 1'-0" (A)

FIXTURE SCHEDULE	
TYPE	DESCRIPTION
A	SECURITY LIGHT ATTACHED TO STRUCTURE LITHONIA NO. VR36-100S-120, 100 WATT, HPS. MATCH EXISTING.
B	BEGA NO. 9850-280, 300 WATT, PAR 56 LAMP, 120V (BLACK) WITH C-CLAMP AND 6 FEET OF CORD AND CAP TO MOUNT AND PLUG INTO RELATED PLAN NOTE NO. 12. TWIST LOCK CAP. PROVIDE A TOTAL OF 4 FIXTURES TO C-CLAMP ONTO BAR PER PLAN NOTE NO. 16. (FUTURE) (1)
C	BEGA NO. 6536, 150 WATT, QI50W/MED/T1ø LAMP, 120V WHITE, MOUNT ON W.P. J-BOX SECURED TO OVER HEAD FRAME.

NOTE:
CONTRACTOR TO PROVIDE TWO SAMPLE LIGHT FIXTURES (WITH CORD, CAP AND LAMP) OF EACH TYPE OF LIGHT FIXTURE A, B, AND C. SEE SPECIFICATIONS.

EXISTING PANEL (21)

PANEL: L
DATE: 04/20/00 TIME: 11:42:47
JOB: 1655
PANEL VOLTAGE: 240/120 1ϕ 3 W
BUS: 125A
MAINS: 80A/2P
AIC RATING: 10,000
CIRCUIT CODE: blank or N : NON-CONTINUOUS; L : LONG-CONTINUOUS; R : DEMANDABLE RECEPTACLES; K : KITCHEN
MOUNTING: SURFACE
NO. OF EQUIPMENT: 0

CKT NO	CODE	TRIP	POLE	LOAD DESIGNATION DESCRIPTION	(NOTE)	M	R	L	CONNECTED VA ϕA	ϕB	A B	ϕA	ϕB	L	R	M	LOAD DESIGNATION (NOTE)	DESCRIPTION	TRIP	POLE	CODE	CKT NO
1		20		STAGE LIGHTS	(A)				1500			1500					(A)	STAGE LIGHTING	20			2
3			2	-	(A)					1500			1500				(A)	-		2		4
(C) 5	L	20	1	EXTERIOR LIGHTS	(A)				1000			X					(A)	SPARE	20	1		6
7		20	1	OUTLETS	(A)					1000			1350	6			(A)	'MOOD' LIGHTING	20	1	8	(E)
9		20	1	OUTLETS	(A)				1000			1500		10			(B)	'MOOD' LIGHTING (EVENT)	20	1	10	(E)
11		20	1	OUTLETS	(A)					1000			X				(B)	SPACE				12
(D) 13		20	1	NEW LIGHTING	(B)				1500			X					(B)	SPACE				14
(1) (D) 15		20	1	NEW LIGHTING (FUTURE)	(B)					1500			X				(B)	SPACE				16
17		20	1	NEW OUTLETS	(B) 2				360			X					(B)	SPACE				18
19		20	1	NEW OUTLETS	(B) 2					360			X					EX. MAIN C.B.	80			20
21		20	1	NEW OUTLETS	(B) 2				360			X						-		2		22
PHASE TOTALS									ϕA: 8320				ϕB: 7660									

PANEL NOTES:
(A) EXISTING CIRCUITS AND CIRCUIT BREAKERS.
(B) EXISTING SPACES.
(C) 5 EXISTING FIXTURES, 3 NEW FIXTURES. CIRCUIT CONTROLLED BY EXISTING RELAY AND EXISTING TIME CLOCK. SEE PLAN NOTE 14.
(D) DIMMER CONTROLLED PER PLAN NOTE NO. 14.
(E) DIMMER CONTROLLED PER PLAN NOTE NO. 30. (DIMMERS 'C' AND 'D')

TOTAL CONNECTED VA	15980
CONNECTED VA (CODE N)	14980
CONNECTED VA (CODE L)	1000
CONNECTED VA (CODE R)	0
CONNECTED VA (CODE K)	0
PANEL CONNECTED KVA	16.0
PANEL DEMAND KVA	16.2
PANEL DEMAND AMPS	67.6
HIGH ϕ AMPS W/LCL	71.4

GENERAL NOTES:

A. PAINT OUT ALL NEW EXPOSED EXTERIOR CONDUIT, JUNCTION BOXES AND MOUNTING DEVICES TO MATCH STRUCTURE.

B. ALL JUNCTION BOXES TO BE WEATHER PROOF 4S BOXES.

C. ROUTE ALL EXPOSED CONDUITS SIMILAR TO EXISTING.

D. THHN/THWN STRANDED COPPER WIRE ONLY

E. MATCH EXISTING ANCHORING HARDWARE FOR BOXES AND CONDUIT.

PLAN NOTES

1. 36" DIAMETER BY 6'-5" DEEP CONCRETE PIER TYP.
2. TS 6"x 6"x 3/8" COLUMN TYP.
3. 4'-0" x 4'-0" SAWCUT THROUGH EXISTING CONCRETE SLAB. REPAIR SLAB OR PLANTER TO MATCH EXISTING TYPE, ELEVATION AND FINISH. TYP.
4. EXISTING SHADE STRUCTURE SUPPORT. PROTECT IN PLACE.
5. EXISTING PLANTER & CURB TO REMAIN, PROTECT IN PLACE. WHERE SAWCUTTING IS REQUIRED FOR NEW FOUNDATION, REPLACE PLANTER CURB TO MATCH EXISTING. PROTECT IN PLACE ALL PLANTER IRRIGATION LINES AND PLANTS. PER CURRENT CITY STANDARDS.
6. EXISTING GFI, 120V OUTLET
7. EXISTING POLE MOUNTED LIGHT FIXTURE TO BE REMOVED. PROTECT AND STORE FIXTURE, POLE AND ALL HARDWARE PER OWNER'S REPRESENTATIVE'S DIRECTION. CAP EXISTING CONDUIT/CIRCUITS BELOW SLAB AND REPAIR CONCRETE SLAB TO MATCH ADJACENT SLAB. TAPE OFF WIRE TO FIXTURE IN (FUTURE) PULL BOX. (1)
8. PROTECT IN PLACE. EXISTING FLUSH PULL BOX.
8A. GRIND DOWN TOP OF PULL BOX FLUSH WITH (FUTURE) EXISTING SURFACE. RESET LID FLUSH WITH EXISTING SURFACE. (1)
9. NEW 120V, GFI, W.P. OUTLET. MOUNTED TO COLUMN AND MATCH EXISTING.
10. EXISTING PHOTOCELL. (VERIFY IN FIELD)
11. PROVIDE NEW DOUBLE DUPLEX, GFI, 20A, W.P. OUTLET (TWO CIRCUITS PER DEVICE) + 16". MATCH EXISTING.
12. SURFACE MOUNT TO STEEL BEAM SYSTEM. PROVIDE W.P. 120V, 20A DUPLEX TWIST-LOCK OUTLET + 16". MOUNT AS DIRECTED.
13. PROVIDE NEW LIGHT FIXTURE 'A'. MATCH EXISTING.
14. PROVIDE NEW BY-PASS SWITCH FOR EXISTING TIME CLOCK AND FOUR DIMMER SWITCHES; 'A' AND 'B' FOR CIRCUITS 13 AND 15; 'C' AND 'D' FOR CIRCUITS 8 AND 10. MOUNT THE FIVE DEVICES HORIZONTAL (STACKED) ON WALL SURFACE NEXT TO PANEL. DIMMERS TO BE 1500 WATT RATED LUTRON NO. NT-1500 IN 2 GANG BOX. LABEL DIMMERS 'A'; "SOUTH" AND 'B'; "EAST" AND DIMMERS 'C' AND 'D'; "MOOD LIGHTING-EVENT AREA". (DIMMER 'B' IS FUTURE.) (1)
15. EXISTING TIME CLOCK/RELAY.
16. 1" DIAMETER BAR, PER STRUCTURAL PLANS, TO BE MOUNTED AT TOP OF STRUCTURE FOR NEW C-CLAMP FIXTURES (TYPE 'B'). (FUTURE.) (1)
17. EXISTING TYPE 'A' FIXTURE.
18. CONNECT TO EXISTING SECURITY LIGHT CIRCUIT.
19. PROVIDE REQUIRED CONDUIT/WIRE.
20. 1/2" C. 2 #12
21. CIRCUIT NUMBERS ARE FOR CLARIFICATION ONLY. VERIFY EXACT CIRCUIT NUMBER IN FIELD. PROVIDE CORRECTED PANEL INDEX FOR NEW AND EXISTING CIRCUITS WITH EXACT INFORMATION.
22. 1/2" C. 3 #12
22A. 3/4" C. 5 #12
23. 3/4" C. 6 #12
24. 3/4" C. 8 #12
25. 1" C. 11 #10.
26. EXISTING CONDUIT/WIRE UNDER SLAB TO EX. PANEL 'L'.
27. SAW CUT EXISTING SLAB. PATCH/REPAIR. RUN CONDUIT TO PANEL 'L' SAME AS EXISTING PER NOTE 26. SEE CITY DETAIL NO. 201 ON SHEET NO. 2.
28. CONTROLLED BY DIMMER 'A'.
29. CONTROLLED BY DIMMER 'B'. (FUTURE.) (1)
30. CONTROLLED BY DIMMER 'C' (ON CIRCUIT 8) AND DIMMER 'D' (CIRCUIT 10).
31. 1/2" C. 2 #10 (FUTURE) (1)
32. REPAIR EXISTING DRY WALL AS NEEDED WITH PAINT/FINISH MATCH EXISTING WALL COLUMN.
33. 1/2" C. 3 #10

ELECTRICAL SYMBOLS

- A — NEW LIGHT FIXTURE 'A'
- C — NEW LIGHT FIXTURE 'C'
- CONDUIT/WIRE (1/2" C. 2 #12 UNLESS NOTED OTHERWISE)
- W.P. — WEATHER PROOF
- (J) — JUNCTION BOX, W.P.

REGISTERED PROFESSIONAL ENGINEER — WILBERT Y. CHO — ELECTRICAL ENGINEER — No. EE 7029 — EXP. 9/30/02 — STATE OF CALIFORNIA

REEDCORP ENGINEERING
CONSULTING ELECTRICAL ENGINEERS
2061 Business Center Drive, Suite 110
Irvine, CA 92612
(949) 752-1278 FAX: (949) 752-1287

1999-482-1655 4/21/00

NO.	DATE	REVISIONS	APP.	DATE
7				
6				
5				
4				
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JOB NO. 00-0113

DRAWN BY: DATE 2/00
DESIGNED BY: DATE 2/00
CHECKED BY: DATE 2/00

RECOMMENDED BY: DATE

APPROVED BY:
MARK CARROLL R.C.E. No. 31515 DATE

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LAKEVIEW SENIOR CENTER
SHADE STRUCTURE ADDITION
ELECTRICAL PLAN - SHT E-1
CITY OF IRVINE
COMMUNITY SERVICES DEPARTMENT

PROJECT NO.

SHEET 5 OF 5

RECORD DRAWING 10-31-01

E-1 (OF 1)

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APPENDIX D

FEDERAL REQUIREMENTS

Federally Assisted Project
U.S. Department of Housing and Urban Development

Exhibit 1	Summary of Contract Provisions for Inclusion in the Notice Inviting Bids
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EXHIBIT 1

Summary of Contract Provisions for Inclusion in the Notice Inviting Bids

Prevailing Wage Statement: This contract will be funded in whole or in part with federal housing and community development funds. The Federal Labor Standards Provisions, including prevailing wage requirements of the Davis-Bacon and Related Acts will be enforced. A copy of the Federal Wage Decision applicable to this project is included in the Bid Document.

This is project is a public work in the State of California, funded in whole or in part with public funds. Therefore, the higher of the two applicable prevailing wage rates, federal or state, will be enforced. The Contractor's duty to pay State prevailing wages can be found under Labor Code Section 1770 et seq. Labor Code Sections 1775 and 1777.7 outline the penalties for failure to pay prevailing wages and to employ apprentices, including forfeitures and debarment. The State Wage Decision is on file at the City Clerk's office, and is also available online at **http://www.dir.ca.gov/dlsr/**.

Apprenticeship Program: Attention is directed to Sections 1777.5, 1777.6 and 1777.7 of the California Labor Code and Title 8, California Administrative code, Section 200 et seq. to ensure compliance and complete understanding of the law regarding apprentices.

Minority and Women Owned Business: Bidders will be required to document their status as a Minority Business Enterprise (MBE), a Women-owned Business Enterprise (MBE) or a non-MBE/WBE firm. Bidders that are not MBE/WBE firms will be required to make a good faith effort, and to document their efforts to include firms as part of the contract bid.

Section 3 Statement: This is a HUD Section 3 construction contract. First preference will be given to a bidder who provides a reasonable bid and is a qualified Section 3 Business Concern. Second preference will be given to a bidder who provides a reasonable bid and commits to achieving the Section 3 employment, training and subcontracting opportunity goals by submitting a written commitment (Economic Opportunity Plan).

Conflict of Interest: In the procurement of supplies, equipment, construction, and services by sub-recipients, the conflict of interest provisions in (State LCA - 24 CFR 85.36 and Non-Profit Organizations – 24 CFR 84.4), OMB Circular A-110, and 24 CFR 570.611, respectively, shall apply. No employee, officer or agent of the sub-recipient shall participate in selection, or in the award or administration of a contract supported by Federal funds if a conflict of interest, real or apparent, would be involved.

EXHIBIT 2

Federal Labor Standards Provisions

(Next Page)

Applicability

The Project or Program to which the construction work covered by this contract pertains is being assisted by the United States of America and the following Federal Labor Standards Provisions are included in this Contract pursuant to the provisions applicable to such Federal assistance.

A. 1. (i) Minimum Wages. All laborers and mechanics employed or working upon the site of the work, will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR Part 3), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics. Contributions made or costs reasonably anticipated for bona fide fringe benefits under Section l(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of 29 CFR 5.5(a)(1)(iv); also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs, which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period.

Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under 29 CFR 5.5(a)(1)(ii) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible, place where it can be easily seen by the workers.

(ii) (a) Any class of laborers or mechanics which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. HUD shall approve an additional classification and wage rate and fringe benefits therefor only when the following criteria have been met:

(1) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

(2) The classification is utilized in the area by the construction industry; and

(3) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(b) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and HUD or its designee agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by HUD or its designee to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, D.C. 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise HUD or its designee or will notify HUD or its designee within the 30-day period that additional time is necessary. (Approved by the Office of Management and Budget under OMB control number 1215-0140.)

(c) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and HUD or its designee do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), HUD or its designee shall refer the questions, including the views of all interested parties and the recommendation of HUD or its designee, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise HUD or its designee or will notify HUD or its designee within the 30-day period that additional time is necessary. (Approved by the Office of Management and Budget under OMB Control Number 1215-0140.)

(d) The wage rate (including fringe benefits where appropriate) determined pursuant to subparagraphs (1)(ii)(b) or (c) of this paragraph, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

(iii) Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

(iv) If the contractor does not make payments to a trustee or other third person, the contractor may consider as part

of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program. (Approved by the Office of Management and Budget under OMB Control Number 1215-0140.)

2. Withholding. HUD or its designee shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld from the contractor under this contract or any other Federal contract with the same prime contractor, or any other Federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract In the event of failure to pay any laborer or mechanic, including any apprentice, trainee or helper, employed or working on the site of the work, all or part of the wages required by the contract, HUD or its designee may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased. HUD or its designee may, after written notice to the contractor, disburse such amounts withheld for and on account of the contractor or subcontractor to the respective employees to whom they are due. The Comptroller General shall make such disbursements in the case of direct Davis-Bacon Act contracts.

3. (i) Payrolls and basic records. Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in Section l(b)(2)(B) of the Davis-bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5 (a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in Section l(b)(2)(B) of the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs. (Approved by the Office of Management and Budget under OMB Control Numbers 1215-0140 and 1215-0017.)

(ii) (a) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to HUD or its designee if the agency is a party to the contract, but if the agency is not such a party, the contractor will submit the payrolls to the applicant sponsor, or owner, as the case may be, for transmission to HUD or its designee. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i) except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at *http://www.dol.gov/esa/whd/forms/wh347instr.htm* or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to HUD or its designee if the agency is a party to the contract, but if the agency is not such a party, the contractor will submit the payrolls to the applicant sponsor, or owner, as the case may be, for transmission to HUD or its designee, the contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this subparagraph for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to HUD or its designee. (Approved by the Office of Management and Budget under OMB Control Number 1215-0149.)

(b) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(1) That the payroll for the payroll period contains the information required to be provided under 29 CFR 5.5 (a)(3)(ii), the appropriate information is being maintained under 29 CFR 5.5(a)(3)(i), and that such information is correct and complete;

(2) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in 29 CFR Part 3;
(3) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(c) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by subparagraph A.3.(ii)(b).

(d) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under Section 1001 of Title 18 and Section 231 of Title 31 of the United States Code.

(iii) The contractor or subcontractor shall make the records required under subparagraph A.3.(i) available for inspection, copying, or transcription by authorized representatives of HUD or its designee or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, HUD or its designee may, after written notice to the contractor, sponsor, applicant or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

4. Apprentices and Trainees.

(i) Apprentices. Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination. In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.
(ii) Trainees. Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant ',to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by

the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(iii) Equal employment opportunity. The utilization of apprentices, trainees and journeymen under 29 CFR Part 5 shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR Part 30.

5. Compliance with Copeland Act requirements. The contractor shall comply with the requirements of 29 CFR Part 3 which are incorporated by reference in this contract

6. Subcontracts. The contractor or subcontractor will insert in any subcontracts the clauses contained in subparagraphs 1 through 11 in this paragraph A and such other clauses as HUD or its designee may by appropriate instructions require, and a copy of the applicable prevailing wage decision, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in this paragraph.

7. Contract termination; debarment. A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

8. Compliance with Davis-Bacon and Related Act Requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR Parts 1, 3, and 5 are herein incorporated by reference in this contract

9. Disputes concerning labor standards. Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR Parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and HUD or its designee, the U.S. Department of Labor, or the employees or their representatives.

10. (i) Certification of Eligibility. By entering into this contract the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of Section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1) or to be awarded HUD contracts or participate in HUD programs pursuant to 24 CFR Part 24.

(ii) No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of Section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1) or to be awarded HUD contracts or participate in HUD programs pursuant to 24 CFR Part 24.

(iii) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001. Additionally, U.S. Criminal Code, Section 1 01 0, Title 18, U.S.C., "Federal Housing Administration transactions", provides in part: "Whoever, for the purpose of . . . influencing in any way the action of such Administration..... makes, utters or publishes any statement knowing the same to be false..... shall be fined not more than $5,000 or imprisoned not more than two years, or both."

11. Complaints, Proceedings, or Testimony by Employees. No laborer or mechanic to whom the wage, salary, or other labor standards provisions of this Contract are applicable shall be discharged or in any other manner discriminated against by the Contractor or any subcontractor because such employee has filed any complaint or instituted or caused to be instituted any proceeding or has testified or is about to testify in any proceeding under or relating to the labor standards applicable under this Contract to his employer.

B. Contract Work Hours and Safety Standards Act. The provisions of this paragraph B are applicable where the amount of the prime contract exceeds $100,000. As used in this paragraph, the terms "laborers" and "mechanics" include watchmen and guards.

(1) Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which the individual is employed on such work to work in excess of 40 hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of 40 hours in such workweek.

(2) Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in subparagraph (1) of this paragraph, the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in subparagraph (1) of this paragraph, in the sum of $10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of 40 hours without payment of the overtime wages required by the clause set forth in sub paragraph (1) of this paragraph.

(3) Withholding for unpaid wages and liquidated damages. HUD or its designee shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contract, or any other Federally-assisted contract subject to the Contract Work Hours and Safety Standards Act which is held by the same prime contractor such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in subparagraph (2) of this paragraph.

(4) Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in subparagraph (1) through (4) of this paragraph and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in subparagraphs (1) through (4) of this paragraph.

C. Health and Safety. The provisions of this paragraph C are applicable where the amount of the prime contract exceeds $100,000.

(1) No laborer or mechanic shall be required to work in surroundings or under working conditions which are unsanitary, hazardous, or dangerous to his health and safety as determined under construction safety and health standards promulgated by the Secretary of Labor by regulation.

(2) The Contractor shall comply with all regulations issued by the Secretary of Labor pursuant to Title 29 Part 1926 and failure to comply may result in imposition of sanctions pursuant to the Contract Work Hours and Safety Standards Act, (Public Law 91-54, 83 Stat 96). 40 USC 3701 et seq.

(3) The contractor shall include the provisions of this paragraph in every subcontract so that such provisions will be binding on each subcontractor. The contractor shall take such action with respect to any subcontractor as the Secretary of Housing and Urban Development or the Secretary of Labor shall direct as a means of enforcing such provisions.

EXHIBIT 3

Federal Equal Employment Opportunity / Affirmative Action Provisions

1. **EQUAL OPPORTUNITY CLAUSE**. During the performance of this contract, the contractor agrees as follows:

   a. The contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. The contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex, or national origin. Such action shall include, but not be limited to the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.

   b. The contractor will, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, or national origin.

   c. The contractor will send to each labor union or representative of workers with which he/she has a collective bargaining agreement or other contract or understanding, a notice to be provided, advising the said labor union or workers' representative of the contractor's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

   d. The contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.

   e. The contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by the rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his/her books, records, and accounts by the administering agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

   f. In the event of the contractor's noncompliance with the nondiscrimination clause of this contract or with any of the said rules, regulations, or orders, this contract may be canceled, terminated, or suspended in whole, or in part, and the contractor may be declared ineligible for further government contracts or federally assisted construction contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

   g. The contractor will include the provisions of Paragraph 1a through 1g in every subcontract or purchase order unless exempted by rule, regulations, or orders of

the Secretary of Labor issued pursuant to Section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The contractor will take such action with respect to any subcontract or purchase order as the administering agency may direct as a means of enforcing such provisions, including sanctions for noncompliance. Provided, however, that in the event a contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the administering agency, the contractor may request the United States to enter into such litigation to protect the interests of the United States.

2. **NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY** (Executive Order 11246)

a. The Offeror's or Bidder's attention is called to the Equal Opportunity Clause and the Standard Federal Equal Employment Specifications set forth herein.

b. The goals and timetables for minority and female participation, expressed in percentage terms for the contractor's aggregated work force in each trade on all construction work in the covered area, are as follows:

Timetables

Location of Work by Standard Metropolitan Statisical Area (SMSA)	Goals for Minority Participation in Each Trade	Goals for Female Participation in Each Trade
0360 Anaheim-Santa Ana-Garden Grove, CA	11.9%	6.9%
4480 Los Angeles-Long Beach, CA	28.3%	6.9%
6000 Oxnard-Simi Valley-Ventura, CA	21.5%	6.9%
6780 Riverside-San Bernardino-Ontario, CA	19.0%	6.9%
7480 Santa Barbara-Santa Maria-Lompoc, CA	19.7%	6.9%
7320 San Diego, CA	16.9%	6.9%
6920 Sacramento, CA	16.1%	6.9%
8520 Tucson, Pima AZ	24.1%	6.9%
6200 Phoenix, Maricopa AZ	15.8%	6.9%

These goals are applicable to all the contractor's construction work (whether or not it is Federal or federally assisted) performed in the covered area. If the contractor performs construction work in a geographical area located outside of the covered area, it shall apply the goals established for such geographical area where the work is actually performed. With regard to this second area, the contractor also is subject to the goals for both its federally involved and non-federally involved construction.

The contractor's compliance with the Executive Order and the regulations in 41 CFR Part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmation action obligations required by the specifications set forth in 41 CFR Part 60-4.3(a), and its efforts to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract and in each trade, and the contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from contractor to contractor or from project to project for the sole purpose of meeting the contractor's goals shall be a violation of the contract, the Executive

Order, and the regulations of 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

c. The contractor shall provide written notification to the Director of the Office of Federal Contract Compliance Programs within ten (10) working days of award of any construction subcontract in excess of $10,000 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the name, address, and telephone number of the subcontractor; employer identification number of the subcontractor; estimated dollar amount of the subcontract; estimated starting and completion dates of the subcontract; and the geographical area in which the contract is to be performed.

d. As used in this notice, and in the contract resulting from this solicitation, the covered area is the Standard Metropolitan Statistical Area of Los Angeles-Long Beach, specifically the County of Los Angeles, State of California.

3. **STANDARD FEDERAL EQUAL EMPLOYMENT SPECIFICATIONS** (Executive Order 11246).

a. As used in these specifications:

(1) Covered area means the geographical area described in the solicitation from which this contract resulted;

(2) Director means Director, Office of Federal Contract Compliance Programs, United States Department of Labor, or any person to whom the Director delegates authority;

(3) Employer Identification Number (EIN) means the Federal Social Security Number used on the Employer's Quarterly Federal Tax Return, United States Treasury Department Form 941.

(4) Minority includes:

(a) Black (all persons having origins in any of the Black African racial groups not of Hispanic origin)

(b) Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish culture or origin, regardless of race);

(c) Asian and Pacific Islander (all persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or the pacific Islands); and

(d) American Indian or Alaskan Native (all persons having origins in any of the original peoples of North America and maintaining identifiable tribal affiliations through membership and participation or community identification).

b. Whenever the contractor, or any subcontractor at any tier, subcontracts a portion of the work involving any construction trade, it shall physically include in each subcontract in excess of $10,000 the provisions of these specifications and

the notice which contains the applicable goals for minority and female participation and which is set forth in the solicitations from which this contract resulted.

c. If the contractor is participating (pursuant to 41 CFR Part 60-4.5) in a Hometown Plan approved by the United States Department of Labor in the covered area either individually or through an association, its affirmative action obligations on all work in the Plan area (including goals and time tables) shall be in accordance with that Plan for those trades which have unions participating in the Plan. Contractors must be able to demonstrate their participation in and compliance with the provisions of any such Hometown Plan. Each contractor or subcontractor participating in an approved Plan is individually required to comply with its obligations under the EEO Clause, and to make a good faith effort to achieve each goal under the Plan in each trade in which it has employees. The overall good faith performance by other contractors or subcontractors toward a goal in an approved Plan does not excuse any covered contractor's or subcontractor's failure to take good faith efforts to achieve the Plan goals and timetables.

d. The contractor shall implement the specific affirmative action standards provided in paragraphs 3g (1) through 3g (16) of these specifications. The goals set forth in the solicitation from which this contract resulted are expressed as percentages of the total hours of employment and training of minority and female utilization the contractor should reasonable be able to achieve in each construction trade in which it has employees in the covered area. Covered construction contractors performing construction work in geographical areas where they do not have a Federal or federally assisted construction contract shall apply the minority and female goals established for the geographical area where the work is being performed. Goals are published periodically in the Federal Register in notice form, and such notices may be obtained from any Office of Federal Contract Compliance Programs office or from Federal procurement contracting officers. The contractor is expected to make substantially uniform progress in meeting its goals in each craft during the period specified.

e. Neither the provisions of any collective bargaining agreement nor the failure by a union with whom the contractor has a collective bargaining agreement, to refer either minority or women shall excuse the contractor's obligations under these specifications, Executive Order 11246, or the regulations promulgated pursuant thereto.

f. In order for the nonworking training hours of apprentices and trainees to be counted in meeting the goals, such apprentices and trainees must be employed by the contractor during the training period, and the contractor must have made a commitment to employ the apprentices and trainees at the completion of their training, subject to the availability of employment opportunities. Trainees must be trained pursuant to training programs approved by the United States Department of Labor.

g. The contractor shall take specific affirmative actions to ensure equal employment opportunity. The evaluation of the contractor's compliance with these specifications shall be based upon its effort to achieve maximum results from its

actions. The contractor shall document these efforts fully, and shall implement affirmative action steps at least as extensive as the following:

(1) Ensure and maintain working environment free of harassment, intimidation, and coercion at all sites, and in all facilities at which the contractor's employees are assigned to work. The contractor, where possible, will assign two or more women to each construction project. The contractor shall specifically ensure that all foremen, superintendents, and other on-site supervisory personnel are aware of and carry out the contractor's obligation to maintain such a working environment, with specific attention to minority or female individuals working at such sites or in such facilities.

(2) Establish and maintain a current list of minority and female recruitment sources, provide written notification to minority and female recruitment sources and to community organizations when the contractor or its unions have employment opportunities available, and maintain a record of the organization's responses.

(3) Maintain a current file of the name, address, and telephone numbers of each minority and female off-the-street applicant and minority or female referral from a union, a recruitment source, or community organization and of what action was taken with respect to each such individual. If such individual was sent to the union hiring hall for referral and was not referred back to the contractor by the union or, if referred, not employed by the contractor, this shall be documented in the file with the reason therefore, along with whatever additional actions the contractor may have taken.

(4) Provide immediate written notification to the Director when the union or unions with which the contractor has a collective bargaining agreement has not referred to the contractor a minority person or woman sent by the contractor, or when the contractor has other information that the union referral process has impeded the contractor's efforts to meet its obligations.

(5) Develop on-the-job training opportunities and/or participate in training programs for the area which expressly include minorities and women, including upgrading programs and apprenticeship and trainee programs relevant to the contractor's employment needs, especially those programs funded or approved by the Department of Labor. The contractor shall provide notice of these programs to the sources compiled under 3g (2) above.

(6) Disseminate the contractor's EEO policy by providing notice of the policy to unions and training programs and requesting their cooperation in assisting the contractor in meeting its EEO obligations; by including it in any policy manual and collective bargaining agreement; by publicizing it in the company newspaper, annual report, etc.; by specific review of the policy with all management personnel and with all minority and female employees at least once a year; and by posting the company EEO policy

on bulletin boards accessible to all employees at each location where construction work is performed.

(7) Review, at least annually, the company's EEO policy and affirmative action obligations under these specifications with all employees having any responsibility for hiring, assignment, layoff, termination or other employment decisions including specific review of these items with on-site supervisory personnel such as Superintendents, General Foremen, etc., prior to the initiation of construction work at any job site. A written record shall be made and maintained identifying the time and place of these meetings, persons attending, subject matter discussed, and disposition of the subject matter.

(8) Disseminate the contractor's EEO policy externally by including it in any advertising in the news media, specifically including minority and female news media, and providing written notification to and discussing the contractor's EEO policy with other contractors and subcontractors with whom the contractor does or anticipates doing business.

(9) Direct its recruitment efforts, both oral and written, to minority, female, and community organizations; to schools with minority and female students; and to minority and female recruitment and training organizations serving the contractor's recruitment area and employment needs. Not later than one month prior to the date for the acceptance of applications for apprenticeship or other training by any recruitment sources, the contractor shall send written notification to organizations such as the above, describing the opening, screening procedures, and tests to be used in the selection process.

(10) Encourage present minority and female employees to recruit other minority persons and women and, where reasonable, provide after school, summer, and vacation employment to minority and female youth, both on the site and in other areas of a contractor's work force.

(11) Validate all tests and other selection requirements where there is an obligation to do so under 41 CFR Part 60-3, Uniform Guidelines on Employee Selection Procedures.

(12) Conduct, at least annually, an inventory and evaluation at least of all minority and female personnel for promotional opportunities and encourage these employees to seek or to prepare for, through appropriate training, etc., such opportunities.

(13) Ensure that seniority practices, job classifications, work assignments, and other personnel practices do not have a discriminatory effect by continually monitoring all personnel and employment-related activities to ensure that the EEO policy and the contractor's obligations under these specifications are being carried out.

(14) Ensure that all facilities and company activities are non-segregated except that separate or single-user toilet and necessary changing facilities shall be provided to assure privacy between the sexes.

(15) Document and maintain a record of all solicitations of offers for subcontracts from minority and female construction contractors and suppliers, including circulation of solicitations to minority and female contractor associations and other business associations.

(16) Conduct a review, at least annually, of all supervisors' adherence to and performance under the contractor's EEO policies and affirmative action obligations.

h. Contractors are encouraged to participate in voluntary associations which assist in fulfilling one or more of their affirmative action obligations 3g(1) through (16). The efforts of a contractor association, joint contractor-union, contractor-community, or other similar group of which the contractor is a member and participant, may be asserted as fulfilling any one or more of its obligations under 3g(1) though (16) of these specifications provided that the contractor actively participates in the group, makes every effort to ensure that the group has a positive impact on the employment of minorities and women in the industry, ensures that the concrete benefits of the program are reflected in the contractor's minority and female work force participation, makes a good faith effort to meet its individual goals and timetables, and can provide access to documentation which demonstrates the effectiveness of actions taken on behalf of the contractor. The obligation to comply, however, is the contractor's, and failure of such a group to fulfill an obligation shall not be a defense for the contractor's noncompliance.

I. A single goal for minorities and a separate single goal for women have been established. The contractor, however, is required to provide equal employment opportunity and to take affirmative action for all minority groups, both male and female, and all women, both minority and non-minority. Consequently, the contractor may be in violation of the Executive Order if a particular group is employed in a substantially disparate manner (for example, even though the contractor has achieved its goals for women generally, the contractor may be in violation of the Executive Order if a specific minority group of women is underutilized).

j. The contractor shall not use the goals and timetables of affirmative action standards to discriminate against any person because of race, color, religion, sec or national origin.

k. The contractor shall not enter into any subcontract with any person or firm debarred from Government contracts pursuant to Executive Order 11246.

l. The contractor shall carry out such sanctions and penalties for violation of these specifications and of the Equal Opportunity Clause, including suspension, termination, and cancellation of existing subcontracts as may be imposed or ordered pursuant to Executive Order 11246, as amended, and its implementing regulations, by the Office of Federal Contract Compliance Programs. Any contractor who fails to carry out such sanctions and penalties shall be in violation of these specifications and Executive Order 11246, as amended.

m. The contractor, in fulfilling its obligations under these specifications, shall implement specific affirmative actions steps, at least as extensive as those standards prescribed in Paragraph 3g of these specifications, so as to achieve maximum results from its efforts to ensure equal employment opportunity. If the contractor fails to comply with the requirements of the Executive Order, the implementing regulations, or these specifications, the Director shall proceed in accordance with 41 CFR Part 60-1.8 (Show Cause Notice).

n. The contractor shall designate a responsible official to monitor all employment related activity to ensure that the company EEO policy is being carried out, to be required by the Government and to keep records. Records shall at least include for each employee the name, address, telephone numbers, construction trade, union affiliation, if any, employee identification number when assigned, social security number, race, sex, status (e.g., mechanic, apprentice, trainee, helper, or laborer), dates of changes in status, hours worked per week in the indicated trade, rate of pay, and locations at which the work was performed. Records shall be maintained in an easily understandable and retrievable form; however, to the degree that existing records satisfy this requirement, contractors shall not be required to maintain separate records.

o. Nothing herein provided shall be construed as a limitation upon the application of other laws which establish different standards of compliance or upon the application of requirements for the hiring of local or other area residents (e.g., those under the Public Works Employment Act of 1977 and the Community Development Block Grant Program).

p. The Director, from time to time, shall issue goals and timetables for minority and female utilization which shall be based on appropriate work force, demographic or other relevant data and which shall cover construction projects or construction contracts performed in specific geographic areas. The goals, which shall be applicable to each construction trade in a covered contractor's or subcontractor's entire work force which is working in the area covered by the goals and timetables, shall be published as notices in the Federal Register, and shall be inserted by the contracting officers and applicants, as applicable, in the Notice required by 41 CFR 60-4.2.

4. **SPECIFIC EEO REQUIREMENTS**. For a federally assisted construction contract in excess of $10,000, the contractor/subcontractor shall:

a. Forward the following EEO certification forms to the contract awarding authority prior to contract award: Certification of Non-segregated Facilities and Certification with Regard to the Performance of Previous Contracts or Subcontracts Subject to the Equal Opportunity Clause and the Filing of Required Reports.

b. Submit a notification of subcontracts awarded to the Director, Office of Federal Contract Compliance Programs, United States Department of Labor - ESA, 200 Constitutional Avenue, NW, Room C3325, Washington, D.C., 20210, within 10 working days of award of any subcontract in excess of $10,000, listing the name, address, and telephone number of the subcontractor; employer identification number; estimated dollar amount of the subcontract; estimated starting date

and completion dates of the subcontract; and the geographical area in which the contract is to be performed.

c. Send a notice of the contractor's commitment to equal employment opportunity to labor unions or representatives of workers prior to commencement of construction work.

d. Display an equal employment opportunity poster in a conspicuous place available to employees and applicants for employment.

e. For contracts in excess of $10,000, bind subcontractors to the Federal Equal Employment Opportunity requirements by including the provisions of Paragraphs 1 through 3, above, in the subcontract.

f. Upon commencement of construction work and until the work is completed, forward the Monthly Employment Utilization Report (Form CC-257) to the contract awarding authority by the end of each work month. With the initial monthly report, the contractor/subcontractor shall attach the Contractor's List of Federal and Non-Federal Work in Bid Condition Area to the monthly report.

5. **CIVIL RIGHTS ACT OF 1964**. Under Title VI of the Civil Rights Act of 1964, no person shall, on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance.

6. **SECTION 109 OF THE HOUSING AND COMMUNITY DEVELOPMENT ACT OF 1974**. No person in the United States on the grounds of race, color, national origin, or sex be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity funded in whole or in part with funds made available under this title.

7. **THE AGE DISCRIMINATION ACT OF 1975**. No person in the Unites States shall, on the basis of age, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance.

8. **REHABILITATION ACT OF 1973**. No otherwise qualified individual with handicaps in the United States shall, solely by reason of his or her handicap, be excluded from the participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal assistance.

EXHIBIT 4

Minority and Women-Owned Business Enterprise Plan

A. Background

The Awarding Agency is a recipient of federal housing and community development assistance through the U.S. Department of Housing and Urban Development (HUD). OMB Circular A-102 states that "It is national policy to award a fair share of contracts to small and minority business firms. Grantees shall take similar appropriate affirmative action to support of women's enterprises and are encouraged to procure goods and services from labor surplus areas." The Uniform Administrative Requirements of 24 CFR 85.36(e) require the Awarding Agency to "take all necessary affirmative steps to assure that minority firms, women's business enterprises, and labor surplus area firms are used when possible." This requirement is applicable to contracting and subcontracting opportunities funded in whole or in part with the federal housing and community development assistance.

Further, the Awarding Agency is required to submit a report to HUD pertaining to the Awarding Agency's Minority Business Enterprise (MBE) and Women's Business Enterprise (WBE) contracting and subcontracting activity generated through the expenditure of HUD funds.

B. Policy

For the purpose of this contract award, the Awarding Agency shall utilize MBE/WBE firms to the greatest extent possible, feasible and legally permissible. This MBE/WBE Plan is guided by the preceding federal regulations and all other related federal and state laws and regulations governing discrimination, equal opportunity and affirmative action pertaining to federally-funded contract and subcontract activities.

The Awarding Agency requires all bidders to abide by these provisions and to make every effort to obtain MBE/WBE participation on this project. Failure to provide required MBE/WBE information to the Awarding Agency as required or requested in this bid solicitation may result in a determination by the Awarding Agency that the bidder is not a responsible bidder.

A successful bidder does not have to be a member of a minority group. What the Awarding Agency is attempting to do is make every possible effort to ensure the participation of MBE/WBE firms on this federally-funded contracting opportunity. This does not preclude the participation of firms that are not MBE/WBE. However, the MBE and WBE performing or providing services must not act merely as a passive conduit. In the event the Awarding Body has reason to question the authenticity of ownership of an MBE/WBE, the burden of proof is on the claimant and/or contracting party to provide documentation to substantiate the ownership and management of a particular MBE or WBE.

Whenever a joint venture MBE/WBE involves a business owned by minorities or women, the contractor shall provide the Awarding Agency with a full account of the nature of the relationship, the basis for creation, the particular financial participation and administrative responsibilities of the parties. The nature of the relationship shall be in writing, and conform to pertinent laws governing the relationships. The Awarding Agency shall have the right to review and make a determination on the propriety of same.

C. Definitions

a. Minority and women business enterprises are defined as any financial institution, business, service, contracting business which is solely owned and operated by a minority group member or women or that is more than 50% owned by minority group members or women. If the enterprise is publicly owned, the minority/women members or stockholders must have at least 51% interest and possess control over management, capital and earnings.

b. Minority Group Member- Black, Hispanic, Asian or Pacific Islander, American Indian or Alaskan Native, and women.
- Black: A person with origins in any of the black racial groups of Africa.
- Hispanic: A person of Mexican, Puerto Rican, Cuban, Central or South American descent and Spanish culture. Portuguese are excluded from the Hispanic category and are classified according to their race.
- Asian or Pacific Islander: A person having origins in the Far East, Southeast Asia, Indian subcontinent or Pacific Islands.
- American Indian or Alaskan Native: A person with origins in original peoples of North America, and who maintain cultural identifications through tribal affiliation or community recognition.

c. Other
- Small Business Enterprise: A business which meets the definition of minority business enterprise or women business enterprise, and in addition, meets the small business size standards of the Small Business Administration.
- Contractor/Subcontractor/Supplier: The individual, partnership, corporation or other legal entity entering into a contract with the City or the City's contractor to perform a portion of the work.

D. Outreach Efforts

Non MBE/WBE bidders must notify minority and women contractors, associations, minority interest groups, etc., of their intention to solicit bids for subcontracts from MBE/WBE firms. This may be accomplished in a variety of ways; however, the non-MBE/WBE bidder must demonstrate that good faith efforts were made to secure the participation of MBE/WBE firms.

E. Documentation Required from Bidders to Document Responsible MBE/WBE Outreach

As part of this contract opportunity, non MBE/WBE bidders must demonstrate that they have made the subcontracting opportunity known to at least three (3) MBE/WBE firms listed in a bona-fide listing of MBE/WBE firms. Such notification must be made at least two (2) weeks prior to bid opening via registered or certified mail. If the contractor has not achieved the participation goal, the Awarding Agency will determine whether the contractor made a good faith effort based on the outreach efforts that are documented on the MBE/WBE Tiered Compliance Plan.

1. To be considered responsible, bidders must submit the MBE/WBE Tiered Compliance Plan (included in this Bid Document/Solicitation) and all supporting documentation to:
- Document their own MBE or WBE status, or
- Document the award of MBE and WBE subcontracts to bona-fide firms, or

- Document the required minimum three (3) firm outreach effort and any other outreach efforts.

The good-faith effort Affidavit on the MBE/WBE Tiered Compliance Plan must be notarized.

2. Some examples of acceptable good-faith supporting documentation include:
   - Responses, proposals, bids from MBE and WBE, rejections and contractor's responses.
   - Contracts with MBE and WBE organizations, associations, related agencies, disseminating bid information.
   - Copies of registered/certified letters, etc.
   - Efforts undertaken by contractor(s) to assist MBE/WBE with obtaining plans, specification, sub bid requirements and bonding.
   - Assistance and encouragement of MBE/WBE and subcontractor participation in all areas of business environment.
   - Methods used in soliciting bids from MBE/WBE, subcontractors and suppliers by advertisements, trade publications, media, etc.
   - Contracts with MBE/WBE brokers, agents, owners, operators of equipment, etc.
   - Other efforts taken by contractor to encourage MBE/WBE participation.

F. Contract Award / Protest

Where a determination is made by Awarding Agency staff as part of the MBE/WBE Bid Evaluation that a bidder is not a MBE/WBE firm or has not made the good faith effort to ensure participation by eligible, WBE and MBE subcontractors, the bid may be deemed not responsible. A bidder whose bid is deemed not responsible may protest to the Contracting Officer of the Awarding Body in writing within 72 hours of the notification of such a determination. The Contracting Officer shall review the facts presented in the written appeal, including any supporting materials, and shall issue a determination and response on the merits of the appeal within ten (10) calendar days. The decision of the Contracting Officer shall be final.

EXHIBIT 5

Compliance with Clean Air and Water Acts

During the performance of this contract, the contractor and all subcontractors shall comply with the requirements of the Clean Air Act, as amended, 42 USC 1857 et seq., the Federal Water Pollution Control Act, as amended, 33 USC 1251 et seq., and the regulations of the Environmental Protection Agency with respect thereto, at 40 CFR Part 15, as amended.

In addition to the foregoing requirements, all nonexempt contractors and subcontractors shall *furnish to* the owner, the following:

1. A stipulation by the contractor or subcontractors, that any facility to be utilizes in the performance of any non exempt contract or subcontract, is not listed on the List of Violating Facilities issued by the Environmental Protection Agency (EPA) pursuant to 40 CFR 15.20.

2. Agreement by the contractor to comply with all the requirements of Section 114 of the Clean Air Act, as amended, (42 USC 1857c-8) and Section 308 of the Federal Water Pollution Control Act, as amended, (33 USC 1318) relating to inspection, monitoring, entry, reports and information, as well as all other requirements specified in said Section 114 and Section 308, and all regulations and guidelines issued there under.

3. A stipulation that as a condition for the award of the contract, prompt notice will be given of any notification received from the Director, Office of Federal Activities, EPA, indicating that a facility utilized, or to be utilized for the contract, is under consideration to be listed on the EPA List of Violating Facilities.

4. Agreement by the contractor that he will include, or cause to be included, the criteria and requirements in paragraph (1) through (4) of this section in every nonexempt subcontract and requiring that the contractor will take such action as the government may direct as a means of enforcing such provisions.

EXHIBIT 6

Worker's Compensation Certification

DATE	PROJECT NAME	PROJECT NUMBER

COMPANY NAME	PHONE

COMPANY ADDRESS

I certify, by signature below, that I am aware of the provisions of Section 3700 of the California Labor Code which require every employer to be insured against liability for worker's compensation or to undertake self-insurance in accordance with the provisions of that code, and I will comply with such provisions before commencing the performance of the work of this contract.

AUTHORIZED OFFICIAL NAME	AUTHORIZED OFFICIAL TITLE/CAPACITY

AUTHORIZED OFFICIAL SIGNATURE	DATE

EXHIBIT 7

List of Proposed Subcontractors or Sub-Tier Contractors

PROJECT NAME | PROJECT NUMBER | AWARDING AGENCY

COMPANY NAME | BID/CONTRACT/SUBCONTRACT DOLLAR AMOUNT | PHONE NUMBER

COMPANY ADDRESS | FAX NUMBER

LICENSE NUMBER | EMPLOYER IDENTIFICATION NUMBER | DUNS NUMBER | E-MAIL

Contractor must list all subcontracts or sub-tier contracts involving labor at the site of construction, regardless of dollar amount or percentage of bid

Sub or Sub-tier Contractor's: Name, Address, and Telephone Number	Contractor License Number	Employer Identification Number	DUNS Number	Contract Amount	Estimated Start Date	Estimated Completion Date	Trade(s) to be Used

AUTHORIZED OFFICIAL NAME | AUTHORIZED OFFICIAL TITLE/CAPACITY | AUTHORIZED OFFICIAL SIGNATURE | DATE

EXHIBIT 8

Certification of Understanding and Authorization

PROJECT NAME/NUMBER _____ AWARDING AGENCY _____

COMPANY NAME _____

COMPANY ADDRESS _____

LICENSE NUMBER _____ EMPLOYER IDENTIFICATION NUMBER _____ DUNS NUMBER _____

This is to certify that the principal(s), and the authorized payroll officer listed below, have read the "Contractor's Guide to Prevailing Wage Requirements for Federally Assisted Construction" and the Federal Labor Standards Provisions (HUD-4010 form) and that both parties understand these requirements.

The following person is designated as the payroll officer for the company and is authorized to sign the Statement of Compliance that will accompany each weekly Certified Payroll Report for the project:

PAYROLL OFFICER: (Individual Responsible for Signing Statements of Compliance)

NAME _____ TITLE _____

SIGNAURE _____ DATE _____

PRINCIPAL OWNER / GENERAL PARTNER: (Listed on CSLB Personnel List)

NAME _____ TITLE _____

SIGNAURE _____ DATE _____

EXHIBIT 9

Request for Additional Classification and Rate

(Next Page)

U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
REPORT OF ADDITIONAL CLASSIFICATION AND RATE

HUD FORM 4230A
OMB Approval Number 2501-0011
(Exp. 01/31/2010)

1. FROM (*name and address of requesting agency*)	2. PROJECT NAME AND NUMBER 3. LOCATION OF PROJECT (City, County and State)
4. BRIEF DESCRIPTION OF PROJECT	5. CHARACTER OF CONSTRUCTION ☐ Building ☐ Residential ☐ Heavy ☐ Other (specify) ☐ Highway
6. WAGE DECISION NO. (include modification number, if any) ☐ COPY ATTACHED	7. WAGE DECISION EFFECTIVE DATE

8. WORK CLASSIFICATION(S)	HOURLY WAGE RATES	
	BASIC WAGE	FRINGE BENEFIT(S) (if any)

9. PRIME CONTRACTOR (name, address)	10. SUBCONTRACTOR/EMPLOYER, IF APPLICABLE (name, address)

Check All That Apply:

☐ The work to be performed by the additional classification(s) is not performed by a classification in the applicable wage decision.

☐ The proposed classification is utilized in the area by the construction industry.

☐ The proposed wage rate(s), including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage decision.

☐ The interested parties, including the employees or their authorized representatives, agree on the classification(s) and wage rate(s).

☐ Supporting documentation attached, including applicable wage decision.

Check One:

☐ **Approved, meets all criteria. DOL confirmation requested.**

☐ **One or more classifications fail to meet all criteria as explained in agency referral. DOL decision requested.**

Agency Representative *(Typed name and signature)* *Date* *Phone Number*	**FOR HUD USE ONLY** **LR2000:** **Log in:** **Log out:**

HUD-4230A (8-03) PREVIOUS EDITION IS OBSOLETE

EXHIBIT 10

Non-Segregated Facilities Certification

PROJECT NAME	PROJECT NUMBER	BID/CONTRACT DOLLAR AMOUNT

COMPANY NAME

COMPANY ADDRESS

LICENSE NUMBER	EMPLOYER IDENTIFICATION NUMBER	DUNS NUMBER

The federally-assisted construction contractor certifies that he/she does not and will not:

1. Maintain or provide, for his/her employees, any segregated facilities at any of his/her establishments.

2. Permit his/her employees to perform their services at any location, under his/her control, where segregated facilities are maintained.

The federally assisted contractor agrees that a breach of this certification is a violation of the Equal Opportunity Clause in this contract. As used in this certification, the term segregated facilities means any waiting room, work areas, restrooms and washrooms, restaurants and other eating areas, time clocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees which are segregated by explicit directive or are in fact segregated on the basis of race, creed, color, or national origin, because of habit, local custom, or otherwise.

The federally-assisted contractor agrees that (except where he/she has obtained identical certifications from proposed subcontractors for specific time periods) he/she will obtain identical certifications from proposed subcontractors prior to the award of subcontracts exceeding $10,000 which are not exempt from the provisions of the Equal Opportunity Clause, and that he/she will retain such certifications in his/her files.

NOTE: The penalty for making false statements in offers is prescribed in 18 U.S.C. 1001.

AUTHORIZED OFFICIAL NAME	AUTHORIZED OFFICIAL TITLE/CAPACITY
AUTHORIZED OFFICIAL SIGNATURE	DATE

EXHIBIT 11

Past Performance Certification

PROJECT NAME	PROJECT NUMBER	NUMBER OF EMPLOYEES

COMPANY NAME

COMPANY ADDRESS

LICENSE NUMBER	EMPLOYER IDENTIFICATION NUMBER	DUNS NUMBER

The ☐ bidder, ☐ proposed sub-contractor, hereby certifies that he/she ☐ has, ☐ has not, participated in a previous contract or subcontract subject to the Equal Opportunity Clause, as required by Executive Orders 10925, 11114, or 11246, and that he/she ☐ has, ☐ has not, filed with the Joint Reporting Committee, the Director of the Office of Federal Contract Compliance, a Federal Government contracting or administering agency, or the former President's Committee on Equal Employment Opportunity, all reports due under the applicable filing requirements.

NOTE: The penalty for making false statements in offers is prescribed in 18 U.S.C. 1001.

AUTHORIZED OFFICIAL NAME	AUTHORIZED OFFICIAL TITLE/CAPACITY
AUTHORIZED OFFICIAL SIGNATURE	DATE

NOTE: The above certification is required by the Equal Employment Opportunity Regulations of the Secretary of Labor (41 CFR 60-1.7(b)(1), and must be submitted by bidders and proposed subcontractors only in connection with contracts and subcontracts which are subject to the equal opportunity clause. Contracts and subcontracts which are exempt from the equal opportunity clause are set forth in 41 CFR 60-1.5 (Generally only contracts or subcontracts of $10,000 or under are exempt). Proposed prime contractors and subcontractors who have participated in a previous contract or subcontract subject to the Executive Orders and have not filed the required reports should note that 41 CFR 60-1.7(b)(1) prevents the award of contracts and subcontracts unless such contractor submits a report covering the delinquent period or such other period specified by the U.S. Department of the Interior or by the Director, Office of Federal Contract Compliance, U.S. Department of Labor.

SF-100 (EEO-1) must be filed by:

(A) All private employers who are:

(1) Subject to Title VII of the Civil Rights Act of 1964 (as amended) with 100 or more employees.

(2) Subject to Title VII who has fewer than 100 employees, if the company is owned or affiliated with another company, or there is centralized ownership, control or management so that the group legally constitutes a single enterprise, and the entire enterprise employs a total of 100 or more employees.

(B) All federal contractors (private employers), who:

(1) Are not exempt as provided for by 41 CFR 60-1.5

(2) Have 50 or more employees, and

a. Are prime contractors or first-tier subcontractors, and have a contract, subcontract, or purchase order amounting to $50,000 or more; or

b. Serve as a depository of Government funds in any amount, or

c. Is a financial institution, which is an issuing, and paying agent for U.S. Savings Bonds and Notes.

EXHIBIT 12

Notice of Equal Employment Opportunity

TO: _____
NAME OF LABOR UNION, WORKERS REPRESENTATIVE, ETC.

_____
ADDRESS

_____ _____ _____
PROJECT NAME PROJECT NUMBER BID/CONTRACT DOLLAR AMOUNT

_____
COMPANY NAME

_____
COMPANY ADDRESS

_____ _____ _____
LICENSE NUMBER EMPLOYER IDENTIFICATION NUMBER DUNS NUMBER

The Undersigned currently holds a contract with _____ involving funds of the U. S. Government, or a subcontract with a prime contractor holding such contract.

You are advised that under the provisions of the above contract or subcontract, and in accordance with Executive Order 11246, the undersigned is obligated not to discriminate against any employee or applicant for employment because of race, color, religion, sex or national origin. This obligation not to discriminate in employment includes, but is not limited to the follow:

1. Hiring, placement, upgrading, transfer or demotion;
2. Recruitment, advertising or solicitation for employment;
3. Treatment during employment;
4. Rates of pay or other forms of compensation;
5. Selection for training, including apprenticeship; and
6. Layoff or termination.

This notice is furnished to you pursuant to the provisions of the above contract or subcontract and Executive Order 11246. Copies of this notice will be posted by the undersigned in conspicuous places available to employees or applicants for employment.

NOTE: The penalty for making false statements in offers is prescribed in 18 U.S.C. 1001.

_____ _____
AUTHORIZED OFFICIAL NAME AUTHORIZED OFFICIAL TITLE/CAPACITY

_____ _____
AUTHORIZED OFFICIAL SIGNATURE DATE

EXHIBIT 13

Minority and Women's Business Enterprise Tiered Compliance Plan

THIS PLAN MUST BE SUBMITTED WITH YOUR BID FOR THIS FEDERALLY-FUNDED CONTRACT OPPORTUNITY

PART 1

DATE _____ PROJECT NAME _____ PROJECT NUMBER _____

FIRM NAME _____ PHONE _____

BUSINESS ADDRESS _____

TYPE OF FIRM:
(Check One and Provide Information)

☐ Individual Name of Owner _____
☐ Corporation State of Incorporation: _____
☐ Partnership Indicate General "G", Limited "L": _____
Name of Partners: _____
☐ Joint Venture Joint Venture Participants: _____

Number of year(s) firm has been in business under present ownership: _____

OWNERSHIP DEMOGRAPHICS:
(Provide the number of owners by category and the percentage of ownership interest of those individuals by category)

	Black	Hispanic	Alaskan Native/ American Indian	Asian/ Pacific Islander	White	Women
Number						
% of Assets Owned						

OWNERSHIP INFORMATION:
(List each owner of the firm that has 5 percent or more of the shares in the firm)

Name	Race	Sex	Years of Ownership	Ownership Percentage	Voting Percentage

I certify that the information provided herein is true and correct.

Federal EIN: _____
License Number: _____
DUNS Number: _____

SIGNATURE _____ DATE _____

IF MORE THAN 50% MINORITY OR WOMEN OWNED, PROCEED TO PART 3.
IF LESS, PROCEED TO PART 2 AND PROVIDE INFORMATION ON SUBCONTRACTS AWARDED TO MBE/WBE FIRMS.

PART 2

MBE AND WBE SUBCONTRACTS AWARDED

DATE _____ PROJECT NAME _____ PROJECT NUMBER _____

FIRM NAME _____ PHONE _____

BID DATE _____ BID AMOUNT _____

Provide information on each subcontract or supply contract awarded to MBE/WBE firms.
Attach a completed copy of Section 1 (previous page) for each MBE/WBE firm listed below.

Subcontractor Firm Name	Scope of Work / Supplies to be Provided	Check One		Dollar amount contract:	If Certified MBE/WBE, List the Certifying Agency and Date of Certification:
		MBE	WBE		

I certify that the information provided herein is true and correct.

Subcontract Type	Dollar Amount	Percentage of Total Bid
MBE:	$	%
WBE:	$	%

SIGNATURE _____ **DATE** _____

IF MBE AND WBE FIRMS ARE NOT SUBCONTRACTED, PROCEED TO PART 3 AND COMPLETE THE CONTRACTING / GOOD FAITH EFFORT AFFIDAVIT

PART 3

CONTRACTING/GOOD-FAITH EFFORT AFFIDAVIT

This Affidavit must be signed, notarized and submitted with your bid or proposal. In addition, documentation must be attached to demonstrate that a good-faith effort was made to secure MBE/WBE participation. Your good-faith effort will be evaluated in accordance with the various criteria listed below.

Please initial where indicated that you have read and complied with each requirement. Complete the requested forms and provide the requested documentation as a part of this affidavit.

Good Faith Effort Evaluation Criteria	Initial here If true and correct
1. The Bidder/Firm attended a pre-bid meeting hosted by the awarding agency to gain knowledge of the project requirements and goals.	_____
2. The Bidder/Firm advertised the availability of subcontracting or supply opportunities for MBE/WBE firms in connection with this project. If so, complete the following: Media where advertised: _____ Media contact information: _____ _____ Date(s) of advertisement: _____ Attach copies of the advertisement(s) to this form and submit with bid.	_____
3. Interested potential MBE/WBE subcontractors were provided with the project plans and specifications. Attach a list of MBE/WBE firms that received project plans and specifications. Include their address, city, state, zip code, contact person, telephone number. Provide a notation of any responses received from those firms.	_____
4. Follow-up contacts were made with potential MBE/WBE firms which expressed an interest in the project. Attach a list of MBE/WBE firms that your company followed-up with. Include their address, city, state, zip code, contact person, telephone number. Provide a notation of any responses received from those firms.	_____
5. Assistance was requested from organizations which identify potential MBE/WBE firms. Attach a list of organizations consulted to include the name of the organization, address, city, state, zip code, contact person, time and dates contracted, method contacted, and results.	_____

Good Faith Effort Evaluation Criteria	Initial here If true and correct
6. Potential MBE/WBE firms were contacted and negotiation was made in good faith. Attach a list of MBE/WBE firms that your company negotiated with. Include the name of the MBE/WBE firm, address, city, state, zip code, contact person, whether MBE or WBE, if plans or specifications were provided to the other party, and the results of your negotiations. Also attach copies of any internal documents that will evidence the same and submit with bid.	_____
7. Potential MBE/WBE subcontractors were given technical assistance by the bidder or advised that technical assistance was available from the bidder to facilitate understanding of the contract requirements and to complete the paperwork necessary to participate in this contract. Attach a list of MBE/WBE firms that your company provided assistance to. Include the name of the MBE/WBE firm, address, city, state, zip code, contact person, and a description of the technical assistance provided.	_____

According to Title 18, Section 1001 of the U.S. Code, it is a felony for any person to knowingly and willingly make false or fraudulent statements to any department of the United States Government. I, the undersigned, hereby certify that all statements contained herein, are true and correct to the best of my knowledge and belief.

Under the penalty of perjury, I certify that the above information is true and correct.

_____ _____

SIGNATURE DATE

_____ _____

TITLE PHONE

(NOTARY SEAL)

EXHIBIT 14

Federal Lobbyist Certification

PROJECT NAME	PROJECT NUMBER	BID/CONTRACT DOLLAR AMOUNT

COMPANY NAME

COMPANY ADDRESS

LICENSE NUMBER	EMPLOYER IDENTIFICATION NUMBER	DUNS NUMBER

Acting on behalf of the above named firm, as its Authorized Official, I make the following Certification to the U. S. Department of Housing and Urban Development and the body awarding this federally assisted construction contract:

1. No Federal appropriated funds have been paid by or on behalf of the above named firm to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of and Federal grant, loan or cooperative agreement, and any extension, continuation, renewal, amendment, or modification thereof, and;

2. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee or any agency, a Member of Congress an officer or employee of Congress or an employee of a Member of Congress in connection with this Federal contract, grant loan, or cooperative agreement, the above named firm shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying", in accordance with its instructions, and;

3. The above name firm shall require that the language of this certification be included in the award documents for all sub-awards at all tiers (including subcontracts, sub-grants, and contracts under grants, loans, and cooperative agreement) and that all sub-recipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into the transaction imposed by Section 1352 Title 31, U. S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

NOTE: The penalty for making false statements in offers is prescribed in 18 U.S.C. 1001.

AUTHORIZED OFFICIAL NAME	AUTHORIZED OFFICIAL TITLE/CAPACITY
AUTHORIZED OFFICIAL SIGNATURE	DATE

EXHIBIT 15

Section 3 Bid Package

ITEM	PURPOSE
Section 3 Clause:	*This is a Section 3 Covered housing rehabilitation, housing construction or other public construction project. The provisions of 24 CFR 135.38 apply to contracts and subcontracts of $100,000 or more.*
Section 3 Bid Preference:	*A bid preference is available to contractors who submit a reasonable bid and commit to achieving the Section 3 employment or subcontracting goals. First preference will be given to bidders who are a Section 3 Business at the time of bid. Second preference will be given to bidders who make a written commitment to meet the Section 3 goals through hiring and subcontracting.*
Business Certification:	*Used to document the status of a bidder or subcontractor as a Section 3 Business or as a business that is making a written commitment to meet the Section 3 goals through hiring or subcontracting to other Section 3 Businesses.*
Economic Opportunity Plan:	*Used to document that a bidder is making a written commitment to meet the Section 3 goals through new hires or subcontracting to other Section 3 Businesses. Subcontracted Section 3 Businesses must be documented with the Business Certification as a Section 3 business at the time of bid.*
Outreach Efforts:	*The successful bidder will be required to post a listing of all job openings (construction and non-construction) at the site of construction, City Hall, local community based employment agencies, and any trade unions or worker's representative organizations to which the contractor is a signatory. Contractors may utilize the Notice of Section 3 Commitment form for this purpose.*
Resident Certifications:	*Used to document each individual claimed on a Business Certification form as a Section 3 Resident (owners or employees) and to document new hires.*
Economic Opportunity Report:	*Section 3 covered contractors are required to submit a Section 3 Economic Opportunity Report on July 1st and with their final Certified Payroll Report to document all Section 3 hiring activity and outreach efforts during the project.*

Section 3 Clause

24 CFR Part 135

a. The work to be performed under this contract is subject to the requirements of Section 3 of the Housing and Urban Development Act of 1968, as amended, 12 U.S.C. 1701u (Section 3). The purpose of Section 3 is to ensure that employment and other economic opportunities generated by the U.S. Department of Housing and Urban Development (HUD) assistance or HUD assisted projects covered by Section 3, shall, to the greatest extent feasible, be directed to low- and very low-income persons, particularly persons who are recipients of HUD assistance for housing.

b. The parties to this contract will comply with HUD's regulations as set forth in 24 CFR Part 135, which implement Section 3. As evidenced by their execution of this contract, the parties to this contract certify that they are under no contractual or other impediment that would prevent them from complying with the Part 135 regulations.

c. The contractor agrees to send to each labor organization or representative of workers which the contractor has a collective bargaining agreement or other understanding, if any, a notice advising the labor organization or workers' representative of the contractor's commitments under this Section 3 Clause, and will post copies of the notice in conspicuous places at the work site where both employees and applicants for training and employment positions can see the notice. The notice shall; describe the Section 3 preference, shall set forth minimum number and job titles subject to hire, availability of apprenticeship and training positions, the qualifications for each, and the name and location of the persons taking applications for each of the positions, and the anticipated date the work shall begin.

d. The contractor agrees to include this Section 3 Clause in every subcontract subject to compliance with regulations in 24 CFR Part 135, and agrees to take appropriate action, as provided in an applicable provision of the subcontract or in this Section 3 Clause, upon a finding that the subcontractor is in violation of the regulations in 24 CFR Part 135. The contractor will not subcontract with any subcontractor where the contractor has notice or knowledge that the subcontractor has been found in violation of regulations under 24 CFR Part 135.

e. The contractor will certify that any vacant employment positions, including training positions, that are filled (1) after the contractor is selected, but before the contract is executed, and (2) with persons other than those to whom the regulations of 24 CFR Part 135 require employment opportunities to be directed, where not filled to circumvent the contractor's obligations under 24 CFR Part 135.

f. Noncompliance with HUD's regulations in 24 CFR Part 135 may result in sanctions, termination of this contract for default, and debarment or suspension from future HUD assisted contracts.

g. With respect to work performed in connection with Section 3 covered Indian Housing Assistance, Section 7(b) of the Indian Self-Determination and Education Assistance Act (25 U.S.C. 450e) also applies to the work to be performed under this contract. Section 7(b) requires that the greatest extent feasible; (i) preference and opportunities for training and employment shall be given to Indians, and (ii) preference in the award of contracts and subcontracts shall be given to Indian organizations and Indian-owned Economic Enterprises. Parties to this contract that are subject to the provisions of Section 3 and Section 7(b) agree to comply with Section 3 to the maximum extent feasible, but not in derogation of compliance with Section 7(b).

Section 3 Bid Preference Evaluation and Contract Award Criteria

First preference for this contract award will be given to a bidder who provides a reasonable bid and is a qualified Section 3 Business Concern. Second preference will be given to a bidder who provides a reasonable bid and commits to achieving the Section 3 employment, training and subcontracting opportunity goals by submitting a written commitment (Economic Opportunity Plan).

Prior to determining preference based on Section 3 responsiveness, the City will evaluate all bids received to determine which bidders are responsive to all of the other contract requirements (excluding Section 3). Those bids that meet all of the other project requirements besides Section 3 are deemed responsive and responsible bidders who may then be evaluated to determine if a bid preference shall be given based on responsiveness to Section 3.

A Section 3 responsive bidder is a bidder that submits a Section 3 Business Certification form with the bid, and:

1. Qualifies as a Section 3 Business concern because the business:
    - Provides the Section 3 Resident Certification form(s) for each qualified owner or employee to document that the business is:
    - 51% owned by Section 3 Residents, or
    - 30% or more of its permanent full-time employees are Section 3 Residents.

    - OR -

2. Makes a written commitment by submitting a Section 3 Economic Opportunity Plan with their bid indicating that the bidder will:
    - Hire at least 30 percent aggregate new-hires that are Section 3 Residents, and
    - Provide the Section 3 Resident Certification form(s) for 30 percent of the new hires it commits to make during the course of the project, or
    - Subcontracts 25 percent or more of the bid amount to Section 3 Business Concern(s), and
    - Ensure that the Business Concern(s) provide Section 3 Resident Certification form(s) for each owner or employee claimed as a Section 3 Resident.

    If the contract is awarded based upon the written commitment, the contractor will be responsible to document all outreach efforts made to recruit Section 3 resident new-hires. Additionally, the recipient of a Section 3 contract who commits to the Section 3 goal is required to submit a Section 3 Economic Opportunity Report by July 1st or with their final Certified Payroll Report submission, whichever occurs first.

A Section 3 non-responsive bidder is a bidder that:

1. Fails to provide a Section 3 Business Certification form with appropriate supporting documentation to demonstrate that the bidder is a Section 3 Business; or
2. Fails to document that their intention to meet the Section 3 goals by submitting a Section 3 Business Certification form and an Economic Opportunity Plan with the bid response.

In order for bid to receive preference based on Section 3 responsiveness over other bidder(s) that are non-responsive to Section 3, the bid must be reasonable. If the bid is not reasonable, the preference may not be given and the contract shall be awarded to the lowest responsible bidder.

A reasonable bid is not more than the value of "X" higher than the lowest bid. This is determined as follows:

1. The actual dollar amount of the lowest bid, **PLUS**
2. The **"X" FACTOR,** which is the lesser of:
    a. The dollar amount of the required percentage listed on the chart below of the lowest bid, or
    b. The actual dollar amount listed on the chart below.
3. This equals the **MAXIMUM ACCEPTABLE BID**, thus defining the Zone of Consideration.

Zone of Consideration

If the Lowest Bid is		The "X" FACTOR is the lesser of	
At Least	But Less Than		
$100,000	N/A	10%	$9,000
$100,000	$200,000	9%	$16,000
$200,000	$300,000	8%	$21,000
$300,000	$400,000	7%	$24,000
$400,000	$500,000	6%	$25,000
$500,000	$1,000,000	5%	$40,000
$1,000,000	$2,000,000	4%	$60,000
$2,000,000	$4,000,000	3%	$80,000
$4,000,000	$7,000,000	2%	$105,000
$7,000,000		1.5%	

The City uses the Section 3 Bid Evaluation Memorandum to document its analysis of bids to determine whether or not preference will be given.

In the event that all bidders are non-responsive to Section 3, or that the only Section 3 responsive bidders are outside of the Zone of Consideration, the provisions of the Section 3 Clause remain in effect for the duration of the contract. This means that if any new hiring is undertaken by firms with a Section 3 Covered contract or subcontract, 30 percent of the aggregate new hires shall be Section 3 Residents. Hiring activity on the part of Section 3 Covered contractors shall be documented on the Section 3 Economic Opportunity Report. In the event that no new hires were made, the contractor shall indicate this on the Section 3 Economic Opportunity Report and shall be responsible for the submittal of the report on July 1st or with the final Certified Payroll Report, whichever occurs first.

Section 3 Business Certification Form

Federal Compliance Form – To be submitted with Bid to be Responsive to Section 3

PROJECT NAME _____ PROJECT NUMBER _____ BID/CONTRACT AMOUNT _____

BUSINESS NAME _____

BUSINESS ADDRESS _____

TELEPHONE NUMBER _____ LICENSE NUMBER _____ EMPLOYER IDENTIFICATION NUMBER _____ DUNS NUMBER _____

1. The above named business is a Section 3 Business Concern based on the following qualifications:

☐ **51-percent owned by Section 3 Residents**

Number of Section 3 Resident Owners: ____ / Number of Owners: ____ = %_____

(Attach Resident Certifications for all Section 3 owners claimed)

☐ **At least 30-percent of permanent, full-time employees are Section 3 Residents**

Number of Section 3 employees _____ / all full-time employees _____ = _____%

(Attach Resident Certifications for all Section 3 employees claimed)

2. The above named business is not a Section 3 business Concern, but commits to meeting the Section 3 goal on this project by:

☐ **Making a Written Commitment – (Submit Section 3 Economic Opportunity Plan)**

The Section 3 Economic Opportunity Plan (attached) submitted by our company declares our intention to incorporate Section 3 into our normal hiring practices beginning with all openings effective on or after the date of contract award, with the goal of becoming a Section 3 Business Concern. On this project, our company will:

Hire Section 3 qualified residents at least 30-percent aggregate new hire positions, and/or Subcontract 25-percent or more of the contract amount to Section 3 Businesses.

(Attach the Section 3 Economic Opportunity Plan, Business Certifications for all Section 3 subcontracts claimed, and collect Section 3 Resident Certifications throughout the duration of the project)

The undersigned declares that the above information is complete and correct.

OWNER/PRINCIPAL NAME _____ SIGNATURE _____ DATE _____

Section 3 Economic Opportunity Plan

Must be submitted with Bid if Box 2 is checked on the Section 3 Business Certification

NOTE: THIS SUBMITTAL MUST INCLUDE NUMERICAL GOALS IN ORDER TO BE RESPONSIVE TO SECTION 3. PART I OR PART II MUST REFLECT NUMERICAL HIRING OR CONTRACTING GOALS.

NAME AND ADDRESS OF CONTRACTOR	FEDERAL IDENTIFICATION: (CONTRACT NO.)	DOLLAR AMOUNT OF BID/AWARD:
	CONTACT PERSON	BID OPENING DATE
	PHONE	FAX

Part I: Employment and Training Commitment

Job Classification	Total New hires	Section 3 New hires	% New hires who are Section 3 Residents
Professionals			%
Technicians			%
Office/Clerical			%
Trade:			%
Trade:			%
Trade:			%
Trade:			%
Trade:			%
Trade:			%
Total:			**%**

Part II: Contract Award Commitment to Section 3 Businesses (Subcontractors, Suppliers, etc.)

Name of Section 3 business concern	Specify construction or non-construction contract	Contract Amount
		$
		$
		$
		$
		$
		$
		$
	Total:	**$**
Percentage of the Prime Contract to be awarded to Section 3 Business Concerns:		**%**

Sample Outreach Efforts for Contractors Seeking to Hire Section 3 Residents

A Section 3 responsive bidder who commits to hire Section 3 Residents by directing employment and training opportunities toward low- and very low-income persons, particularly those who are recipients of government assistance for housing, may use any combination of outreach efforts to meet the Section 3 commitment made when a Section 3 Economic Opportunity Plan has been submitted.

REMEMBER: All employees of a business/firm count toward meeting your Section 3 compliance goals—Section 3 New Hires do not have to be construction workers, they just have to be a part of your permanent, full-time staff.

- At the beginning of the project, and subsequently as positions become available, the Notice of Section 3 Commitment shall be submitted to and/or posted at the following locations:
    - At the site of construction; and
    - At any trade unions or worker's representatives organizations to which the contractor is a signatory.

- Submit a request for dispatch of apprentices to local apprenticeship committees.

- Enter into "first-source" hiring agreements with organizations representing Section 3 residents, such as a local Workforce Investment Board.

- Sponsor a HUD-certified "Step-Up" employment and training program for Section 3 residents.

- Advertise training and employment positions by distributing flyers (Notice of Section 3 Commitment or other flyer that identifies the positions to be filled, the qualifications required, and where to obtain additional information about the application process) to every occupied dwelling unit in the housing development(s) adjacent to the project site.

- Post training and employment position flyers in public housing developments, offices of the local government, and other conspicuous places.

- Contact State-approved apprenticeship programs to gain access to potentially low-income residents who are actively seeking job-placement and training.

- Contact agencies administering HUD Youthbuild programs, and requesting their assistance to recruit current HUD Youthbuild program participants who are in need of permanent placement.

- Advertise any positions to be filled through the local media, such as community television networks, newspapers of general circulation, or commonly-used job placement websites such as **www.monster.com**

Section 3 Resident Certification
Employee Residing in Los Angeles County

Submit with Bid if Box 1 is checked on Section 3 Business Certification or for New Hires

NAME

ADDRESS

I hereby certify that I am a Section 3 resident; based on the following qualification(s):

1. ☐ I am a Public Housing Resident:

NAME OF PUBLIC HOUSING SITE

ADDRESS OF PUBLIC HOUSING SITE

2. ☐ I am a low-income resident of the metropolitan area and:

FY 2016 INCOME LIMITS

My household Size is:	My household's gross annual income from all sources is:
☐ 1	$48,650 or less
☐ 2	$55,600 or less
☐ 3	$62,550 or less
☐ 4	$69,450 or less
☐ 5	$75,050 or less
☐ 6	$80,600 or less
☐ 7	$86,150 or less
☐ 8	$91,700 or less

According to Title 18, Section 1001 of the U.S. Code, it is a felony for any person to knowingly and willingly make false or fraudulent statements to any department of the United States Government. I, the undersigned, hereby certify that all statements contained herein, are true and correct to the best of my knowledge and belief. I understand the information I provide in this certification is subject to verification, and I agree to provide necessary documentation if requested.

Under the penalty of perjury, I certify that the above information is true and correct.

EMPLOYEE SIGNATURE

DATE

To be Completed by Employer:

The above-named person was hired previous to this certification on: _____

The above-named person is a new hire as of: _____

The above-named person's job title is: _____

Company Name: _____

Employer Name/Signature: _____

Section 3 Resident Certification
Employee Residing in Orange County

Submit with Bid if Box 1 is checked on Section 3 Business Certification or for New Hires

NAME

ADDRESS

I hereby certify that I am a Section 3 resident; based on the following qualification(s):

1. ☐ I am a Public Housing Resident:

NAME OF PUBLIC HOUSING SITE

ADDRESS OF PUBLIC HOUSING SITE

2. ☐ I am a low-income resident of the metropolitan area and:

FY 2016 INCOME LIMITS

My household Size is:	My household's gross annual income from all sources is:
☐ 1	$54,600 or less
☐ 2	$62,400 or less
☐ 3	$70,200 or less
☐ 4	$78,000 or less
☐ 5	$84,250 or less
☐ 6	$90,500 or less
☐ 7	$96,750 or less
☐ 8	$103,000 or less

According to Title 18, Section 1001 of the U.S. Code, it is a felony for any person to knowingly and willingly make false or fraudulent statements to any department of the United States Government. I, the undersigned, hereby certify that all statements contained herein, are true and correct to the best of my knowledge and belief. I understand the information I provide in this certification is subject to verification, and I agree to provide necessary documentation if requested.

Under the penalty of perjury, I certify that the above information is true and correct.

EMPLOYEE SIGNATURE

DATE

To be Completed by Employer:

The above-named person was hired previous to this certification on: _____

The above-named person is a new hire as of: _____

The above-named person's job title is: _____

Company Name: _____

Employer Name/Signature: _____

Section 3 Resident Certification
Employee Residing in San Bernardino County / Riverside County

Submit with Bid if Box 1 is checked on Section 3 Business Certification or for New Hires

NAME

ADDRESS

I hereby certify that I am a Section 3 resident; based on the following qualification(s):

1. ☐ I am a Public Housing Resident:

NAME OF PUBLIC HOUSING SITE

ADDRESS OF PUBLIC HOUSING SITE

2. ☐ I am a low-income resident of the metropolitan area and:

FY 2016 INCOME LIMITS

My household Size is:	My household's gross annual income from all sources is:
☐ 1	$35,800 or less
☐ 2	$40,900 or less
☐ 3	$46,000 or less
☐ 4	$51,100 or less
☐ 5	$55,200 or less
☐ 6	$59,300 or less
☐ 7	$63,400 or less
☐ 8	$67,500 or less

According to Title 18, Section 1001 of the U.S. Code, it is a felony for any person to knowingly and willingly make false or fraudulent statements to any department of the United States Government. I, the undersigned, hereby certify that all statements contained herein, are true and correct to the best of my knowledge and belief. I understand the information I provide in this certification is subject to verification, and I agree to provide necessary documentation if requested.

Under the penalty of perjury, I certify that the above information is true and correct.

EMPLOYEE SIGNATURE DATE

To be Completed by Employer:

The above-named person was hired previous to this certification on: _____

The above-named person is a new hire as of: _____

The above-named person's job title is: _____

Company Name: _____

Employer Name/Signature: _____

Section 3 Resident Certification
Employee Residing in San Diego County

Submit with Bid if Box 1 is checked on Section 3 Business Certification or for New Hires

NAME

ADDRESS

I hereby certify that I am a Section 3 resident; based on the following qualification(s):

1. ☐ I am a Public Housing Resident:

NAME OF PUBLIC HOUSING SITE

ADDRESS OF PUBLIC HOUSING SITE

2. ☐ I am a low-income resident of the metropolitan area and:

FY 2016 INCOME LIMITS

My household Size is:	My household's gross annual income from all sources is:
☐ 1	$47,600 or less
☐ 2	$54,400 or less
☐ 3	$61,200 or less
☐ 4	$68,000 or less
☐ 5	$73,450 or less
☐ 6	$78,900 or less
☐ 7	$84,350 or less
☐ 8	$89,800 or less

According to Title 18, Section 1001 of the U.S. Code, it is a felony for any person to knowingly and willingly make false or fraudulent statements to any department of the United States Government. I, the undersigned, hereby certify that all statements contained herein, are true and correct to the best of my knowledge and belief. I understand the information I provide in this certification is subject to verification, and I agree to provide necessary documentation if requested.

Under the penalty of perjury, I certify that the above information is true and correct.

EMPLOYEE SIGNATURE

DATE

To be Completed by Employer:

The above-named person was hired previous to this certification on: _____

The above-named person is a new hire as of: _____

The above-named person's job title is: _____

Company Name: _____

Employer Name/Signature: _____

Section 3 Resident Certification
Employee Residing in Ventura County

Submit with Bid if Box 1 is checked on Section 3 Business Certification or for New Hires

NAME

ADDRESS

I hereby certify that I am a Section 3 resident; based on the following qualification(s):

1. ☐ I am a Public Housing Resident:

NAME OF PUBLIC HOUSING SITE

ADDRESS OF PUBLIC HOUSING SITE

2. ☐ I am a low-income resident of the metropolitan area and:

FY 2016 INCOME LIMITS

My household Size is:	My household's gross annual income from all sources is:
☐ 1	$52,300 or less
☐ 2	$59,800 or less
☐ 3	$67,250 or less
☐ 4	$74,700 or less
☐ 5	$80,700 or less
☐ 6	$86,700 or less
☐ 7	$92,650 or less
☐ 8	$98,650 or less

According to Title 18, Section 1001 of the U.S. Code, it is a felony for any person to knowingly and willingly make false or fraudulent statements to any department of the United States Government. I, the undersigned, hereby certify that all statements contained herein, are true and correct to the best of my knowledge and belief. I understand the information I provide in this certification is subject to verification, and I agree to provide necessary documentation if requested.

Under the penalty of perjury, I certify that the above information is true and correct.

EMPLOYEE SIGNATURE DATE

To be Completed by Employer:

The above-named person was hired previous to this certification on: _____

The above-named person is a new hire as of: _____

The above-named person's job title is: _____

Company Name: _____

Employer Name/Signature: _____

Notice of Section 3 Commitment

Submit with Bid, Post at Jobsite, Forward to Labor Unions

TO: _____

(NAME OF LABOR UNION, WORKERS REPRESENTATIVE, ETC.)

_____

(ADDRESS)

_____

NAME OF BUSINESS/CONTRACTOR

_____ _____

PROJECT NAME PROJECT NUMBER

The undersigned currently holds a contract with _____ involving federal housing and community development assistance from the U.S. Department of Housing and Urban Development, or has a subcontract with a prime contractor holding such contract.

You are advised that under the provisions of the above contract or subcontract and in accordance with Section 3 of the Housing and Urban Development Act of 1968, the undersigned is obligated to the greatest extent feasible, to give opportunities for employment and training to lower income residence of the project area and to award contracts for work on the project to business concerns which are located in or are owned in substantial part by project area residence.

Regarding current employment opportunities for Section 3, the minimum number and job titles are:

Minimum Number	Job Classification

Regarding job referrals, request that consideration be given to the assignment of persons residing in the service area or neighborhood in which the project is located.

The anticipated date the work will begin is _____.

For additional information, please contact:

_____, _____ at (_____) _____.

CONTACT PERSON'S NAME TITLE PHONE

This notice is furnished to you pursuant to the provisions of the above contract or subcontract and Section 3 of the Housing and Urban Development Act of 1968. Copies of this notice will be posted by the undersigned in conspicuous places available to employees or applicants for employment.

_____ _____

PRINT NAME SIGNATURE

_____ _____

DATE TITLE

Section 3 Economic Opportunity Report

If a Section 3 Economic Opportunity Plan was submitted with the Bid, or upon request, Submit with Final Certified Payroll Report or on July 1st, whichever occurs first.

CONTRACTOR NAME AND ADDRESS	PROJECT NUMBER:	DOLLAR AMOUNT OF CONTRACT:
	CONTRACTOR CONTACT PERSON:	PHONE: (INCLUDE AREA CODE)
	DATE REPORT SUBMITTED:	DATE(S) COVERED:
	CONTRACTOR'S LICENSE NUMBER AND CLASS:	FEDERAL EIN:

Part I: Employment/Training of Section 3 Residents (Minimum Goal: 30% of New Hires)

Job Category	Number of New Hires	Number of New Hires that are Section 3 Residents	% of Aggregate Number of Staff Hours of New Hires that are Sec. 3 Residents	% of Total Staff Hours for Section 3 Employees and Trainees	Number of Section 3 Trainees
Professionals					
Technicians					
Office/Clerical					
Trade:					
Trade:					
Trade:					
Trade:					
Trade:					
TOTALS:			**%**	**%**	

Part II: Subcontracts Awarded (Minimum Subcontract Goal is 25% of the Prime Contract Amount)

Number of Subcontracts awarded:		**Number of Section 3 Businesses Contracted:**	
Name of Qualified Business Concern		**Construction or Non-construction Contract**	**Amount**
			$
			$
			$
			$
Total Dollar Amount of Subcontracts awarded to Section 3 qualified Business Concerns:			**$**
Dollar Amount of All Subcontracts:			$
Percentage of the total dollar amount awarded to qualified Business Concerns:			**%**

Part III: Summary of the efforts that were made to generate economic opportunities

☐ Trained and/or Employed _____ low-income individuals equal to _____ (%) of the aggregate new hires. (Attach Resident Certifications)

☐ Awarded a Subcontract to _____ qualified Business Concerns equal to _____ (%) of the contract amount. (Attach Business Certifications)

☐ Attempted to recruit low-income individuals through:
- ☐ Advertised through local media, television, radio, newspaper (Attach copy of (advertisement)
- ☐ Signs prominently displayed at the project site
- ☐ Contacts with community organizations
- ☐ Contacted management to notify residents and posted or distributed flyers at public housing authority (Attach list)

☐ Participated in a HUD program or other program which promotes the training or employment of low-income individuals

☐ Participated in a HUD program or other program which promotes the award of contracts to Section 3 Qualified Business Concerns

☐ Contacted agencies administering HUD Youth-Build programs. (Attach list)

☐ Maintained a file of eligible qualified low-income Residents and qualified Business Concerns for future employment.

OTHER: (Describe and attach supporting documentation)

_____

_____

_____

_____

According to Title 18, Section 1001 of the U.S. Code, it is a felony for any person to knowingly and willingly make false or fraudulent statements to any department of the United States Government. I, the undersigned, hereby certify that all statements contained herein, are true and correct to the best of my knowledge and belief.

Under the penalty of perjury, I certify that the above information is true and correct.

_____ _____

SIGNATURE DATE

_____ _____

TITLE PHONE

APPENDIX E

FEDERAL WAGE RATES

General Decision Number: CA170035 02/17/2017 CA35

Superseded General Decision Number: CA20160035

State: California

Construction Types: Building, Heavy (Heavy and Dredging) and Highway

County: Orange County in California.

BUILDING CONSTRUCTION PROJECTS; DREDGING PROJECTS (does not include hopper dredge work); HEAVY CONSTRUCTION PROJECTS (does not include water well drilling); HIGHWAY CONSTRUCTION PROJECTS

Note: Under Executive Order (EO) 13658, an hourly minimum wage of $10.20 for calendar year 2017 applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least $10.20 (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2017. The EO minimum wage rate will be adjusted annually. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Modification Number	Publication Date
0	01/06/2017
1	01/20/2017
2	01/27/2017
3	02/17/2017

ASBE0005-002 07/04/2016

	Rates	Fringes
Asbestos Workers/Insulator (Includes the application of all insulating materials, protective coverings, coatings, and finishes to all types of mechanical systems)	$ 38.37	20.13
Fire Stop Technician (Application of Firestopping Materials for wall openings and penetrations in walls, floors, ceilings and curtain walls)	$ 26.15	17.31

ASBE0005-004 07/04/2016

	Rates	Fringes
Asbestos Removal worker/hazardous material		

handler (Includes preparation, wetting, stripping, removal, scrapping, vacuuming, bagging and disposing of all insulation materials from mechanical systems, whether they contain asbestos or not)....$ 18.38 10.82

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* BRCA0004-010 05/01/2016

	Rates	Fringes
BRICKLAYER; MARBLE SETTER	$ 37.93	14.94

*The wage scale for prevailing wage projects performed in Blythe, China lake, Death Valley, Fort Irwin, Twenty-Nine Palms, Needles and 1-15 corridor (Barstow to the Nevada State Line) will be Three Dollars ($3.00) above the standard San Bernardino/Riverside County hourly wage rate

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BRCA0018-004 06/01/2016

	Rates	Fringes
MARBLE FINISHER	$ 29.20	12.93
TILE FINISHER	$ 24.53	11.08
TILE LAYER	$ 35.89	9.08

BRCA0018-010 09/01/2016

	Rates	Fringes
TERRAZZO FINISHER	$ 28.53	12.27
TERRAZZO WORKER/SETTER	$ 35.57	13.14

CARP0409-001 07/01/2016

	Rates	Fringes
CARPENTER		
(1) Carpenter, Cabinet Installer, Insulation Installer, Hardwood Floor Worker and acoustical installer	$ 39.83	17.03
(2) Millwright	$ 40.90	17.03
(3) Piledrivermen/Derrick Bargeman, Bridge or Dock Carpenter, Heavy Framer, Rock Bargeman or Scowman, Rockslinger, Shingler (Commercial)	$ 40.53	17.03
(4) Pneumatic Nailer, Power Stapler	$ 40.09	17.03
(5) Sawfiler	$ 39.83	17.03
(6) Scaffold Builder	$ 31.60	17.03
(7) Table Power Saw Operator	$ 40.93	17.03

FOOTNOTE: Work of forming in the construction of open cut sewers or storm drains, on operations in which horizontal lagging is used in conjunction with steel H-Beams driven or placed in pre- drilled holes, for that portion of a lagged trench against which concrete is poured, namely, as a substitute for back forms (which work is performed by piledrivers): $0.13 per hour additional.

CARP0409-005 07/01/2015

	Rates	Fringes
Drywall		
DRYWALL INSTALLER/LATHER	$ 40.40	15.03
STOCKER/SCRAPPER	$ 10.00	7.17

CARP0409-008 08/01/2010

	Rates	Fringes
Modular Furniture Installer	$ 17.00	7.41

ELEC0011-002 12/28/2015

COMMUNICATIONS AND SYSTEMS WORK

	Rates	Fringes
Communications System		
Installer	$ 30.73	14.00
Technician	$ 30.10	12.48

SCOPE OF WORK:
Installation, testing, service and maintenance of systems utilizing the transmission and/or transference of voice, sound, vision and digital for commercial, educational, security and entertainment purposes for the following: TV monitoring and surveillance, background-foreground music, intercom and telephone interconnect, inventory control systems, microwave transmission, multi-media, multiplex, nurse call systems, radio page, school intercom and sound, burglar alarms, fire alarm (see last paragraph below) and low voltage master clock systems in commercial buildings. Communication Systems that transmit or receive information and/or control systems that are intrinsic to the above listed systems; inclusion or exclusion of terminations and testings of conductors determined by their function; excluding all other data systems or multiple systems which include control function or power supply; excluding installation of raceway systems, conduit systems, line voltage work, and energy management systems. Does not cover work performed at China Lake Naval Ordnance Test Station. Fire alarm work shall be performed at the current inside wireman total cost package.

ELEC0441-001 08/29/2016

	Rates	Fringes
CABLE SPLICER	$ 44.29	18.13
ELECTRICIAN	$ 42.34	18.07

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* ELEC0441-003 12/26/2016

COMMUNICATIONS & SYSTEMS WORK (excludes any work on Intelligent Transportation Systems or CCTV highway systems)

	Rates	Fringes
Communications System		
Installer	$ 32.50	12.64
Technician	$ 31.23	15.39

SCOPE OF WORK The work covered shall include the installation, testing, service and maintenance, of the following systems that utilize the transmission and/or transference of voice, sound, vision and digital for commercial, education, security and entertainment purposes for TV monitoring and surveillance, background foreground music, intercom and telephone interconnect, inventory control systems, microwave transmission, multi-media, multiplex, nurse call system, radio page, school intercom and sound, burglar alarms and low voltage master clock systems.

A. Communication systems that transmit or receive information and/or control systems that are intrinsic to the above listed systems SCADA (Supervisory control/data acquisition PCM (Pulse code modulation) Inventory control systems Digital data systems Broadband & baseband and carriers Point of sale systems VSAT data systems Data communication systems RF and remote control systems Fiber optic data systems

B. Sound and Voice Transmission/Transference Systems Background-Foreground Music Intercom and Telephone Interconnect Systems Sound and Musical Entertainment Systems Nurse Call Systems Radio Page Systems School Intercom and Sound Systems Burglar Alarm Systems Low-Voltage Master Clock Systems Multi-Media/Multiplex Systems Telephone Systems RF Systems and Antennas and Wave Guide

C. *Fire Alarm Systems-installation, wire pulling and testing.

D. Television and Video Systems Television Monitoring and Surveillance Systems Video Security Systems Video Entertainment Systems Video Educational Systems CATV and CCTV

E. Security Systems, Perimeter Security Systems, Vibration Sensor Systems
Sonar/Infrared Monitoring Equipment, Access Control Systems, Card Access Systems

*Fire Alarm Systems
1. Fire Alarms-In Raceways: Wire and cable pulling in raceways performed at the current electrician wage rate and fringe benefits.
2. Fire Alarms-Open Wire Systems: installed by the Technician.

ELEC0441-004 08/29/2016

	Rates	Fringes
ELECTRICIAN (TRANSPORTATION SYSTEMS, TRAFFIC SIGNALS & STREET LIGHTING)		
Cable Splicer/Fiber Optic Splicer	$ 44.29	18.13
Electrician	$ 42.34	18.07
Technician	$ 31.76	16.75

SCOPE OF WORK: Electrical work on public streets, freeways, toll-ways, etc, above or below ground. All work necessary for the installation, renovation, repair or removal of Intelligent Transportation Systems, Video Surveilance Systems (CCTV), Street Lighting and and Traffic Signal work or systems whether underground or on bridges. Includes dusk to dawn lighting installations and ramps for access to or egress from freeways, toll-ways, etc.
Intelligent Transportation Systems shall include all systems and components to control, monitor, and communicate with pedestrian or vehicular traffic, included but not limited to: installation, modification, removal of all Fiber optic Video System, Fiber Optic Data Systems, Direct interconnect and Communications Systems, Microwave Data and Video Systems, Infrared and Sonic Detection Systems, Solar Power Systems, Highway Advisory Radio Systems, highway Weight and Motion Systems, etc.
Any and all work required to install and maintain any specialized or newly developed systems. All cutting, fitting and bandaging of ducts, raceways, and conduits. The cleaning, rodding and installation of "fish and pull wires". The excavation, setting, leveling and grouting of precast manholes, vaults, and pull boxes including ground rods or grounding systems, rock necessary for leveling and drainagae as well as pouring of a concrete envelope if needed.

JOURNEYMAN TRANSPORTATION ELECTRICIAN shall perform all tasks necessary toinstall the complete transportation system. JOURNEYMAN TECHNICIAN duties shall consist of: Distribution of material at job site, manual excavation and backfill, installation of system conduits and raceways for electrical, telephone, cable television and comnmunication systems. Pulling, terminating and splicing of traffic signal and street lighting conductors and electrical systems including interconnect, dector loop, fiber optic cable and video/data.

ELEC1245-001 06/01/2015

	Rates	Fringes
LINE CONSTRUCTION		
(1) Lineman; Cable splicer	$ 52.85	15.53
(2) Equipment specialist (operates crawler tractors, commercial motor vehicles, backhoes, trenchers, cranes (50 tons and below), overhead & underground distribution line equipment)	$ 42.21	14.32
(3) Groundman	$ 32.28	14.03
(4) Powderman	$ 47.19	14.60

HOLIDAYS: New Year's Day, M.L. King Day, Memorial Day, Independence Day, Labor Day, Veterans Day, Thanksgiving Day and day after Thanksgiving, Christmas Day

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ELEV0018-001 01/01/2017

	Rates	Fringes
ELEVATOR MECHANIC	$ 52.21	31.585

FOOTNOTE:
PAID VACATION: Employer contributes 8% of regular hourly rate as vacation pay credit for employees with more than 5 years of service, and 6% for 6 months to 5 years of service.
PAID HOLIDAYS: New Years Day, Memorial Day, Independence Day, Labor Day, Veterans Day, Thanksgiving Day, Friday after Thanksgiving, and Christmas Day.

ENGI0012-003 07/01/2016

	Rates	Fringes
OPERATOR: Power Equipment (All Other Work)		
GROUP 1	$ 39.95	23.35
GROUP 2	$ 40.73	23.35
GROUP 3	$ 41.02	23.35
GROUP 4	$ 42.51	23.35
GROUP 5	$ 41.86	23.35
GROUP 6	$ 41.83	23.35
GROUP 8	$ 42.84	23.35
GROUP 9	$ 42.19	23.35
GROUP 10	$ 42.96	23.35
GROUP 11	$ 42.31	23.35
GROUP 12	$ 43.13	23.35
GROUP 13	$ 43.23	23.35
GROUP 14	$ 43.26	23.35
GROUP 15	$ 43.34	23.35
GROUP 16	$ 43.46	23.35
GROUP 17	$ 43.63	23.35
GROUP 18	$ 43.73	23.35
GROUP 19	$ 43.84	23.35
GROUP 20	$ 43.96	23.35

GROUP 21	$ 44.13	23.35
GROUP 22	$ 44.23	23.35
GROUP 23	$ 44.34	23.35
GROUP 24	$ 44.46	23.35
GROUP 25	$ 44.63	23.35
OPERATOR: Power Equipment (Cranes, Piledriving & Hoisting)		
GROUP 1	$ 43.20	22.15
GROUP 2	$ 43.98	22.15
GROUP 3	$ 44.27	22.15
GROUP 4	$ 44.41	22.15
GROUP 5	$ 44.63	22.15
GROUP 6	$ 44.74	22.15
GROUP 7	$ 44.86	22.15
GROUP 8	$ 45.03	22.15
GROUP 9	$ 45.20	22.15
GROUP 10	$ 46.20	22.15
GROUP 11	$ 47.20	22.15
GROUP 12	$ 48.20	22.15
GROUP 13	$ 49.20	22.15
OPERATOR: Power Equipment (Tunnel Work)		
GROUP 1	$ 41.80	23.35
GROUP 2	$ 42.58	23.35
GROUP 3	$ 42.87	23.35
GROUP 4	$ 43.01	23.35
GROUP 5	$ 43.23	23.35
GROUP 6	$ 43.34	23.35
GROUP 7	$ 43.46	23.35

PREMIUM PAY:
$3.75 per hour shall be paid on all Power Equipment Operator work on the followng Military Bases: China Lake Naval Reserve, Vandenberg AFB, Point Arguello, Seely Naval Base, Fort Irwin, Nebo Annex Marine Base, Marine Corp Logistics Base Yermo, Edwards AFB, 29 Palms Marine Base and Camp Pendleton

Workers required to suit up and work in a hazardous material environment: $2.00 per hour additional. Combination mixer and compressor operator on gunite work shall be classified as a concrete mobile mixer operator.

SEE ZONE DEFINITIONS AFTER CLASSIFICATIONS

POWER EQUIPMENT OPERATORS CLASSIFICATIONS

GROUP 1: Bargeman; Brakeman; Compressor operator; Ditch Witch, with seat or similar type equipment; Elevator operator-inside; Engineer Oiler; Forklift operator (includes loed, lull or similar types under 5 tons; Generator operator; Generator, pump or compressor plant operator; Pump operator; Signalman; Switchman

GROUP 2: Asphalt-rubber plant operator (nurse tank operator); Concrete mixer operator-skip type; Conveyor operator; Fireman; Forklift operator (includes loed, lull or similar types over 5 tons; Hydrostatic pump operator; oiler crusher (asphalt or concrete plant); Petromat laydown machine; PJU

side dum jack; Screening and conveyor machine operator (or similar types); Skiploader (wheel type up to 3/4 yd. without attachment); Tar pot fireman; Temporary heating plant operator; Trenching machine oiler

GROUP 3: Asphalt-rubber blend operator; Bobcat or similar type (Skid steer); Equipment greaser (rack); Ford Ferguson (with dragtype attachments); Helicopter radioman (ground); Stationary pipe wrapping and cleaning machine operator

GROUP 4: Asphalt plant fireman; Backhoe operator (mini-max or similar type); Boring machine operator; Boxman or mixerman (asphalt or concrete); Chip spreading machine operator; Concrete cleaning decontamination machine operator; Concrete Pump Operator (small portable); Drilling machine operator, small auger types (Texoma super economatic or similar types - Hughes 100 or 200 or similar types - drilling depth of 30' maximum); Equipment greaser (grease truck); Guard rail post driver operator; Highline cableway signalman; Hydra-hammer-aero stomper; Micro Tunneling (above ground tunnel); Power concrete curing machine operator; Power concrete saw operator; Power-driven jumbo form setter operator; Power sweeper operator; Rock Wheel Saw/Trencher; Roller operator (compacting); Screed operator (asphalt or concrete); Trenching machine operator (up to 6 ft.); Vacuum or much truck

GROUP 5: Equipment Greaser (Grease Truck/Multi Shift).

GROUP 6: Articulating material hauler; Asphalt plant engineer; Batch plant operator; Bit sharpener; Concrete joint machine operator (canal and similar type); Concrete planer operator; Dandy digger; Deck engine operator; Derrickman (oilfield type); Drilling machine operator, bucket or auger types (Calweld 100 bucket or similar types - Watson 1000 auger or similar types - Texoma 330, 500 or 600 auger or similar types - drilling depth of 45' maximum); Drilling machine operator; Hydrographic seeder machine operator (straw, pulp or seed), Jackson track maintainer, or similar type; Kalamazoo Switch tamper, or similar type; Machine tool operator; Maginnis internal full slab vibrator, Mechanical berm, curb or gutter(concrete or asphalt); Mechanical finisher operator (concrete, Clary-Johnson-Bidwell or similar); Micro tunnel system (below ground); Pavement breaker operator (truck mounted); Road oil mixing machine operator; Roller operator (asphalt or finish), rubber-tired earth moving equipment (single engine, up to and including 25 yds. struck); Self-propelled tar pipelining machine operator; Skiploader operator (crawler and wheel type, over 3/4 yd. and up to and including 1-1/2 yds.); Slip form pump operator (power driven hydraulic lifting device for concrete forms); Tractor operator-bulldozer, tamper-scraper (single engine, up to 100 h.p. flywheel and similar types, up to and including D-5 and similar types); Tugger hoist operator (1 drum); Ultra high pressure waterjet cutting tool system operator; Vacuum blasting machine operator

GROUP 8: Asphalt or concrete spreading operator (tamping or finishing); Asphalt paving machine operator (Barber Greene

or similar type); Asphalt-rubber distribution operator; Backhoe operator (up to and including 3/4 yd.), small ford, Case or similar; Cast-in-place pipe laying machine operator; Combination mixer and compressor operator (gunite work); Compactor operator (self-propelled); Concrete mixer operator (paving); Crushing plant operator; Drill Doctor; Drilling machine operator, Bucket or auger types (Calweld 150 bucket or similar types - Watson 1500, 2000 2500 auger or similar types - Texoma 700, 800 auger or similar types - drilling depth of 60' maximum); Elevating grader operator; Grade checker; Gradall operator; Grouting machine operator; Heavy-duty repairman; Heavy equipment robotics operator; Kalamazoo balliste regulator or similar type; Kolman belt loader and similar type; Le Tourneau blob compactor or similar type; Loader operator (Athey, Euclid, Sierra and similar types); Mobark Chipper or similar; Ozzie padder or similar types; P.C. slot saw; Pneumatic concrete placing machine operator (Hackley-Presswell or similar type); Pumpcrete gun operator; Rock Drill or similar types; Rotary drill operator (excluding caisson type); Rubber-tired earth-moving equipment operator (single engine, caterpillar, Euclid, Athey Wagon and similar types with any and all attachments over 25 yds. up to and including 50 cu. yds. struck); Rubber-tired earth-moving equipment operator (multiple engine up to and including 25 yds. struck); Rubber-tired scraper operator (self-loading paddle wheel type-John Deere, 1040 and similar single unit); Self-propelled curb and gutter machine operator; Shuttle buggy; Skiploader operator (crawler and wheel type over 1-1/2 yds. up to and including 6-1/2 yds.); Soil remediation plant operator; Surface heaters and planer operator; Tractor compressor drill combination operator; Tractor operator (any type larger than D-5 - 100 flywheel h.p. and over, or similar-bulldozer, tamper, scraper and push tractor single engine); Tractor operator (boom attachments), Traveling pipe wrapping, cleaning and bendng machine operator; Trenching machine operator (over 6 ft. depth capacity, manufacturer's rating); trenching Machine with Road Miner attachment (over 6 ft depth capacity): Ultra high pressure waterjet cutting tool system mechanic; Water pull (compaction) operator

GROUP 9: Heavy Duty Repairman

GROUP 10: Drilling machine operator, Bucket or auger types (Calweld 200 B bucket or similar types-Watson 3000 or 5000 auger or similar types-Texoma 900 auger or similar types-drilling depth of 105' maximum); Dual drum mixer, dynamic compactor LDC350 (or similar types); Monorail locomotive operator (diesel, gas or electric); Motor patrol-blade operator (single engine); Multiple engine tractor operator (Euclid and similar type-except Quad 9 cat.); Rubber-tired earth-moving equipment operator (single engine, over 50 yds. struck); Pneumatic pipe ramming tool and similar types; Prestressed wrapping machine operator; Rubber-tired earth-moving equipment operator (single engine, over 50 yds. struck); Rubber tired earth moving equipment operator (multiple engine, Euclid, caterpillar and similar over 25 yds. and up to 50 yds. struck), Tower crane repairman; Tractor loader operator (crawler and wheel

type over 6-1/2 yds.); Woods mixer operator (and similar Pugmill equipment)

GROUP 11: Heavy Duty Repairman - Welder Combination, Welder - Certified.

GROUP 12: Auto grader operator; Automatic slip form operator; Drilling machine operator, bucket or auger types (Calweld, auger 200 CA or similar types - Watson, auger 6000 or similar types - Hughes Super Duty, auger 200 or similar types - drilling depth of 175' maximum); Hoe ram or similar with compressor; Mass excavator operator less tha 750 cu. yards; Mechanical finishing machine operator; Mobile form traveler operator; Motor patrol operator (multi-engine); Pipe mobile machine operator; Rubber-tired earth- moving equipment operator (multiple engine, Euclid, Caterpillar and similar type, over 50 cu. yds. struck); Rubber-tired self- loading scraper operator (paddle-wheel-auger type self-loading - two (2) or more units)

GROUP 13: Rubber-tired earth-moving equipment operator operating equipment with push-pull system (single engine, up to and including 25 yds. struck)

GROUP 14: Canal liner operator; Canal trimmer operator; Remote- control earth-moving equipment operator (operating a second piece of equipment: $1.00 per hour additional); Wheel excavator operator (over 750 cu. yds.)

GROUP 15: Rubber-tired earth-moving equipment operator, operating equipment with push-pull system (single engine, Caterpillar, Euclid, Athey Wagon and similar types with any and all attachments over 25 yds. and up to and including 50 yds. struck); Rubber-tired earth-moving equipment operator, operating equipment with push-pull system (multiple engine-up to and including 25 yds. struck)

GROUP 16: Rubber-tired earth-moving equipment operator, operating equipment with push-pull system (single engine, over 50 yds. struck); Rubber-tired earth-moving equipment operator, operating equipment with push-pull system (multiple engine, Euclid, Caterpillar and similar, over 25 yds. and up to 50 yds. struck)

GROUP 17: Rubber-tired earth-moving equipment operator, operating equipment with push-pull system (multiple engine, Euclid, Caterpillar and similar, over 50 cu. yds. struck); Tandem tractor operator (operating crawler type tractors in tandem - Quad 9 and similar type)

GROUP 18: Rubber-tired earth-moving equipment operator, operating in tandem (scrapers, belly dumps and similar types in any combination, excluding compaction units - single engine, up to and including 25 yds. struck)

GROUP 19: Rotex concrete belt operator (or similar types); Rubber-tired earth-moving equipment operator, operating in tandem (scrapers, belly dumps and similar types in any combination, excluding compaction units - single engine, Caterpillar, Euclid, Athey Wagon and similar types with any

and all attachments over 25 yds.and up to and including 50 cu. yds. struck); Rubber-tired earth-moving equipment operator, operating in tandem (scrapers, belly dumps and similar types in any combination, excluding compaction units - multiple engine, up to and including 25 yds. struck)

GROUP 20: Rubber-tired earth-moving equipment operator, operating in tandem (scrapers, belly dumps and similar types in any combination, excluding compaction units - single engine, over 50 yds. struck); Rubber-tired earth-moving equipment operator, operating in tandem (scrapers, belly dumps, and similar types in any combination, excluding compaction units - multiple engine, Euclid, Caterpillar and similar, over 25 yds. and up to 50 yds. struck)

GROUP 21: Rubber-tired earth-moving equipment operator, operating in tandem (scrapers, belly dumps and similar types in any combination, excluding compaction units - multiple engine, Euclid, Caterpillar and similar type, over 50 cu. yds. struck)

GROUP 22: Rubber-tired earth-moving equipment operator, operating equipment with the tandem push-pull system (single engine, up to and including 25 yds. struck)

GROUP 23: Rubber-tired earth-moving equipment operator, operating equipment with the tandem push-pull system (single engine, Caterpillar, Euclid, Athey Wagon and similar types with any and all attachments over 25 yds. and up to and including 50 yds. struck); Rubber-tired earth-moving equipment operator, operating with the tandem push-pull system (multiple engine, up to and including 25 yds. struck)

GROUP 24: Rubber-tired earth-moving equipment operator, operating equipment with the tandem push-pull system (single engine, over 50 yds. struck); Rubber-tired earth-moving equipment operator, operating equipment with the tandem push-pull system (multiple engine, Euclid, Caterpillar and similar, over 25 yds. and up to 50 yds. struck)

GROUP 25: Concrete pump operator-truck mounted; Rubber-tired earth-moving equipment operator, operating equipment with the tandem push-pull system (multiple engine, Euclid, Caterpillar and similar type, over 50 cu. yds. struck)

CRANES, PILEDRIVING AND HOISTING EQUIPMENT CLASSIFICATIONS

GROUP 1: Engineer oiler; Fork lift operator (includes loed, lull or similar types)

GROUP 2: Truck crane oiler

GROUP 3: A-frame or winch truck operator; Ross carrier operator (jobsite)

GROUP 4: Bridge-type unloader and turntable operator; Helicopter hoist operator

GROUP 5: Hydraulic boom truck; Stinger crane (Austin-Western or similar type); Tugger hoist operator (1 drum)

GROUP 6: Bridge crane operator; Cretor crane operator; Hoist operator (Chicago boom and similar type); Lift mobile operator; Lift slab machine operator (Vagtborg and similar types); Material hoist and/or manlift operator; Polar gantry crane operator; Self Climbing scaffold (or similar type); Shovel, backhoe, dragline, clamshell operator (over 3/4 yd. and up to 5 cu. yds. mrc); Tugger hoist operator

GROUP 7: Pedestal crane operator; Shovel, backhoe, dragline, clamshell operator (over 5 cu. yds. mrc); Tower crane repair; Tugger hoist operator (3 drum)

GROUP 8: Crane operator (up to and including 25 ton capacity); Crawler transporter operator; Derrick barge operator (up to and including 25 ton capacity); Hoist operator, stiff legs, Guy derrick or similar type (up to and including 25 ton capacity); Shovel, backhoe, dragline, clamshell operator (over 7 cu. yds., M.R.C.)

GROUP 9: Crane operator (over 25 tons and up to and including 50 tons mrc); Derrick barge operator (over 25 tons up to and including 50 tons mrc); Highline cableway operator; Hoist operator, stiff legs, Guy derrick or similar type (over 25 tons up to and including 50 tons mrc); K-crane operator; Polar crane operator; Self erecting tower crane operator maximum lifting capacity ten tons

GROUP 10: Crane operator (over 50 tons and up to and including 100 tons mrc); Derrick barge operator (over 50 tons up to and including 100 tons mrc); Hoist operator, stiff legs, Guy derrick or similar type (over 50 tons up to and including 100 tons mrc), Mobile tower crane operator (over 50 tons, up to and including 100 tons M.R.C.); Tower crane operator and tower gantry

GROUP 11: Crane operator (over 100 tons and up to and including 200 tons mrc); Derrick barge operator (over 100 tons up to and including 200 tons mrc); Hoist operator, stiff legs, Guy derrick or similar type (over 100 tons up to and including 200 tons mrc); Mobile tower crane operator (over 100 tons up to and including 200 tons mrc)

GROUP 12: Crane operator (over 200 tons up to and including 300 tons mrc); Derrick barge operator (over 200 tons up to and including 300 tons mrc); Hoist operator, stiff legs, Guy derrick or similar type (over 200 tons, up to and including 300 tons mrc); Mobile tower crane operator (over 200 tons, up to and including 300 tons mrc)

GROUP 13: Crane operator (over 300 tons); Derrick barge operator (over 300 tons); Helicopter pilot; Hoist operator, stiff legs, Guy derrick or similar type (over 300 tons); Mobile tower crane operator (over 300 tons)

TUNNEL CLASSIFICATIONS

GROUP 1: Skiploader (wheel type up to 3/4 yd. without attachment)

GROUP 2: Power-driven jumbo form setter operator

GROUP 3: Dinkey locomotive or motorperson (up to and including 10 tons)

GROUP 4: Bit sharpener; Equipment greaser (grease truck); Slip form pump operator (power-driven hydraulic lifting device for concrete forms); Tugger hoist operator (1 drum); Tunnel locomotive operator (over 10 and up to and including 30 tons)

GROUP 5: Backhoe operator (up to and including 3/4 yd.); Small Ford, Case or similar; Drill doctor; Grouting machine operator; Heading shield operator; Heavy-duty repairperson; Loader operator (Athey, Euclid, Sierra and similar types); Mucking machine operator (1/4 yd., rubber-tired, rail or track type); Pneumatic concrete placing machine operator (Hackley-Presswell or similar type); Pneumatic heading shield (tunnel); Pumpcrete gun operator; Tractor compressor drill combination operator; Tugger hoist operator (2 drum); Tunnel locomotive operator (over 30 tons)

GROUP 6: Heavy Duty Repairman

GROUP 7: Tunnel mole boring machine operator

ENGINEERS ZONES

$1.00 additional per hour for all of IMPERIAL County and the portions of KERN, RIVERSIDE & SAN BERNARDINO Counties as defined below:

That area within the following Boundary: Begin in San Bernardino County, approximately 3 miles NE of the intersection of I-15 and the California State line at that point which is the NW corner of Section 1, T17N,m R14E, San Bernardino Meridian. Continue W in a straight line to that point which is the SW corner of the northwest quarter of Section 6, T27S, R42E, Mt. Diablo Meridian. Continue North to the intersection with the Inyo County Boundary at that point which is the NE corner of the western half of the northern quarter of Section 6, T25S, R42E, MDM. Continue W along the Inyo and San Bernardino County boundary until the intersection with Kern County, as that point which is the SE corner of Section 34, T24S, R40E, MDM. Continue W along the Inyo and Kern County boundary until the intersection with Tulare County, at that point which is the SW corner of the SE quarter of Section 32, T24S, R37E, MDM. Continue W along the Kern and Tulare County boundary, until that point which is the NW corner of T25S, R32E, MDM. Continue S following R32E lines to the NW corner of T31S, R32E, MDM. Continue W to the NW corner of T31S, R31E, MDM. Continue S to the SW corner of T32S, R31E, MDM. Continue W to SW corner of SE quarter of Section 34, T32S, R30E, MDM. Continue S to SW corner of T11N, R17W, SBM. Continue E along south boundary of T11N, SBM to SW corner of T11N, R7W, SBM. Continue S to SW corner of T9N, R7W, SBM. Continue E along south boundary of T9N, SBM to SW corner of T9N, R1E, SBM.

Continue S along west boundary of R1E, SMB to Riverside County line at the SW corner of T1S, R1E, SBM. Continue E along south boundary of T1s, SBM (Riverside County Line) to SW corner of T1S, R10E, SBM. Continue S along west boundary of R10E, SBM to Imperial County line at the SW corner of T8S, R10E, SBM. Continue W along Imperial and Riverside county line to NW corner of T9S, R9E, SBM. Continue S along the boundary between Imperial and San Diego Counties, along the west edge of R9E, SBM to the south boundary of Imperial County/California state line. Follow the California state line west to Arizona state line, then north to Nevada state line, then continuing NW back to start at the point which is the NW corner of Section 1, T17N, R14E, SBM

$1.00 additional per hour for portions of SAN LUIS OBISPO, KERN, SANTA BARBARA & VENTURA as defined below:

That area within the following Boundary: Begin approximately 5 miles north of the community of Cholame, on the Monterey County and San Luis Obispo County boundary at the NW corner of T25S, R16E, Mt. Diablo Meridian. Continue south along the west side of R16E to the SW corner of T30S, R16E, MDM. Continue E to SW corner of T30S, R17E, MDM. Continue S to SW corner of T31S, R17E, MDM. Continue E to SW corner of T31S, R18E, MDM. Continue S along West side of R18E, MDM as it crosses into San Bernardino Meridian numbering area and becomes R30W. Follow the west side of R30W, SBM to the SW corner of T9N, R30W, SBM. Continue E along the south edge of T9N, SBM to the Santa Barbara County and Ventura County boundary at that point whch is the SW corner of Section 34.T9N, R24W, SBM, continue S along the Ventura County line to that point which is the SW corner of the SE quarter of Section 32, T7N, R24W, SBM. Continue E along the south edge of T7N, SBM to the SE corner to T7N, R21W, SBM. Continue N along East side of R21W, SBM to Ventura County and Kern County boundary at the NE corner of T8N, R21W. Continue W along the Ventura County and Kern County boundary to the SE corner of T9N, R21W. Continue North along the East edge of R21W, SBM to the NE corner of T12N, R21W, SBM. Continue West along the north edge of T12N, SBM to the SE corner of T32S, R21E, MDM. [T12N SBM is a think strip between T11N SBM and T32S MDM]. Continue North along the East side of R21E, MDM to the Kings County and Kern County border at the NE corner of T25S, R21E, MDM, continue West along the Kings County and Kern County Boundary until the intersection of San Luis Obispo County. Continue west along the Kings County and San Luis Obispo County boundary until the intersection with Monterey County. Continue West along the Monterey County and San Luis Obispo County boundary to the beginning point at the NW corner of T25S, R16E, MDM.

$2.00 additional per hour for INYO and MONO Counties and the Northern portion of SAN BERNARDINO County as defined below:

That area within the following Boundary: Begin at the intersection of the northern boundary of Mono County and the California state line at the point which is the center of Section 17, T10N, R22E, Mt. Diablo Meridian. Continue S then SE along the entire western boundary of Mono County, until it reaches Inyo County at the point which is the NE corner of the

Western half of the NW quarter of Section 2, T8S, R29E, MDM. Continue SSE along the entire western boundary of Inyo County, until the intersection with Kern County at the point which is the SW corner of the SE 1/4 of Section 32, T24S, R37E, MDM. Continue E along the Inyo and Kern County boundary until the intersection with San Bernardino County at that point which is the SE corner of section 34, T24S, R40E, MDM. Continue E along the Inyo and San Bernardino County boundary until the point which is the NE corner of the Western half of the NW quarter of Section 6, T25S, R42E, MDM. Continue S to that point which is the SW corner of the NW quarter of Section 6, T27S, R42E, MDM. Continue E in a straight line to the California and Nevada state border at the point which is the NW corner of Section 1, T17N, R14E, San Bernardino Meridian. Then continue NW along the state line to the starting point, which is the center of Section 18, T10N, R22E, MDM.

REMAINING AREA NOT DEFINED ABOVE RECIEVES BASE RATE

ENGI0012-004 08/01/2015

	Rates	Fringes
OPERATOR: Power Equipment (DREDGING)		
(1) Leverman	$ 49.50	23.60
(2) Dredge dozer	$ 43.53	23.60
(3) Deckmate	$ 43.42	23.60
(4) Winch operator (stern winch on dredge)	$ 42.87	23.60
(5) Fireman-Oiler, Deckhand, Bargeman, Leveehand	$ 42.33	23.60
(6) Barge Mate	$ 42.94	23.60

IRON0377-002 07/01/2016

	Rates	Fringes
Ironworkers:		
Fence Erector	$ 28.33	20.64
Ornamental, Reinforcing and Structural	$ 34.75	29.20

PREMIUM PAY:

$6.00 additional per hour at the following locations:

China Lake Naval Test Station, Chocolate Mountains Naval Reserve-Niland,
Edwards AFB, Fort Irwin Military Station, Fort Irwin Training Center-Goldstone, San Clemente Island, San Nicholas Island, Susanville Federal Prison, 29 Palms - Marine Corps, U.S. Marine Base - Barstow, U.S. Naval Air Facility - Sealey, Vandenberg AFB

$4.00 additional per hour at the following locations:

Army Defense Language Institute - Monterey, Fallon Air Base,

Naval Post Graduate School - Monterey, Yermo Marine Corps Logistics Center

$2.00 additional per hour at the following locations:

Port Hueneme, Port Mugu, U.S. Coast Guard Station - Two Rock

LABO0300-005 01/01/2017

	Rates	Fringes
Asbestos Removal Laborer	$ 31.88	16.82

SCOPE OF WORK: Includes site mobilization, initial site cleanup, site preparation, removal of asbestos-containing material and toxic waste, encapsulation, enclosure and disposal of asbestos- containing materials and toxic waste by hand or with equipment or machinery; scaffolding, fabrication of temporary wooden barriers and assembly of decontamination stations.

LABO0345-001 07/03/2016

	Rates	Fringes
LABORER (GUNITE)		
GROUP 1	$ 37.89	20.50
GROUP 2	$ 36.94	20.50
GROUP 3	$ 33.40	20.50

FOOTNOTE: GUNITE PREMIUM PAY: Workers working from a Bosn'n's Chair or suspended from a rope or cable shall receive 40 cents per hour above the foregoing applicable classification rates. Workers doing gunite and/or shotcrete work in a tunnel shall receive 35 cents per hour above the foregoing applicable classification rates, paid on a portal-to-portal basis. Any work performed on, in or above any smoke stack, silo, storage elevator or similar type of structure, when such structure is in excess of 75'-0" above base level and which work must be performed in whole or in part more than 75'-0" above base level, that work performed above the 75'-0" level shall be compensated for at 35 cents per hour above the applicable classification wage rate.

GUNITE LABORER CLASSIFICATIONS

GROUP 1: Rodmen, Nozzlemen

GROUP 2: Gunmen

GROUP 3: Reboundmen

LABO0652-001 07/04/2016

	Rates	Fringes

LABORER (TUNNEL)		
GROUP 1	$ 38.09	19.07
GROUP 2	$ 38.41	19.07
GROUP 3	$ 38.87	19.07
GROUP 4	$ 39.56	19.07
LABORER		
GROUP 1	$ 32.34	19.07
GROUP 2	$ 32.89	19.07
GROUP 3	$ 33.44	19.07
GROUP 4	$ 34.99	19.07
GROUP 5	$ 35.34	19.07

LABORER CLASSIFICATIONS

GROUP 1: Cleaning and handling of panel forms; Concrete screeding for rough strike-off; Concrete, water curing; Demolition laborer, the cleaning of brick if performed by a worker performing any other phase of demolition work, and the cleaning of lumber; Fire watcher, limber, brush loader, piler and debris handler; Flag person; Gas, oil and/or water pipeline laborer; Laborer, asphalt-rubber material loader; Laborer, general or construction; Laborer, general clean-up; Laborer, landscaping; Laborer, jetting; Laborer, temporary water and air lines; Material hose operator (walls, slabs, floors and decks); Plugging, filling of shee bolt holes; Dry packing of concrete; Railroad maintenance, repair track person and road beds; Streetcar and railroad construction track laborers; Rigging and signaling; Scaler; Slip form raiser; Tar and mortar; Tool crib or tool house laborer; Traffic control by any method; Window cleaner; Wire mesh pulling - all concrete pouring operations

GROUP 2: Asphalt shoveler; Cement dumper (on 1 yd. or larger mixer and handling bulk cement); Cesspool digger and installer; Chucktender; Chute handler, pouring concrete, the handling of the chute from readymix trucks, such as walls, slabs, decks, floors, foundation, footings, curbs, gutters and sidewalks; Concrete curer, impervious membrane and form oiler; Cutting torch operator (demolition); Fine grader, highways and street paving, airport, runways and similar type heavy construction; Gas, oil and/or water pipeline wrapper - pot tender and form person; Guinea chaser; Headerboard person - asphalt; Laborer, packing rod steel and pans; Membrane vapor barrier installer; Power broom sweeper (small); Riprap stonepaver, placing stone or wet sacked concrete; Roto scraper and tiller; Sandblaster (pot tender); Septic tank digger and installer(lead); Tank scaler and cleaner; Tree climber, faller, chain saw operator, Pittsburgh chipper and similar type brush shredder; Underground laborer, including caisson bellower

GROUP 3: Buggymobile person; Concrete cutting torch; Concrete pile cutter; Driller, jackhammer, 2-1/2 ft. drill steel or longer; Dri-pak-it machine; Gas, oil and/or water pipeline wrapper, 6-in. pipe and over, by any method, inside and out; High scaler (including drilling of same); Hydro seeder and similar type; Impact wrench multi-plate; Kettle person, pot person and workers applying asphalt, lay-kold, creosote, lime caustic and similar type materials

("applying" means applying, dipping, brushing or handling of such materials for pipe wrapping and waterproofing); Operator of pneumatic, gas, electric tools, vibrating machine, pavement breaker, air blasting, come-alongs, and similar mechanical tools not separately classified herein; Pipelayer's backup person, coating, grouting, making of joints, sealing, caulking, diapering and including rubber gasket joints, pointing and any and all other services; Rock slinger; Rotary scarifier or multiple head concrete chipping scarifier; Steel headerboard and guideline setter; Tamper, Barko, Wacker and similar type; Trenching machine, hand-propelled

GROUP 4: Asphalt raker, lute person, ironer, asphalt dump person, and asphalt spreader boxes (all types); Concrete core cutter (walls, floors or ceilings), grinder or sander; Concrete saw person, cutting walls or flat work, scoring old or new concrete; Cribber, shorer, lagging, sheeting and trench bracing, hand-guided lagging hammer; Head rock slinger; Laborer, asphalt- rubber distributor boot person; Laser beam in connection with laborers' work; Oversize concrete vibrator operator, 70 lbs. and over; Pipelayer performing all services in the laying and installation of pipe from the point of receiving pipe in the ditch until completion of operation, including any and all forms of tubular material, whether pipe, metallic or non-metallic, conduit and any other stationary type of tubular device used for the conveying of any substance or element, whether water, sewage, solid gas, air, or other product whatsoever and without regard to the nature of material from which the tubular material is fabricated; No-joint pipe and stripping of same; Prefabricated manhole installer; Sandblaster (nozzle person), water blasting, Porta Shot-Blast

GROUP 5: Blaster powder, all work of loading holes, placing and blasting of all powder and explosives of whatever type, regardless of method used for such loading and placing; Driller: All power drills, excluding jackhammer, whether core, diamond, wagon, track, multiple unit, and any and all other types of mechanical drills without regard to the form of motive power; Toxic waste removal

TUNNEL LABORER CLASSIFICATIONS

GROUP 1: Batch plant laborer; Changehouse person; Dump person; Dump person (outside); Swamper (brake person and switch person on tunnel work); Tunnel materials handling person; Nipper; Pot tender, using mastic or other materials (for example, but not by way of limitation, shotcrete, etc.)

GROUP 2: Chucktender, cabletender; Loading and unloading agitator cars; Vibrator person, jack hammer, pneumatic tools (except driller); Bull gang mucker, track person; Concrete crew, including rodder and spreader

GROUP 3: Blaster, driller, powder person; Chemical grout jet person; Cherry picker person; Grout gun person; Grout mixer person; Grout pump person; Jackleg miner; Jumbo person; Kemper and other pneumatic concrete placer operator; Miner, tunnel (hand or machine); Nozzle person; Operating of

troweling and/or grouting machines; Powder person (primer house); Primer person; Sandblaster; Shotcrete person; Steel form raiser and setter; Timber person, retimber person, wood or steel; Tunnel Concrete finisher

GROUP 4: Diamond driller; Sandblaster; Shaft and raise work

LABO0652-003 07/01/2016

	Rates	Fringes
Brick Tender	$ 30.52	18.56

LABO1184-001 07/04/2016

	Rates	Fringes
Laborers: (HORIZONTAL DIRECTIONAL DRILLING)		
(1) Drilling Crew Laborer	$ 33.65	13.95
(2) Vehicle Operator/Hauler	$ 33.82	13.95
(3) Horizontal Directional Drill Operator	$ 35.67	13.95
(4) Electronic Tracking Locator	$ 37.67	13.95
Laborers: (STRIPING/SLURRY SEAL)		
GROUP 1	$ 34.86	17.03
GROUP 2	$ 36.16	17.03
GROUP 3	$ 38.17	17.03
GROUP 4	$ 39.91	17.03

LABORERS - STRIPING CLASSIFICATIONS

GROUP 1: Protective coating, pavement sealing, including repair and filling of cracks by any method on any surface in parking lots, game courts and playgrounds; carstops; operation of all related machinery and equipment; equipment repair technician

GROUP 2: Traffic surface abrasive blaster; pot tender - removal of all traffic lines and markings by any method (sandblasting, waterblasting, grinding, etc.) and preparation of surface for coatings. Traffic control person: controlling and directing traffic through both conventional and moving lane closures; operation of all related machinery and equipment

GROUP 3: Traffic delineating device applicator: Layout and application of pavement markers, delineating signs, rumble and traffic bars, adhesives, guide markers, other traffic delineating devices including traffic control. This category includes all traffic related surface preparation (sandblasting, waterblasting, grinding) as part of the application process. Traffic protective delineating system installer: removes, relocates, installs, permanently affixed roadside and parking delineation barricades, fencing, cable anchor, guard rail, reference signs, monument markers; operation of all related machinery and

equipment; power broom sweeper

GROUP 4: Striper: layout and application of traffic stripes and markings; hot thermo plastic; tape traffic stripes and markings, including traffic control; operation of all related machinery and equipment

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LABO1414-001 08/03/2016

	Rates	Fringes
LABORER		
PLASTER CLEAN-UP LABORER	$ 31.60	19.28
PLASTER TENDER	$ 34.15	19.28

Work on a swing stage scaffold: $1.00 per hour additional.

PAIN0036-001 07/01/2015

	Rates	Fringes
Painters: (Including Lead Abatement)		
(1) Repaint (excludes San Diego County)	$ 27.29	12.83
(2) All Other Work	$ 30.72	12.83

REPAINT of any previously painted structure. Exceptions: work involving the aerospace industry, breweries, commercial recreational facilities, hotels which operate commercial establishments as part of hotel service, and sports facilities.

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* PAIN0036-008 10/01/2016

	Rates	Fringes
DRYWALL FINISHER/TAPER	$ 37.18	17.99

PAIN0036-015 06/01/2016

	Rates	Fringes
GLAZIER	$ 41.70	21.13

FOOTNOTE: Additional $1.25 per hour for work in a condor, from the third (3rd) floor and up Additional $1.25 per hour for work on the outside of the building from a swing stage or any suspended contrivance, from the ground up

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PAIN1247-002 05/01/2016

	Rates	Fringes
SOFT FLOOR LAYER	$ 31.10	14.06

PLAS0200-009 08/05/2015

	Rates	Fringes
PLASTERER	$ 38.44	13.77

PLAS0500-002 07/01/2016

	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER	$ 33.30	23.33

PLUM0016-001 07/01/2016

	Rates	Fringes
PLUMBER/PIPEFITTER		
Plumber and Pipefitter All other work except work on new additions and remodeling of bars, restaurant, stores and commercial buildings not to exceed 5,000 sq. ft. of floor space and work on strip malls, light commercial, tenant improvement and remodel work	$ 47.19	21.41
Work ONLY on new additions and remodeling of bars, restaurant, stores and commercial buildings not to exceed 5,000 sq. ft. of floor space	$ 45.73	20.43
Work ONLY on strip malls, light commercial, tenant improvement and remodel work	$ 35.69	18.76

PLUM0345-001 07/01/2014

	Rates	Fringes
PLUMBER		
Landscape/Irrigation Fitter	$ 29.27	19.75
Sewer & Storm Drain Work	$ 33.24	17.13

ROOF0036-002 08/01/2015

	Rates	Fringes
ROOFER	$ 35.07	14.40

FOOTNOTE: Pitch premium: Work on which employees are exposed to pitch fumes or required to handle pitch, pitch base or pitch impregnated products, or any material containing coal tar pitch, the entire roofing crew shall receive $1.75 per hour "pitch premium" pay.

SFCA0669-008 04/01/2016

DOES NOT INCLUDE SAN CLEMENTE ISLAND, THE CITY OF SANTA ANA, AND THAT PART OF ORANGE COUNTY WITHIN 25 MILES OF THE CITY LIMITS OF LOS ANGELES:

	Rates	Fringes
SPRINKLER FITTER	$ 37.32	20.27

SFCA0709-003 07/01/2015

SAN CLEMENTE ISLAND, THE CITY OF SANTA ANA, AND THAT PART OF ORANGE COUNTY WITHIN 25 MILES BEYOND THE CITY LIMITS OF LOS ANGELES:

	Rates	Fringes
SPRINKLER FITTER (Fire)	$ 42.93	24.04

SHEE0105-003 07/01/2016

LOS ANGELES (South of a straight line drawn between Gorman and Big Pines)and Catalina Island, INYO, KERN (Northeast part, East of Hwy 395), MONO ORANGE, RIVERSIDE, AND SAN BERNARDINO COUNTIES

	Rates	Fringes
SHEET METAL WORKER		
(1) Commercial - New Construction and Remodel work	$ 41.86	26.88
(2) Industrial work including air pollution control systems, noise abatement, hand rails, guard rails, excluding aritechtural sheet metal work, excluding A-C, heating, ventilating systems for human comfort	$ 41.86	26.88

TEAM0011-002 08/01/2016

	Rates	Fringes
TRUCK DRIVER		
GROUP 1	$ 29.09	26.39
GROUP 2	$ 29.24	26.39
GROUP 3	$ 29.37	26.39
GROUP 4	$ 29.56	26.39
GROUP 5	$ 29.59	26.39
GROUP 6	$ 29.62	26.39
GROUP 7	$ 29.87	26.39
GROUP 8	$ 30.12	26.39
GROUP 9	$ 30.32	26.39
GROUP 10	$ 30.62	26.39

GROUP 11.....$ 31.12 26.39
GROUP 12.....$ 31.55 26.39

WORK ON ALL MILITARY BASES:
PREMIUM PAY: $3.00 per hour additional.
[29 palms Marine Base, Camp Roberts, China Lake, Edwards AFB, El Centro Naval Facility, Fort Irwin, Marine Corps Logistics Base at Nebo & Yermo, Mountain Warfare Training Center, Bridgeport, Point Arguello, Point Conception, Vandenberg AFB]

TRUCK DRIVERS CLASSIFICATIONS

GROUP 1: Truck driver

GROUP 2: Driver of vehicle or combination of vehicles - 2 axles; Traffic control pilot car excluding moving heavy equipment permit load; Truck mounted broom

GROUP 3: Driver of vehicle or combination of vehicles - 3 axles; Boot person; Cement mason distribution truck; Fuel truck driver; Water truck - 2 axle; Dump truck, less than 16 yds. water level; Erosion control driver

GROUP 4: Driver of transit mix truck, under 3 yds.; Dumpcrete truck, less than 6-1/2 yds. water level

GROUP 5: Water truck, 3 or more axles; Truck greaser and tire person ($0.50 additional for tire person); Pipeline and utility working truck driver, including winch truck and plastic fusion, limited to pipeline and utility work; Slurry truck driver

GROUP 6: Transit mix truck, 3 yds. or more; Dumpcrete truck, 6-1/2 yds. water level and over; Vehicle or combination of vehicles - 4 or more axles; Oil spreader truck; Dump truck, 16 yds. to 25 yds. water level

GROUP 7: A Frame, Swedish crane or similar; Forklift driver; Ross carrier driver

GROUP 8: Dump truck, 25 yds. to 49 yds. water level; Truck repair person; Water pull - single engine; Welder

GROUP 9: Truck repair person/welder; Low bed driver, 9 axles or over

GROUP 10: Dump truck - 50 yds. or more water level; Water pull - single engine with attachment

GROUP 11: Water pull - twin engine; Water pull - twin engine with attachments; Winch truck driver - $1.25 additional when operating winch or similar special attachments

GROUP 12: Boom Truck 17K and above

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

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Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of "identifiers" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than "SU" or "UAVG" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the "SU" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

* an existing published wage determination
* a survey underlying a wage determination
* a Wage and Hour Division letter setting forth a position on a wage determination matter
* a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

==========

END OF GENERAL DECISION

The Contractor and all subcontractors shall pay all workers at least minimum prevailing wage rates as determined by the State Director of Industrial Relations or the federal minimum basic hourly rate and fringe benefits payments as most recently published, whichever is greater. The City has endeavored to obtain the latest federal wage rate copies of which are included, but does not guarantee their accuracy. State minimum prevailing wage rates are on file in the office of the City Clerk and the office of the City Engineer, City of Irvine, and in the office of the Associated General Contractors of America, California Chapter. It is the sole responsibility of the Contractor to ascertain the latest rates and comply with those rates.

Certified payroll reports are required for all persons working on the project.

CONSTRUCTION PLANS FOR THE IMPROVEMENT OF

LAKEVIEW SENIOR CENTER REHABILITATION

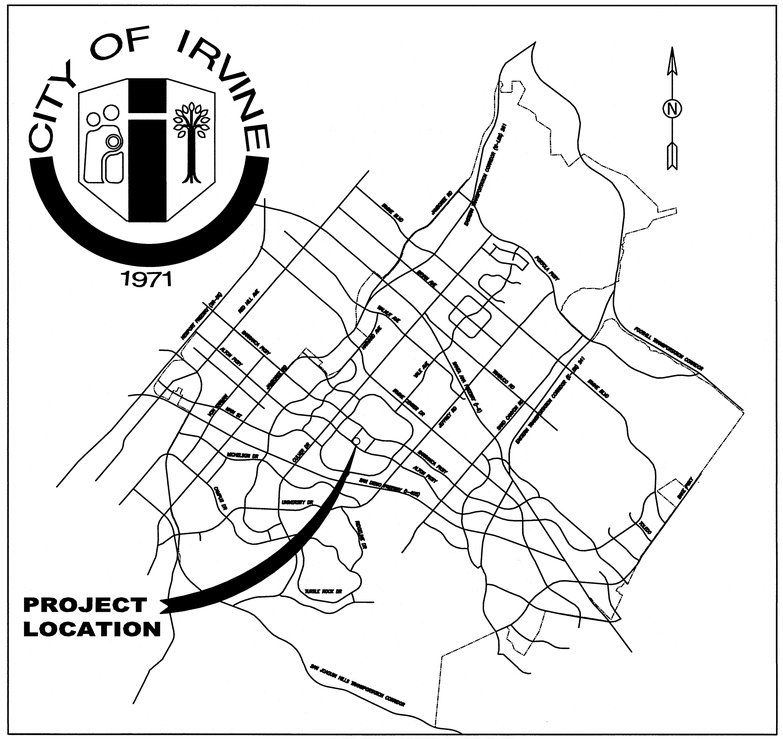
AT 20 LAKE ROAD

CIP NO. 361733

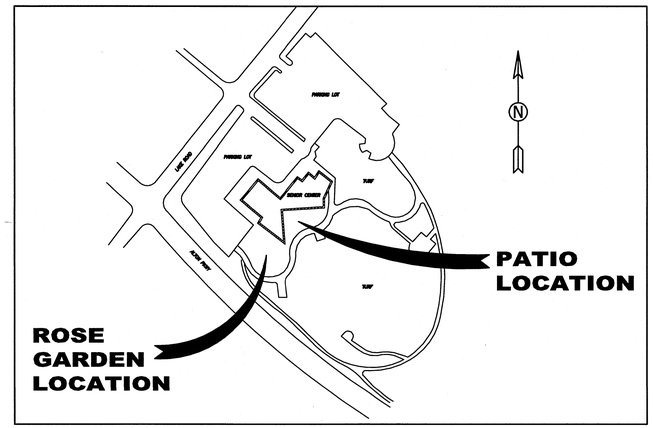
CITY OF IRVINE
BUILDING AND SAFETY DIVISION
GRADING APPROVED

This set of plans and specifications must be kept on the job at all times. It is unlawful to make any changes or alterations on these plans without written permission from the City of Irvine Building and Safety Division. The stamping of this plan and specifications SHALL NOT be held to permit or be an approval of the violation of any provisions of any City Ordinance or State Law, as may be found during field inspection.

Approved By: Bryan H Choi
Date: 1/25/17



VICINITY MAP



LOCATION MAP

INDEX OF DRAWINGS

SHEET No.	DESCRIPTION
1	TITLE SHEET
2	PROJECT NOTES
3	SITE DEMOLITION
4	SITE EROSION CONTROL
5	SITE CONTROL & LAYOUT
6	SITE GRADING
7	GRADING DETAILS
8	SITE DRAINAGE & DETAILS
9	WALL & SHADE STRUCTURE PAINTING ROSE GARDEN ACCESSORIES
10	IRRIGATION PLAN
11	IRRIGATION NOTES & DETAILS
12	PLANTING PLAN

BENCH MARK:

ELEVATIONS SHOWN HEREON ARE BASED UPON THE COUNTY OF ORANGE BENCH MARK "3F–114–82", ELEVATION = 87.108 FEET. (NAVD 88)

DESCRIBED BY OC 2002 – FOUND 3 3\4" OCS ALUMINUM BENCHMARK DISK STAMPED "3F–114–82", SET IN THE SOUTHEASTERLY CORNER OF A 4.3 FT. BY 15 FT. CONCRETE CATCH BASIN. MONUMENT IS LOCATED IN THE EASTERLY CORNER OF THE INTERSECTION OF LAKE ROAD AND ALTON PARKWAY, 41.5 FT. NORTHEASTERLY OF THE CENTERLINE OF ALTON AND 82 FT. SOUTHEASTERLY OF THE CENTERLINE OF LAKE. MONUMENT IS SET LEVEL WITH THE SIDEWALK.

BASIS OF BEARINGS:

THE BEARINGS SHOWN HEREON ARE BASED UPON THE STATE PLANE COORDINATE SYSTEM OF 1983 (NAD 83), CALIFORNIA ZONE 6. ESTABLISHED BY GPS OBSERVATION BASED UPON C.O.R.S. STATION "TRAK"

SITE INFORMATION

APN: 42505108
TRACT: 135/11–15 LOT: 01
IMPROVEMENT ACREAGE: 0.27 ACRE

DIGALERT
DIAL BEFORE YOU DIG — TWO WORKING DAYS BEFORE YOU DIG
TOLL FREE 811
Underground Service Alert of Southern California

NO.	DATE	REVISIONS	ENGR.	APPROV.	DATE
7					
6					
5					
4					
3					
2					
1					

PLAN PREPARED BY:
CIVIL WORKS ENGINEERS
3151 Airway Avenue, Suite T-1
Costa Mesa, CA 92626
(714) 966-9060
DESIGN ENGINEER — 38798 R.C.E. No. — JANUARY 24, 2017 DATE

REGISTERED PROFESSIONAL ENGINEER MARIE MARSTON RCE 38798 Exp. 03/31/17 CIVIL STATE OF CALIFORNIA

DRAWN BY:		DATE
DESIGNED BY:		DATE
CHECKED BY:		DATE
RECOMMENDED BY:		DATE

APPROVED BY: CITY ENGINEER
JAMES M. HOULIHAN R.C.E. NO. 51568 — 2/13/17 DATE

LAKEVIEW SENIOR CENTER
PATIO IMPROVEMENTS
TITLE SHEET

CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

PLAN CHECK NO. 00697162–GPRE
CIP NO. 361733
PROJECT NO.
SHEET 1 OF 12

CITY OF IRVINE BUILDING & SAFETY DIVISION

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SHFFT RFVISFD: 1/24/2017

GRADING NOTES

1. All work shall be in accordance with the latest adopted edition of
   a. The Irvine Grading and Excavation Regulations and Grading Manual
   b. The City of Irvine Standard Plans
   c. Special requirements of the Grading Permit
   d. The California Building Code
   e. Standard Specifications for Public Works Construction (Green Book).
   f. Manual of Uniform Traffic Control Devices (MUTCD) 2005 California supplement
   Whenever special requirements conflict on any subject matter, the Chief Building Official will determine which special requirement and/or code will govern.
2. No grading shall be started without first notifying Grading Inspection. A pre–grading meeting at the site is required before start of clearing and grading with the following people present: Owner, Grading Contractor, Design Civil Engineer, Geotechnical Engineer, Engineering Geologist, City Grading Inspectors, City Maintenance Representative, Archaeologist, Paleontologist or their representatives.
3. The Permittee or his agent shall notify Grading Inspection when the grading operation is ready for each of the following inspections: (Phone (949) 724–6329)
   a. Initial Inspection. When the permittee is ready to begin work, but not less than two days before any clearing or grading is started.
   b. Toe Inspection. After the natural ground or bedrock is exposed and prepared to receive fill, but before fill is placed.
   c. Excavation Inspection. After the excavation is started, but before the vertical depth of the excavation exceeds ten feet.
   d. Fill Inspection. After the fill placement is started, but before the vertical height of the fill exceeds ten feet.
   e. Drainage Device Inspection. After forming of terrace drains, down–drains or after placement of pipe in subdrains, but before any concrete or filler material is placed.
   f. Rough Grading Inspection. When all rough grading has been completed. This inspection may be called for at the completion of rough grading without the inspector necessarily having previously reviewed and approved the required reports.
   g. Final Grading and Improvement Inspection. When all work (including installation of all drainage structures, other protective devices and all other improvements which include landscaping and irrigation systems) has been completed and the as–graded plan, professional certifications and the required reports have been submitted.
4. Cut and fill slopes shall be no steeper than two horizontal to one vertical.
5. Fills shall be compacted throughout to a minimum of 90% of the maximum density as determined by ASTM D1557–02e1 Modified. Compacted fills shall be certified by the Geotechnical Engineer.
6. Areas to receive fill shall be properly prepared and approved by the Chief Building Official and Geotechnical Engineer prior to placing of fill.
7. Fills shall be benched into approved material as deemed suitable by the Geotechnical Engineer.
8. All existing fills shall be approved by the Geotechnical Engineer and Chief Building Official before any additional fills are added.
9. Any existing irrigation lines and cisterns shall be removed or crushed in place and back filled and approved by the Grading Inspector and Geotechnical Engineer.
10. Slopes exceeding five feet in height must be planted with an approved irrigation system. All slopes more than three feet in height shall be permanently protected against damage from erosion by planting with grass or groundcover plants.
11. The stockpiling of excess material shall be approved by the Chief Building Official prior to excavation.
12. The Design Civil Engineer, prior to rough grade approval, shall provide a minimum of one blue top per finished pad, set at the highest point in the finished drainage swale. For precise grade approval, the elevation of the floor shall also be provided to insure proper clearance and fall to drainage swale. These elevations shall be noted on the building plans.
13. All trench back fills shall be tested and approved by the site Geotechnical Engineer per the Grading and Excavation Regulations.
14. The Engineering Geologist and Geotechnical Engineer shall, after clearing and prior to the placement of fill in canyons, inspect each canyon for areas of adverse stability and to determine the presence or absence of subsurface water or spring flow. If needed, canyon subdrains will be designed and constructed prior to the placement of fill.
15. Subdrain outlets shall be completed at the beginning of the subdrain construction.
16. Subdrain and backdrain locations shall be surveyed in the field for line and grade, and the locations shall be shown on the as–graded plans.
17. All cut slopes shall be evaluated both during and after grading by an Engineering Geologist to determine if any slope stability problem exists. Should excavation disclose any geological hazards or potential geological hazards, the Engineering Geologist shall recommend necessary treatment to the City Grading Engineer for approval.
18. Where support or buttressing of cut and natural slopes is determined to be necessary by the Engineering Geologist and/or Geotechnical Engineer, the Geotechnical Engineer will submit design calculations to the Chief Building Official prior to construction. The Engineering Geologist and Geotechnical Engineer will inspect and control the construction of the buttressing and certify the stability of the slope and adjacent structures upon completion.
19. When cut pads are brought to near grade, the Engineering Geologist shall determine if the bedrock is extensively fractured or faulted and will readily transmit water. If considered necessary by the Engineering Geologist and Geotechnical Engineer, a compacted fill blanket will be placed.
20. The Geotechnical Engineer shall perform periodic inspections and submit a complete report and map upon completion of the rough grading.
21. The final compaction report and approval from the Geotechnical Engineer shall contain the type of field–testing performed. The method of obtaining the in–place density, whether sand cone, nuclear gauge, or drive ring shall be so noted for each test. Sufficient maximum density determinations shall be performed to verify the accuracy of the maximum density curves used by the field technician.
22. Notification of Noncompliance: If, in the course of fulfilling their responsibility, the Civil Engineer, the Geotechnical Engineer, the Engineering Geologist or the Testing Agency finds that the work is not being done in conformance with the approved grading plans, the discrepancies shall be reported immediately in writing to the person in charge of the grading work and to the Chief Building Official. Recommendation for corrective measures, if necessary, shall be submitted to the Chief Building Official for approval.
23. The Design Civil Engineer shall provide written approval that the grading operation is in compliance with the approved plans, specifications and applicable codes at completion of the grading operation.
24. Dust shall be controlled by watering using an approved method without creating any runoff from the area.
25. Sanitary facilities shall be maintained on the site.
26. The location and protection of all utilities is the responsibility of the permittee.
27. All existing drainage courses on the project site must continue to function, while protected, especially during storm conditions. Approved protective measures and temporary drainage provisions must be used to protect adjoining properties during the grading project. In all cases, the Contractor and/or Developer shall be held liable for any damage due to obstructing natural or manmade drainage patterns.
28. All water wells shall be abandoned in compliance with the City of Irvine Code of Ordinances Title VI; Division H, Chapter II, Section 6–4–216.
29. All existing sewers, cesspools and septic tanks or other sewage disposal facilities shall be abandoned in compliance with the Uniform Plumbing Code and to the approval of the Geotechnical Engineer and Grading Inspector.
30. Prior to final approval, the Design Civil Engineer shall certify to the Grading Inspector the number of cubic yards of cut, fill, import, or export moved during the grading operation.
31. The Permittee shall comply with Section 5–10–127 of the Grading Code when an excess of 5,000 cubic yards of earth is moved on public roadways from the site of an earth grading operation.
32. Whenever there is an existing catch basin along the construction site frontage, the on–site storm drain system shall be designed to convey water directly to the basin. Exceptions shall require approval by the City Engineer.
33. All concrete structures that come in contact with the on–site soils shall be constructed with Type 5 six (6) sack cement unless deemed unnecessary by the sulfate–content tests conducted by the Geotechnical Engineer and reported in the preliminary soils report.
34. All planters adjacent to the foundations shall be sealed along side of the foundation footing and extended under the planter area to a minimum of 12" to prevent moisture from reaching the foundation subgrade soils. All concrete planter curbs adjacent to pavement areas shall be constructed with weep holes through the curb face.
35. Export soils must go to a legal dumpsite or to a legal permitted site approved by the Chief Building Official.
36. The preliminary geotechnical report and all subsequent geotechnical reports as approved by the Community Development Department are considered a part of the approved grading plan.
37. Provide weakened plane joints in concrete curbs 10' on centers.
38. All walkways, landings, and other finished surfaces at doorways shall be finished to within one–half inch or less of the doorway threshold with a 2:1 bevel (single family detached are exempt).
39. No dirt, rock or construction material may be tracked or dropped within the public rights–of–way during the transportation of said material or equipment associated with the project. Any debris in the public right–of–way shall be removed immediately and/or as deemed necessary by the grading inspector.
40. Dirt access ramps over curb and gutter to construction sites are not allowed. When necessary for entrance to such construction sites, asphalt ramps with a minimum 3" diameter pipe will be constructed per City standard 217. All base, gravel, soil or other material carried into the roadway by contractor's personnel or equipment will be cleaned immediately as necessary to prevent pollutants from getting into the storm drain system. Trucks hauling base, gravel, fill or export materials within City limits shall be tarped as necessary to prevent material from spilling into the roadway.
41. Prior to any construction that involves hazardous conditions, the Contractor shall first obtain a permit from the State Division of Occupational Safety and Health (DOSH).
42. Proposed revisions to the grading plan shall be drawn in red pencil on bluelines of the approved plan. These bluelines are then to be submitted to the Community Development Department for review and approval. Only after the blueline approval is given should the originals be changed by the Engineer/Architect.
43. Prior to Final Approval from Inspection Services, the Engineer or Architect shall submit two sets of compact disk/DVD containing individual PDF files and AutoCAD files of the "AS–GRADED" plan. The grading permit number and the words "RECORD DRAWING" shall appear on all of the sheets
44. A minimum of 6" aggregate base will be required under concrete valley gutters. All valley gutters shall be a minimum 3'–0" wide.
45. Open cuts of arterial highways will not be permitted without prior approval. Rock wheels are not allowed.
46. All new asphalt construction shall be shaded on grading plan.
47. Rule 403, Air Quality Control Management District, must be implemented during construction.
   a. A person shall not cause or allow the emissions of fugitive dust from any transport, handling, construction or storage activity so that the presence of such dust remains visible in the atmosphere beyond the property line of the emission source. (Does not apply to emission emanating from unpaved roadways open to public travel or farm roads. This exclusion shall not apply to industrial or commercial facilities).
   b. A person shall take every reasonable precaution to minimize fugitive dust emissions from wrecking, excavation, grading, clearing of land and solid waste disposal operations.
   c. A person shall not cause or allow particulate matter to exceed 100 micrograms per cubic meter when determined as the difference between upwind and downwind samples collected on high volume samplers at the property line for a minimum of five hours.
   d. A person shall take every reasonable precaution to prevent visible particulate matter from being deposited upon public roadways, including, but not limited to, the removal of particulate matter from equipment prior to movement on paved street.
   e. Subsections a. and b. shall not be applicable when the wind speed instantaneously exceeds 40 kilometers (25 miles) per hour, or when the average wind speed is greater than 24 kilometers (15 miles) per hour. The average wind speed determinations shall be on a 15–minute average at the nearest official air–monitoring station or by wind instrument located at the site being checked.
   f. The provisions of this rule shall not apply to agricultural operations.
48. Grading operations shall occur only between the hours of 7:00 a.m. and 7:00 p.m. Monday through Friday, and between the hours of 9:00 a.m. and 6:00 p.m. Saturdays. No construction activities shall be permitted outside of these permitted hours or on Sundays and federal holidays, unless a temporary waiver has been granted by the Chief Building Official. Any waivers shall take into account the impact upon the community. Irvine Municipal Code Section 6–8–205.
49. Where an excess of five thousand (5,000) cubic yards of earth per project site is moved on public roads from or to the site of an earth grading operation, City of Irvine Building and Safety enforces the section of the grading code, which contains requirements to curtail impacts to adjacent properties. Such requirements include, but are not limited to; application of water to truck loads, sweeping of access roads to the site and use of approved truck haul routes.
50. Prior to approval of grading permit, the Design Engineer shall submit drawings on DXF or Auto/CAD .dwg file to the City. Minimum information that will be required: Tract Boundary, Lot Lines, Curb Lines, Storm Drains and Building Footprints. Call (949) 724–6343 for details.
51. Curved storm drains shall be constructed in accordance with Section 306 – 1.2.4b, Standard Specifications for Public Works Construction, latest approved edition.
52. A separate Landscape Permit will be required for any landscaping associated with this project.
53. A resource specialist will be available on site to monitor activities should grading disturb native soils

PRIVATE ENGINEER'S NOTICE TO CONTRACTOR(S)

1. THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITIES AND/OR STRUCTURES SHOWN ON THESE PLANS WERE OBTAINED BY A SEARCH OF THE AVAILABLE RECORDS. APPROVAL OF THESE PLANS BY THE CITY OF IRVINE DOES NOT CONSTITUTE A REPRESENTATION AS TO THE ACCURACY OR COMPLETENESS OF THE LOCATION OR THE EXISTENCE OR NON–EXISTENCE OF ANY UTILITY AND/OR STRUCTURE WITHIN THE LIMITS OF THIS PROJECT. THE CONTRACTOR IS REQUIRED TO TAKE ALL DUE PRECAUTIONARY MEANS TO PROTECT THE UTILITIES OF RECORD OR NOT OF RECORD OR NOT SHOWN ON THESE PLANS.
2. RELOCATION OR REMOVAL OF ANY EXISTING UTILITIES SHALL BE PERFORMED BY THE RESPECTIVE UTILITY OWNERS, AT THE EXPENSE OF THE DEVELOPER.
3. THE GRADING CONTRACTOR SHALL SATISFY HIMSELF AS TO THE GRADING QUANTITY AS SHOWN ON THIS PLAN AS PART OF HIS BID.
4. IT IS REQUESTED THAT THE GRADING CONTRACTOR NOTIFY THIS PRIVATE ENGINEER BY CALLING AT LEAST 48 HOURS BEFORE COMPLETION OF THE GRADING OPERATION IN ORDER THAT THIS OFFICE MAY PERFORM A FINAL INSPECTION WITH OUR GRADE CERTIFICATION COMMITMENT TO THE CITY OF IRVINE.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL REQUIRED PERMITS PRIOR TO COMMENCEMENT OF GRADING OPERATIONS.
6. UNAUTHORIZED CHANGES AND USES: THE ENGINEER PREPARING THESE PLANS WILL NOT BE RESPONSIBLE FOR, OR LIABLE FOR, UNAUTHORIZED CHANGES TO OR USES OF THESE PLANS. ALL CHANGES TO THE PLANS MUST BE IN WRITING AND MUST BE APPROVED BY THE PREPARER OF THESE PLANS AND THE CITY OF IRVINE.

EARTHWORK QUANTITIES

EARTHWORK	QUANTITIES
RAW CUT	63 CY
RAW FILL	0 CY

FLOOD ZONE INFORMATION

ZONE X – AREA OUTSIDE 0.2% ANNUAL CHANCE FLOODPLAIN

FEMA MAP NO. 06059C0291J, PANEL NO. 291

DECEMBER 3, 2009

CITY OF IRVINE
COMMUNITY DEVELOPMENT DEPARTMENT

This set of plans & specifications must be kept on the job at all times and it is unlawful to make any changes or alterations on same without written permission from the City of Irvine Community Development Department. The stamping of this plan & specifications SHALL NOT be held to permit or be an approval of the violation of any provisions of any City Ordinance or State Law.

IMPORTANT NOTICE

Section 4216/4217 of the Government Code requires a Dig Alert Identification Number be issued before a "Permit to Excavate" will be valid.

TOLL FREE 1–800–422–4133
Two working days before you dig.

ALL WORK PROPOSED IN PUBLIC RIGHT–OF–WAY WILL BE SHOWN ON THE GRADING PLANS. THOSE ITEMS THAT ARE NOT SHOWN WILL REQUIRE A SEPARATE ENCROACHMENT PERMIT.
THIS DOES NOT EXEMPT ONSITE UTILITIES FROM OBTAINING THEIR REQUIRED PERMITS.

MODEL WATER EFFICIENT LANDSCAPE ORDINANCE

☐ THIS PROJECT IS EXEMPT FROM MWELO.
☒ THIS PROJECT IS NOT EXEMPT FROM MWELO.
– PROJECT CATEGORY: C
– COMPLIANCE APPROACH: LANDSCAPE DOCUMENTATION PACKAGE

NO.	DATE	REVISIONS	ENGR.	APPROV.	DATE
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4					
3					
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DRAWN BY: DATE
DESIGNED BY: DATE
CHECKED BY: DATE

REGISTERED PROFESSIONAL ENGINEER MARTE MARSTON PARTNO RCE 38798 Exp. 03/31/17 CIVIL STATE OF CALIFORNIA

PLAN PREPARED BY:
CIVIL WORKS ENGINEERS
3151 Airway Avenue, Suite T-1
Costa Mesa, CA 92626
(714) 966-9060

LAKEVIEW SENIOR CENTER REHABILITATION

PROJECT NOTES

CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

PLAN CHECK NO. 00697-162-GPRE
CIP NO. 381733
PROJECT NO.
JOB NO.
SHEET 2 OF 12

CITY OF IRVINE BUILDING & SAFETY DIVISION

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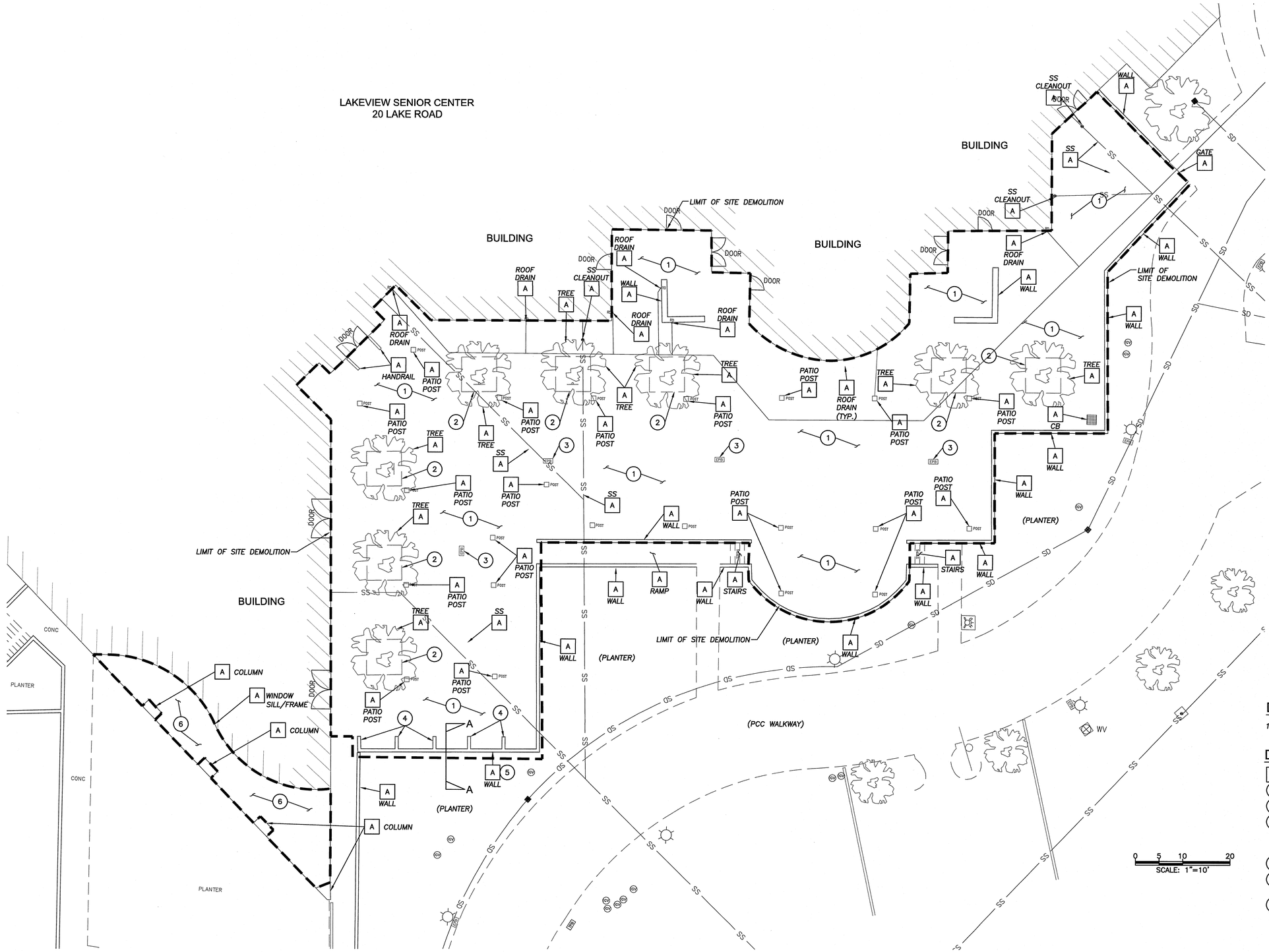
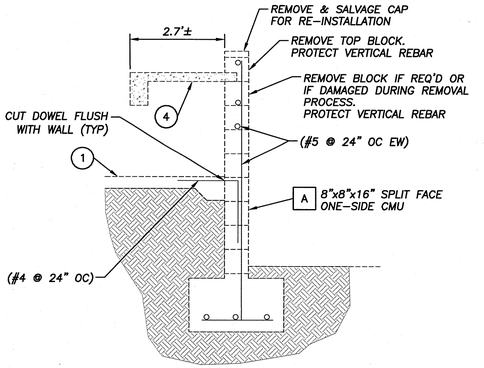
SHEET REVISED: 1/23/2017

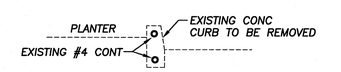
LAKEVIEW SENIOR CENTER
20 LAKE ROAD





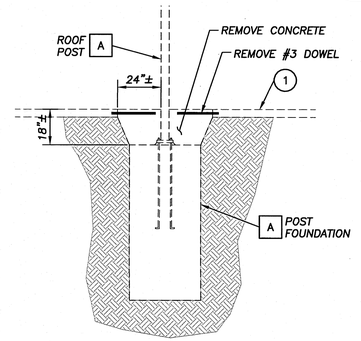
WING WALL & CONCRETE SLAB REMOVAL (A)

NO SCALE



TREE WELL CURB REMOVAL (2)

NO SCALE



EXISTING POST FOUNDATION (1)

NO SCALE

DEMOLITION NOTES

1. SEE IRRIGATION PLANS FOR ABANDONMENT LIMITS OF EXISTING IRRIGATION SYSTEM

DEMOLITION NOTES

- (A) PROTECT-IN-PLACE (ITEM AS NOTED)
- (1) REMOVE CONCRETE PAVEMENT (4"± THICK)
- (2) REMOVE PCC PLANTER CURB
- (3) ELECTRICAL PULLBOX
  REMOVE PULLBOX IF CONDUIT & ELEC CIRCUIT ABANDONED
  REPLACE PULLBOX IF CONDUIT & ELEC CIRCUIT ACTIVE (NO. 3-1/2 PULLBOX WITH CONCRETE LID). COORDINATE WORK WITH CITY INSPECTOR
- (4) REMOVE BLOCK WING WALL & ATTACHED CONCRETE COUNTER SLAB
- (5) REMOVE TOP TWO OF BLOCK WALL AS REQUIRED/DAMAGED BY WINGWALL/SLAB REMOVAL. SEE DETAIL 'A' FOR ADDITIONAL INFORMATION
- (6) REMOVE LOOSE PLANTING MATERIAL, SPRINKLER HEADS AND CAP IRRIGATION LINES

NO.	DATE	REVISIONS	ENGR.	APPROV.	DATE
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DRAWN BY: DATE
DESIGNED BY: DATE
CHECKED BY: DATE

REGISTERED PROFESSIONAL ENGINEER MARTE MARSHON RGE 38798 Exp. 03/31/17 CIVIL STATE OF CALIFORNIA

PLAN PREPARED BY:
CIVIL WORKS ENGINEERS
3151 Airway Avenue, Suite T-1
Costa Mesa, CA 92626
(714) 966-9060

LAKEVIEW SENIOR CENTER REHABILITATION
PATIO IMPROVEMENTS

SITE DEMOLITION

CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

PLAN CHECK NO. 00697162-GPRE
CIP NO. 381733
PROJECT NO.
JOB NO.
SHEET 3 OF 12

CITY OF IRVINE BUILDING & SAFETY DIVISION

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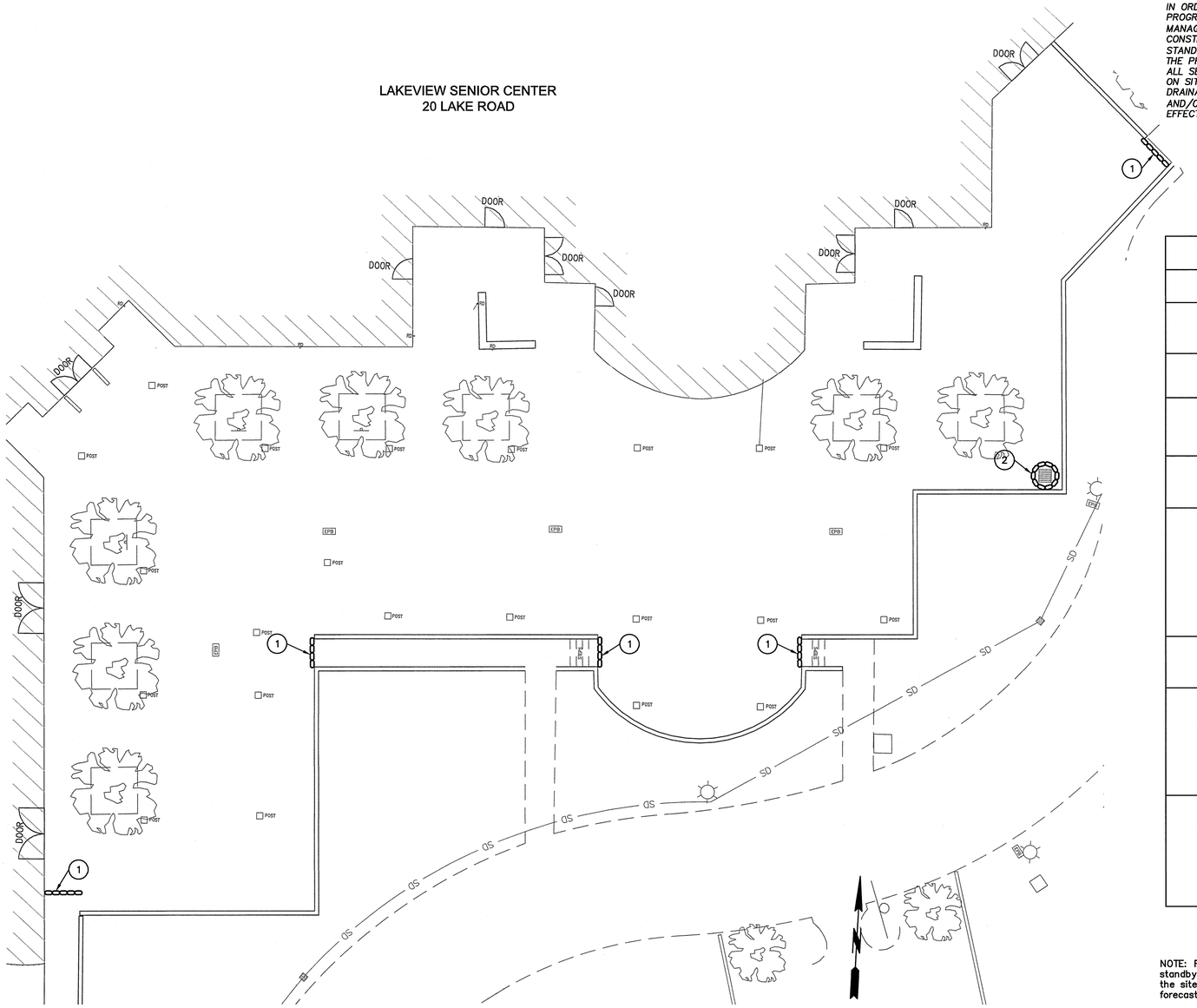
SHEET REVISED: 1/5/2017

EROSION CONTROL GENERAL NOTES

1. A STAND–BY CREW FOR EMERGENCY WORK SHALL BE AVAILABLE AT ALL TIMES DURING THE RAINY SEASON (OCTOBER 1 TO APRIL 30). NECESSARY MATERIALS SHALL BE AVAILABLE ON–SITE AND STOCKPILED AT CONVENIENT LOCATIONS TO FACILITATE RAPID CONSTRUCTION OF EMERGENCY DEVICES WHEN RAIN IS IMMINENT.
2. EROSION CONTROL DEVICES SHOWN ON THIS PLAN MAY BE REMOVED WHEN APPROVED BY THE BUILDING OFFICIAL IF THE GRADING OPERATION HAS PROGRESSED TO THE POINT WHERE THEY ARE NO LONGER REQUIRED.
3. GRADED AREAS ADJACENT TO FILL SLOPES LOCATED AT THE SITE PERIMETER MUST DRAIN AWAY FROM THE TOP OF SLOPE AT THE CONCLUSION OF EACH WORKING DAY. ALL LOOSE SOILS AND DEBRIS THAT MAY CREATE A POTENTIAL HAZARD TO OFF–SITE PROPERTY SHALL BE STABILIZED OR REMOVED FROM THE SITE ON A DAILY BASIS.
4. ALL SILT AND DEBRIS SHALL BE REMOVED FROM ALL DEVICES WITHIN 24 HOURS AFTER EACH RAINSTORM AND BE DISPOSED OF PROPERLY.
5. A GUARD SHALL BE POSTED ON THE SITE WHENEVER THE DEPTH OF WATER IN ANY DEVICE EXCEEDS TWO FEET. THE DEVICE SHALL BE DRAINED OR PUMPED DRY WITHIN 24 HOURS AFTER EACH RAINSTORM. PUMPING AND DRAINING OF ALL BASINS AND DRAINAGE DEVICES MUST COMPLY MUST COMPLY WITH THE APPROPRIATE BMP FOR DEWATERING OPERATIONS.
6. THE PLACEMENT OF ADDITIONAL DEVICES TO REDUCE EROSION DAMAGE AND CONTAIN POLLUTANTS WITHIN THE SITE IS LEFT TO THE DISCRETION OF THE FIELD ENGINEER. ADDITIONAL DEVICES AS NEEDED SHALL BE INSTALLED TO RETAIN SEDIMENTS AND OTHER POLLUTANTS ON SITE.
7. DESILTING BASINS MAY NOT BE REMOVED OR MADE INOPERABLE BETWEEN OCTOBER 1 AND APRIL 30 OF THE FOLLOWING YEAR WITHOUT THE APPROVAL OF THE BUILDING OFFICIAL.
8. STORM WATER POLLUTION AND EROSION CONTROL DEVICES ARE TO BE MODIFIED, AS NEEDED, AS THE PROJECT PROGRESSES, THE DESIGN AND PLACEMENT OF THESE DEVICES IS THE RESPONSIBILITY OF THE FIELD ENGINEER. PLANS REPRESENTING CHANGES MUST BE SUBMITTED FOR APPROVAL IF REQUESTED BY THE BUILDING OFFICIAL.
9. EVERY EFFORT SHOULD BE MADE TO ELIMINATE THE DISCHARGE OF NONSTORM WATER FROM THE PROJECT SITES AT ALL TIMES.
10. ERODED SEDIMENTS AND OTHER POLLUTANTS MUST BE RETAINED ON–SITE AND MAY NOT BE TRANSPORTED FROM THE SITE VIA SHEET FLOW, SWALES, AREA DRAINS, NATURAL DRAINAGE COURSES, OR WIND.
11. STOCKPILES OF EARTH AND OTHER CONSTRUCTION–RELATED MATERIALS MUST BE PROTECTED FROM BEING TRANSPORTED FROM THE SITE BY THE FORCES OF WIND OR WATER.
12. FUELS, OILS, SOLVENTS, AND OTHER TOXIC MATERIALS MUST BE STORED IN ACCORDANCE WITH THEIR LISTING AND ARE NOT TO CONTAMINATE THE SOILS AND SURFACE WATERS. ALL APPROVED STORAGE CONTAINERS ARE TO BE PROTECTED FROM THE WEATHER. SPILLS MUST BE CLEANED UP IMMEDIATELY AND DISPOSED OF IN A PROPER MANNER. SPILLS MAY NOT BE WASHED INTO THE DRAINAGE SYSTEM.
13. EXCESS OR WASTE CONCRETE MAY NOT BE WASHED INTO THE PUBLIC WAY OR ANY OTHER DRAINAGE SYSTEM. PROVISIONS SHALL BE MADE TO RETAIN CONCRETE WASTES ON–SITE UNTIL THEY CAN BE DISPOSED OF AS SOLID WASTE.
14. CONTRACTOR IS RESPONSIBLE TO INSPECT ALL EROSION CONTROL DEVICES AND BMP'S ARE INSTALLED AND FUNCTIONING PROPERLY IF THERE IS A 40% CHANCE OF 0.25 INCHES OR GREATER OF PREDICTED PRECIPITATION, AND AFTER ACTUAL PRECIPITATION. A CONSTRUCTION SITE INSPECTION CHECKLIST AND INSPECTION LOG SHALL BE MAINTAINED AT THE PROJECT SITE AT ALL TIMES AND AVAILABLE FOR REVIEW BY THE BUILDING OFFICIAL (COPIES OF THE SELF–INSPECTION CHECK LIST AND INSPECTION LOGS ARE AVAILABLE UPON REQUEST).
15. TRASH AND CONSTRUCTION–RELATED SOLID WASTES MUST BE DEPOSITED INTO A COVERED RECEPTACLE TO PREVENT CONTAMINATION OF RAINWATER AND DISPERSAL BY WIND.
16. SEDIMENTS AND OTHER MATERIALS MAY NOT BE TRACKED FROM THE SITE BY VEHICLE TRAFFIC. THE CONSTRUCTION ENTRANCE ROADWAYS MUST BE STABILIZED SO AS TO INHIBIT SEDIMENTS FROM BEING DEPOSITED INTO THE PUBLIC WAY. ACCIDENTAL DEPOSITIONS MUST BE SWEPT UP IMMEDIATELY AND MAY NOT BE WASHED DOWN BY RAIN OR OTHER MEANS.
17. ANY SLOPES WITH DISTURBED SOILS OR DENUDED OF VEGETATION MUST BE STABILIZED SO AS TO INHIBIT EROSION BY WIND AND WATER.

LAKEVIEW SENIOR CENTER
20 LAKE ROAD



POLLUTION PREVENTION NOTES

IN ORDER TO MEET THE REQUIREMENTS OF THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PROGRAM FOR CONSTRUCTION, CONSTRUCTION CONTRACTORS SHALL INSTALL AND MAINTAIN APPROPRIATE BEST MANAGMENT PRACTICES (BMPS), AS SHOWN IN THE EROSION AND SEDIMENT CONTROL PLAN, ON ALL CONSTRUCTION PROJECTS. BMPS SHALL BE INSTALLED IN ACCORDANCE WITH INDUSTRY RECOMMENDED STANDARDS, AND/OR IN ACCORDANCE WITH ANY GENERAL CONSTRUCTION PERMIT ISSUED BY THE STATE FOR THE PROJECT TO PREVENT ANY DISCHARGES FROM THE PROJECT SITE OR INTO ANY STORM DRAIN FACILITIES. ALL SEDIMENTS, CONSTRUCTION MATERIALS, DEBRIS AND WASTES, AND OTHER POLLUTANTS MUST BE RETAINED ON SITE AND MAY NOT BE TRANSPORTED FROM THE SITE VIA SHEET FLOW, SWALES, AREA DRAINS, NATURAL DRAINAGE COURSES, WIND, OR VEHICLE TRACKING. UNDER DIRECTION OF THE ENGINEER OF RECORD, EROSION AND/OR SEDIMENT CONTROL DEVICES SHALL BE MODIFIED AS NEEDED AS THE PROJECT PROGRESSES TO ENSURE EFFECTIVENESS.

Erosion and Sediment Control Requirements

Requirements	SPECIFIED BMPs BMP Detail(s)/ Sheet Number
A. Wind erosion BMPs (dust control) shall be implemented.	WE–1
B. Sediment control BMPs shall be implemented at the site perimeter, at all operational storm drain inlets and at all non–active slopes.	SE–6, SE–10
C. BMPs to control off–site sediment tracking shall be implemented and maintained.	SE–6
D. Appropriate waste management and material pollution control BMPs shall be implemented to prevent the contamination of stormwater by wastes and construction materials.	WM–1, WM–2, WM–4, WM–5, WM–8
E. Appropriate non–stormwater BMPs shall be implemented to prevent the contamination of stormwater from construction activities.	NS–1, NS–3, NS–6, NS–7, NS–12, NS–13
F. Adequate physical or vegetation erosion control BMPs (temporary or permanent) shall be installed and established for all completed slopes. If a selected BMP fails, it must be repaired and improved, or replaced with an acceptable alternate as soon as it is safe to do so. The failure of a BMP may indicate that the BMP, as installed, was not adequate for the circumstances in which it was used. Repairs or replacements must result in a more robust BMP, or additional BMPs should be installed to provide adequate protection.	N/A
G. Adequate erosion and sediment controls must be implemented prior to the onset of a storm event for all actively graded areas.	EC–1
H. A disturbed area that is not completed but that is not being actively graded (non–active area) shall be fully protected from erosion with the referenced temporary and/or permanent BMPs (erosion and sediment control). The ability to deploy standby BMP materials is not sufficient for these areas. Erosion and sediment control BMPs must actually be deployed. This includes all building pads, unfinished roads and slopes.	N/A
I. Sufficient materials needed to install referenced standby erosion and sediment control BMPs necessary to completely protect the exposed portions of the site from erosion and to prevent sediment discharges shall be stored on site. Areas that have already been protected from erosion using permanent physical stabilization or established vegetation stabilization BMPs are not considered "exposed" for purposes of this requirement.	EC–16

NOTE: For Risk Level 2 and 3 sites, there shall be a "Rain Event Action Plan" and the ability to deploy standby erosion and sediment control BMPs as needed to completely protect the exposed portions of the site within 48 hours of a predicted storm event (a predicted storm event is defined as a forecasted 50% chance of rain).

I hereby certify that I have read and understand the requirements in the Construction General Permit and that the erosion control plans and BMPs shown hereon are in compliance with these requirements.

Signed by: Marie Marston RCE/ PE Number: 38798

In case of an emergency, the responsible person to be contacted shall be:
Name: Kal Lambaz Title: Sr. Project Engineer
Company: City of Irvine 24–Hr. Phone No.: (949) 724–7555

THE FOLLOWING BMP FROM THE "CALIFORNIA STORM WATER BMP CONSTRUCTION HANDBOOK" - LATEST EDITION, MUST BE IMPLEMENTED FOR ALL CONSTRUCTION ACTIVITIES AS APPLICABLE.

EROSION CONTROL
EC1 - SCHEDULING
EC2 - PRESERVATION OF EXISTING VEGETATION
EC3 - HYDRAULIC MULCH
EC4 - HYDROSEEDING
EC5 - SOIL BINDERS
EC6 - STRAW MULCH
EC7 - GEOTEXTILES & MATS
EC8 - WOOD MULCHING
EC9 - EARTH DIKES AND DRAINAGE SWALES
EC10 - VELOCITY DISSIPATION DEVICES
EC11 - SLOPE DRAINS
EC12 - STREAMBANK STABILIZATION
EC13 - POLYACRYLAMIDE

TEMPORARY SEDIMENT CONTROL
SE1 - SILT FENCE
SE2 - SEDIMENT BASIN
SE3 - SEDIMENT TRAP
SE4 - CHECK DAM
SE5 - FIBER ROLLS
SE6 - GRAVEL BAG BERM
SE7 - STREET SWEEPING AND VACUUMING
SE8 - SANDBAG BARRIER
SE9 - STRAW BALE BARRIER
SE10 - STORM DRAIN INLET PROTECTION

WIND EROSION CONTROL
WE1 - WIND EROSION CONTROL

EQUIPMENT TRACKING CONTROL
TC1 - STABILIZED CONSTRUCTION ENTRANCE EXIT
TC2 - STABILIZED CONSTRUCTION ROADWAY
TC3 - ENTRANCE/OUTLET TIRE WASH

NON–STORMWATER MANAGEMENT
NS1 - WATER CONSERVATION PRACTICES
NS2 - DEWATERING OPERATIONS
NS3 - PAVING AND GRINDING OPERATIONS
NS4 - TEMPORARY STREAM CROSSING
NS5 - CLEAR WATER DIVERSION
NS6 - ILLICIT CONNECTION/DISCHARGE
NS7 - POTABLE WATER/IRRIGATION
NS8 - VEHICLE AND EQUIPMENT CLEANING
NS9 - VEHICLE AND EQUIPMENT FUELING
NS10 - VEHICLE AND EQUIPMENT MAINTENANCE
NS11 - PILE DRIVING OPERATIONS
NS12 - CONCRETE CURING
NS13 - CONCRETE FINISHING
NS14 - MATERIAL AND EQUIPMENT USE
NS15 - DEMOLITION ADJACENT TO WATER
NS16 - TEMPORARY BATCH PLANTS

WASTE MANAGEMENT & MATERIAL POLLUTION CONTROL
WM1 - MATERIAL DELIVERY AND STORAGE
WM2 - MATERIAL USE
WM3 - STOCKPILE MANAGEMENT
WM4 - SPILL PREVENTION AND CONTROL
WM5 - SOLID WASTE MANAGEMENT
WM6 - HAZARDOUS WASTE MANAGEMENT
WM7 - CONTAMINATION SOIL MANAGEMENT
WM8 - CONCRETE WASTE MANAGEMENT
WM9 - SANITARY/SEPTIC WASTE MANAGEMENT
WM10 - LIQUID WASTE MANAGEMENT

CONSTRUCTION NOTES

1 – FURNISH & INSTALL GRAVELBAG BERM PER BMP SE6.
2 – FURNISH & INSTALL CATCH BASIN PROTECTION PER BMP SE10.

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REGISTERED PROFESSIONAL ENGINEER MARIE MARSTON RCE 38798 Exp. 03/31/17 CIVIL STATE OF CALIFORNIA

PLAN PREPARED BY:
CIVIL WORKS ENGINEERS
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(714) 966-9060

LAKEVIEW SENIOR CENTER REHABILITATION
PATIO IMPROVEMENTS

SITE EROSION CONTROL

CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

PLAN CHECK NO. 00697-162-GPRE
CITY NO. 381733
PROJECT NO.
JOB NO.
SHEET 4 OF 12

CITY OF IRVINE BUILDING & SAFETY DIVISION

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SHEET REVISED: 12/22/2016

LAKEVIEW SENIOR CENTER
20 LAKE ROAD

BUILDING

BUILDING

BUILDING

BUILDING

(PLANTER)

CP-#003
N10195.67
E10195.67

CONCRETE JOINTS (TYP)

N10173.56 E9983.23

N10174.65 E10003.20

N10173.99 E9991.04

N10175.74 E10023.17

N10175.08 E10011.01

N10176.16 E10030.98

N10178.99 E10082.86

N10179.41 E10090.66

N10180.50 E10110.63

N10180.08 E10102.83

N10165.76 E9983.66

N10166.18 E9991.47

N10166.84 E10003.63

N10167.93 E10023.60

N10167.27 E10011.44

N10168.36 E10031.41

N10171.18 E10083.28

N10171.61 E10091.09

N10172.27 E10103.25

N10172.69 E10111.06

N10152.56 E9964.19

N10152.99 E9972.00

N10144.75 E9964.62

N10145.18 E9972.43

N10132.59 E9965.28

N10133.02 E9973.09

N10124.78 E9965.70

N10125.21 E9973.51

N10112.62 E9966.37

N10113.04 E9974.18

N10104.81 E9966.79

N10105.24 E9974.60

CP-#002
N10144.95
E10017.02

CP-#001
N10000.00
E10000.00

PLANTER

(RAMP)

(WALK)

(PCC WALKWAY)

CONCRETE JOINTS (TYP)

CONC

NC

DOOR

POST

8' TYP

9.7'

10.3'

9.0'

10.8'

11'

9'

10'

3'

LEGEND

———— = WEAKENED PLANE JOINT

— — — — = EXPANSION JOINT

PROJECT COORDINATE CONTROL

CP–#001
SCRIBED X
NORTHING: 10000.00
EASTING: 10000.00

CP–#002
SCRIBED X
NORTHING: 10144.95
EASTING: 10017.02

CP–#003
SCRIBED X
NORTHING: 10195.67
EASTING: 10195.67

0 5 10 20
SCALE: 1"=10'

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CHECKED BY: DATE

REGISTERED PROFESSIONAL ENGINEER
MARTE MARSTON
RCE 38798
Exp. 03/31/17
CIVIL
STATE OF CALIFORNIA

PLAN PREPARED BY:
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LAKEVIEW SENIOR CENTER REHABILITATION
PATIO IMPROVEMENTS

SITE CONTROL & LAYOUT

CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

PLAN CHECK NO. 00697162-GPRE
CIP NO. 381733
PROJECT NO. JOB NO.
SHEET 5 OF 12

CITY OF IRVINE BUILDING & SAFETY DIVISION

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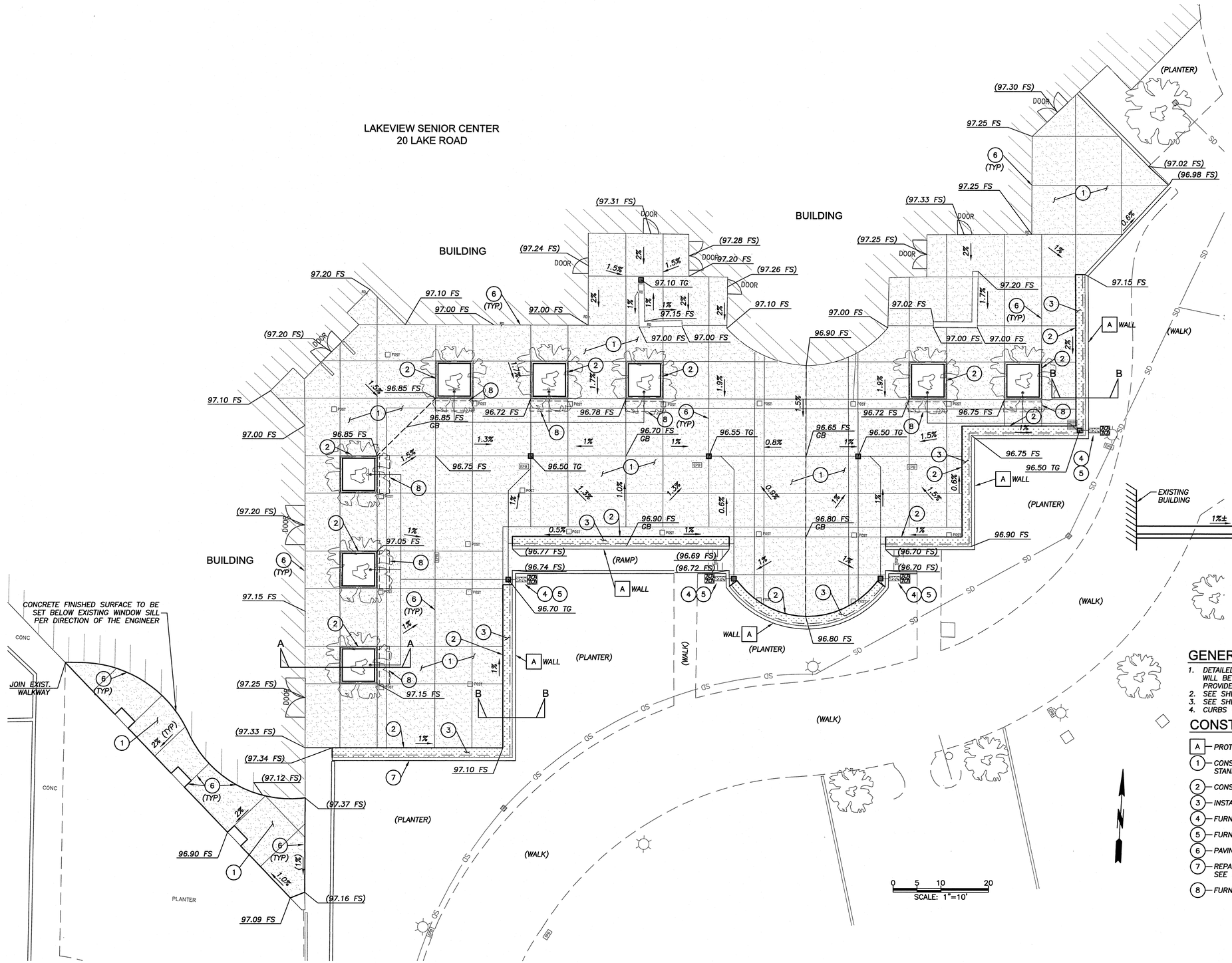
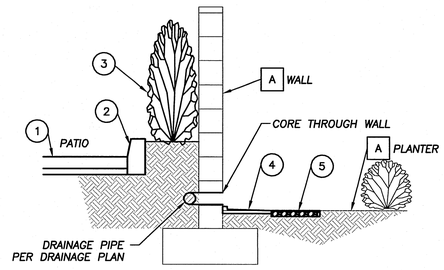
LAKEVIEW SENIOR CENTER
20 LAKE ROAD





TYPICAL PLANTER B
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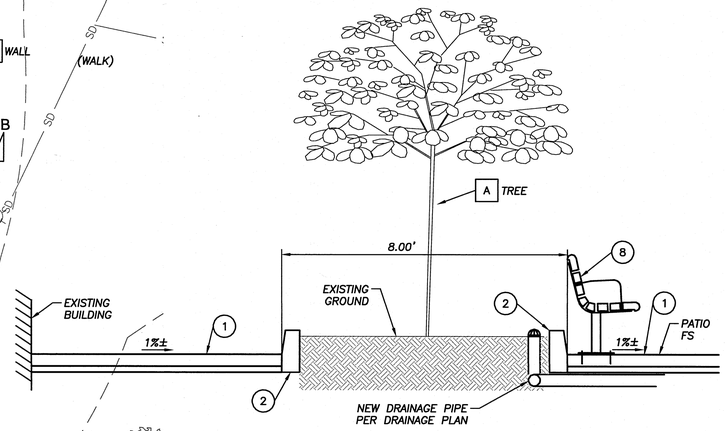

TYPICAL TREE WELL A
NO SCALE

GENERAL NOTES

1. DETAILED CONSTRUCTION STAKING BY A LAND SURVEYOR (LICENSED IN CALIFORNIA) WILL BE REQUIRED FOR THE NEW PATIO HARDSCAPE. FINISHED HARDSCAPE MUST PROVIDE ACCEPTABLE DRAINAGE CONDITIONS AND MEET ACCESSIBILITY SLOPES.
2. SEE SHEET 5 FOR HARDSCAPE JOIN TYPES AND LOCATIONS
3. SEE SHEET 7 FOR DRAINAGE DETAILS.
4. CURBS – WEAKENED PLANE JOINTS SHALL BE CONSTRUCTED AT 10–FT INTERVALS.

CONSTRUCTION NOTES

- (A) PROTECT–IN–PLACE (ITEM AS NOTED)
- (1) CONSTRUCT 4" PCC (WITH 6x6 WWM) OVER 2" CMB OVER COMPACTED SUBGRADE STANDARD GRAY COLOR WITH MEDIUM BROOM FINISH
- (2) CONSTRUCT CONCRETE CURB TYPE "B–8" PER CITY OF IRVINE STD PLAN 200
- (3) INSTALL IRRIGATION & LANDSCAPING PER PLANS
- (4) FURNISH & INSTALL 12"x30"(MIN) CONCRETE SPLASH BLOCK
- (5) FURNISH AND INSTALL UNGROUTED RIP–RAP (2'X2') PER DETAIL 6, SHEET 7
- (6) PAVING JOINT PER SHEET 5 & DETAILS 3, 4 & 5, SHEET 7
- (7) REPAIR EXISTING BLOCK WALL PER DETAIL 7, SHEET 7. SEE SITE DEMOLITION PLAN FOR WALL REMOVAL DETAILS
- (8) FURNISH & INSTALL PUBLIC BENCH PER DETAIL 8 & PROJECT SPECS

NO.	DATE	REVISIONS	ENGR.	APPROV.	DATE
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REGISTERED PROFESSIONAL ENGINEER
MARIE MARSTON
RCE 38798
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LAKEVIEW SENIOR CENTER REHABILITATION
PATIO IMPROVEMENTS

SITE GRADING

CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

PLAN CHECK NO. 00697-162-GPRE
CITY NO. 387733
PROJECT NO.
JOB NO.
SHEET 6 OF 12

CITY OF IRVINE BUILDING & SAFETY DIVISION

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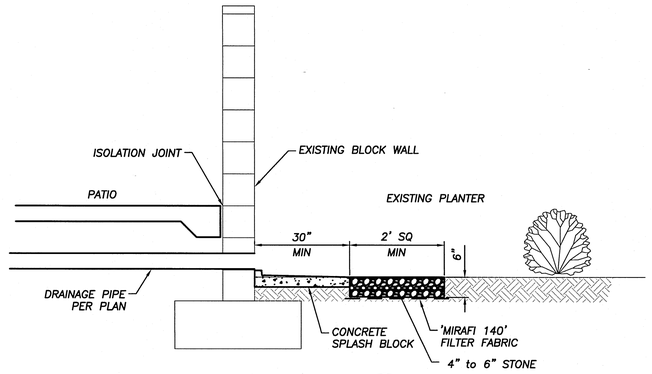

PIPE OUTLET SECTION 6
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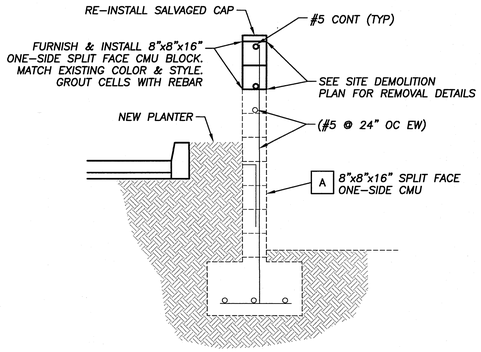

BLOCK WALL REPAIR 7
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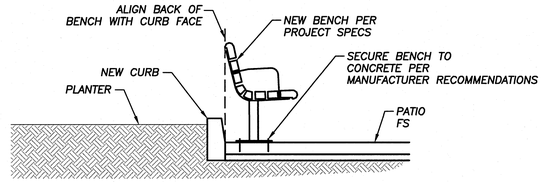

BENCH INSTALLATION 8
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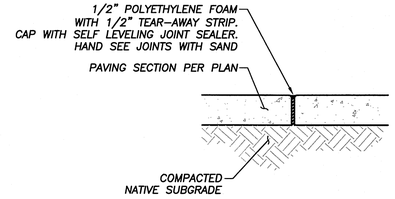
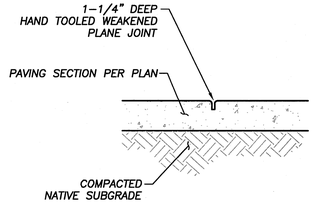
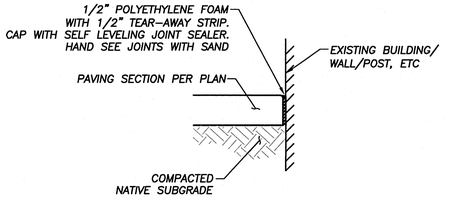


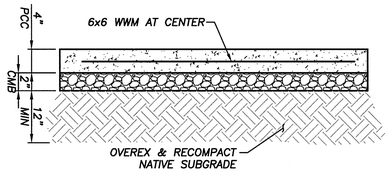
EXPANSION JOINT 3
NO SCALE
SEE SHEET 5 FOR LOCATIONS



WEAKENED PLANE JOINT 4
NO SCALE
SEE SHEET 5 FOR LOCATIONS

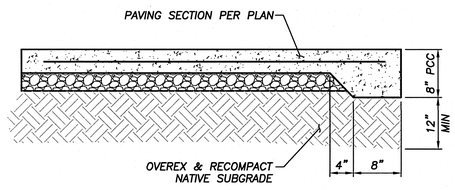


ISOLATION JOINT 5
NO SCALE
TYPICAL AT ALL APPLICABLE LOCATIONS



NOTES:
1. CONSTRUCT WEAKENED PLANE JOINTS PER PLAN LAYOUT
2. CONCRETE SHALL BE 520-C-2500

CONCRETE PATIO HARDSCAPE 1
NO SCALE



THICKENED EDGE AT EDGE OF HARDSCAPE 2
NO SCALE

NOTE:
SUBGRADE TO RECEIVE NEW PAVING MUST BE COMPACTED TO A MINIMUM OF 90 PERCENT MAXIMUM DENSITY.

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REGISTERED PROFESSIONAL ENGINEER MARTE MARSTON RCE 38798 Exp. 03/31/17 CIVIL STATE OF CALIFORNIA

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LAKEVIEW SENIOR CENTER REHABILITATION
PATIO IMPROVEMENTS

GRADING DETAILS

CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

PLAN CHECK NO. 00697162-GPRE
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JOB NO.
SHEET 7 OF 12

CITY OF IRVINE BUILDING & SAFETY DIVISION

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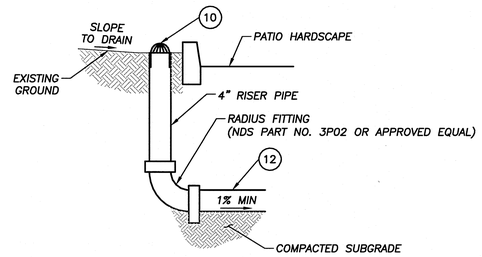
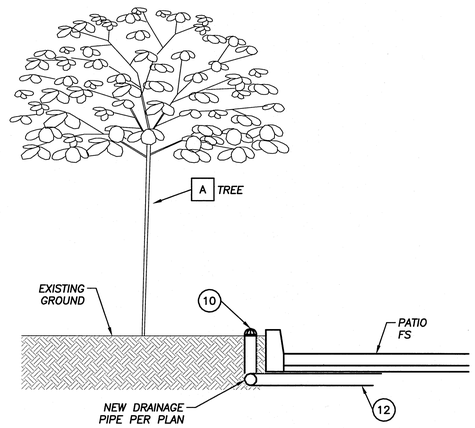


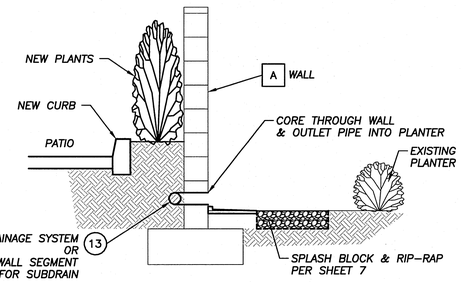
TYPICAL TREE WELL INLET 4

NO SCALE



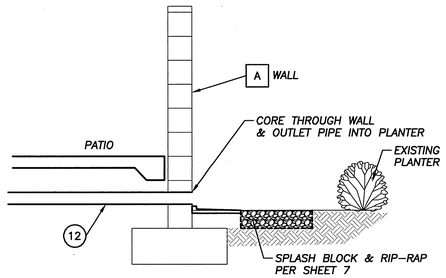
TYPICAL PLANTER 3

NO SCALE



TYPICAL WALL PLANTER 2

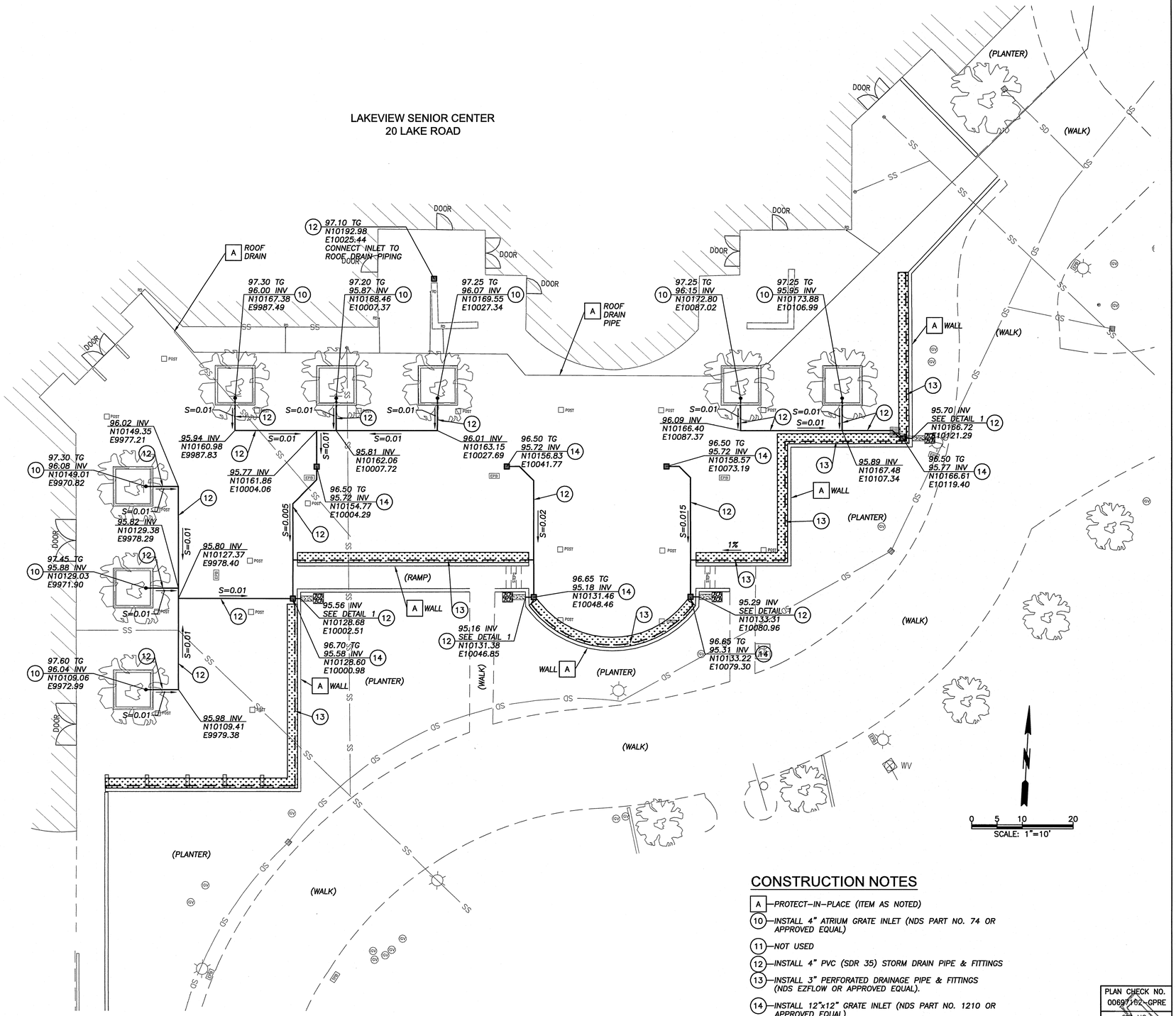
NO SCALE



TYPICAL DRAINAGE PIPE OUTLET 1

NO SCALE

LAKEVIEW SENIOR CENTER
20 LAKE ROAD



CONSTRUCTION NOTES

- A — PROTECT-IN-PLACE (ITEM AS NOTED)
- 10 — INSTALL 4" ATRIUM GRATE INLET (NDS PART NO. 74 OR APPROVED EQUAL)
- 11 — NOT USED
- 12 — INSTALL 4" PVC (SDR 35) STORM DRAIN PIPE & FITTINGS
- 13 — INSTALL 3" PERFORATED DRAINAGE PIPE & FITTINGS (NDS EZFLOW OR APPROVED EQUAL).
- 14 — INSTALL 12"x12" GRATE INLET (NDS PART NO. 1210 OR APPROVED EQUAL)

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DRAWN BY: DATE
DESIGNED BY: DATE
CHECKED BY: DATE

REGISTERED PROFESSIONAL ENGINEER MARIE MARSHONE RCE 38798 Exp. 03/31/17 CIVIL STATE OF CALIFORNIA

PLAN PREPARED BY:

CIVIL WORKS ENGINEERS
3151 Airway Avenue, Suite T-1
Costa Mesa, CA 92626
(714) 966-9060

LAKEVIEW SENIOR CENTER REHABILITATION
PATIO IMPROVEMENTS

SITE DRAINAGE & DETAILS

CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

PLAN CHECK NO. 00697162-GPRE
CIP NO. 381733
PROJECT NO.
JOB NO.
SHEET 8 OF 12

CITY OF IRVINE BUILDING & SAFETY DIVISION

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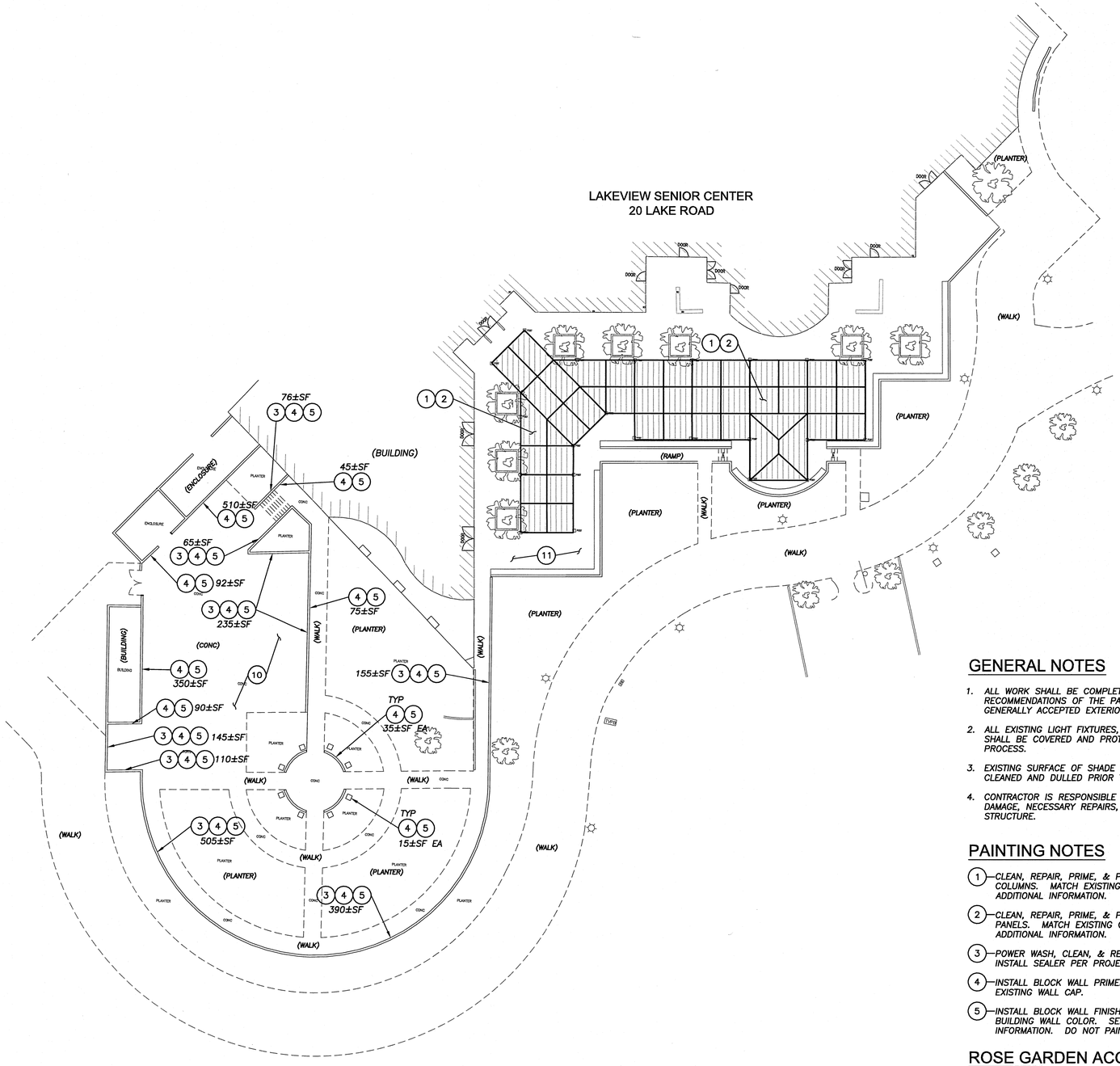
SHEET REVISED: 1/25/2017



GENERAL NOTES

1. ALL WORK SHALL BE COMPLETED IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE PAINT PRODUCT MANUFACTURER AND GENERALLY ACCEPTED EXTERIOR PAINTING PRACTICES.
2. ALL EXISTING LIGHT FIXTURES, ELECTRICAL OUTLETS, DOORS, ETC. SHALL BE COVERED AND PROTECTED DURING THE REPAIR AND PAINTING PROCESS.
3. EXISTING SURFACE OF SHADE STRUCTURE FRAME & ROOF SHALL CLEANED AND DULLED PRIOR TO STARTING THE PAINTING PROCESS.
4. CONTRACTOR IS RESPONSIBLE TO DETERMINE THE EXTENT OF THE DAMAGE, NECESSARY REPAIRS, & TOTAL SURFACE AREA OF THE SHADE STRUCTURE.

PAINTING NOTES

(1) CLEAN, REPAIR, PRIME, & PAINT EXISTING SHADE STRUCTURE FRAME AND COLUMNS. MATCH EXISTING COLOR. SEE GENERAL NOTES & SPECS FOR ADDITIONAL INFORMATION.

(2) CLEAN, REPAIR, PRIME, & PAINT EXISTING SHADE STRUCTURE ROOF PANELS. MATCH EXISTING COLOR. SEE GENERAL NOTES & SPECS FOR ADDITIONAL INFORMATION.

(3) POWER WASH, CLEAN, & REMOVE EXISTING STAINING/EFFLORESCENCE. INSTALL SEALER PER PROJECT SPECS. DO NOT SEAL EXISTING WALL CAP.

(4) INSTALL BLOCK WALL PRIMER PER PROJECT SPECS. DO NOT PRIMER EXISTING WALL CAP.

(5) INSTALL BLOCK WALL FINISH PAINT PER PROJECT SPECS. MATCH ADJACENT BUILDING WALL COLOR. SEE PROJECT SPECS FOR ADDITIONAL INFORMATION. DO NOT PAINT EXISTING WALL CAP.

ROSE GARDEN ACCESSORIES

(10) FURNISH, DELIVER, ASSEMBLE AND INSTALL PATIO TABLE, CHAIRS AND UMBRELLAS IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS.

(11) FURNISH, DELIVER, ASSEMBLE AND TEST PORTABLE PATIO HEATERS IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS.

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DRAWN BY: DATE
DESIGNED BY: DATE
CHECKED BY: DATE

REGISTERED PROFESSIONAL ENGINEER MARIE MARSTON RCE 38798 Exp. 03/31/17 CIVIL STATE OF CALIFORNIA

PLAN PREPARED BY:
CIVIL WORKS ENGINEERS
3151 Airway Avenue, Suite T-1
Costa Mesa, CA 92626
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LAKEVIEW SENIOR CENTER REHABILITATION
PATIO IMPROVEMENTS
WALL & SHADE STRUCTURE PAINTING
ROSE GARDEN ACCESSORIES

CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

PLAN CHECK NO. 00697-02-GPRE
CIP NO. 387733
PROJECT NO.
JOB NO.
SHEET 9 OF 12

BUILDING & SAFETY DIVISION CITY OF IRVINE

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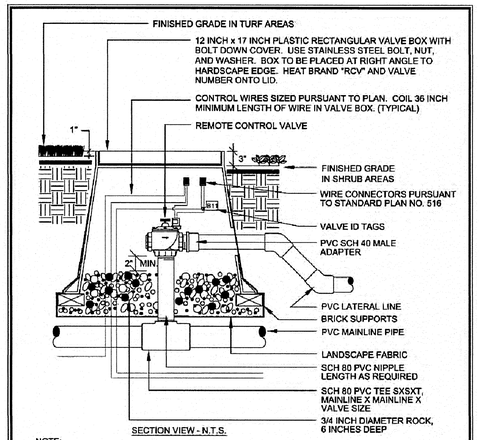
SHEET REVISED: 1/24/2017



SECTION VIEW - N.T.S.

NOTE:
INSTALL CONTROL VALVES A MINIMUM OF TWO FEET APART IN SHRUB AREAS UNLESS OTHERWISE NOTED.

INSTALL CHRISTY'S MODEL #3800 RECLAIMED WATER IDENTIFICATION NAME PLATES TO THE LID OF EACH RECLAIMED WATER VALVE BOX.

USE TEFLON TAPE ON THREADED FITTINGS.

WRAP LANDSCAPE FABRIC AROUND SIDES AND BOTTOM OF BOX TO COVER ALL OPENINGS.

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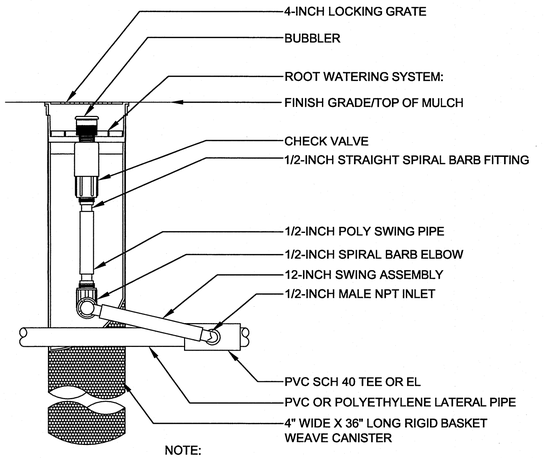
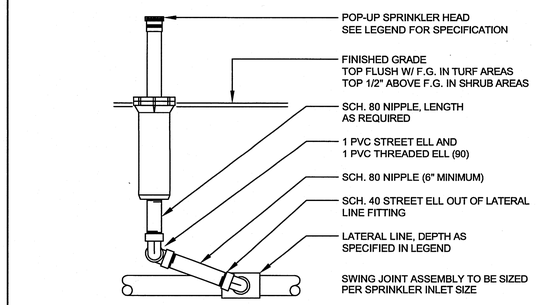
REVISIONS	CITY OF IRVINE	STANDARD PLAN NO.
	ANGLE REMOTE CONTROL VALVE	**510**
	Approved by: Mark L. Carroll R.C.E. 21315, City Engineer — Date: 6-20-08	Sheet 1 of 1



NOTE:
1. ONCE RWS HAS BEEN INSTALLED FILL THE BASKET WITH PEA GRAVEL BEFORE LOCKING LID.

B | ROOT WATERING SYSTEM — NOT TO SCALE



A | POP UP SPRAY BODY — NOT TO SCALE

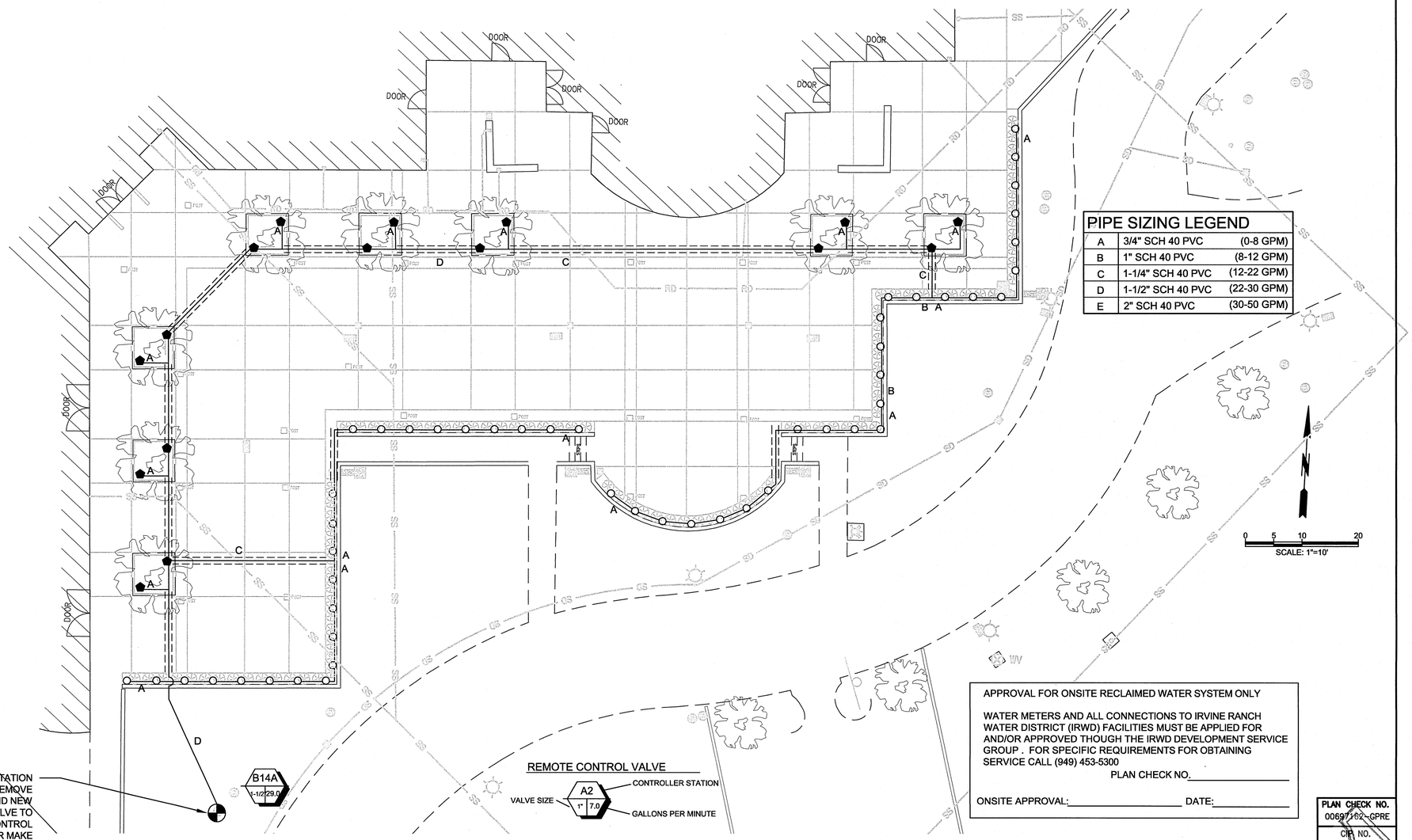
IRRIGATION LEGEND

BUBBLERS

SYMBOL	MANUFACTURER/ DESCRIPTION	MODEL	RAD.	HOUSING	GPM	PSI	PRECIP. RATE
○	RAINBIRD 6" POP-UP BUBBLER NOZZLE	1402	N/A	1806-SAM-PRS	0.5	30	N/A
⬟	RAINBIRD - ROOT ZONE WATERING SYSTEM	RWS-B-C-1401	N/A	DEEP ROOT WATERING SLEEVE W/ SOCK	0.25	30	N/A

MISC. MATERIAL AND ITEMS

SYMBOL	MANUFACTURER/ DESCRIPTION	MODEL	HOUSING	COMMENTS
◔	1-1/2" GRISWOLD REMOTE CONTROL VALVE	2000KR RECLAIMED	CARSON #1220 W/ FLUSH COVER AND L-BOLT LOCK	
———	RECLAIMED IRRIGATION LATERAL LINE	SCHDULE 40 PVC (PURPLE)		
- - - - -	PIPE SLEEVE	SCHDULE 40 PVC		REFER TO SLEEVING NOTE ON SHEET 11



PIPE SIZING LEGEND

A	3/4" SCH 40 PVC	(0-8 GPM)
B	1" SCH 40 PVC	(8-12 GPM)
C	1-1/4" SCH 40 PVC	(12-22 GPM)
D	1-1/2" SCH 40 PVC	(22-30 GPM)
E	2" SCH 40 PVC	(30-50 GPM)

APPROXIMATE LOCATION OF EXISTING VALVE (STATION B14A) USED FOR IRRIGATING PATIO LANDSCAPE. REMOVE AND INSTALL NEW REMOTE CONTROL VALVE AND NEW VALVE BOX PER IRRIGATION LEGEND. WIRE NEW VALVE TO THE EXISTING CONTROLLER WITH THE EXISTING CONTROL WIRES. CONTRACTOR SHALL REPLACE/REPAIR OR MAKE ADJUSTMENTS TO THE EXISTING MAINLINE TO ENSURE PROPER FUNCTION OF THE IRRIGATION SYSTEM.

B14A
1-1/2" 29.0

REMOTE CONTROL VALVE
A2
VALVE SIZE: 1"
7.0 GALLONS PER MINUTE
CONTROLLER STATION

APPROVAL FOR ONSITE RECLAIMED WATER SYSTEM ONLY

WATER METERS AND ALL CONNECTIONS TO IRVINE RANCH WATER DISTRICT (IRWD) FACILITIES MUST BE APPLIED FOR AND/OR APPROVED THOUGH THE IRWD DEVELOPMENT SERVICE GROUP . FOR SPECIFIC REQUIREMENTS FOR OBTAINING SERVICE CALL (949) 453-5300

PLAN CHECK NO._____

ONSITE APPROVAL:_____ DATE:_____

REFER TO SHEET 11 FOR IRRIGATION NOTES AND DETAILS

NO.	DATE	REVISIONS	ENGR.	APPROV.	DATE
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DRAWN BY: PC — DATE 11-18-16
DESIGNED BY: PC — DATE 11-18-16
CHECKED BY: GV — DATE 11-18-16

REGISTERED LANDSCAPE ARCHITECT — GARY B. VARNER — NO. 3883 — SIGNATURE — EXP. 2-28-17 — DATE — STATE OF CALIFORNIA

PLAN PREPARED BY:
David Volz Design
Landscape Architects And Park Planners
Corporate Office: 151 Kalmus Drive, Suite M9, Costa Mesa, CA 92626, 714.641.1300, 714.641.1323 Facsimile
Regional Office: 78060 Calle Estrado, La Quinta, CA 92253, 760.580.5165, 760.564.0369 Facsimile
LANDSCAPE ARCHITECT 3883 11-18-16 — L.A. No. DATE

LAKEVIEW SENIOR CENTER REHABILITATION
PATIO IMPROVEMENTS

IRRIGATION PLAN

CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

PLAN CHECK NO.	00697162-GPRE
CIP NO.	381733
PROJECT NO. JOB NO.	
SHEET	10
OF	12

CITY OF IRVINE BUILDING & SAFETY DIVISION

PATH =
DWG =
VIEW =

SHEET REVISED: 8/15/07

GENERAL IRRIGATION NOTES

1. IT IS THE RESPONSIBILITY OF THE IRRIGATION CONTRACTOR TO FAMILIARIZE HIMSELF WITH ALL GRADE DIFFERENCES, LOCATION OF WALL, RETAINING WALLS, STRUCTURES AND UTILITIES. THE CONTRACTOR SHALL REPAIR OR REPLACE, AT NO ADDITIONAL COST TO THE CITY, ALL ITEMS DAMAGED BY HIS WORK. THE CONTRACTOR SHALL COORDINATE HIS WORK WITH OTHER CONTRACTORS FOR THE LOCATION AND INSTALLATION OF PIPE SLEEVES AND LATERALS THROUGH WALLS, UNDER ROADWAYS AND PAVING, ETC.

2. THE CONTRACTOR SHALL NOT WILLFULLY INSTALL THE IRRIGATION SYSTEM AS SHOWN ON THE DRAWINGS WHEN IT IS OBVIOUS IN THE FIELD THAT UNKNOWN OBSTRUCTIONS, GRADE DIFFERENCES, OR DIFFERENCES IN THE AREA DIMENSION EXIST THAT MIGHT NOT HAVE BEEN ADDRESSED IN THE DESIGN OF THE IRRIGATION SYSTEM. SUCH OBSTRUCTIONS OR DIFFERENCES SHALL BE BROUGHT TO THE ATTENTION OF THE CITY ENGINEER. IN THE EVENT THIS NOTIFICATION IS NOT PERFORMED, THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ANY NECESSARY ALTERATIONS TO THE WORK.

3. THE CONTRACTOR SHALL OBTAIN, COORDINATE, AND PAY FOR ANY AND ALL INSPECTIONS AS REQUIRED.

4. THE CONTRACTOR SHALL BE RESPONSIBLE AND LIABLE FOR ANY ENCROACHMENT INTO ADJACENT PROPERTY, R.O.W.'S EASEMENTS SETBACKS OR ANY OTHER LEGAL PROPERTY RESTRICTIONS EITHER MARKED OR UNMARKED.

5. ALL SPRINKLER HEADS SHALL BE SET PERPENDICULAR TO FINISH GRADE UNLESS OTHERWISE SPECIFIED. INSTALL ALL HEADS WITH DOUBLE SWING JOINTS AS PER DETAIL. ALL HEADS ADJACENT TO PARKING LOTS, WALKS, ROADS, OR OTHER PAVED AREAS SHALL BE INSTALLED WITH POP-UP BODIES.

6. THE CONTRACTOR SHALL FLUSH AND ADJUST ALL SPRINKLER HEADS AND VALVES FOR OPTIMUM COVERAGE WITH MINIMAL MISTING AND/OR OVER SPRAY ONTO WALKS, STREETS, WALLS, ETC. SUBSTITUTION OF NOZZLE PATTERN OR RADIUS AS REQUIRED TO ACHIEVE OPTIMUM COVERAGE IS RESPONSIBILITY OF CONTRACTOR.

7. ALL IRRIGATION EQUIPMENT NOT OTHERWISE DETAILED OR SPECIFIED SHALL BE INSTALLED AS PER MANUFACTURER'S RECOMMENDATIONS AND SPECIFICATIONS.

8. TRENCHING WITHIN THE DRIPLINE OF LARGE EXISTING TREES SHALL BE PERFORMED BY HAND, AND WITH EXTREME CARE NOT TO SEVER ROOTS 1-1/2" IN DIAMETER AND LARGER. WHERE ROOTS 1-1/2" IN DIAMETER AND LARGER ARE ENCOUNTERED, THE CONTRACTOR SHALL TUNNEL UNDER SAID ROOTS. EXPOSED ROOTS THAT HAVE BEEN TUNNELED UNDER SHALL BE WRAPPED IN WET BURLAP AND KEPT MOIST WHILE THE TRENCH IS OPEN.

9. PIPE SIZES SHALL CONFORM TO THOSE SHOWN ON THE DRAWINGS. NO SUBSTITUTIONS OF SMALLER PIPE SIZES SHALL BE PERMITTED, BUT SUBSTITUTIONS OF LARGER SIZES MAY BE APPROVED. ALL DAMAGED AND REJECTED PIPE SHALL BE REMOVED FROM THE SITE AT THE TIME OF SAID REJECTION.

RECLAIMED WATER

THIS IRRIGATION SYSTEM UTILIZES RECLAIMED WATER. ALL SUBTERRANEAN PVC PIPE TO BE PURPLE. SEE IRWD NOTES FOR FURTHER RECLAIMED WATER NOTES.

IRRIGATION SYSTEM LAYOUT

DUE TO THE SCALE OF THESE DRAWINGS THE CONTRACTOR SHOULD BE AWARE OF THE POSSIBILITY THAT THE NEED FOR MINOR ADJUSTMENTS TO THE IRRIGATION SYSTEM MAY BE NECESSARY TO PROVIDE PROPER COVERAGE. THESE ADJUSTMENTS COULD INCLUDE NOZZLE CHANGES AND/OR ADDITION OR DELETION OF INDIVIDUAL HEADS TO COMPENSATE FOR CHANGES MADE ON THE SITE. FURTHERMORE, THE IRRIGATION DESIGN IS DIAGRAMMATIC. ALL PIPING, VALVES, ETC., SHOWN WITHIN PAVED AREAS IS FOR DESIGN CLARIFICATIONS ONLY AND SHALL BE INSTALLED IN **SHRUB** AREAS WHEREVER POSSIBLE.

EXISTING CONDITIONS

THE CONTRACTOR IS RESPONSIBLE FOR REPLACING ANY EXISTING DAMAGED ITEMS DURING CONSTRUCTION INCLUDING HARDSCAPE, LIGHTING, DRAINAGE, IRRIGATION EQUIPMENT, TREES, SHRUBS, TURF AND GROUNDCOVER. THE CONTRACTOR SHALL REPLACE ANY AND ALL DAMAGED ITEMS TO THE SATISFACTION OF THE ENGINEER.

EQUIPMENT BOXES

ALL REMOTE CONTROL VALVES, AIR/VACUUM RELIEF VALVES, MANUAL FLUSH VALVES, ETC. SHALL BE INSTALLED IN SPECIFIED **GREEN** SUBGRADE VALVE BOXES AS SHOWN IN IRRIGATION LEGEND COMPLETE WITH LOCKING COVERS. VALVE BOXES SHALL BE CARSON BROOKS OR APPROVED EQUAL AND SHALL BE MARKED 'R.C.V.' FOR REMOTE CONTROL VALVES, ETC. REMOTE CONTROL VALVE BOXES ARE ALSO TO BE HEAT BRANDED WITH THE CONTROLLER AND STATION NUMBER. ALL MARKINGS SHALL BE 2" LETTERS AND NUMBERS.

REMOTE CONTROL VALVE LABELS

ALL VALVES ARE TO BE FASTENED WITH CHRISTY'S VALVE IDENTIFICATION TAGS IDENTIFYING STATION # AND APPROPRIATE CONTROLLER IDENTIFICATION INFORMATION.

SLEEVING

SLEEVES SHALL BE PLACED UNDER ALL DRIVEWAYS AND WALKS WHERE IRRIGATION LATERAL, MAINLINE, AND WIRE WILL CROSS. SLEEVES SHALL BE PVC SCH. 40, MINIMUM BURY 36" DEEP. MINIMUM DISTANCE PAST EDGE OF DRIVEWAY OR CONCRETE WALK SHALL BE 24". WATER AND WIRE SHALL NOT BE PLACED IN THE SAME SLEEVE. SLEEVES TO BE TWICE THE DIAMETER OF THE PIPE BEING SLEEVED. WIRE SLEEVES TO BE 2" DIA.

POLYVINYL CHLORIDE PIPE CEMENT

IPS WELD-ON PVC 721 BLUE MEDIUM-BODIED (USE WITH 1/2" TO 1-1/2" PVC PIPE)
IPS WELD-ON PVC 711 GRAY HEAVY-BODIED (USE WITH 2" AND LARGER PVC PIPE AND ALL MAIN LINES)

POLYVINYL CHLORIDE PIPE PRIMER

IPS WELD-ON P-70 PRIMER PURPLE (USE WITH ALL PVC CONNECTIONS)

DIRECT BURIAL CONTROL WIRES

(SOLID COPPER, 600 VOLT, TYPE UF)

COMMON WIRES:
WHITE (#12 AWG)

STATION WIRES:
(#14 AWG) COLOR-CODED REQUIREMENTS PER CITY STANDARD. SPARE WIRES MUST BE RUN TO THE FARTHEST VALVE MANIFOLD FROM THE CONTROLLER.

WIRE SPLICES/ CONNECTORS ARE TO BE 3M DBY DIRECT BURY SPLICE KIT. USE EXTRA SEALANT INSIDE CONNECTORS.

PVC PIPE FITTINGS

ALL FITTINGS CONNECTING PVC TO PVC SHALL BE SPEARS 'EverTUFF TURF FITTINGS' COLORED BLUE OR APPROVED EQUAL. ALL PVC FITTINGS TO BRASS VALVES SHALL BE REINFORCED WITH STAINLESS STEEL COLLAR.

IRRIGATION CONTROLLER

WIRE ALL NEW VALVES TO EXISTING IRRIGATION CONTROLLER WITH EXISTING CONTROL WIRES. VERIFY EXACT LOCATION WITH CITY ENGINEER PRIOR TO INSTALLATION.

IRWD RECYCLED AND POTABLE WATER NOTES

1. THE INSTALLATION OF THE IRRIGATION WATER SYSTEM SHALL CONFORM TO THE REGULATIONS FOR THE CONSTRUCTION OF IRRIGATION WATER SYSTEMS WITHIN THE IRVINE RANCH WATER DISTRICT (IRWD) AND THE ACCOMPANYING PLANS AND SPECIFICATIONS.

2. ALL ONSITE RECYCLED AND POTABLE WATER PIPING INSTALLED ON THIS PROJECT SHALL BE IDENTIFIED IN ACCORDANCE WITH IRWD'S REGULATIONS AND THE IRRIGATION SPECIFICATIONS.

3. RECYCLED WATER PIPING SHALL BE PURPLE PVC MANUFACTURED FOR RECYCLED (RECLAIMED) WATER SYSTEMS.

4. MARKING ON THE PURPLE PVC SHALL INCLUDE THE FOLLOWING:

   CAUTION RECYCLED (OR RECLAIMED) WATER; NOMINAL PIPE SIZE PVC-1120; PRESSURE RATING IN POUNDS PER SQUARE INCH AT 73 DEGREES; ASTM DESIGNATIONS SUCH AS 1785, 2241, 2672, 3139, PRINTING SHALL BE PLACED CONTINUOUSLY ON TWO SIDES OF THE PIPE.

   ALL RECYCLED WATER SPRINKLER BOX COVERS AND CONTROL VALVES SHALL BE IDENTIFIED.

A. IDENTIFICATION SHALL BE AFFIXED TO EACH IRRIGATION VALVE LID COVER AND VALVE AS FOLLOWS

a. IDENTIFY VALVE COVER WITH LABEL OR BRANDED HOT STAMP THAT READS 'RECYCLED (OR RECLAIMED) WATER DO NOT DRINK"

b. ATTACH TAG TO CONTROL VALVE STEM DIRECTLY OR WITH PLASTIC TIE-WRAP

OR

c. ATTACH GAGE TO CONTROL VALVE SELONOID WIRE DIRECTLY OR WITH PLASTIC TIE-WRAP

B. TAGS SHALL BE WEATHERPROOF PLASTIC, 3"x4", PURPLE IN COLOR WITH THE WORDS 'WARNING RECYCLED (OR RECLAIMED) WATER - DO NOT DRINK' IMPRINTED ON ONE SIDE, AND 'AVISA AGUA IMPURA - NO TOMAR' ON THE OTHER SIDE. IMPRINTING SHALL BE PERMANENT AND BLACK IN COLOR. USE TAGS AS MANUFACTURED BY T. CHRISTY ENTERPRISES OR APPROVED EQUAL.

5. WARNING TAPES SHALL BE USED ON ALL CONSTANT PRESSURE MAINLINE PIPING CARRYING POTABLE WATER.

6. WARNING TAPES SHALL BE A MINIMUM OF 3-INCHES WIDE AND SHALL RUN CONTINUOUSLY FOR THE ENTIRE LENGTH OF ALL CONSTANT PRESSUE MAINLINE PIPING. THE TAPE SHALL BE ATTACHED TO THE TOP OF THE PIPE WITH PLASTIC TAPE BANDED AROUND WARNING TAPE AND PIPE EVERY 5 FEET ON CENTER.

7. WARNING TAPE FOR CONSTANT PRESSURE POTABLE WATER PIPING SHALL BE BLUE IN COLOR WITH THE WORDS 'CAUTION BURIED WATERLINE BELOW' IMPRINTED IN MINIMUM 1-INCH HIGH LETTERS BLACK IN COLOR. IMPRINTING SHALL BE CONTINUOUS AND PERMANENT.

8. IRWD SHALL BE NOTIFIED TWO DAYS PRIOR TO THE START OF IRRIGATION CONSTRUCTION AT 949.453.5300 AND EACH WORK DAY THEREAFTER UNTIL COMPLETION OF THE PROJECT.

9. ALL PRESSURE MAINLINE PIPING FROM RECYCLED WATER SYSTEM SHALL BE INSTALLED TO MAINTAIN 10 FEET MINIMUM HORIZONTAL SEPARATION FROM ALL POTABLE WATER PIPING. WHERE RECYCLED AND POTABLE WATER PRESSURE MAIN LINE PIPING CROSS, THE RECYCLED WATER PIPING SHALL BE INSTALLED BELOW THE POTABLE WATER PIPING IN CLASS 200 PURPLE PVC SLEEVE WHICH EXTENDS A MINIMUM OF 5 FEET ON EITHER SIDE OF THE POTABLE WATER PIPING. PROVIDE A MINIMUM VERTICAL CLEARANCE OF 6 INCHES. CONVENTIONAL (WHITE) PVC PIPE MAY BE USED FOR SLEEVING MATERIAL IF IT IS TAPED WITH 3-INCH WIDE PURPLE WARNING TAPE WHICH READS 'CAUTION RECYCLED (OR RECLAIMED) WATER'

10. THE IRRIGATION SYSTEM HAS BEEN DESIGNED TO OPERATE BETWEEN THE HOURS OF 9:00 P.M. AND 6:00 A.M. UNLESS OTHERWISE DIRECTED BY THE DISTRICT ENGINEER.

11. ADJUST SPRAY HEADS TO ELIMINATE OVERSPRAY ONTO AREAS NOT UNDER THE CONTROLL OF THE CUSTOMER. FOR EXAMPLE, POOL DECKS, PRIVATE PATIOS, STREETS AND SIDEWALKS.

12. CONTACT THE IRWD OFFICE TWO DAYS PRIOR TO THE IRRIGATION SYSTEM COVERAGE TEST AT 949.453.5300 AND ARRANGE A WALK-THROUGH OF THE SYSTEM.

13. FAILURE TO COMPLY WITH ANY OR ALL OF THE ABOVE GUIDELINES WILL PLACE THE SYSTEM IN VIOLATION OF IRWD RULES AND REGULATIONS, AND WILL RESULT IN TERMINATION OF SERVICE UNITL APPROPRIATE CORRECTIVE MEASURES HAVE BEEN TAKEN.

14. WARNING TAPE ON RECYCLED WATER CONSTANT PRESSURE MAIN LINE IS ONLY ALLOWED ON A PROJECT-BY-PROJECT APPROVAL FROM THE DISTRICT ENGINEER. IF APPROVED, IT MUST FOLLOW THESE INSTALLTION SPECIFICATIONS:

A. WARNING TAPE SHALL BE USED ON ALL CONSTANT PRESSURE MAINS.

C. WARNING TAPE SHALL BE A MINIMUM OF 3 INCHES WIDE AND SHALL RUN CONTINUOUSLY FOR THE ENTIRE LENGTH OF ALL CONSTANT PRESSURE MAINLINE PIPING. THE TAPE SHALL BE ATTACHED TO THE TOP OF THE PIPE WITH PLASTIC TAPE BANDED AROUND WARNING TAPE AND THE PVC EVERY 5 FEET ON CENTER.

D. WARNING TAPE FOR THE CONSTANT PRESSURE RECYCLED WATER PIPING SHALL BE PURPLE IN COLOR WITH THE WORDS 'CAUTION-RECYCLED (OR RECLAIMED) WATER' IMPRINTED A MINIMUM OF 1 INCH HIGH AND BLACK IN COLOR. IMPRINTING SHALL BE CONTINUOUS AND PERMANENT.

RECLAIMED WATER GUIDELINES

THE FOLLOWING GUIDELINES HAVE BEEN ESTABLISHED BY THE IRVINE RANCH WATER DISTRICT IN CONJUCTION WITH THE ORANGE COUNTY HEALTH DEPARTMNET AND THE SANTA ANA REGIONAL WATER QUALITY CONTROL BOARD. THEY ARE TO PROVIDE THE BASIC PARAMETERS FOR THE USE OF RECLAIMED WATER IN LANDSCAPE IRRIGATION. TO OPERATE YOUR SYSTEM IN COMPLIANCE WITH THESE GUIDELINES YOU MUST:

1. IRRIGATE BETWEEN THE HOURS OF 9:00 P.M. AND 6:00 A.M. ONLY. WATERING OUTSIDE THIS TIME FRAME MUST BE DONE MANUALLY WITH QUALIFIED SUPERVISORY PERSONNEL ON-SITE. NO SYSTEM SHALL AT ANY TIME BE LEFT UNATTENDED DURING USE OUTSIDE THE NORMAL SCHEDULE.

2. IRRIGATE IN A MANNER THAT WILL MINMIZE RUNOFF, POOLING AND PONDING. THE APPLICATION RATE SHALL NOT EXCEED THE INFILTRATION RATE OF THE SOIL. TIMERS MUST BE ADJUSTED SO AS TO BE COMPATIBLE WITH THE LOWEST SOIL INFILTRATION RATE PRESENT. THIS PROCEDURE MAY BE FACILITATED BY THE EFFICIENT SCHEDULING OF THE AUTOMATIC CONTROL, (I.E. EMPLOYING THE REPEAT FUNCTION TO BREAK UP THE TOTAL IRRIGATION TIME INTO CYCLES THAT WILL PROMOTE MAXIMUM SOIL ABSORPTION)

3. ADJUST SPRAY HEADS TO ELIMINATE OVERSPRAY ONTO AREAS NOT UNDER THE CONTROL OF THE CUSTOMER. FOR EXAMPLE, POOL DECKS, PRIVATE PATIOS, STREETS AND SIDEWALKS.

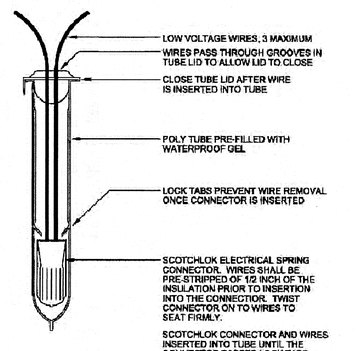
4. MONITOR AND MAINTAIN THE SYSTEM TO MINIMIZE EQUIPMENT AND MATERIAL FAILURE. BROKEN SPRINKLER HEADS, LEAKS, UNRELIABLE VALVES, ETC., SHOULD BE REPAIRED AS SOON AS THEY BECOME APPARENT.

5. EDUCATE ALL MAINTENANCE PERSONNEL, ON A CONTINUOUS BASIS, OF THE PRESENCE OF RECLAIMED WATER, AND THE FACT THAT IT IS NOT APPROVED FOR DRINKING PURPOSES. GIVEN THE HIGH TURNOVER RATE OF EMPLOYEES IN THE LANDSCAPE INDUSTRY, IT IS IMPORTANT THAT THIS INFORMATION BE DISSEMINATED ON AN ALMOST DAILY BASIS. IT IS YOU, THE LANDSCAPE CONTRACTOR, WHO IS RESPONSIBLE FOR EDUCATING EACH AND EVERY ONE OF YOUR EMPLOYEES.

6. OBTAIN PRIOR APPROVAL FOR ALL PROPOSED CHANGES AND MODIFICATION TO ANY ON SITE FACILITIES. SUCH CHANGES MUST BE SUBMITTED TO, AND APPROVED BY, THE DISTRICT ENGINEERING OFFICE AND DESIGNED IN ACCORDANCE WITH THE DISTRICT STANDARDS.

7. FAILURE TO COMPLY WITH ANY OR ALL OF THE ABOVE GUIDELINES PUTS YOUR SYSTEM IN VIOLATION OF THE DISTRICTS RULES AND REGULATIONS, AND WILL RESULT IN TERMINATION OF SERVICE UNTIL THE APPROPRIATE CORRECTIVE STEPS HAVE BEEN TAKEN.

8. THE IRVINE RANCH WATER DISTRICT FEELS THAT THE BENEFITS TO BE DERIVED FROM THE SUCCESSFUL APPLICATION OF RECLAIMED WATER MERIT THE OPERATING REQUIREMENTS THAT HAVE BEEN ESTABLISHED. IF YOU HAVE ANY QUESTIONS, OR IF YOU NEED ASSISTANCE, PLEASE DO NOT HESITATE TO CALL OUR IRRIGATION WATER GROUP AT 949.453.5300.



NOTE:
WIRE CONNECTOR SHALL BE A 3M DBY DIRECT BURY SPLICE KIT.

KIT SHALL INCLUDE A SCOTCHLOK Y SPRING CONNECTOR, A POLYPROPYLENE TUBE, AND A WATERPROOF SEALING GEL. TUBE SHALL BE SUPPLIED PREFILLED WITH GEL.

SPLICE KIT SHALL BE USED TO ELECTRICALLY CONNECT 2 - 3 #14 OR 2#12 PRE-STRIPPED COPPER WIRES. LARGER WIRES OR GREATER QUANTITIES OF WIRES SHALL REQUIRE A LARGER APPROVED WIRE CONNECTION.

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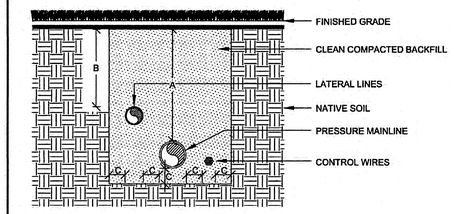
REVISIONS	CITY OF IRVINE	STANDARD PLAN NO.
	WIRE CONNECTOR	516
	Approved by: Mark L. Carroll R.C.E. 31915, City Engineer — Date: 6-22-06	Sheet 1 of 1



DIMENSION	A	B	C
1/2" TO 2 1/2" IN SIZE	18"	12"	4"
3" TO 6" IN SIZE	24"	X	4"

SECTION VIEW - N.T.S.

NOTE:
ALL PLASTIC PIPING SHALL BE SNAKED WITHIN TRENCH.
BUNDLE WIRING AND WRAP WITH TAPE AT TEN FOOT INTERVALS.
ALL MAINLINE PIPING TO BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS' INSTALLATION SPECIFICATIONS.

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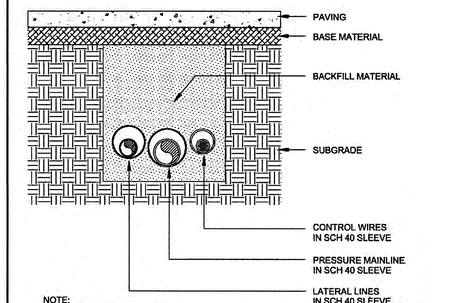
REVISIONS	CITY OF IRVINE	STANDARD PLAN NO.
	PIPE AND WIRE TRENCHING	500
	Approved by: Mark L. Carroll R.C.E. 31915, City Engineer — Date: 6-22-06	Sheet 1 of 1



NOTE:
ALL PIPING TO BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS' INSTALLATION SPECIFICATIONS.

ALL MAINLINE, LATERAL LINES, AND CONTROL WIRES SHALL BE SLEEVED BELOW ALL HARDSCAPE ELEMENTS WITH SCH 40 PVC, 2 TIMES THE DIAMETER OF THE PIPE OR WIRE BUNDLE WITHIN.

DEPTH OF SLEEVES, BACKFILL, AND COMPACTION OF TRENCH SHALL BE IN ACCORDANCE WITH STANDARD PLAN NO. 223 FOR CROSSINGS OF STREETS AND SHALL BE IN ACCORDANCE WITH STANDARD PLAN NO. 500 FOR CROSSINGS OF PARKING LOTS, SIDEWALKS, OR OTHER HARDSCAPE ELEMENTS.

HORIZONTAL DIMENSION BETWEEN SLEEVES SHALL BE A MINIMUM OF 4 INCHES.

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REVISIONS	CITY OF IRVINE	STANDARD PLAN NO.
	SLEEVE TRENCHING	501
	Approved by: Mark L. Carroll R.C.E. 31915, City Engineer — Date: 6-22-06	Sheet 1 of 1

PATH =
DWG =
VIEW =

NO.	DATE	REVISIONS	ENGR.	APPROV.	DATE
7					
6					
5					
4					
3					
2					
1					

		DATE
DRAWN BY:	PC	11-18-16
DESIGNED BY:	PC	11-18-16
CHECKED BY:	GV	11-18-16

REGISTERED LANDSCAPE ARCHITECT — GARY M. VASSER — NO. 3883 — SIGNATURE — EXP. 2-28-17 — 11-18-16 — DATE — STATE OF CALIFORNIA

PLAN PREPARED BY:
David Volz Design
Landscape Architects And Park Planners
Corporate Office: 151 Kalmus Drive, Suite M8, Costa Mesa, CA 92626, 714.641.1300, 714.641.1323 Facsimile
Regional Office: 78060 Calle Estrado, La Quinta, CA 92253, 760.580.5165, 760.564.0369 Facsimile
LANDSCAPE ARCHITECT — 3883 — L.A. No. — 11-18-16 — DATE

LAKEVIEW SENIOR CENTER REHABILITATION
PATIO IMPROVEMENTS

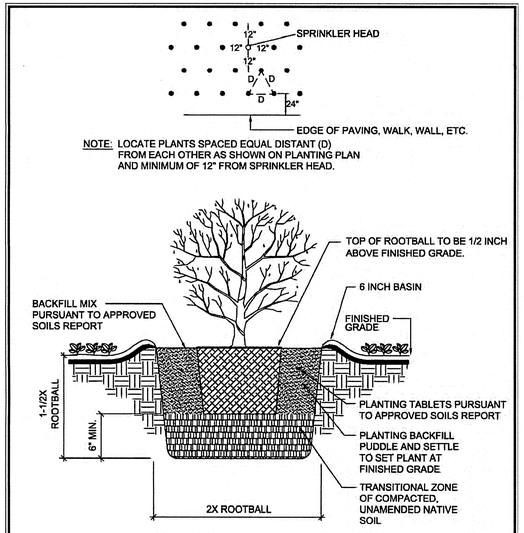
IRRIGATION NOTES AND DETAILS

CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

PLAN CHECK NO. 00697-02-GPRE
CIP NO. 381733
PROJECT NO.
JOB NO.
SHEET 11 OF 12

BUILDING & SAFETY DIVISION — CITY OF IRVINE

SHEET REVISED: 8/15/07



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REVISIONS	CITY OF IRVINE	STANDARD PLAN NO.
	SHRUB PLANTING	**601**
	Approved by: Mark L. Connell R.C.E. 31918, City Engineer — Date: 6-22-09	Sheet 1 of 1

PLANTING NOTES

1. ALL LOCAL, MUNICIPAL, COUNTY AND STATE LAWS, RULES, AND REGULATIONS GOVERNING OR RELATING TO ANY PORTION OF THIS WORK ARE HEREBY INCORPORATED INTO AND MADE PART OF THE PROJECT PLANS AND SPECIFICATIONS; AND THEIR PROVISIONS SHALL BE CARRIED OUT BY THE CONTRACTOR. ADDITIONALLY, ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE APPLICABLE SECTIONS OF THE 2009 OR LATEST EDITION OF THE APWA, STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, ("GREENBOOK"), AND THE PROJECT SPECIFICATIONS.

   WHENEVER SPECIAL REQUIREMENTS CONFLICT ON ANY SUBJECT MATTER, THE CITY APPROVED REPRESENTATIVE, OR HIS/HER DESIGNATED REPRESENTATIVE, WILL DETERMINE WHICH SPECIAL REQUIREMENTS AND/OR CODES SHALL GOVERN.

2. THE CONTRACTOR SHALL NOTIFY UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA (DIG ALERT) AT LEAST TWO (2) WORKING DAYS BEFORE DIGGING, EXCAVATING, OR CONSTRUCTION. PHONE 811.

3. THE CONTRACTOR SHALL NOT PROCEED WITH CONSTRUCTION AS SHOWN ON THE PLANS WHEN IT IS OBVIOUS IN THE FIELD THAT UNKNOWN OBSTRUCTIONS, GRADE DIFFERENCES, OR DISCREPANCIES IN AREA CONFIGURATION OR SIZES, OR IN DIMENSIONS EXIST THAT MIGHT NOT HAVE BEEN CONSIDERED IN ENGINEERING. SUCH OBSTRUCTIONS, OR DIFFERENCES, SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER, OR HIS DESIGNATED REPRESENTATIVE. IN THE EVENT THIS NOTIFICATION IS NOT PERFORMED, THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ANY REVISIONS NECESSARY AND SHALL PERFORM SUCH REVISIONS AT HIS OWN EXPENSE.

4. FINISH GRADE ALL PLANTING AREAS TO ACHIEVE A MINIMUM 2% DRAINAGE AND SMOOTH AND EVEN CONDITION, MAKING SURE THAT NO WATER POCKETS OR IRREGULARITIES REMAIN. REMOVE AND DISPOSE OF ALL SURFACE STONES, ROOTS, WEEDS, DEBRIS, FOREIGN MATERIALS, CLODS, AND ROCKS OVER (1) INCH IN DIAMETER SO THAT AFTER CONDITIONING AND PLANTING THE GRADE IS THREE INCHES (3") BELOW ADJACENT HARDSCAPE. CONTRACTOR IS TO ENSURE SMOOTH TRANSITION FROM EXISTING TO NEW GRADE.

5. ALL INSPECTIONS HEREIN SPECIFIED SHALL BE MADE BY THE ENGINEER. THE CONTRACTOR SHALL REQUEST INSPECTION AT LEAST 48 HOURS IN ADVANCE OF THE TIME THE INSPECTION IS REQUIRED. 949-724-6505.

6. ALL EXISTING LANDSCAPED AREAS DAMAGED DURING CONSTRUCTION MUST BE RESTORED TO THEIR ORIGINAL CONDITION AT THE CONTRACTOR'S EXPENSE. RESTORATION OF EXISTING LANDSCAPE AREAS SHALL BE DONE TO THE SATISFACTION OF THE ENGINEER.

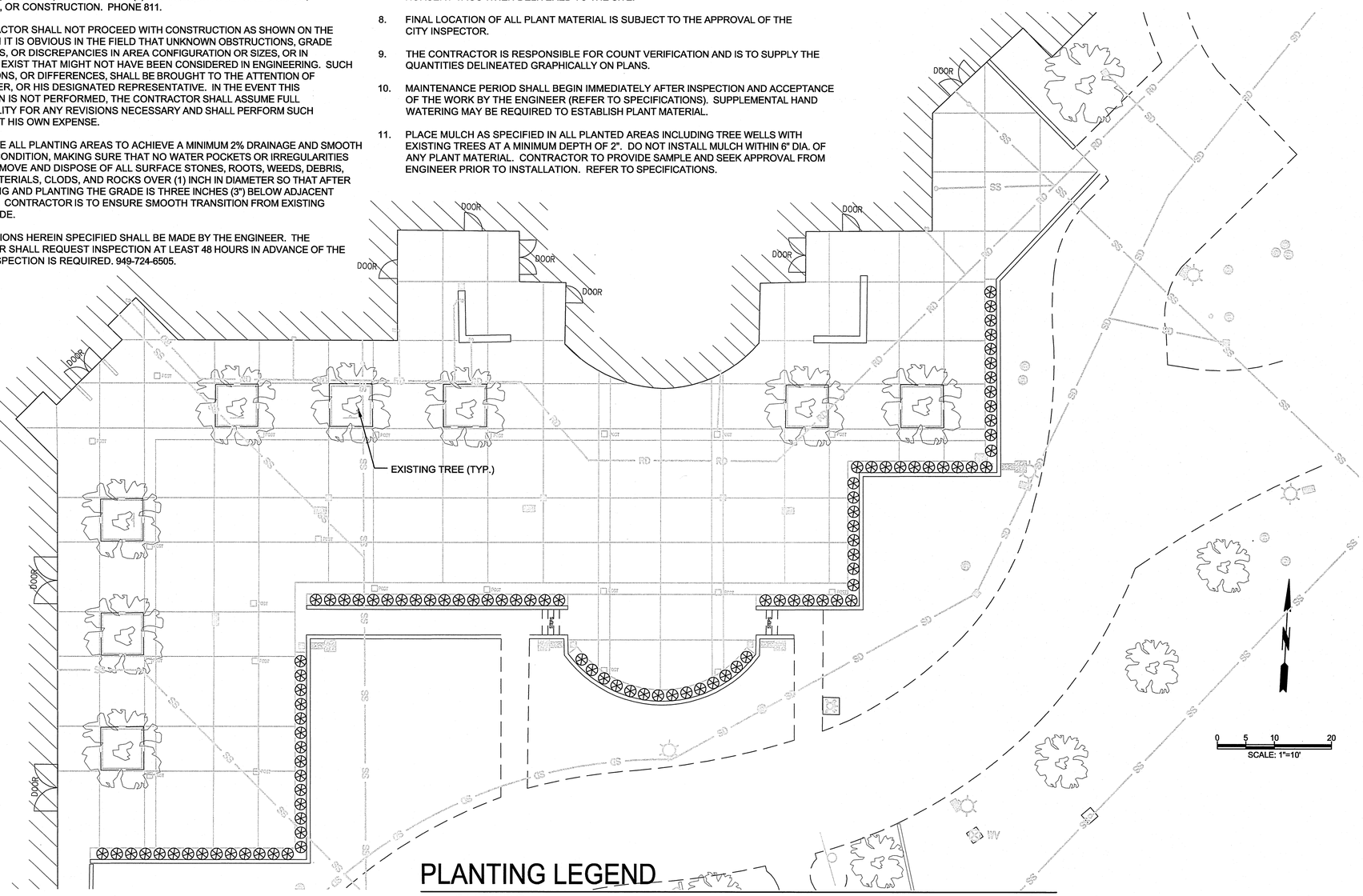
7. ALL PLANT MATERIAL SHALL BE SUBJECT TO THE INSPECTION AND APPROVAL OF THE ENGINEER BEFORE PLANTING. PROVIDE 48 HOURS NOTICE AND LOCATION TO SAFELY INSPECT PLANTING MATERIAL. ALL PLANT MATERIAL DELIVERED ON-SITE WILL BE INSPECTED FOR SIZE AND CONDITION OF ROOT GROWTH, INSECTS, INJURIES, AND DEFECTS. PLANTS NOT APPROVED ARE TO BE REMOVED FROM THE SITE IMMEDIATELY AND REPLACED WITH SUITABLE PLANTS. THE CITY APPROVED REPRESENTATIVE RESERVES THE RIGHT TO REJECT ENTIRE LOTS OF PLANTS REPRESENTED BY DEFECTIVE SAMPLES. ALL PLANT MATERIAL SHALL HAVE NURSERY TAGS WHEN DELIVERED TO THE SITE.

8. FINAL LOCATION OF ALL PLANT MATERIAL IS SUBJECT TO THE APPROVAL OF THE CITY INSPECTOR.

9. THE CONTRACTOR IS RESPONSIBLE FOR COUNT VERIFICATION AND IS TO SUPPLY THE QUANTITIES DELINEATED GRAPHICALLY ON PLANS.

10. MAINTENANCE PERIOD SHALL BEGIN IMMEDIATELY AFTER INSPECTION AND ACCEPTANCE OF THE WORK BY THE ENGINEER (REFER TO SPECIFICATIONS). SUPPLEMENTAL HAND WATERING MAY BE REQUIRED TO ESTABLISH PLANT MATERIAL.

11. PLACE MULCH AS SPECIFIED IN ALL PLANTED AREAS INCLUDING TREE WELLS WITH EXISTING TREES AT A MINIMUM DEPTH OF 2". DO NOT INSTALL MULCH WITHIN 6" DIA. OF ANY PLANT MATERIAL. CONTRACTOR TO PROVIDE SAMPLE AND SEEK APPROVAL FROM ENGINEER PRIOR TO INSTALLATION. REFER TO SPECIFICATIONS.



PLANTING LEGEND

SHRUBS

SYMBOL	ABBR	NAME	QUANTITY	SIZE	COMMENTS	WATER USE
⊛	*COP EVE*	*Coprosma 'Evening Glow'* Evening Glow Mirror Bush	97	5 GAL	PLANT MUST BE AT LEAST CAN FULL TO BE ACCEPTED (SPACE 36" O.C.)	Med .4

NO.	DATE	REVISIONS	ENGR.	APPROV.	DATE
7					
6					
5					
4					
3					
2					
1					

DRAWN BY: PC — DATE 11-18-16
DESIGNED BY: PC — DATE 11-18-16
CHECKED BY: GV — DATE 11-18-16

REGISTERED LANDSCAPE ARCHITECT — GARY M. VASQUEZ — NO. 3883 — SIGNATURE — EXP. 2-28-17 — 11-18-16 DATE — STATE OF CALIFORNIA

PLAN PREPARED BY:
David Volz Design
Landscape Architects And Park Planners
Corporate Office: 151 Kalmus Drive, Suite M8, Costa Mesa, CA 92626, 714.641.1300, 714.641.1327 Facsimile
Regional Office: 78060 Calle Estrado, La Quinta, CA 92253, 760.580.5165, 760.564.0359 Facsimile
Gary Vasquez — 3883 — 11-18-16
LANDSCAPE ARCHITECT — L.A. No. — DATE

LAKEVIEW SENIOR CENTER REHABILITATION
PATIO IMPROVEMENTS

PLANTING PLAN

CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

PLAN CHECK NO. 00697-162-CPRE
CIP NO. 381733
PROJECT NO. JOB NO.
SHEET 12 OF 12

CITY OF IRVINE BUILDING & SAFETY DIVISION

VIEW = DWG = PATH =

SHEET REVISED: 8/15/07

3.7

REQUEST FOR CITY COUNCIL ACTION

MEETING DATE: MAY 9, 2017

TITLE: MEMORANDUM OF UNDERSTANDING WITH CONCORDIA UNIVERSITY FOR CAMPUS BUILD-OUT PROJECT AT 1530 CONCORDIA WEST, PLANNING AREA 21 (TURTLE ROCK), AND SECOND READING AND ADOPTION OF ORDINANCE NO. 17-05 REVISING SPECIAL DEVELOPMENT REQUIREMENTS IN ZONING ORDINANCE SECTION 9-21-7

Director of Community Development

City Manager

RECOMMENDED ACTION

1. Authorize Mayor Pro Tem Schott to sign a Memorandum of Understanding and Covenants between the City of Irvine and Concordia University for Concordia University's Campus Master Build-Out Plan Update associated with Conditional Use Permit Modification 00612052-PCPU, Zone Change 00629029-PZC and Final Environmental Impact Report SCH No. 2015091023/File No. 00618828-PCLE
2. Read by title only, second reading and adoption of ORDINANCE NO. 17-05 – AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, APPROVING ZONE CHANGE 00629029-PZC TO REVISE ZONING ORDINANCE SECTION 9-21-7.B, SPECIAL DEVELOPMENT REQUIREMENTS FOR CONCORDIA UNIVERSITY (CHRIST COLLEGE IRVINE); PLANNING AREA 21, (TURTLE ROCK); FILED BY CONCORDIA UNIVERSITY

EXECUTIVE SUMMARY

On April 25, 2017, the City Council voted 3-0-0 (Councilmembers Schott, Fox, Shea in favor; Mayor Wagner abstaining; Councilmember Lalloway absent) to certify the Final Environmental Impact Report (EIR) prepared for the Concordia University Campus Master Build-Out Plan and Zone Change. Resolution 17-29 is included as Attachment 1 for reference.

The City Council also introduced for first reading an ordinance amending Zoning Ordinance Section 9-21-7.B, Special Development Requirements for Concordia University in Planning Area 21 (Turtle Rock) associated with the Conditional Use Permit

Modification for the campus master build-out plan (Attachment 2). The motion to introduce Ordinance No. 17-05 for first reading carried by the following vote:

AYES:	3	COUNCILMEMBERS:	Fox, Schott and Shea
NOES:	0	COUNCILMEMBERS:	None
ABSENT:	2	COUNCILMEMBERS:	Lalloway, Wagner
ABSTAIN:	0	COUNCILMEMBERS:	None

Unless otherwise directed by a Member of the City Council, the vote at second reading will reflect the same vote as at the first reading. However, if a Councilmember was absent at first reading, his or her vote cast at second reading will be reflected. If a Councilmember is not present at the second reading/adoption, the vote will be reflected as absent.

In addition to certifying the EIR and introducing Ordinance No. 17-05 for first reading, the City Council directed staff and City Attorney to prepare a Memorandum of Understanding (MOU) that memorializes five commitments proposed by Concordia University, and further clarifies and supplements certain conditions of approval (COA) to Planning Commission Resolution No. 17-3598. The five commitments proposed by Concordia University and accepted by the City Council at its April 25, 2017 meeting are included as Attachment 3. This MOU (Attachment 4) is intended to further address resident concerns regarding the Conditional Use Permit (CUP) Modification. Per the City Council's direction for reference, Exhibit B of the MOU is Planning Commission Resolution No. 17-3598 approving the CUP Modification.

The Concordia campus is located at 1530 Concordia West in Planning Area 21 (Turtle Rock), is approximately 72.8 acres, and generally located south of University Drive, west of Ridgeline Drive, north of Turtle Rock Drive, and east of Culver Drive (Attachment 5).

COMMISSION / BOARD / COMMITTEE RECOMMENDATION

Not applicable.

ANALYSIS

The MOU memorializes additional commitments made by Concordia University at the April 25, 2017 City Council hearing. Concordia University representatives reviewed and agree with the MOU.

In summary, the MOU clarifies and supplements select conditions of approval for the CUP Modification for the following:

A. The Planning Commission shall review future discretionary (e.g., CUP Modification) applications for project Phases 3 and 4 of the Campus Master Build-Out Plan. COA 2.34 requires that any CUP modification applications and building-level permit applications received that are inconsistent with the approved CUP plans trigger a CUP modification application subject to the Minor vs. Major Modification Procedure in Zoning Ordinance Chapter 2-9. The MOU automatically mandates that discretionary applications for project Phases 3 and 4 of the Campus Build-Out Plan be reviewed by the Planning Commission regardless of the Minor vs. Major Modification Procedure.

B. The maximum daily trip cap for the campus cannot exceed the pre-project conditions of 4,732 vehicle trips per day until, at earliest, Phase 3 of the Campus Master Build-Out Plan. The 4,732 daily trip cap is based on the October 2014 counts taken for the project. COA 6.21 requires Concordia University to conduct biannual trip counts and to submit comprehensive trip summary reports within 30 calendar days of count completion for review by the Director of Community Development and Concordia East/Concordia West Community Association boards. Corrective measures are required and Concordia East and West Community Associations' Boards input is encouraged if Concordia exceeds the trip cap. COA 6.21 also allows the Director of Community Development to require additional counts and monitoring reports anytime, beyond the biannual count requirement, if deemed necessary. The MOU supplements COA 6.21 by limiting project Phases 1 and 2 to the October 2014 count of 4,732 with no possible incremental increases in the cap until project Phase 3, which is subject to Planning Commission review. COA 6.21 prohibits the issuance of a grading or building permit or development application if the campus is non-compliant and this requirement remains unchanged with the MOU. The MOU also supplements COAs 6.24 and 6.25 related to non-University and Special events as all events are subject to the daily trip cap.

C. The City shall be primarily responsible for conducting biannual vehicle trip counts on dates unilaterally selected by the City to ensure independent trip counts and verify compliance. The MOU requirement clarifies COA 6.21 and requires City personnel or an independent qualified entity selected and approved by the City, without advance notice provided to Concordia, to conduct the biannual counts during three consecutive days in October and one weekend day in the spring.

D. The City may use the Ridgeline Drive and Concordia East traffic signal financial security for different unfunded traffic improvements in the immediate area as determined by the Transportation Commission, if the traffic signal is not installed. COA 4.17 requires Concordia to enter into an agreement with the City to post security guaranteeing the construction of a traffic signal. The Transportation Commission will determine if the signal is necessary and actual timing of construction. The MOU supplements COA 4.17 by providing greater flexibility by allowing the Transportation Commission to determine the best and appropriate use of the funds for other traffic improvements if the signal is not installed.

E. Athletic field lighting on the campus is limited to 15 poles until, at earliest, Phase 3 of the Campus Master Build-Out Plan. The MOU supplements COAs 3.33, 3.34 and 6.26 by limiting the number of permanent athletic field light poles to 15 maximum during project Phases 1 and 2. The MOU prohibits the use of temporary lighting apparatus to illuminate any athletic facility for athletic purposes once the permanent athletic field light poles are in place and operational. Furthermore, any additional light poles beyond the 15 permanent poles shall require Planning Commission review and approval for project Phases 3 and 4 and must conform with the physical characteristics and locations shown in the lighting studies contained in the Project EIR.

F. Concordia will seek input from Concordia East and West Community Associations' Boards on Construction Staging and Management Plans. COA 2.33 requires Concordia to prepare a detailed Construction Staging and Management Plan for review and approval by Community Development, Public Safety, Public Works and Orange County Fire Authority staff. The MOU supplements COA 2.33 by requiring Concordia to meet and seek input from Concordia East and West Community Associations' Boards to proactively address any potential construction staging and management concerns.

Exhibit D of the MOU contains a table summarizing the relationships between the MOU provisions, CUP Conditions of Approval and Mitigation Monitoring and Reporting Program for the EIR. Some COAs are also included verbatim in the Mitigation Monitoring and Reporting Program and are noted in the summary table. Most importantly, the MOU strengthens the COAs in the CUP Modification, further ensuring monitoring and compliance of Concordia's operations, and enforcement mechanisms in the event of non-compliance.

ALTERNATIVES CONSIDERED

No alternatives were considered.

FINANCIAL IMPACT

Concordia University will be responsible for all costs associated with the development, operation, and on-going vehicle trip and special event reporting responsibilities.

REPORT PREPARED BY Melissa Chao, Senior Planner
Stephen Higa, Principal Planner
Tim Gehrich, Deputy Director of Community Development

ATTACHMENTS

Attachment 1:	City Council Resolution No. 17-29 Certifying EIR (SCH NO. 2015091023)
Attachment 2:	City Council Ordinance No. 17-05 Approving Zone Change 00629029-PZC
Attachment 3:	Proposed Concordia Commitments – April 25, 2017
Attachment 4:	Memorandum of Understanding and Covenants
Attachment 5:	Vicinity Map

ec: Ronald Van Blarcom, Concordia University (Ronald.VanBlarcom@cui.edu)
Lesley Harper, Concordia University (lesley.harper@cui.edu)
Tim Odle, Concordia University (tim.odle@cui.edu)
Tom Sonoff, Concordia University (tom.sonoff@cui.edu)
Coralee Newman, Government Solutions (cora@govsol.com)
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Lana Feldman, Concordia East HOA president (ljfeldmanlaw@msn.com)
Aaron Ehrlich, Berding & Weill LLP (Aehrlich@berdingweil.com)
Marie Whitehouse, Laguna Shores Management (mwhitehouse@lagunashores.com)
Stewart A Sutton, Concordia West HOA president (stewsutton@gmail.com)
Christina Thomas, Concordia West HOA board member (cristinabthomas@gmail.com)
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Rabbi Larry Seidman (lpseidman@cox.net)
Karen Jaffe (kjaffe1964@gmail.com)
Greg McKeown, OCFA Fire Division Chief (gregmckeown@ocfa.org)
Tim Kerbrat, OCFA Deputy Fire Marshal (timothykerbrat@ocfa.org)
Nick Pivaroff, OCFA Assistant Fire Marshal – Community Wildfire Mitigation (NickPivaroff@ocfa.org)
Marta Crane, OC Parks (Marta.Crane@ocparks.com)
Tina Anderson, BonTerra Psomas (tina.andersen@psomas.com)
Chad Beckstrom, ICF International (Chad.Beckstrom@icfi.com)

Pat Hurtado, Police Lieutenant
Dave Klug, Police Lieutenant
Traci Stubbler, Community Services Supervisor – ICCP
Jim Houlihan, Manager of Engineering/City Engineer
Jaimee Bourgeois, City Traffic Engineer
Tran Tran, Senior Transportation Engineer
Uyenly Bui, Senior Civil Engineer
Kerwin Lau, Project Development Administrator
Sun-Sun Murillo, Supervising Transportation Analyst
Karen Urman, Senior Transportation Analyst

Files: 00612052-PCPU; 00629029-PZC; 00618828-PCLE

CITY COUNCIL RESOLUTION NO. 17-29

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, CERTIFYING AN ENVIRONMENTAL IMPACT REPORT (SCH NO. 2015091023, 00618828-PCLE) AND ADOPTING A MITIGATION MONITORING AND REPORTING PROGRAM AND ENVIRONMENTAL FINDINGS PURSUANT TO THE CALIFORNIA ENVIRONMENTAL QUALITY ACT FOR CONDITIONAL USE PERMIT MODIFICATION 00612052-PCPU FOR CONCORDIA UNIVERSITY CAMPUS MASTER BUILD-OUT PLAN AND ZONE CHANGE 00629029-PZC TO REVISE ZONING ORDINANCE SECTION 9-21-7.B, SPECIAL DEVELOPMENT REQUIREMENTS; LOCATED AT 1530 CONCORDIA WEST IN PLANNING AREA 21 (TURTLE ROCK);FILED BY CONCORDIA UNIVERSITY

WHEREAS, Concordia University ("Project Applicant") proposes Conditional Use Permit (CUP) Modification 00612052-PCPU and Zone Change 00629029-PZC for the Campus Master Build-Out Plan Update ("Project" or "proposed Project"); and

WHEREAS, the Concordia University Irvine main campus encompasses approximately 72.8 acres and is located at 1530 Concordia West in the City of Irvine ("City"); and

WHEREAS, the Irvine City Council approved General Plan Amendment 4237-GA on April 14, 1992, and Zone Change 5232-ZC on April 28, 1992, to allow development of 310,980 square feet of institutional use and 330 institutional dwelling unit on the Concordia University campus; and

WHEREAS, the Irvine Planning Commission approved Conditional Use Permit 12273-CPU on August 5, 1993, which provided for the master build-out plan of the campus with development of 310,980 square feet (later modified to allow 321,220 square feet) of institutional use to serve 1,800 full time students, 330 institutional dwelling units, a child care center, control access gates, and administrative relief for shared parking; and

WHEREAS, the proposed Project includes (1) a Major Modification to the existing CUP for Concordia University Irvine to reflect the proposed Campus Master Build-Out Plan Update, and (2) a Zone Change to revise Special Development Requirements ("SDRs") identified in Section 9-21-7.B of the City of Irvine Zoning Ordinance; and

WHEREAS, the proposed Project proposes demolition of seven buildings totaling approximately 71,231 square feet, and new construction (new buildings and additions to existing buildings) of up to 148,880 square feet resulting in 77,649 square feet of new building square footage; and

ATTACHMENT 1

WHEREAS, at full buildout, the campus would contain 321,220 square feet of institutional buildings and 330 dormitory units, consistent with the approved maximums; and

WHEREAS, the Project Applicant's public outreach for the proposed Project started in 2012, prior to the filing of applications, and has continued throughout the planning and environmental review processes; and

WHEREAS, at a regular meeting of the Planning Commission of the City of Irvine ("Planning Commission") on October 2, 2014, representatives of the Project Applicant and residents of the Concordia East and Concordia West neighborhoods presented general introductory information regarding the proposed Project; and

WHEREAS, on or about May 5, 2015, City staff established a webpage (www.cityofirvine.org/concordia) on the City's website to inform the public about the proposed Project, and City staff has continuously updated that webpage throughout the planning and environmental review processes; and

WHEREAS, pursuant to Public Resources Code section 21067 of the California Environmental Quality Act (Pub. Res. Code §§ 21000 et seq.) ("CEQA"), Section 15367 of the State CEQA Guidelines (Cal. Code Regs., tit. 14, § 15000 et seq.), and the City of Irvine CEQA Procedures, the City is the lead agency for the proposed Project; and

WHEREAS, pursuant to CEQA and the State CEQA Guidelines the City determined that an Environmental Impact Report ("EIR") should be prepared in order to analyze all potential adverse environmental impacts of the proposed Project; and

WHEREAS, the City issued a Notice of Preparation ("NOP") of a Draft EIR for the proposed Project and circulated the NOP for a 30-day public review period from September 10, 2015 to October 9, 2015 to 58 interested agencies, organizations and individuals; and

WHEREAS, the City solicited comments in the NOP from various public agencies, other entities, and members of the public; and

WHEREAS, the City conducted a public scoping session meeting on September 29, 2015 to further solicit comments on the scope of the EIR; and

WHEREAS, on or about May 17, 2016 and June 8, 2016, City staff hosted two evening meetings for the Concordia East and Concordia West homeowner association presidents and their designated attendees at Irvine City Hall where City staff provided a general overview of the proposed Project and an update on the status of the Draft EIR, and the Project Applicant's consultants and an Orange County Fire Authority (OCFA) representative discussed other specific topics, including: the Record of Survey, Fire Behavior Analysis Report and fuel modification design criteria, the proposed signal and intersection improvements at Concordia East and Ridgeline Drive, the Traffic Study, and the daily trip cap; and

WHEREAS, the City prepared the Draft EIR, issued a Notice of Availability ("NOA"), released the Draft EIR for public review and comment, and thereby initiated a 45-day public review and comment period of the Draft EIR for the proposed Project from August 1, 2016 through September 14, 2016; and

WHEREAS, pursuant to State CEQA Guidelines section 15086, the City consulted with and requested comments from all responsible and trustee agencies, other regulatory agencies, and others during the 45-day public review and comment period; and

WHEREAS, the City mailed the NOA to all property owners/occupants/community associations within 500 feet of the Project site, all Concordia East and Concordia West residential owners/occupants, and all other interested parties; and

WHEREAS, the City also posted the NOA at five libraries, designated public bulletin boards (including Irvine City Hall), on- and off-site (Ridgeline Dr./Concordia East and Turtle Rock Dr./Concordia West) and the City's project webpage; and

WHEREAS, hard copies of the Draft EIR were available at Irvine City Hall and the five libraries listed above, including Concordia University's library, and an electronic copy of the Draft EIR was made available online; and

WHEREAS, the Project Applicant's representatives hosted additional community meetings for various neighborhoods on November 20, 2016, December 1, 2016, December 5, 2016, February 6, 2017 and February 7, 2016; and

WHEREAS, the City has prepared a Final EIR, consisting of the comments received during the 45-day public review and comment period on the Draft EIR, the late comment letters received after the close of the 45-day public review and comment period, written responses to those comments, and revisions to the Draft EIR; and

WHEREAS, on or about February 21, 2017, the City released the Final EIR that includes responses to comments and corrections to the Draft EIR for the proposed Project; and

WHEREAS, consistent with CEQA's requirements the City has prepared environmental Findings of Fact, which are attached hereto and incorporated herein as **Exhibit A**;

WHEREAS, the environmental impacts identified in the Final EIR that the City finds are of no impact or constitute a less than significant impact and do not require mitigation are described in **Section VI of Exhibit A**; and

WHEREAS, the environmental impacts identified in the Final EIR as potentially significant but which the City finds can be mitigated to a level of less than significant

through the incorporation of feasible Mitigation Measures identified in the EIR and set forth herein, are described in **Section VII of Exhibit A** hereof; and

WHEREAS, the City has determined that all environmental impacts are either less than significant, or can be mitigated to a level of less than significant, and therefore the project will not result in any significant or unavoidable environmental impacts; and

WHEREAS, the cumulative impacts of the Project identified in the Final EIR and set forth herein, are described in **Section VII of Exhibit A** hereof; and

WHEREAS, findings regarding potential significant and irreversible environmental changes that would result from the proposed Project, are described in **Section IX of Exhibit A** hereof; and

WHEREAS, the existence of any growth-inducing impacts resulting from the proposed Project identified in the Final EIR and set forth herein, are described in **Section X of Exhibit A** hereof; and

WHEREAS, alternatives to the proposed Project that might eliminate or reduce significant environmental impacts are described in **Section XI of Exhibit A** hereof; and

WHEREAS, the Mitigation Monitoring and Reporting Program setting forth the mitigation measures to which the City shall bind itself in connection with the Project, is attached hereto and incorporated herein as **Exhibit B**; and

WHEREAS, as of March 8, 2017, the City received a total of 52 comment letters, 7 of which were received after the close of the 45-day public comment period, and two of which were form letters; and

WHEREAS, Form Letter A was submitted by 47 individuals or couples and Form Letter B was submitted by 10 individuals or couples; and

WHEREAS, the City also received Form Letter A transmitted as a "petition" with 119 signatures; and

WHEREAS, of the comment letters received by the City, three were submitted by state agencies, three were submitted by county agencies, three were submitted by other local agencies and utilities, six were submitted by organizations, and the remainder were submitted by individuals; and

WHEREAS, after the date of the preparation of the Planning Commission report, City staff received additional written correspondences about the proposed Project (including one letter from the Concordia East Community Association Board supporting the Project with modifications to certain conditions of approval for the CUP Modification), all of which were provided to the Planning Commission at the March 16, 2017 public hearing in the form of an "errata"; and

WHEREAS, on March 16, 2017, the Planning Commission held a duly noticed public hearing on the Final EIR and the corresponding Zone Change and CUP Modification, at which time oral and documentary evidence was introduced along with the written recommendations of the Community Development Department of the City of Irvine, and the Planning Commission received public testimony; and

WHEREAS, the Planning Commission heard, was presented with, reviewed and considered all of the information and data in the administrative record, including the EIR, and all oral and written evidence presented to it during all meetings and hearings; and

WHEREAS, on March 16, 2017, the Planning Commission, by a 5-0-0 vote, approved PC Resolutions 17-3596, 17-3597, and 17-3598, which: (1) recommended the City Council approve the Zone Change, (2) recommended the City Council certify the Final EIR, and (3) approved the CUP Modification, contingent on the City Council approving the Zone Change and certifying the Final EIR; and

WHEREAS, after the Planning Commission hearing, City staff continued to receive written correspondences about the proposed Project, all of which were provided to the City Council at the April 25, 2017 public hearing;

WHEREAS, on April 25, 2017 the City Council of the City of Irvine ("City Council") held a duly noticed public hearing on the Final EIR and the corresponding Zone Change, at which time oral and documentary evidence was introduced along with the written recommendations of the Planning Commission and Community Development Department of the City of Irvine, and the City Council received public testimony; and

WHEREAS, prior to taking action, the City Council has heard, been presented with, reviewed and considered all of the information and data in the administrative record, including the EIR, and all oral and written evidence presented to it during all meetings and hearings; and

WHEREAS, the EIR reflects the independent judgment of the City Council and is deemed adequate for purposes of making decisions on the merits of the Project; and

WHEREAS, the City has not received any comments or additional information that constituted substantial new information requiring recirculation under Public Resources Code section 21092.1 and State CEQA Guidelines section 15088.5; and

WHEREAS, all the requirements of CEQA, the State CEQA Guidelines, and the City of Irvine CEQA Procedures have been satisfied by the City in the EIR, which is sufficiently detailed so that all of the potentially significant environmental effects of the proposed Project have been adequately evaluated; and

WHEREAS, all other legal prerequisites to the adoption of this Resolution have occurred; and

NOW, THEREFORE, the City Council of the City of Irvine DOES HEREBY RESOLVE as follows:

SECTION 1. The Recitals above are true and correct and incorporated herein by this reference.

SECTION 2. In accordance with the City of Irvine CEQA procedures and Article 7 of the CEQA Guidelines, the City Council, after receiving and considering comments from interested parties, finds that the Final EIR has been completed in compliance with CEQA, the State Guidelines, and the City's CEQA procedures. The City Council, having final approval authority over the Project, certifies as complete and adequate the Final EIR for Concordia University CUP Modification/Zone Change Campus Master Build-Out Plan Update (SCH No. 2015091023, File No. 00618828-PCLE), comprised of the following:

A. The Draft EIR
B. The Technical Appendices to the Draft EIR
C. Comments and Responses to the Draft EIR, including a list of persons, organizations and agencies who commented on the Draft EIR
D. Statement of Facts and Findings (Exhibit A)
E. Mitigation Monitoring and Reporting Program (Exhibit B)

SECTION 3. Pursuant to Section 15025 of the State CEQA Guidelines, the City Council finds that the Final EIR reflects the independent judgment and analysis of the City as the lead agency for the project, that the Final EIR was presented to the City Council, and that the City Council has reviewed and considered the information contained in the Final EIR prior to making its decision on the Project. In addition, the City Council considered comments received during the public review process, as well as the responses to comments.

SECTION 4. The Final EIR identifies certain significant effects that would potentially result if the Project is approved. However, based on substantial evidence in the record, the City Council makes the following findings:

1. Changes or alterations have been required in, or incorporated into, the Project which avoid or substantially lessen the potentially significant environmental effects as identified in the Final EIR. As set forth in more detail in the Statement of Findings and Facts attached hereto as Exhibit A and incorporated herein by this reference as if set forth in full, all potentially significant environmental effects can feasibly be avoided or mitigated and will be avoided or mitigated by the plans, programs and policies (PPPs), project design features (PDFs) and mitigation measures (MMs) in the Mitigation Monitoring and Reporting Program attached hereto as Exhibit B and incorporated herein by this reference as if set forth in full.

2. As set forth in more detail in the Statement of Findings and Facts attached hereto as Exhibit A and the Mitigation Monitoring and Reporting Program attached hereto as Exhibit B, to the extent such changes or alterations are within the responsibility and jurisdiction of another public agency, such

changes have been adopted by such other agency or can and should be adopted by such other agency.

3. As set forth in more detail in the Statement of Findings and Facts attached hereto as Exhibit A, any potential mitigation measures and potential Project alternatives that were not incorporated into the Project were rejected as infeasible based upon specific economic, legal, social, technological, or other considerations.

SECTION 4. Pursuant to Fish and Game Code Section 711.4(c) and the conclusions of the EIR, all required Fish and Game filing fees shall be paid subsequent to certification of the EIR for the Concordia University CUP Modification/Zone Change Campus Master Build-Out Plan Update (SCH No. 2015091023).

SECTION 5. As noted above in Section 2, although the Final EIR identifies certain significant environmental effects that would result if the Project is approved, all environmental effects can feasibly be avoided or mitigated. The applicable plans, programs and policies (PPPs), project design features (PDFs) and mitigation measures (MMs), included in the Final EIR attached as Exhibit B, have been incorporated into the Project or identified as requirements of the Project.

SECTION 6. Based on the above findings, the City Council finds that the Final EIR has been completed in compliance with CEQA and the State CEQA Guidelines, and the City's CEQA Procedures. The City Council hereby certifies as complete and adequate the Final EIR and hereby adopts the CEQA Findings of Fact (Exhibit A) and Mitigation Monitoring and Reporting Program (Exhibit B).

SECTION 7. The location and of the documents or other materials which constitute the record of proceedings upon which the City Council's decision is based is the City of Irvine, Community Development Department, One Civic Center Plaza, Irvine, California 92623-9575. The City's Community Development Department is the custodian of the record of proceedings for the Project. Copies of the documents and other materials that constitute the record of proceedings, are and at all relevant times have been and will be available upon request directed to the City's Community Development Department.

PASSED AND ADOPTED by the City Council of the City of Irvine at a regular hearing held on the 25th day of April 2017, by the following roll call vote:

MAYOR OF THE CITY OF IRVINE

ATTEST:

CITY CLERK OF THE CITY OF IRVINE

STATE OF CALIFORNIA)
COUNTY OF ORANGE) SS
CITY OF IRVINE)

I, MOLLY MCLAUGHLIN, City Clerk of the City of Irvine, HEREBY DO CERTIFY that the foregoing resolution was duly adopted at a regular meeting of the City Council of the City of Irvine, held on the 25th day of April 2017.

AYES:	3	COUNCILMEMBERS:	Fox, Schott and Shea
NOES:	0	COUNCILMEMBERS:	None
ABSENT:	2	COUNCILMEMBERS:	Lalloway and Wagner
ABSTAIN:	0	COUNCILMEMBERS:	None

CITY CLERK OF THE CITY OF IRVINE

DRAFT

FINDINGS OF FACT REGARDING THE FINAL ENVIRONMENTAL IMPACT REPORT FOR CONCORDIA UNIVERSITY CUP MODIFICATION/ ZONE CHANGE CAMPUS MASTER BUILD-OUT PLAN UPDATE IRVINE, CALIFORNIA

STATE CLEARINGHOUSE NO. 2015091023

April 2017

EXHIBIT A

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I. INTRODUCTION

A. Findings of Fact

The California Environmental Quality Act ("CEQA") (Pub. Resources Code, §§ 21000-21178) and the State CEQA Guidelines (Cal. Code Regs., tit. 14, §§ 15000-15387) require that the lead agency analyze and provide findings on a project's environmental impacts before approving the project. If a project will generate significant environmental effects that cannot be avoided or substantially lessened, then before approving the project, the lead agency must provide a statement of overriding considerations documenting that the project's benefits outweigh its unavoidable adverse significant environmental effects.

The City of Irvine (the "City"), in its capacity as the CEQA Lead Agency, has prepared these Findings of Fact ("Findings") to comply with CEQA for the Concordia University Conditional Use Permit ("CUP") Modification/Zone Change for the Campus Master Build-Out Plan Update (the "Project"). The Project is within the City's jurisdiction. The Project Applicant is Concordia University. Specifically, regarding Findings, State CEQA Guidelines Section 15091 establishes the following requirements:

(a) No public agency shall approve or carry out a project for which an EIR has been certified which identifies one or more significant environmental effects of the project unless the public agency makes one or more written findings for each of those significant effects, accompanied by a brief explanation of the rationale for each finding. The possible findings are:

1. Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final EIR.

2. Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.

3. Specific economic, legal, social, technological, or other considerations, including the provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the final EIR.

(b) The findings required by subdivision (a) shall be supported by substantial evidence in the record.

(c) The finding in subdivision (a)(2) shall not be made if the agency making the finding has concurrent jurisdiction with another agency to deal with identified feasible mitigation measures or alternatives. The finding in subdivision (a)(3) shall describe the specific reasons for rejecting identified mitigation measures and project alternatives.

(d) When making the findings required in subdivision (a)(1), the agency shall also adopt a program for reporting on or monitoring the changes which it has either required in the project or made a condition of approval to avoid or substantially lessen significant environmental effects. These measures must be fully enforceable through permit conditions, agreements, or other measures.

(e) The public agency shall specify the location and custodian of the documents or other materials which constitute the record of the proceedings upon which its decision is based.

(f) A statement made pursuant to Section 15093 does not substitute for the findings required by this section.

The "changes or alterations" under Section 15091(a)(1) that would avoid or substantially lessen a project's significant environmental effects can include a variety of measures or actions, including but not limited to:

(a) Avoiding the impact altogether by not taking a certain action or parts of an action.

(b) Minimizing impacts by limiting the degree or magnitude of the action and its implementation.

(c) Rectifying the impact by repairing, rehabilitating, or restoring the impacted environment.

(d) Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action.

(e) Compensating for the impact by replacing or providing substitute resources or environments.

A Statement of Overriding Considerations states that the decision-making body has balanced the benefits of the proposed Project against its unavoidable significant environmental effects and has determined that the benefits of the proposed Project outweigh the adverse effects and, therefore, the adverse effects are considered to be acceptable. Because the proposed Project would not result in any significant and unavoidable impacts, a Statement of Overriding Considerations is not required for the proposed Project.

Having received, reviewed and considered the Final Environmental Impact Report (Final EIR) for the Concordia University CUP Modification and Zone Change for the Campus Master Build-Out Plan Update (Final EIR) (State Clearinghouse [SCH] No. 2015091023), as well as all other information in the record of proceedings on this matter, the following Findings are hereby adopted by the City of Irvine. The Findings set forth the environmental and other bases for current and subsequent discretionary actions to be undertaken by the City and responsible agencies for the implementation of the proposed Project.

B. Record of Proceedings

For purposes of CEQA and these Findings, the Record of Proceedings for the Project consists of the following documents and other evidence, at a minimum:

- The Notice of Preparation (NOP) and all other public notices issued by the City in conjunction with the Project;
- The Draft EIR for the Project;
- The Final EIR for the Project (SCH No. 2015091023);
- All documents, studies, EIRs or other materials incorporated by reference in the Draft EIR and Final EIR;
- All written comments submitted by the agencies, organizations, or members of the public during the public review comment period on the Draft EIR, including a list of all commenters;
- All responses to written comments submitted by agencies or members of the public during the public review comment period on the Draft EIR;
- All written and verbal public testimony presented during a noticed public hearing for the Project at which such testimony was taken;
- Information provided in submissions of testimony from officials and Departments of the City, the public and other municipalities and agencies;
- The Mitigation Monitoring and Reporting Program (MMRP);
- The Ordinances and Resolutions adopted by the City in connection with the Project, and all documents incorporated therein;
- Matters of common knowledge to the City, including but not limited to federal, state, and local laws and regulations;
- Any documents expressly cited in these Findings; and
- Any other relevant materials required to be in the record of proceedings by Public Resources Code Section 21167.6(c).

C. Custodian and Location of Records

Each section of the Draft EIR, incorporated as part of the Final EIR, contains a list of the references used in the preparation of the environmental analysis. The documents and other materials that constitute the record of proceedings for the City's approval of the Final EIR and actions related to the Project are located at the City of Irvine, Community Development Department, One Civic Center Plaza, Irvine, California 92623-9575. The City's Community Development Department is the custodian of the record of proceedings for the Project. Copies of the documents and other materials that constitute the record of proceedings, are and at all relevant times have been and will be available upon request directed to the offices of the City's Community Development Department. These Findings provide this information in compliance

with California Public Resources Code section 21081.6(a)(2) and State CEQA Guidelines Section 15091(e).

II. PROJECT SUMMARY

A. Project Location

The Concordia University Irvine main campus (also referred to herein as "the campus" or "the project site") encompasses 72.8 acres and is located at 1530 Concordia West in the City of Irvine (City), in Orange County, California. The campus is located in the City's Planning Area (PA) 21 (Turtle Rock), and is generally located south of University Drive and Mason Regional Park, west of Ridgeline Drive, north of Turtle Rock Drive, and east of the Concordia West roadway.

B. Project Description

The proposed Project involves (1) a Major Modification to the existing CUP for Concordia University Irvine to reflect the proposed Campus Master Build-Out Plan Update and (2) a Zone Change to revise Special Development Requirements (SDRs) identified in Section 9-21-7.B of the City of Irvine Zoning Ordinance. Many of these SDRs have already been met or are not applicable to the proposed Project because they address development of the residential uses adjacent to the campus (Concordia East and Concordia West). The proposed Project does not require any changes to the City of Irvine General Plan and would not change the existing General Plan designation of Educational Facilities or the zoning designation of 6.1, Institutional.

The existing campus is comprised of 16 institutional buildings totaling approximately 243,571 square feet and 256 dormitory units (1,024 beds). Original Conditional Use Permit 12273-CPU and subsequently approved modifications approved a maximum 321,220 square feet of institutional buildings and 330 institutional dormitory units (1,320 beds) for the campus.

With respect to the changes in physical development at the campus that would occur with implementation of the proposed Campus Master Build-Out Plan Update, of the 16 existing institutional (non-residential) buildings (approximately 243,571 sf), 7 buildings would be demolished (approximately 71,231 sf). New construction (new buildings and additions to existing buildings) would involve up to 148,880 sf of institutional square footage. Therefore, should the Campus Master Build-Out Plan Update be fully implemented, there would be 321,220 sf of institutional buildings on campus, an increase of 77,649 sf compared to existing conditions. As outlined in Table 3-2, in Section 3, Project Description, of the Draft EIR, Phases 1 and 2 of the proposed Campus Master Build-Out Plan would involve development of 48,580 sf of new institutional uses. There would be no buildings demolished to implement Phases 1 and 2. With implementation of Phases 3 and 4, building demolition discussed above would occur, and 100,300 sf of new institutional development would be constructed. The four existing residence halls, which accommodate 256 units/1,024 beds, would be retained, and a new residence hall would be constructed (74 units/296 beds) during Phase 3, resulting in a total of 330 units/1,320 beds.

The total square footage of institutional (non-residential) building space would not increase above the total amount currently allowed to be built on campus based on current

entitlements (321,220 sf per 43809-CPM). Additionally, the proposed Project would not increase the institutional (dormitory) dwelling units/beds (330 dwelling units/1,320 beds) currently allowed on campus based on existing entitlements.

In addition to institutional buildings and a residence hall, the proposed Campus Master Build-Out Plan Update would allow for added, relocated, or improved recreational and athletic facilities. Phases 1 and 2 would include upgrades to the track and soccer field, installation of athletic field lighting at all fields, and construction of two new sand volleyball courts. Phases 3 and 4 would include construction of a new lap and recreational pool with kidney-shaped "play" area for students and staff only (not for athletic competition), and two new tennis courts with four relocated tennis courts on a deck over the southwest parking area.

On-campus surface parking lots would provide all parking. New parking areas are proposed to be added and existing parking areas would remain, be reconfigured, or be removed (there would be a net increase of 218 parking spaces). Internal campus roadway improvements and off-site improvements at the Ridgeline Drive and Concordia East roadway intersection, including installation of a traffic signal, are proposed. Although not required to mitigate traffic impacts, to address input received during the scoping process, the Draft EIR also addresses proposed intersection and roadway improvements at the intersection of Ridgeline Drive and the Concordia East roadway. Taking into consideration existing physical constraints (including biological resources), a potential intersection improvement includes the addition of a shared left/right eastbound lane that would improve the operation of the intersection by providing a second outbound lane for residential and University traffic, subject to the approval of the County of Orange (OC Parks).

On-site utility infrastructure (e.g., water [potable and recycled], wastewater, drainage, electricity, natural gas, and communications) would be provided, as necessary, to serve the proposed uses and would connect to the existing backbone infrastructure which would require on-site improvements and off-site improvements along Ridgeline Drive and University Drive (for upgraded dry utility infrastructure). Structural and non-structural water quality best management practices (BMPs) would be implemented in compliance with applicable regulations. Fuel modification (for fire protection purposes) required for new development, and additional fuel modification to address existing conditions would be implemented. In addition, installation of landscaping, hardscape, lighting, walls/fences is proposed.

The proposed project would generally be implemented in four phases with Phases 1 and 2 estimated to be implemented between 2017 and 2020, and Phases 3 and 4 estimated to be implemented between 2020 and 2035. A description of the proposed Project components that would occur with each phase is provided in Section 3.0, Project Description.

C. Use of Environmental Impact Report

The City of Irvine is the public agency which has the principal responsibility for carrying out or approving the project and, as such, is the Lead Agency for this proposed Project under CEQA. The Lead Agency must identify, evaluate, and consider the potential environmental impacts of a project prior to taking any discretionary action on the project. The EIR is intended to provide information to the Lead Agency and other public agencies, the general public, and

decision makers regarding the potential environmental impacts from the construction and operation of the proposed uses allowed by the proposed CUP Modification and Zone Change for the Campus Master Build-Out Plan Update.

The EIR is intended to serve as the primary environmental clearance document for all future entitlements associated with implementation of the proposed Project, including all discretionary approvals requested or required to implement the project. Proposed Phase 1 and Phase 2 components of the Campus Master Build-Out Plan Update, as described in Section 3.0, Project Description, of the EIR which are anticipated to be constructed between 2017 and 2020, have been evaluated in the EIR at a "project level." Pursuant to Section 15161 of the State CEQA Guidelines, a Project EIR examines the environmental impacts of a specific development project. The entirety of the Campus Master Build-Out Plan Update (including Phases 3 and 4, which are expected to be constructed subsequent to Phases 1 and 2 starting in approximately 2020 and 2025 respectively) is being addressed at a "program level." Subsequent actions implementing the proposed Campus Master Build-Out Plan Update will be reviewed as required by Section 21166 of the California Public Resources Code and Sections 15162 and 15163 of the State CEQA Guidelines.

The City, as the Lead Agency, will use the Final EIR in assessing the effects of the City actions detailed below. The City's actions will include, but are not limited to, the following:

- Certification of the Environmental Impact Report. The proposed Project requires acceptance of the environmental document as having been prepared in compliance with CEQA and the State and City CEQA Guidelines, and certification that the data were considered in the final decisions on the project.
- Major Modification to CUP 12273-CUP, as subsequently modified, to update the Campus Master Build-Out Plan (Case No. 00612052-PCPU)**.** The proposed Project requires a major modification to the existing CUP, as described in Section 3.4.1, of the Draft EIR.
- Zoning Ordinance Amendment (Case No. 00629029-PZC). The proposed Project requires an amendment to the Irvine Zoning Ordinance to remove and/or revise Special Development Requirements. Certain SDRs are being addressed through project-specific Conditions of Approval rather than in the Zoning Ordinance as discussed in Section 3.4.2 of the Draft EIR, and Section 5.9, Land Use and Planning, of the Draft EIR.

Subsequent to the discretionary process, ministerial permits or approvals (such as grading permits, building permits, and street work permits) would be issued by the City or other appropriate agencies in order to allow site preparation, construction in public street right-of-way (e.g., for the potential installation of the traffic signal and upgraded dry utility infrastructure), and construction of the proposed Project and connections to off-site utility infrastructure.

State and local agencies in addition to the City may use the Final EIR in connection with any discretionary actions required to implement or otherwise assure development of the Project including, but not limited to, the following actions:

- Regional Water Quality Control Board ("RWQCB"). Pursuant to the Federal Clean Water Act, the Project may require a NPDES permit and Section 401 water quality certification.
- OC Parks (County of Orange). The Project may require acquisition/easement/encroachment permit for improvements at the Concordia East/Ridgeline Drive intersection.

D. Statement of Objectives

Section 15124(b) of the State CEQA Guidelines indicates that an EIR must include "a statement of objectives sought by the proposed Project". Following are the objectives established for the proposed Project:

1. Implement the remaining development allowed on campus by existing City of Irvine General Plan and Zoning entitlements and ensure that development of the site is consistent with applicable goals and objectives of the City as set forth in the *General Plan.*
2. Update the current Campus Master Build-Out Plan to accommodate the physical resources needed to support Concordia University's Strategic Plan and to accomplish this in a manner that preserves the environmental quality of the main campus and the surrounding community while maintaining the currently allowed maximum development of 321,220 sf of institutional buildings.
3. Provide the previously approved 74 residential units/296 beds to address current and anticipated demand for undergraduate student on campus housing, and to improve the quality of student life and academic experience.
4. Replace aging infrastructure and buildings at the main campus to allow for the development of state of the art, and Americans with Disabilities Act of 1990 (ADA) compliant, academic facilities and co-curricular facilities, including science, visual arts and performing arts facilities, which will also facilitate recruitment of faculty and students.
5. Provide new, relocated and/or improved athletic facilities at the main campus to better serve Concordia's sports teams and the student athletes, including the provision of athletic field lighting to allow use of fields in the evening to facilitate student athlete's academic schedules.
6. Provide additional recreational opportunities at the main campus to support the existing and anticipated future increase in the campus population.
7. Improve pedestrian and vehicular access and circulation on campus, including on-site parking, and strengthen the public bicycle linkage that traverses the campus.
8. Improve traffic operations at the intersection of Ridgeline Drive/Concordia East, which currently operates at a deficient level of service, and warrants a signal based on the City's Transportation Design Procedures (TDP)-12 (Signal Warrants) analysis.

III. ENVIRONMENTAL REVIEW AND PUBLIC PARTICIPATION

In its role as the lead agency, the City determined that an EIR would be required for the proposed project and distributed a Notice of Preparation ("NOP") on September 9, 2015, for 30-day review. In addition to a letter from the Governor's Office of Planning and Research (OPR) identifying that the Initial Study ("IS") and NOP was transmitted to state agencies, a total of 16 agencies and interested parties responded to the NOP. The IS and NOP and written comments to the NOP are included in the Draft EIR, Appendix A, and summarized in Section 2.4, Public Review Process, of the Draft EIR and are on file at the City of Irvine, Community Development Department, One Civic Center Plaza, Irvine, California, 92606.

On September 29, 2015, the City held a public scoping meeting at Irvine City Hall to describe the project, answer questions, and seek public input regarding the proposed scope of the EIR analysis. Notice of the scoping meeting was sent to 58 interested agencies, organizations, and individuals along with a copy of the IS and NOP. The meeting was attended by approximately 18 residents from the Concordia East and Concordia West communities and representatives of Concordia University. Besides the City of Irvine, there were no public agency representatives present at the scoping meeting. Issues raised at the scoping meeting are also in Section 2.4 of the Draft EIR and, along with NOP comments received, were considered in the preparation of the Draft EIR.

The Draft EIR was distributed for public review and comment for a required 45-day public review period that began on August 1, 2016 and ended on September 14, 2016. In compliance with Section 15087 of the State CEQA Guidelines, the City of Irvine provided public Notice of Availability (NOA) of the Draft EIR at the same time it sent a Notice of Completion to the Office of Planning and Research. The City of Irvine used several methods to solicit comments on the Draft EIR. The NOA, along with a CD containing the Draft EIR and technical appendices, was mailed to various agencies and organizations and to individuals who had previously requested such notice. The Draft EIR was submitted to the State Clearinghouse for distribution to and review by State agencies. The NOA was also mailed to all property owners and occupants within 500 feet of the project site; homeowners associations within 500 feet of the project site; all Concordia East and West occupants and owners; and all interested parties who previously called, corresponded, attended an EIR scoping session, and/or provided comments on the IS/NOP. Additionally, the NOA was posted on site and off site (City bulletin boards as well as along Concordia East and Concordia West directly outside of the Concordia campus). Copies of the Draft EIR were available for review at four public libraries, at City Hall, and at the Concordia University Library. The Draft EIR was also available on the City's website.

In addition to correspondence from the Governor's Office of Planning and Research, 49 comment letters were received by the City; 7 of these letters were received after the end of the 45-day public review period. Additionally, 2 form letters were submitted; Form Letter A was submitted by 47 individuals and Form Letter B was submitted by 10 individuals. All of the comment letters received by the City have been included and responded to in the EIR. Comments contained in the letters that address environmental issues are thoroughly responded to in Section 2.0 of the Final EIR. Form Letter A was also transmitted as a "petition" with 87 signatures from the Concordia East community and 32 signatures from the Concordia West community; some of these people who signed the petition also submitted individual comment letters. The Final EIR

also revisions and clarifications to the Draft EIR as a result of the comments received. City staff have reviewed this information and determined that it does not constitute significant new information, so recirculation of the Draft EIR for further comment (pursuant to State CEQA Guidelines, Section 15088.5) is not required. The Final EIR, including all responses to comments submitted on the Draft EIR were provided to the commenters, at least 10 days before final action on the Project.

A Planning Commission public hearing was held on March 16, 2017; and the Planning Commission made recommendations to the City Council on the Final EIR and Project requests. The Planning Commission recommended certification of the Final EIR (SCH No. 2015091023) and adoption of the Mitigation, Monitoring, and Reporting Program ("MMRP"), and these Findings (Resolution No. 17-3596); and, recommended approval of the requested Zone Change (Resolution No. 17-3597). The Planning Commission also approved the requested CUP Modification for the Campus Master Build-Out Plan (Resolution No. 17-3598), contingent upon the City Council's certification of the Final EIR and approval of the Zone Change. A subsequent City Council public hearing was held, at which time the City Council, as the final approval body, considered the proposed Project and certification of the Final EIR for the proposed Project. The City Council made findings regarding the extent and nature of the impacts as depicted in the Final EIR. The Final EIR was certified as complete by the City before making a decision to approve or deny the Project. Public input was encouraged at all public hearings before the City.

IV. GENERAL FINDINGS

The City hereby finds as follows:

- The City is the lead agency for the proposed Project evaluated in the Final EIR;
- The Draft EIR and Final EIR were prepared in compliance with CEQA and the Guidelines;
- The City has independently reviewed and analyzed the Draft EIR and the Final EIR, and these documents reflect the independent judgment of the City Council and the City;
- A Mitigation, Monitoring, and Reporting Program ("MMRP") has been prepared for the Project, and compliance with each of the mitigation measures, project design features, and plans programs and policies set forth in the MMRP has been made a condition of approval of the Project. The MMRP is incorporated by reference and is considered part of the record of proceedings for the Project;
- The MMRP designates the monitoring and reporting responsibility, method and anticipated timing for the implementation of mitigation. The City will serve as the MMRP Coordinator;
- In determining whether the Project has a significant impact on the environment, and in adopting these Findings under California Public Resources Code Section 21081; the City has complied with California Public Resources Code Sections 21081.5 and 21082.2;

- The impacts of the proposed Project have been analyzed to the extent feasible at the time of certification of the Final EIR;
- The City reviewed the comments received and responses provided on the Draft EIR and Final EIR and has determined that neither the comments nor the responses add significant new information on environmental impacts. The City has based its actions on full appraisal of all viewpoints, including all comments received up to the date of adoption of these Findings, concerning the environmental impacts identified and analyzed in the Final EIR;
- The responses to the comments on the Draft EIR, which are contained in the Final EIR, clarify and amplify the analysis in the Draft EIR;
- Having reviewed the information contained in the Draft EIR, Final EIR, and record of proceedings, as well as the requirements of CEQA and the Guidelines regarding recirculation of Draft EIRs, and having analyzed the changes in the Draft EIR, which have occurred since the close of the public review period, the City finds that there is no significant new information in the Final EIR and finds that recirculation is not required;
- The City has made no decisions that constitute an irreversible commitment of resources toward the Project prior to certifying the Final EIR, nor has the City previously committed to a definite course of action for the Project;
- Copies of all the documents incorporated by reference in the Final EIR are and have been available upon request at all times at the offices of the City, which is the custodian of record for these documents or other materials; and
- Having received, reviewed, and considered all information and documents in the record, the City hereby conditions the Project on the requirements and determinations stated in these Findings.

V. SUMMARY OF ENVIRONMENTAL IMPACTS

At a session assembled on April 25, 2017, the City Council determined that, based on all of the evidence presented, including but not limited to the Draft and Final EIRs, written and oral testimony given at meetings and hearings, and the submission of testimony from the public, organizations, and other public agencies, the following environmental impacts associated with the project are: (1) less than significant and do not require mitigation, or (2) potentially significant but will be avoided or reduced to a level of insignificance through the identified Mitigation Measures. No significant and unavoidable impacts would result from implementation of the proposed Project.

VI. FINDINGS REGARDING LESS THAN SIGNIFICANT IMPACTS NOT REQUIRING MITIGATION

Consistent with Public Resources Code section 21002.1 and section 15128 of the State CEQA Guidelines, the Draft EIR focused its analysis on potentially significant impacts, and limited discussion of other impacts for which it can be seen with certainty there is no potential for significant adverse environmental impacts. State CEQA Guidelines section 15091 does not

require specific findings to address environmental effects that an EIR identifies as "no impact" or a "less than significant" impact. Nonetheless, the City Council hereby finds that the Project would have either no impact or a less than significant impact to the following resource areas:

A. Aesthetics

1. Would the project have a substantial adverse effect on a scenic vista? (Initial Study Impact I.a.)

Finding: No impact. (Initial Study, p. 13.)

Facts in Support of Finding: The *City of Irvine General Plan's* Land Use Element identifies "major views" on Figure A-4, Scenic Highways. There are two major views on University Drive: (1) looking east at the University Drive/Ridgeline Drive intersection and (2) looking south at the University Drive/Culver Drive intersection. There are no major views identified on Figure A-4 that would include views of the project site. Therefore, no impacts to scenic vistas would occur with implementation of the proposed Project.

2. Would the project substantially damage scenic resources including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway? (EIR Impacts 1.1a and 1.1b)

Finding: Less than significant impact. (DEIR, p. 5.1-13.)

Facts in Support of Finding: The Concordia University campus is not visible from I-405; therefore, implementation of the proposed Project would not damage scenic resources within a State scenic highway. Views of the campus from most vantage points along University Drive are completely or partially obstructed due to intervening topography and mature trees and vegetation along University Drive and because the majority of the development on campus is set back from the northern boundary. The proposed project would involve the construction of new buildings in the northern portion of the campus. With the exception of the Keck Astronomy Center, which is north of the Concordia East roadway, these buildings would replace existing buildings, which are not historic, and would be located on sites that do not contain scenic resources, with the exception of mature trees. However, it is primarily the mature trees along the north side of the Concordia East roadway and along the northern campus boundary that are visible from University Avenue. Similar to existing conditions, the new buildings would either be completely or partially obstructed from views from University Drive. Additionally, the trees along the northern property boundary would not be removed and new trees would be planted in the areas surrounding the building sites. There are no major ridgelines visible from locations along University Drive where the campus is also visible. Impacts would be less than significant and no mitigation is required.

3. Would the project substantially degrade the existing visual character or quality of the site and its surroundings? (EIR Impacts 1.2a and 1.2b)

Finding: Proposed construction activities and development of the proposed Project would alter the views of the campus from vantage points on- and off-campus. However, with incorporation of identified PPPs and PDFs into the Project, impacts would be less than significant and no mitigation is required. (DEIR, pp. 5.1-21, 5.1-27.)

Facts in Support of Finding: There would be views of construction activities in various stages on campus, including earthwork and associated construction equipment, building construction activities and equipment, and building material stockpiles. Visual changes associated with construction would be less than significant with implementation of PDF 1-1 which requires the installation of screened perimeter fencing around construction staging and construction sites during construction.

Implementation of the proposed Campus Master Build-Out Plan Update (Phases 1 through 4) would alter the views of the campus from on- and off-campus vantage points to the north, south, east, and west and internal to the campus primarily due to the introduction of new institutional structures and completion of other proposed improvements such as lighting to on-campus athletic facilities. However, these visual changes would occur on an already developed campus. Physical development on campus is required to comply with the provisions of the Irvine Zoning Ordinance, which address visual character, as described in Section 5.1.1, Regulatory Setting, of the Draft EIR. Applicable regulations in the Zoning Ordinance include landscaping, site coverage, and building setbacks. Additionally, development on campus is required to comply with the City's Hillside Development regulations for all development projects in Planning Area (PA) 21, which includes the proposed project. Consistent with Chapter 3-37, Zoning District Land Use Regulations and Development Standards, of the City's Zoning Ordinance, which addresses institutional uses in the City, proposed buildings would not exceed 50 feet in height and building coverage would not exceed 50 percent (refer to PPP 1-1). Light poles of various types and heights would be installed as part of these project elements as necessary to provide sufficient lighting for proposed activities, security, and safety. Consistent with existing conditions, parking lot lights would be up to approximately 20 feet; however, light poles for athletic field lighting would range from 40-feet high (at the tennis and sand volleyball courts) to 90-feet high (at the baseball field). The maximum pole height would be 90-feet at two poles for the baseball field; however, the higher light pole is necessary to ensure that off-site light and glare impacts do not occur. Project site landscaping would be installed consistent with the conceptual planting plan for the project and would exceed the minimum landscape area requirements of Chapter 3-37 of the Irvine Zoning Ordinance.

To maintain a cohesive visual image on campus, all future development (institutional and residential) would follow the architectural style guidelines outlined in the *Narrative of Proposed Architectural Styles* prepared for the campus (June 2016), which is included in Appendix C to the Draft EIR. These guidelines address building orientation, building massing, exterior building materials, building entrances, fenestration, view opportunities throughout the campus, natural daylighting, rooftops, and placement and screening of mechanical enclosures. The requirement to follow the established campus architectural guidelines is incorporated into the project through PPP 1-3. Additionally, all future development would be subject to review pursuant to Chapter 2-19, Minor/Major

Modification Procedure, of the City of Irvine Zoning Ordinance. Adherence to Chapter 2-19 ensures that applications for any proposed future buildings on campus that include revisions to the approved Conditional Use Permit are appropriate categorized as Minor or Major, and are subject to the application and approval requirements outlined, including a determination as to whether the revisions would cause any significant environmental impact (refer to PPP 1-3). This impact is less than significant with incorporation of identified PDFs and PPPs.

PPPs and PDFs:

Phases 1 through 4

PPP 1-1 Prior to issuance of each building permit, the Community Development Department shall confirm compliance with requirements outlined in Chapter 3-37, Zoning District Land Use Regulations and Development Standards, of the City's Zoning Ordinance, related to maximum site coverage for buildings (50 percent), maximum allowed building height (50 feet), minimum required building setbacks, and minimum site landscaping (15 percent).

PPP 1-3 Prior to approval of any modification application and/or issuance of grading and/or building permits for future buildings on campus, the Community Development Department shall review any proposed revisions, if applicable, to Conditional Use Permit modification 00612052-PCPU pursuant to Zoning Ordinance Chapter 2-19, Minor/Major Modification Procedure. Future buildings shall also comply with the University's *Narrative of Proposed Architectural Styles*, included in Appendix C of the Draft Environmental Impact Report (EIR).

PDF 1-1 Prior to issuance of grading permits and/or building permits, the Community Development Department shall confirm that the contractor specifications include installation of screened perimeter fencing around construction staging areas and construction sites to obstruct views from adjacent ground-level vantage points during construction. Implementation of the required fencing shall be verified by the City's Building and Safety Department during construction.

B. Agriculture and Forestry Resources

1. Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California resources Agency, to non-agricultural use? (Initial Study Impact II.a.)

Finding: No Impact. (Initial Study, p. 14.)

Facts in Support of Finding: Based on farmland mapping published by the California Department of Conservation, the project site is designated in the Farmland Mapping and

Monitoring Program (FMMP) as "Urban and Built-Up Land", as are the residential areas to the east and west. Mason Regional Park to the north and the preserved open space to the south are designated as "Other Land". No portion of the project site is located on land designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance according to the California Department of Conservation.

2. Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract? (Initial Study Impact II.b.)

Finding: No Impact. (Initial Study, p. 14.)

Facts in Support of Finding: No portion of the project site or adjacent areas is zoned for agricultural use or currently under Williamson Act contract.

3. Would the project conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned Timberland Production? (Initial Study Impact II.c.)

Finding: No impact. (Initial Study, p. 15.)

Facts in Support of Finding: The *City of Irvine General Plan's* Land Use Element designates the project site as Educational and the site is zoned 6.1 Institutional per the Irvine Zoning Code. The site is not designated or zoned for forestland, timberland, or timberland zoned Timberland Production.

4. Would the project result in the loss of forest land or conversion of forest land to non-forest use? (Initial Study Impact II.d.)

Finding: No impact. (Initial Study, p. 15.)

Facts in Support of Finding: The project site is the Concordia University Irvine main campus, which is largely developed with existing buildings, athletic fields, and parking areas, and includes ornamental landscaping. There are no forestlands on the project site or in the surrounding area. Therefore, the project would not result in a loss or conversion of forestland to non-forest use.

5. Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use? (Initial Study Impact II.e.)

Finding: No impact. (Initial Study, p. 15.)

Facts in Support of Finding: The project site and surrounding areas do not support agricultural or forestlands. The proposed Project would not result in the conversion of farmland to nonagricultural use or conversion of forestland to non-forest use.

C. Air Quality

1. Would the project conflict with or obstruct implementation of the applicable air quality plan? (EIR Impact 2.1)

Finding: The proposed project would not conflict with or obstruct the SCAQMD AQMP. The impact would be less than significant, and no mitigation would be required. (DEIR, p. 5.2-22.)

Facts in Support of Finding: The South Coast Air Quality Management District's (SCAQMD's) *CEQA Air Quality Handbook* identifies that a project should be considered to be consistent with the air quality management plan (AQMP) if it furthers one or more policies and does not obstruct other policies. The two principal criteria for conformance to an AQMP are (1) whether the project would result in an increase in the frequency or severity of existing air quality violations, cause or contribute to new violations, or delay timely attainment of air quality standards and (2) whether the project would exceed the assumptions in the AQMP.

The City of Irvine CEQA Manual identifies a three-tiered screening approach for determining if a project is consistent with the AQMP. Based on the established screening criteria, the proposed Campus Master Build-Out Plan Update (Phases 1 through 4) would be consistent with the AQMP. The existing General Plan land use designation for the campus is Institutional Use - "Educational Facilities". The proposed Project is consistent with this land use designation, and the proposed increase in on-campus beds and institutional square footage is already assumed in the City of Irvine General Plan. Additionally, the proposed Project is not regionally significant and would not exceed the SCAQMD localized or regional significance thresholds. Therefore, the proposed Project would not conflict with the adopted 2012 AQMP and jeopardize attainment of state and national ambient air quality standards in the area under the jurisdiction of the SCAQMD. The impact would be less than significant and no mitigation is required.

2. Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation? (EIR Impacts 2.2a and 2.2b)

Finding: Implementation of the proposed Project would generate short-term and long-term air pollutant emissions; however, with adherence to identified PPPs, which are incorporated into the Project, regional and local construction emissions not exceed the established SCAQMD thresholds and would be less than significant. No mitigation is required. (DEIR, pp. 5.2-27, 5.2-30.)

Facts in Support of Finding: The estimated project emissions data assume implementation of PPPs 2-1 and 2-2, which require compliance with SCAQMD Rules related to dust, particulate, and volatile organic compound (VOC) emissions. As shown in Tables 5.2-9 and 5.2-12 of the Draft EIR, emissions during the construction phases would not exceed the SCAQMD's local significance thresholds (LSTs) for the specified pollutants. Therefore, impacts related to localized pollutant concentrations during

construction would be less than significant, and no mitigation is required. As shown in Tables 5.2-10 and 5.2-11 of the Draft EIR, the mass daily construction-related emissions generated during the project construction phase would also not exceed the thresholds of significance recommended by the SCAQMD. Impacts would be less than significant and no mitigation is required.

As shown in Table 5.2-13 of the Draft EIR, the average daily emissions resulting from operation of Phases 1 through 4 of the proposed Project, and any existing structures to remain, would not exceed the SCAQMD thresholds. The net increase in emissions from implementation of proposed development in Phases 1 through 4 would be less than these calculated emissions. Therefore, impacts associated with regional operational emissions from the proposed Project and would be less than significant, and no mitigation is required.

PPPs:

Phases 1 through 4

PPP 2-1 During construction of future development on campus (i.e., proposed project), the Project Applicant and its contractors shall comply with South Coast Air Quality Management District (SCAQMD) Rules 402 and 403, in order to minimize short-term emissions of dust and particulates. SCAQMD Rule 402 requires that air pollutant emissions not be a nuisance off site. SCAQMD Rule 403 requires that fugitive dust be controlled with the best available control measures so that the presence of such dust does not remain visible in the atmosphere beyond the property line of the emission source. This requirement shall be included as notes on the contractor specifications. Table 1 of Rule 403 prescribes the Best Available Control Measures that are applicable to all construction projects and is included in Appendix D. Prior to issuance of each demolition permit or grading permit, whichever occurs first, the Project Applicant shall provide the City of Irvine with a SCAQMD-approved Dust Control Plan and/or other sufficient proof of compliance with Rule 403 as deemed sufficient by the Director of Community Development.

PPP 2-2 Prior to the issuance of each building permit for each project on campus, the Project Applicant shall demonstrate compliance with Rule 1113 (i.e., Super Compliant Paints) to the satisfaction of the Director of the Community Development. Architectural coatings and solvents shall be selected so that the volatile organic compound (VOC) content of the coatings is compliant with SCAQMD Rule 1113. This requirement shall be included as notes on the contractor specifications and architectural building plans.

3. Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)? (EIR Impacts 2.3a and 2.3b)

Finding: With the incorporation of identified PPPs, the mass daily and localized emissions generated by construction-related and operational activities for the proposed Project would not exceed the thresholds of significance recommended by the SCAQMD. Therefore, the proposed Project would not generate a cumulatively considerable net increase of criteria pollutants, and no mitigation is required. (DEIR, pp. 5.2-31, 5.2-32.)

Facts in Support of Finding: The South Coast Air Basin (SoCAB) is in nonattainment for ozone (O_3) (VOC and nitrogen oxides [NOx] are O_3 precursors), particles smaller than or equal to 10 microns in diameter size (PM10) and smaller than or equal to 2.5 microns in diameter (PM2.5). The proposed Project would contribute these criteria pollutants to the area during short-term construction and long-term operational activities. With respect to determining the significance of the proposed Project contribution, the SCAQMD neither recommends quantified analyses of construction and/or operational emissions from multiple development projects nor provides methodologies or thresholds of significance to be used to assess the cumulative emissions generated by multiple cumulative projects. Instead, the SCAQMD recommends that a project's potential contribution to cumulative impacts be assessed utilizing the same significance criteria as those for project specific impacts. Furthermore, the SCAQMD states that if an individual development project generates less-than-significant construction or operational emissions impacts, then the development project would not contribute to a cumulatively considerable increase in emissions for those pollutants for which the SoCAB is in nonattainment.

With incorporation of PPPs 2-1 and 2-2, which require compliance with SCAQMD Rules related to dust, particulate, and VOC emissions, the mass daily and localized construction-related and operational emissions generated under the proposed Project would not exceed any of the thresholds of significance recommended by the SCAQMD. Therefore, the proposed Project would not contribute a cumulatively considerable increase in emissions for the pollutants for which the SoCAB is in nonattainment. The cumulative air quality impacts associated with the proposed Project would be less than significant.

PPPs:

Refer to **PPPs 2-1** and **2-2** provided previously.

4. Would the project expose sensitive receptors to substantial pollutant concentrations? (EIR Impacts 2.4a and 2.4b)

Finding: Phases 1 through 4 would have a less than significant impact related to (1) off-site CO hotspots, (2) exposure of persons to construction and operational phase criteria

pollutants, and (3) exposure to construction-related toxic air contaminant (TACs). Phase 3, which includes construction of the Science, Nursing and Healthcare Building, would incorporate PPP 2-3, and would have a less than significant impact related to exposure of persons TACs generated on site. No mitigation is required. (DEIR, pp. 5.2-33, 5.2-34.)

Facts in Support of Finding: The analysis of Ambient Air Quality for Criteria Pollutants – Local Significance Thresholds for Phases 1 and 2 shows that exposure of on- and off-site receptors to localized construction emissions would be less than significant, and no mitigation is required.

There would be no potential for a carbon monoxide (CO) hotspot or exposure of persons to CO in excess of the established criteria for ambient air quality for CO at the three signalized intersections (Michelson Drive/University Drive [PM peak hour]; Ridgeline Drive/University Drive [AM and PM peak hours]; and Jeffrey Road/Alton Parkway [AM and PM peak hours]) with LOS E or LOS F where the project would increase delay. This impact would be less than significant, and no mitigation is required.

In accordance with the Traffic and Parking Management Plan (TPMP), vehicles entering the campus will be directed to parking lots designated for specific events. Buses entering the campus will be requested to do so via the Turtle Rock Drive gate. Buses remaining on campus will be directed to park in designated bus parking areas. Buses will not be permitted to idle while parked on campus. The Traffic and Parking Management Plan will continue to be enforced through PDF 13-3 (discussed under Transportation/Traffic, below). Therefore, sensitive receptors would not be exposed to substantial ambient pollutant concentrations from nearby idling buses.

With respect to TACs, construction activities associated with the project would result in short-term emissions of diesel PM from the exhaust of off-road, heavy-duty diesel equipment used for demolition, site preparation (e.g., excavation and grading), paving, building construction, and other miscellaneous activities. The dose to which receptors are exposed is the primary factor used to determine health risk. Construction-related emissions of TACs would not expose sensitive receptors to substantial emissions of TACs because (1) the use of off-road, heavy-duty diesel equipment would be short in duration when compared to 70 years; (2) diesel PM has highly dispersive properties; and (3) further reductions in exhaust emissions from improved equipment would occur. Therefore, the proposed Project would have a less than significant impact related to emissions of diesel PM during construction, and no mitigation is required.

None of the new or expanded buildings proposed for the campus under Phases 1 and 2 would provide new facilities that use and release toxic chemicals into the outside air. Therefore, the impact would be less than significant, and no mitigation is required. However, the Science, Nursing and Health Care Building proposed under Phase 3 is a potential new source of toxic chemicals that could be released into the outside air. The potential health risks associated with any release of TACs are dependent upon the types and amounts of chemicals used and actually released into the outside air, which are unknown at this time. However, as required by PPP 2-3, any new sources of TACs would be subject to review and approval by the SCAQMD under Regulation XIV (Toxics and

Other Non-Criteria Pollutants); Rule 201 and Regulation II (requiring a Permit to Construct prior to the installation of any equipment that may cause air contaminants); and Rule 203 (requiring a Permit to Operate prior to the use of any equipment that may cause air contaminants). Compliance with all applicable SCAQMD rules and regulations would ensure that sensitive receptors at the campus and surrounding area would not be exposed to significant health risks. Therefore, the impact would be less than significant, and no mitigation is required.

PPP:

Science, Nursing and Health Care Building (Phase 3)

PPP 2-3 Prior to the issuance of a building permit for the Science, Nursing and Healthcare Building, the Project Applicant shall provide the City of Irvine with the SCAQMD-approved Permit to Construct and Permit to Operate or other sufficient proof of compliance with Regulation XIV and Rules 1401, 201, and 203. New sources of toxic chemicals that may be emitted into the outside air at the campus shall comply with SCAQMD Rule 1401 and Regulation XIV (Toxics and Other Non-Criteria Pollutants) along with Rule 201 and Regulation II (requiring a Permit to Construct prior to the installation of any equipment that may cause air contaminants) as well as Rule 203 (requiring a Permit to Operate prior to the use of any equipment that may cause air contaminants). These rules and regulations are required unless the equipment or aspects of the project are exempt under Rule 219, which identifies those equipment, processes, or operations that do not require permits.

5. Would construction and/or operation of the project create objectionable odors affecting a substantial number of people? (Initial Study Impact III.e.)

Finding: Less than significant. (Initial Study, p. 17.)

Facts in Support of Finding: Potential construction odors include the on-site construction equipment's diesel exhaust and roofing, painting, and paving operations. There would be situations where construction activity odors would be noticed by the existing population in the immediate vicinity. These temporary odors are typical of urbanized environments and would not be objectionable. Additionally, these odors would dissipate rapidly from the source with an increase in distance and would be subject to construction and air quality regulations in order to minimize engine emissions. The proposed Project would not create any uses that are different than uses that currently exist, so no new odor sources would be created. Existing and potential odors, if any, associated with on campus operations, including instructional laboratory facilities, are localized and do not permeate to off-campus locations. The proposed Project would have a less than significant impact related to objectionable odors.

D. Biological Resources

1. Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites? (EIR Impact 3.4)

Finding: The proposed Project may impact active nests of migratory birds and/or raptors. However, impacts would be less than significant with adherence to requirements outlined in PPPs 3-3 and 3-4. No mitigation is required. (DEIR, p. 5.3-46.)

Facts in Support of Finding: The survey area is located within a largely urbanized landscape that typically constrains wildlife movement; however, there is open space in the immediate vicinity of the survey area, including French Hill to the south and in Mason Regional Park and Sand Canyon Wash to the north. Sand Canyon Wash has been designated as Non-Reserve Open Space by the NCCP/HCP to the north of the survey area and as a Special Linkage to the east. Sand Canyon Wash would not be directly impacted by the proposed Project. Further, under the NCCP/HCP IA, the Reserve design incorporated sufficient connectivity for purposes of wildlife movement. Accordingly, impacts to regional movement are covered within approved development areas (such as the campus) designated by the NCCP/HCP and therefore do not require further mitigation.

Compliance with PPP 3-3, which addresses the requirements of the Migratory Bird Treaty Act, including the time frames that construction could occur, would ensure that potential impacts are less than significant. Compliance with PPP 3-4, which addresses the time frames that construction could occur to avoid nesting raptors and includes a preconstruction survey for active nests, would ensure that potential impacts are less than significant.

Traffic mitigation and roadway improvements at Ridgeline Drive and the Concordia East roadway would occur where the Special Linkage east of Ridgeline Drive connects to Non-Reserve Open Space west of Ridgeline Drive. This roadway work would be confined to an existing developed area or bare ground and would not impact vegetation. Given the existing levels of traffic along this roadway, these impacts are not expected to present a barrier to wildlife movement or affect nesting birds or raptors.

PPPs:

Phases 1 through 4

PPP 3-3 All construction activities shall comply with the federal Migratory Bird Treaty Act of 1918 (MBTA); the Golden Eagle Protection Act; and *California Fish and Game Code* Sections 3503, 3511 and 3513. Compliance with these regulations shall be accomplished by completing the following:

- Construction activities involving vegetation removal shall be conducted between September 1 and February 15, to the extent feasible. If construction occurs inside the peak nesting season (between February 15 and August 31), a preconstruction survey (or possibly multiple surveys) by a qualified Biologist shall be conducted within 72 hours prior to construction activities to identify any active nesting locations. If the Biologist does not find any active nests, the construction work shall be allowed to proceed. The Biologist conducting the clearance survey shall document a negative survey with a report indicating that no impacts to active avian nests shall occur.
- If the Biologist finds an active nest and determines that the nest may be impacted, the Biologist shall delineate an appropriate buffer zone around the nest. The size of the buffer shall be determined by the Biologist, in consultation with CDFW, and shall be based on the nesting species, its sensitivity to disturbance, and expected types of disturbance. These buffers are typically 300 feet from the nests of non-listed species and 500 feet from the nests of listed species. Any active nests observed during the survey shall be mapped on an aerial photograph. Only construction activities (if any) that have been approved by the Biologist shall take place within the buffer zone until the nest is vacated. The Biologist shall serve as a Construction Monitor when construction activities take place near active nest areas to ensure that no inadvertent impacts on these nests occur. Results of the preconstruction survey and any subsequent monitoring shall be provided to the Project Applicant, CDFW, and the City. The monitoring report shall summarize the results of the nest monitoring, describe construction restrictions currently in place, and confirm that construction activities can proceed within the buffer area without jeopardizing the survival of the young birds. Construction within the designated buffer area shall not proceed until written authorization is received by the Project Applicant from CDFW.

PPP 3-4 All construction activities shall comply with Sections 3503, 3503.5, 3511, and 3513 of the California Fish and Game Code, which protect active nests of any raptor species (i.e., white-tailed kite), including common raptor species. Compliance with these codes shall be accomplished by completing the following:

- If vegetation is to be cleared during the potential raptor nesting season (February 1 to August 31), all suitable habitat within 500 feet of the project site shall be thoroughly surveyed for the

presence of nesting raptors by a qualified Biologist within 72 hours prior to clearing. If the Biologist does not find any active nests, the construction work shall be allowed to proceed. The Biologist conducting the clearance survey shall document a negative survey with a report indicating that no impacts to active avian nests shall occur.

- If any active nests are detected, the area shall be flagged or fenced and mapped on the construction plans with a buffer. The size of the buffer shall be determined by the Biologist, in consultation with CDFW, and shall be based on the nesting species, its sensitivity to disturbance, and expected types of disturbance. These buffers are typically 500 feet from the nests of raptors. The buffer area shall be avoided until the nesting cycle is complete or until it is determined that the nest has failed. Results of the preconstruction survey and any subsequent monitoring shall be provided to the Project Applicant, CDFW, and the City. The monitoring report shall summarize the results of the nest monitoring, describe construction restrictions currently in place, and confirm that construction activities can proceed within the buffer area without jeopardizing the survival of the young birds. Construction within the designated buffer area shall not proceed until authorization is received by the Project Applicant from CDFW.

2. Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? (EIR Impact 3.6)

Finding: The proposed Project may impact urban forestry resources. Adherence to applicable requirements would ensure no conflict with the Urban Forestry Ordinance, and no impact would occur. No mitigation is required. (DEIR, p. 5.3-47.)

Facts in Support of Finding: In 1994, the City of Irvine enacted the Urban Forestry Ordinance (*Irvine Municipal Code*, Section 5-7-401 et al.) to protect and enhance the existing urban forest resources. An unspecified number of trees may be removed with implementation of the proposed Project. In addition, during implementation of Phase 1 two gum trees (*Eucalyptus* spp.) in the median of Turtle Rock Drive are expected to be removed as part of mitigation for traffic impacts at Turtle Rock Drive and the Concordia West roadway. Tree replacement through a tree permit application would be required for trees removed in the median of Turtle Rock Drive to ensure minimum landscaping requirements are met. Implementation of PPP 3-5 shall ensure that the proposed Project does not conflict with a local ordinance protecting urban forestry resources. Adherence to applicable requirements would ensure no conflict with the Urban Forestry Ordinance, and no impact would occur. It should also be noted that the proposed Project includes a landscape plan, which would involve the planting of various tree species on campus

(refer to the landscape plan provided in Exhibit 3-23 in Section 3.0, Project Description, of the Draft EIR).

PPP:

Phases 1 through 4

PPP 3-5 Prior to removal of any significant trees on public or private land as part of the proposed project, the Project Applicant shall obtain a Tree Removal Permit, pursuant to Sections 5-7-407 and 5-7-410 (Urban Forestry) of the City's Municipal Code and associated Urban Forestry Guideline Manual. This permit may require the replacement of removed trees to ensure compliance with Chapter 4, Urban Forestry, of Municipal Code.

3. Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan? (EIR Impact 3.5).

Finding: The proposed project would not conflict with the provisions of the NCCP/HCP, and no impact would occur. (DEIR, p. 5.3-46.)

Facts in Support of Finding: The Concordia University campus is within the planning area covered by the Central-Coastal Natural Community Conservation Plan (NCCP)/Habitat Conservation Plan (HCP). The NCCP/HCP identifies that the campus is in a development area of the NCCP/HCP. However, the survey area extends into areas designated as Non-Reserve Open Space (i.e., Mason Regional Park, including Sand Canyon Wash) and Existing Use (i.e., French Hill). The City is a participant in the NCCP/HCP and the Implementing Agreement (IA), and the proposed Campus Master Build-Out Plan (Phases 1 through 4) including proposed fuel modification activities and off-campus roadway/intersection improvements would be implemented in compliance with all applicable NCCP/HCP and associated IA requirements, including completion of required surveys for sensitive species. In addition, the analysis of impacts on species and habitats covered by the NCCP/HCP and recommended measures are consistent with the requirements of the NCCP/HCP. The proposed Project would not impact a Reserve area, Special Linkage area, Non-Reserve Open Space area, or a Transportation Corridor Wildlife Crossing. Therefore, the proposed Project would not conflict with the provisions of the NCCP/HCP, and no mitigation would be required.

E. Cultural Resources

1. Would the project disturb any human remains, including those interred outside of dedicated cemeteries? (EIR Impacts 4.4a and 4.4b).

Finding: There are no known human remains within the boundaries of the campus, including areas proposed for development. While not anticipated, buried and undiscovered archaeological remains, including human remains, may be present in

subsurface soils. With incorporation of PPP 4-3 into the proposed Project this impact is less than significant. No mitigation is required. (DEIR, p. 5.4-12.)

Facts in Support of Finding: There are no known human remains within the boundaries of the campus, including areas proposed for development under Phases 1through 4. Therefore, construction activities would not disturb known human remains. However, as described above, buried and undiscovered archaeological remains, including human remains, may be present in subsurface soils. Implementation of PPP 4-3 provides the measures necessary to appropriately address such a situation by stopping further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until the Orange County Coroner is contacted. The Orange County Coroner would, in turn, contact the appropriate persons or groups with the authority to determine treatment or disposing of the human remains as provided in Section 5097.98 of the Public Resources Code. As such, the proposed Project's potential to impact human remains, if any, would be less than significant.

PPP:

Phases 1 through 4

PPP 4-3 During ground disturbance activities, in the event of the accidental discovery or recognition of human remains in any location other than a dedicated cemetery, the steps listed below shall be taken:

a. There shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until the Orange County Coroner is contacted to determine if the remains are prehistoric and that no investigation of the cause of death is required. If the Coroner determines the remains to be Native American, then s/he shall contact the Native American Heritage Commission (NAHC) within 24 hours, and the NAHC shall identify the person or persons it believes to be the most likely descendant from the deceased Native American. The most likely descendant may make recommendations to the landowner or the person responsible for the excavation work, for means of treating or disposing of the human remains and any associated grave goods with appropriate dignity, as provided in Section 5097.98 of the PRC, or

b. Where the following conditions occur, the landowner or his/her authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity either in accordance with the recommendations of the most likely descendant or on the property in a location not subject to further subsurface disturbance:

    1. The NAHC is unable to identify a most likely descendant or the most likely descendant failed to make a recommendation within 48 hours after being granted access to the site;

2. The identified descendant fails to make a recommendation; or
3. The landowner or his/her authorized representative rejects the recommendation of the descendant, and mediation by the NAHC fails to provide measures acceptable to the landowner (State CEQA Guidelines, Section 15064.5[e]).

F. Geology and Soils

1. Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Initial Study Impact VI.a.)

Finding: No Impact. (Initial Study, pp. 22-23.)

Facts in Support of Finding: There are no major or active faults mapped at the site that could result in surface rupture, nor is the site located in an Alquist-Priolo Fault Rupture Hazard Zone. There would be no impact from risk of loss, injury, or death involving fault rupture.

2. Would the project result in substantial soil erosion or the loss of topsoil? (Initial Study Impact VI.b.)

Finding: Less than significant. (Initial Study, p. 23.)

Facts in Support of Finding: The project site is predominantly developed; however, there are some undeveloped pervious areas. Previous grading activities and placement of engineered fill disturbed the topsoil (topsoil is the layer of the soil containing nutrients and is particularly valuable for agricultural operations). Existing topsoil would be disturbed with implementation of the proposed Project; however, since no agricultural operations exist or are planned for the site, disturbance of the site's topsoil layer is considered less than significant. During construction activities, soil would be exposed and there would be an increased potential for soil erosion compared to the existing conditions. Additionally, during a storm event, soil erosion could occur at an accelerated rate. Project site grading, the storm drain system, and landscape cover would be designed to City standards to minimize long-term erosion potential. Additionally, the amount of erosion would decrease under developed conditions with an increase in impervious surface area and landscape coverage. Compliance with State-mandated requirements for erosion control during construction would ensure that potential impacts related to erosion are less than significant.

3. Would the project have soils incapable of adequately supporting the use of septic tanks of alternative waste water disposal systems where sewers are not available for the disposal of waste water? (Initial Study Impact VI.e.)

Finding: No impact. (Initial Study, p. 24.)

Facts in Support of Finding: The proposed Project would connect with the municipal sewer system and would not involve the use of septic systems or alternative wastewater disposal systems. Therefore, no impacts would occur.

G. Greenhouse Gas Emissions

1. Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? (EIR Impact 6.1)

Finding: The proposed Project would generate an increase of GHG emissions; however, the net increase would not exceed the thresholds of significance. The impact of the proposed Project would be less than significant. PPPs 6-2 and 6-3 are incorporated into the proposed Project and further reduce GHG emissions. (DEIR, p. 5.6-16.)

Facts in Support of Finding: As shown in Table 5.6-3 in the Draft EIR, the estimated net increase in annual emissions with implementation of Phases 1 through 4 would be 428 metric tons of carbon dioxide per year ($MTCO_2e$/year), well below the draft 3,000 $MTCO_2e$/year screening threshold for non-industrial land use development projects developed by the SCAQMD, and used as the significance threshold to evaluate Project impacts. The majority of the GHG emissions from the proposed Project would be generated from energy and mobile sources. The new buildings proposed to be developed on campus would be more energy efficient than the existing buildings, including the buildings to be demolished. The 8 new buildings represent approximately 46 percent of the anticipated institutional development on campus (321,220 sf) and, along with the new residence hall, would incorporate energy-efficient design in compliance with Title 24 Energy Efficiency Standards and the CALGreen Code (refer to PPPs 6-2 and 6-3). Additionally, in an effort to reduce campus energy use and lessen the environmental impact of campus buildings, Concordia University would incorporate other green building strategies. GHG emissions from the Project would be less than significant.

It is accepted as very unlikely that any individual development project would have GHG emissions of a magnitude to directly impact global climate change; therefore, any impact would be considered on a cumulative basis. Therefore, based on the analysis above, the proposed Project would not result in a cumulative impact related to GHG emissions.

PPPs:

Phases 1 through 4

PPP 6-1 Prior to the issuance of demolition and/or building permits, whichever occurs first, the Project Applicant shall submit a Waste Management Plan

for review and approval by the Director of Public Works demonstrating compliance with the requirements of Title 6, Division 7 (Refuse) of the *City of Irvine Municipal Code* relating to recycling and diversion of construction and demolition (C&D) debris as applicable. Over the course of demolition and construction, the Project Applicant shall ensure compliance with all code requirements related to the use of City-authorized waste haulers.

PPP 6-2 Prior to the issuance of each building permit, the Project Applicant shall be required to demonstrate that buildings have been designed in accordance with the applicable Title 24 Energy Efficiency Standards for Residential and Nonresidential Buildings (24 CCR 6).

PPP 6-3 Prior to the issuance of each building permit, the Project Applicant shall be required to demonstrate that the project meets the applicable California Green Building Standards (24 CCR 11).

2. Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases? (EIR Impact 6.2)

Finding: The proposed Project would generate an increase of GHG emissions, but it would not conflict with applicable plans, policies, or regulations for the purpose of reducing the emissions of GHGs. (DEIR, p. 5.6-18.)

Facts in Support of Finding: Statewide plans and regulations such as GHG emissions standards for vehicles are being implemented at the statewide level, and compliance at the master plan or project level is not addressed. Therefore, the proposed Project does not conflict with those plans and regulations.

Senate Bill (SB) 375 is being addressed at the State and regional level, and the principles of SB 375 are incorporated in the adopted Southern California Association of Governments (SCAG) 2016–2040 Regional Transportation Plan /Sustainable Communities Strategy (RTP/SCS). The proposed Project is consistent with the compact and efficient land use development goals of SB 375 and the RTP/SCS and would not conflict with SB 375 or the policies proposed by SCAG.

The principal overall State plan and policy adopted for the purpose of reducing GHG emissions is AB 32. Strategies and measures have been implemented at the State level with the Title 24 Energy Efficient Standards and the CalGreen Code and at the local level with the City's C&D Recycling and Reuse Ordinance and its adoption of the CalGreen Code and Title 24 Energy Efficiency Standards (refer to PPPs 6-1 and 6-3 above). The proposed Project consistency with the SCAQMD's service population (SP) efficiency targets that were established based on the goal of AB 32 to reduce statewide GHG emissions to 1990 levels by 2020 was also evaluated. The proposed Campus Master Build-Out Plan Update would increase the campus population by 292 students and 71 faculty/staff. Dividing the net increase of 428 $MTCO_2e$ by the net service population

increase of 363 students/faculty/staff results in an efficiency of 1.18 $MTCO_2e$ of GHGs per service population member. This would be less than the SCAQMD's 2035 draft 2035 threshold of 3.0 $MTCO_2e$ per SP. Therefore, the proposed Project would not conflict with the goals of AB 32. Because the project would reduce emissions consistent with AB 32 and would continue to incorporate additional emissions-reducing measures that may be required by future laws or policies, it would not impede the achievement of Executive Order (EO) S-3-05's 2050 goals, EO B-30-15's 2030 goals, or other interim goals that may be established.

PPPs:

Refer to PPP 6-1 and 6-2 presented previously.

H. Hazards and Hazardous Materials

1. Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? (Initial Study Impact VIII.a.)

Finding: Less than significant impact. (Initial Study, p. 25.)

Facts in Support of Finding: Construction activities associated with the proposed Project would involve the use of chemical substances such as solvents, paints, fuel for equipment, and other potentially hazardous materials. These materials are common to typical construction activities and do not pose a significant hazard to the public or the environment. Long-term operations at Concordia University are not anticipated to involve substantial amounts of hazardous substances. Future development of the proposed uses, as allowed by the proposed Campus Master Build-Out Plan Update, would be consistent with existing campus development and typical hazardous substances that are already in use. Standard cleaning products and pesticides and/or herbicides would be used in association with standard landscaping and maintenance practices. Additionally, hazardous substances are used in laboratories and buildings on campus. Substances in the hazardous material category of Compressed Gas (i.e. liquid helium storage, liquid nitrogen, high pressure nitrogen gas cylinder, oxygen, and refrigerated liquid carbon dioxide) are used in Founders Hall and the Student Union; Class III-B Combustible Liquid (i.e. miscellaneous oils) are used in Library Arts, CU Arena, Student Union, and Grimm Hall; Class II (1.1 II) Combustible Liquid (i.e. diesel fuel) is found between Founders Hall and Grimm Hall, and in the Facilities Maintenance Building; and Corrosives (sulfuric acid) is stored in the Facilities Maintenance Building. However, the amount of materials that would be handled at any one time is relatively small, would not be any greater than what is currently used for on campus operations, and would not create a significant hazard to the public or environment. The proposed Project would not create a significant public hazard through the routine transport, use, or disposal of hazardous materials during construction or operation of the proposed Project.

2. Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? (EIR Impact 7.2a, 7.2b.)

Finding: Less than significant impact. (DEIR, p. 5.7-14.)

Facts in Support of Finding: There are no existing or proposed campus facilities within a ¼ mile of Turtle Rock Elementary School, and there are limited existing and proposed on campus uses within a ¼ mile of Turtle Rock Preschool. With respect to proposed development in Phases 1 and 2, only the proposed Music, Worship and Theology Building; expanded Parking Lot A; and certain roadway and bicycle/pedestrian path improvements, and possibly athletic field improvements would be within a ¼ mile of the preschool. Phases 3 and 4 would involve the construction of the proposed tennis court deck over Parking Lot A, which would be located within a ¼ mile of Turtle Rock Preschool. None of these project components would generate hazardous emissions or involve the handling of hazardous materials. Additionally, there would be no hazardous materials used that are not currently used on campus. A less than significant impact would result and no mitigation is required.

3. Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code section 65962.5 and, as a result, would it create a significant hazard to the public or the environment? (Initial Study Impact VIII.d.)

Finding: Less than significant impact. (Initial Study, p. 26.)

Facts in Support of Finding: Based on the information provided in the EDR Report (Appendix G to the Draft EIR) and information from Concordia University, the Hazardous Waste Information System (HAZNET) and California Hazardous Materials Incident Report System (CHMIRS) database listings on the project site are closed with no further action required. There are no surrounding property database listings that would impact the project site. The previous incidents at the project site would not create a significant hazard to the public or the environment. Therefore, no significant impact would occur from implementation of the proposed Project.

4. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport of public use airport, would the project result in a safety hazard for people residing or working in the project area? (Initial Study Impact VIII.e.)

Finding: No Impact. (Initial Study p. 27.)

Facts In Support of Finding: The project site is not located within two miles of a public airport or public use airport. The closest airport to the City of Irvine is the John Wayne Airport, which is approximately 3.2 miles northwest of the project site. The project site is not within a designated Airport Impact Zone or within a height restriction zone.

5. For a project located within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area? (Initial Study Impact VIII.f.)

Finding: No Impact. (Initial Study p. 27.)

Facts In Support of Finding: The project site is not located within the vicinity of a private airstrip. As a result, future site development would not present a safety hazard to existing or future residents or people working in the area due to airport operations.

6. Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? (Initial Study Impact VIII.g.)

Finding: Less than significant impact. (Initial Study p. 27.)

Facts In Support of Finding: Implementation of the proposed Campus Master Build-Out Plan Update would not interfere with the implementation of the City's Emergency Management Plan or the Campus Emergency Quick Plan. During project construction or operation and consistent with the existing conditions, should an emergency occur on the project site that would necessitate evacuation, the internal street system would provide access and one lane would always remain open to provide access to the outlying arterial roadway system.

The Initial Study's determination that impacts relating to evacuation plans were further discussed in the Draft EIR in Section 5.13 (Transportation/Traffic), specifically Impact 13.4 (would the project result in inadequate emergency access), as well as further clarified in the Final EIR, as part of the responses to comments received by the City on the Draft EIR. (See Final EIR, Responses to Comments, Topical Response 5.) Access to the campus, including emergency access, is provided via two gated entries at the intersections of Ridgeline Drive/Concordia East roadway and Turtle Rock Drive/Concordia West roadway. The primary route of travel within the campus is the Concordia East/West roadway, a two-lane private roadway that is owned by the University. Residents and guests of the Concordia East and Concordia West communities use Concordia East/West roadway subject to the provisions of executed agreements between the University and the respective Community Associations (further discussed in Section 5.9, Land Use and Planning, of the Draft EIR). As reported in the TIA provided in Appendix J of the Draft EIR, approximately 77 percent of traffic uses the east gate. Evacuation routes at the east gate and west gate have at least two different directions of travel from these campus entrances. Additionally, the network of internal roads and pathways on campus, which provide access to various campus facilities, offer additional evacuation routes within a relative short distance from the project entries.

Notably, the public bicycle/pedestrian pathway that extends through campus connecting the Concordia West roadway to Dorm Road also serves as an emergency access and meets OCFA's weight requirements for emergency access roads (see OCFA-approved Fire Master Plan included in Attachment A to the Final EIR). This facility (under existing

and future conditions) is constructed to allow for vehicular movement in both directions and in the event of an emergency is accessible to emergency vehicles as well as students, faculty, staff, etc. There are existing gates at the east and west ends of this facility, which are locked to avoid non-emergency use during typical operations. Emergency personnel as well as campus personnel have the ability to unlock these gates in the event of an emergency. There is also a fire access that connects the southern end of Dorm Road on campus with the Blessing roadway cul-de-sac in the Concordia East residential community.

With implementation of the project, the campus entries at Ridgeline Drive/Concordia East roadway and Turtle Rock Drive/Concordia West roadway would continue to provide vehicular access to the campus, along the Concordia East/West roadway, and the network of internal roadways to the campus. Additionally, [prior to operation of Phase 1, on-campus roadway improvements along Concordia East/West roadways would be implemented and provisions for the potential installation of a traffic signal at the intersection of Ridgeline Drive/Concordia East roadway would be in place through an agreement between the City and the Project Applicant (see PDF 13-2). The signal improvements would include installation of an optical emergency vehicle preemption device. Additionally, access along the bike path would be maintained at all times during construction and operation. These project design features would improve emergency access on campus by improving all transportation access and service, maintaining multiple access alternatives, even during construction, and allowing faster and more efficient responses from emergency vehicles. Additionally, prior to the issuance of the first building permit, the Project Applicant is required to prepare an Emergency Access Plan (refer to PPP 13-1 of the Draft EIR). Therefore, impacts to evacuation plans would be less than significant.

7. Would the project expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands? (EIR Impacts 7.3a and 7.3b)

Finding: The northern, eastern, and southern parts of the campus and certain surrounding areas are located in a very high fire hazard safety zone (VHFHSZ) as identified on CalFire Hazard maps (refer to Exhibit 5.7-1 in the Draft EIR). With implementation of the approved conceptual Fuel Modification Plan (PDF 7-1), which is included in Attachment A to the Final EIR, the proposed Project would not expose people or structures to a significant risk of loss, injury, or death involving wildland fires. This impact is less than significant. (DEIR pp. 5.7-16, -17.)

Facts in Support of Finding: As shown on Exhibit 3-26 of the Draft EIR, under Phases 1 and 2, the Keck Astronomy Center Building would require fuel modification. With respect to other uses associated with Phases 1 and 2, the approved Conceptual Fuel Modification Plan identifies Special Maintenance Areas (SMAs) around the proposed Music, Worship and Theology Building. An SMA is an area that has maintenance requirements to reduce the chances of ignition from wildfire. Phases 3 and 4 involve three additional buildings along the northern boundary of the campus that would require

fuel modification in addition to the Keck Astronomy Center (the Science, Nursing and Healthcare Building, and Grimm Student Center Addition in Phase 3, and the Arts, Alumni, and Advancement Building in Phase 4).

It should also be noted that although not required to address fuel modification requirements for the proposed Project, Exhibit 3-27 in the Draft EIR, identifies additional recommendations for existing non-conforming areas that would further assist in providing fuel modification to the campus. With implementation of the approved Fuel Modification Plan (PDF 7-1), and compliance with applicable building and Fire Codes, the proposed Project would not expose people or structures to a significant risk of loss, injury, or death involving wildland fires. This impact is less than significant.

PDF:

Phases 1 through 4

PDF 7-1 Prior to the issuance of temporary or final certificate of occupancy permits for each building on campus, fuel modification requirements identified in the approved Fuel Modification Plan shall be installed and inspected to ensure they are in conformance with the approved Fuel Modification Plan, to the satisfaction of OCFA. A Conceptual Fuel Modification Plan has been prepared for the proposed project (refer to Exhibits 3-26 and 3-27 and Appendix G of this Draft EIR) and shall be approved by OCFA prior to issuance of a grading permit.

I. Hydrology and Water Quality

1. Would the project violate any water quality standards or waste discharge requirements? (EIR Impacts 8.1a and 8.1b)

2. Would the project otherwise substantially degrade water quality? (EIR Impacts 8.2a and 8.2b)

Finding: Development of the proposed Project would increase pollutant levels in storm water runoff due to an increase in development and an increase in impervious surface area and could potentially result in hydromodification at Sand Canyon Wash. With incorporation of PPPs 8-1 and 8-2, and PDF 8-1 impacts would be less than significant. No mitigation is required. (DEIR, pp. 5.8-16, -17.)

Facts in Support of Finding: The potential impacts of construction activities, construction materials, and non-storm water runoff on water quality during the construction phase of the proposed Project would primarily be due to sediment (total suspended solids [TSS] and turbidity) and certain non-sediment-related pollutants. The construction-phase BMPs would ensure effective control of not only sediment discharge, but also of pollutants associated with sediments (e.g., nutrients, heavy metals, and certain pesticides, including legacy pesticides). In addition, compliance with Best Available Technology Economically Achievable and Best Conventional Pollutant Control Technology (BAT/BCT) requires that BMPs used to control construction water quality

impacts are updated over time as new water quality control technologies are developed and become available for use. Therefore, compliance with the BAT/BCT performance standard ensures mitigation of construction water quality impacts over time. Compliance with the Construction General Permit, including filing an NOI, which includes preparation of a Storm Water Pollution Prevention Plan (SWPPP) (PPP 8-1) by a Qualified SWPPP Developer, would ensure impacts to receiving waters from non-storm water flows during construction are less than significant. No mitigation is required.

Development of the proposed Project is expected to be a source of various urban pollutants entering the storm water. Pollutants of concern for the campus include pollutants that coincide with pollutants on the 303(d) list for receiving waters and include sediments, nutrients, pesticides, bacteria, and heavy metals. Additionally, the proposed Project qualifies as a Priority Project under the 2003 DAMP and the municipal separate storm sewer system (MS4) Permit requires that hydrologic conditions of concerns (HCOCs) associated with Priority Projects be identified; an HCOC occurs when there is a potential for increased runoff that can cause significant impacts on downstream channels and aquatic habitats (hydromodification impact). As identified in Table 5.8-4 in the Draft EIR, implementation of biotreatment BMPs and bioretention areas with underdrains would treat the entire design capture volume or the amount of storm water runoff from a design storm for the proposed Project. No further water quality treatment, including treatment-control BMPs, are required for the proposed Project.

The final BMP system for each project on campus with implementation of the proposed Campus Master Build-Out Plan Update (Phases 1 through 4) would be sized and the outlet structures designed to ensure that the post-development storm water runoff flows comply with the applicable requirements. This would occur during final design for each development project and through preparation of final WQMPs for each development project (refer to PPP 8-2). Based on the proposed BMPs incorporated into the project as required by existing regulations (as identified in PDF 8-1) and requirements for preparation of project-specific Final WQMPs (as identified in PPP 8-2), the project's impacts related to storm water quality and hydromodification would be less than significant.

PPPs and PDF:

Phases 1 through 4

PPP 8-1 Prior to the issuance of preliminary or precise grading permits for a project that will result in soil disturbance of one or more acres of land, the Project Applicant shall provide the Chief Building Official with evidence that a Notice of Intent (NOI) has been filed with the State Water Resources Control Board. Such evidence shall consist of a copy of the NOI stamped by the State Water Resources Control Board or the Regional Water Quality Control Board or a letter from either agency stating that the NOI has been filed. (*City of Irvine Standard Condition 2.12*)

PPP 8-2 Prior to the issuance of preliminary or precise grading permits, the applicant shall submit to the Chief Building Official for review and approval, a Water Quality Management Plan (WQMP). The WQMP shall identify the Best Management Practices (BMPs) that will be used on the site to control predictable pollutant runoff. (*City of Irvine Standard Condition 2.13)*

PDF 8-1 Prior to issuance of each grading permit, the Community Development Department shall verify that required Low Impact Development (LID) structural and non-structural Best Management Practices (BMPs) required by project-specific Final Water Quality Management Plans (WQMPs) are incorporated into the grading plans and contractor specifications. The Municipal Separate Storm Sewer System (MS4) permit and Drainage Area Management Plan/Local Implementation Plan (DAMP/LIP) require the consideration and incorporation of site design practices to reduce runoff and to promote a hydrologically functional project that mimics the natural hydrologic regime to the extent feasible. The proposed project incorporates installation of LID structural BMPs (refer to Exhibit 3-32, Conceptual WQMP BMP Plan) and implementation of non-structural BMPs as identified in the preliminary WQMP included in Appendix H of this Draft EIR. The following BMPs are included as part of the proposed project.

LID BMPs

- Bio-retention system with underdrains
- Stormwater planter boxes with underdrains
- Vegetated swales
- Vegetated filter strips
- Proprietary bio-treatment (modular wetlands devices)

Non-Structural Source-Control BMPs

- Property owner, tenant, and occupant education
- Activity restrictions
- Common area landscape management
- BMP maintenance
- Common area litter control
- Employee training
- Housekeeping of loading docks
- Common area catch basin inspection
- Street sweeping

Structural Source-Control BMPs

- Storm drain system stenciling and signage

- Trash and waste storage areas to reduce pollution introduction
- Efficient irrigation systems and landscape design, water conservation, smart controllers, and source control
- Slope and channel protection and energy dissipation
- Incorporation of requirements applicable to individual priority project categories (from Santa Ana Regional Water Quality Control Board NPDES Permit)
- Loading dock areas
- Hillside landscaping
- Wash water control for food preparation areas

3. Would the project substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level? (Initial Study Impact IX.b.)

Finding: Less than significant impact. (Initial Study, p. 28.)

Facts in Support of Finding: The project site is located within the Irvine Subbasin of the Orange County Groundwater Basin, and groundwater is expected to be at depths of 30 feet or deeper. The proposed Project would not involve direct or indirect withdrawals of groundwater. Domestic water service would be provided by the Irvine Ranch Water District. Although additional development on the project site would reduce the pervious areas available for natural recharge (due to the construction of buildings, sidewalks, or other structures), the area of the project site to be developed is small (approximately 34.6 acres) from a regional recharge perspective, and the project site does not accept run-on, only direct precipitation, providing little overall opportunity for recharge under existing conditions. The Orange County Water District is responsible for managing the groundwater basin and has established recharge basins in the Cities of Anaheim and Orange. There are no recharge basins in the City of Irvine. Therefore, the proposed Project would not deplete groundwater supplies or interfere substantially with groundwater recharge.

4. Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site? (EIR Impacts 8.3a and 8.3b)

5. Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site? (EIR Impacts 8.4a and 8.4b)

Finding: Implementation of the proposed Project would result in minor changes to the existing drainage patterns on campus. However, with adherence to construction-related erosion control requirements (refer to PPP 8-1) and implementation of LID BMPs

(refer to PDF 8-1), the potential for increased erosion and sedimentation and flooding on and off campus would be less than significant. No mitigation is required. (DEIR, pp. 5.8-19, -20.)

Facts in Support of Finding: There are two drainages on campus, the East Outfall which discharges to an existing drainage that has a continuous hydrologic connection to Sand Canyon Wash and an ephemeral ditch that carries storm water from the upland areas, including Parking Lot E in the northeast portion of the campus. While proposed retaining walls and new structures may modify the drainage tributaries within the campus, the larger tributaries (East and West watersheds) would continue to drain to the two 48-inch storm drain lines under the Concordia East and Concordia West roadways. There would be no direct impacts to these drainages as a result of implementation of the proposed Project.

With implementation of proposed development, the amount of impervious surface would increase. The proposed LID BMPs (refer to PDF 8-1), including on-site modular wetlands systems and bioretention areas with underdrains, would be designed to capture and treat the entire design capture volume (DCV) for the project site and ensure that the storm water volumes discharging to the off-site storm drain system would not exceed existing conditions. Implementation of the LID BMPs would prevent the potential for on-site flooding through the capture and detention of storm water runoff and would also prevent off-site flooding because there would be no increase to the discharge volumes entering the off-site storm drain system or the tributary water bodies.

The potential for increase in erosion and sedimentation with implementation of the proposed Project would also be less than significant during construction and operation. As identified above, the proposed Project would be required to comply with the Construction General Permit (refer to PPP 8-1), which would include implementation of an SWPPP and associated erosion- and sediment-control BMPs.

PPP and PDF:

Refer to PPP 8-1 and PDF 8-1 presented previously.

6. Would the project require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? (EIR Impacts 8.5a and 8.5b).

7. Would the project create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff? (EIR Impacts 8.6a and 8.6b).

Finding: Less than significant impact. (DEIR, p. 5.8-21.)

Facts in Support of Finding: The proposed Project would include area drains, catch basins, and new storm drain lines that would flow to the same discharge points as existing

conditions. Low Impact Development (LID) Best Management Practices (BMPs) would be implemented for individual project components to regulate the amount and volume of storm water runoff and to treat the water quality before it enters the regional storm drain system. The final sizing and design of on-site facilities would occur during final building design; however, the conceptual storm drain plan and water quality treatment BMP plan have been developed to provide sufficient capacity in proposed on campus storm drain lines to ensure that required water quality treatment is accomplished and to ensure the increase in storm water runoff from the proposed Project would not exceed the capacity of the existing local storm drains serving the site. Construction activities associated with the proposed on-site storm drain facilities would be within the physical impact area identified for the proposed Project, as shown on Exhibit 3-35, Construction Impact Area, of the Draft EIR, and evaluated throughout the Draft EIR. No additional impacts associated with construction of on-site storm drains or connections to existing facilities would occur. Impacts would be less than significant, and no mitigation is required.

8. Would the project place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary of Flood Insurance Rate Map or other flood hazard delineation map? (Initial Study Impact IX.g.)

Finding: No impact. (Initial Study, p. 29.)

Facts in Support of Finding: Based on review of the Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Maps (FIRM), and Figure J-3, Flood Hazard Areas, of the City of Irvine General Plan's Safety Element, the project site is outside the 100-year floodplain. Therefore, no housing would be placed in the 100-year flood hazard area.

9. Would the project place within a 100 year flood hazard area structures which would impede or redirect flood flows? (Initial Study Impact IX.h.)

Finding: No impact. (Initial Study, p. 30.)

Facts in Support of Finding: Based on review of the Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Maps (FIRM), and Figure J-3, Flood Hazard Areas, of the *City of Irvine General Plan's* Safety Element, the project site is outside the 100-year floodplain. Therefore, no structures would be placed in the 100-year flood hazard area that would impede or redirect flood flows.

10. Would the project expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam? (Initial Study Impact IX.i.)

Finding: No impact. (Initial Study, p. 30.)

Facts in Support of Finding: The project site is not located near any levees or dams; therefore, there is no risk of flooding from the failure of these facilities. The Irvine Ranch Water District-owned Sand Canyon Reservoir is located approximately 0.75 mile southeast of the campus and is surrounded by the Strawberry Farms Golf Club. The

project site, which is at a higher elevation and is not downstream of the reservoir, would not be affected by inundation from the reservoir.

11. Would the project expose people or structures to inundation by seiche, tsunami, or mudflow? (EIR Impacts 8.7a and 8.7b.)

Finding: No impact. (DEIR, p. 5.8-22.)

Facts in Support of Finding: Based on review of Figure L-2 of the City of Irvine General Plan's Conservation and Open Space Element, the project site is not located in proximity to standing bodies of water or water storage facilities. Therefore, there is no risk from inundation by a seiche. The project site is located approximately 5.5 miles northeast of the Pacific Ocean and, therefore, would not be subject to inundation by tsunami. No impacts related to seiches or tsunamis would occur and no mitigation is required. Implementation of the proposed project, which involves development on the existing campus, does not involve any uses that would cause inundation by mudflow. Further, as discussed in Section 5.5, Geology and Soils, and shown in Exhibit 5.5-2, Local Geology, of the Draft EIR, the majority of the campus and adjacent French Hill are underlain by the Vaqueros bedrock formation, which is not susceptible to mudflows. Therefore, no impacts related to mudflow would occur and no mitigation is required.

J. Land Use and Planning

1. Would the project physically divide an established community? (Initial Study Impact X.a.)

Finding: No impact. (Initial Study, pp. 30-31.)

Facts in Support of Finding: The project site, which includes the Concordia University main campus, is bound by Mason Regional Park to the north, an open space preserve (French Hill) to the south, and existing residential areas to the east and west (Concordia East and Concordia West, respectively). The campus is currently developed with uses that are allowed under the existing Campus Master Build-Out Plan, and most of the on-site uses were constructed prior to development of the adjacent residential neighborhoods. The proposed Project involves an update to the Campus Master Build-Out Plan identifying the potential future development on the campus. The proposed Project does not involve the introduction of any new off-site roadways or uses that have the potential physically divide an established community. Proposed development would occur within the existing boundaries of the campus; any offsite infrastructure improvements would be limited to connections to existing facilities on or adjacent to the campus. The proposed Project would not require a General Plan Amendment and the requested zone change would not change the underlying land use. Implementation of the proposed Project would not physically divide an established community.

K. Mineral Resources

1. Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state? (Initial Study Impact XI.a.)

2. Would the project result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan? (Initial Study Impact XI.b.)

Finding: No impact. (Initial Study, pp. 31-32.)

Facts in Support of Finding: Based on review of the *City of Irvine General Plan* Conservation and Open Space Element and the California Department of Conservation's (DOC's) Aggregate Resources in the Los Angeles Metropolitan Area map, there are no locally important mineral resource recovery sites designated in the City. Therefore, implementation of the proposed Project would not result in the loss of such mineral resources.

L. Noise

1. Would the project expose persons to or generate noise levels in excess of standards established in the local general plan or noise ordinance or applicable standards of other agencies? (EIR Impact 10.4)

Finding: The proposed Project has the potential to expose persons to or generate noise levels in excess of standards established in the local general plan or noise ordinance or applicable standards of other agencies. With incorporation of PPPs 10-1, 10-3 and 10-4, this impact would be less than significant. (DEIR, p. 5.10-45.)

Facts in Support of Finding: The applicable standard for construction noise is Section 6-8-205(a) of the City of Irvine Municipal Code. Implementation of PPP 10-1 ensures compliance with the standard, and there would be no impact. The proposed buildings would be of conventional construction with mechanical ventilation or air conditioning, which would reduce exterior-to-interior noise by at least 20 dBA. Therefore, interior noise levels of the proposed new buildings would meet the applicable State Building Code and City standards for interior noise levels. Further, PPP 10-3, which outlines the City's standard condition for preparation and submittal of a Final Acoustical Report, is incorporated into the proposed Project and would ensure the proposed Project's compatibility with future ambient noise levels. The Final Acoustical Report must demonstrate that the proposed development would be sound-attenuated against present and projected noise levels to meet City interior and exterior noise standards.

The proposed Project would involve the installation of HVAC systems and other mechanical equipment, consistent with existing conditions on campus. The City's Noise Ordinance requires that noise from HVAC systems and other mechanical equipment, combined with other noise from on-site sources but excluding mobile sources and other exempted sources, not exceed the specified noise level limits. PPP 10-4 requires the

Project Applicant to demonstrate that noise from new HVAC systems and other mechanical equipment meet the Noise Ordinance limits. Therefore, with adherence to PPP 10-4, noise levels from on-campus mechanical equipment associated with implementation of the proposed Project would have a less than significant noise impact to off-campus properties, and no mitigation is required.

PPPs:

Refer to PPP 10-4 presented previously.

PPP 10-1 Prior to issuance of a grading permit, the Community Development Department shall confirm that the following requirement is included on the contract plans and specifications.

"Construction activities occurring as part of the project shall be subject to the limitations and requirements of Section 6-8-205(a) of the Irvine Municipal Code, which states that construction activities may only occur between 7:00 AM and 7:00 PM Mondays through Fridays and 9:00 AM and 6:00 PM on Saturdays. No construction activities shall be permitted outside these hours or on Sundays and federal holidays unless a temporary waiver is granted by the Chief Building Official or an authorized representative. Trucks, vehicles, and equipment that are making or are involved with material deliveries, loading, or transfer of materials; equipment service; maintenance of any devices; or appurtenances for or within any construction project in the City shall not be operated or driven on City streets outside of these hours or on Sundays and federal holidays unless the City grants a temporary waiver. Any waiver granted shall consider impacts upon the community. No construction activity, including maintenance work on the City rights-of-way that might be required, shall be permitted outside these hours except in emergencies." Compliance by the contractor shall be confirmed by the Community Development Department during construction.

PPP 10-3 Prior to the issuance of building permits for each structure or tenant improvement other than a parking structure, the Project Applicant shall submit a Final Acoustical Report prepared to the satisfaction of the Director of Community Development. The report shall demonstrate that the development will be sound-attenuated against present and projected noise levels, including stationary, roadway, aircraft, helicopter, and railroad noise to meet City interior and exterior noise standards. The Final Acoustical Report shall include all information required by the City's Acoustical Report Information Sheet (Form 42-48). The report shall be accompanied by a list identifying the sheet(s) of the building plans that include required sound attenuation measures *(City of Irvine Standard Condition 3.5)*.

2. Would the project result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project? (EIR Impact 10.2)

Finding: Long-term noise impacts resulting from the proposed Project (Phases 1 through 4) include traffic-related noise impacts to off-site uses, traffic-related noise impacts to on-site uses, and noise impacts from on-campus activities. With incorporation of identified PPPs and PDF, impacts would be less than significant. No mitigation is required. (DEIR, p. 5.10-40.)

Facts in Support of Finding: For each traffic analysis scenarios evaluated in the Draft EIR, the proposed Project (Phases 1 through 4) would generate traffic that would contribute to increased noise levels along off-site roadways within the vicinity of the campus. Where the future noise levels would exceed 65 dBA CNEL, project-generated traffic noise increases would be 0.1 to 0.3 dBA, less than the 3 dBA threshold of significance. The traffic noise increases along on-campus would also be less than 3 dBA. The proposed project would not result in significant long-term, traffic-related noise impacts to on- or off-campus uses, and no mitigation is required.

The primary general operational noise sources from implementation of the proposed Campus Master Build-Out Plan Update would be increased human activity associated with the use of proposed structures and other facilities. Noise level increase would be proportional to the population growth for normal on-campus operations. As a result, the noise impacts to off-campus receptors from the proposed uses would be similar to existing conditions, as the noise level increase would likely be less than 3 dBA and likely less than 1 dBA. Thus, the noise impacts from normal operations would be less than significant for off-campus receptors.

Modifications to athletic field facilities and operations, including the addition of a spectator viewing deck and lights that would allow evening sports activities, would not result in a substantial increase in daytime noise levels. There would be an increase in average evening noise levels from 1 to 5 dBA during athletic activities, including competitive games. However, PDF 10-1, as modified by the Final EIR, is incorporated into the project and requires that no amplified music occur after 7:00 PM, and that announcing not occur after 9:00 PM or after the completion of an outdoor game/competition, whichever occurs first.

Implementation of the proposed Project would not change the types of special events that are held on campus and even with a potential increase in the number of attendees to special events at the CU Center and associated increase in traffic, the noise impact would be less than significant, and no mitigation is required.

New buildings constructed during Phases 1 through 4 would use an existing chiller plant on campus or would involve installation of HVAC equipment, cooling fans, or similar mechanical equipment at the individual buildings. PPP 10-4 requires the Project Applicant to demonstrate that noise from new HVAC systems and other mechanical equipment meet the Noise Ordinance limits. Therefore, with adherence to PPP 10-4,

noise levels from on-campus mechanical equipment associated with implementation of the proposed Campus Master Build-Out Plan Update (Phases 1 through 4) would have a less than significant noise impact to off-campus properties, and no mitigation is required.

PPP and PDF:

PPP 10-4 Prior to the issuance of building permits for each structure, the Project Applicant shall submit for review and approval by the Chief Building Official, acoustical specifications or equivalent analysis that demonstrates that noise levels from heating, ventilation, and air conditioning (HVAC) equipment and similar equipment would not exceed the noise level limits of Section 6-8-204 B.2 of the Noise Ordinance as shown in Table 5.10-6 of this EIR.

PDF 10-1 During operation of existing and proposed outdoor on campus athletic facilities by the University, City of Irvine, or private rental users, the University shall prohibit amplified music after 7:00 PM. Announcing shall be allowed until the completion of each outdoor game/competition or until 9:00 PM, whichever occurs first. This requirement shall be stipulated in all University, City of Irvine, or private rental agreements for use of the outdoor campus athletic fields.

3. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels? (Initial Study Impact XII.e.)

Finding: No impact. (Initial Study, p. 33.)

Facts in Support of Finding: The project site is located approximately 3.2 miles southeast of the nearest public airport, John Wayne Airport. As shown on Figure F-1, Aircraft Noise, of the City of Irvine General Plan's Noise Element, the project site is not located in the 65 Community Noise Equivalent Level (CNEL) of the airport. Therefore, the proposed Project would not expose people residing or working in the project area to excessive noise levels.

4. For a project located within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels? (Initial Study Impact XII.f.)

Finding: No impact. (Initial Study, p. 33.)

Facts in Support of Finding: The project site is not located within the vicinity of a private airstrip; therefore, no noise impacts related to private airstrip operations would occur.

M. Population and Housing

1. Would the project induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)? (EIR Impacts 11.1a and 11.1b.)

Finding: Less than significant impact. (DEIR, pp. 5.11-10, -11.)

Facts in Support of Finding: The proposed Campus Master Build-Out Plan Update would involve the demolition of 7 institutional buildings and the construction of new buildings and additions to existing buildings totaling 148,880 sf of institutional square footage. There would be a net increase of 77,649 sf of institutional uses on campus. Additionally, a new residence hall (74 units/296 beds) would be constructed as part of Phase 3, resulting in a total of 330 units/1,320 beds on campus, consistent with existing entitlements. Because the new residence hall is proposed in response to the existing and projected full-time student population, it would not generate new full-time student enrollment growth.

With implementation of the proposed Campus Master Build-Out Plan Update, it is expected that the full-time student population would increase from approximately 1,508 full-time students under existing conditions up to the historically assumed maximum of 1,800 full-time students, an increase of approximately 292 full-time students (approximately 19 percent) compared to existing conditions. The number of full-time faculty and staff would increase from 329 individuals to approximately 400 individuals, an increase of approximately 71 individuals (approximately 21.5 percent) compared to existing conditions. Therefore, there would be an overall increase of approximately 363 individuals in the on campus population consisting of full-time students and faculty/staff during the timeframe assumed for implementation of the proposed Project (15 to 20 years). It is not expected that there would be a substantial increase in the number of part-time students, graduate students, and other individuals (e.g., visitors) who are on campus on any given day, compared to existing conditions, as described previously.

Many of the full-time students who enroll at the University (particularly the full-time commuter students which currently constitute approximately 43 percent of the full time student enrollment) already live in Orange County. However, even if all of the anticipated increase in students were from geographic areas outside of Orange County, the increase in full-time students would represent a negligible amount of the total population growth anticipated in Orange County (less than 0.001 percent) and the City of Irvine (approximately 0.004 percent) by 2040. Similarly, if each of the additional 71 jobs were filled by employees from outside Orange County and they settled in the City of Irvine, this would represent a negligible amount of the employment growth forecast between 2015 and 2040 for Orange County and the City of Irvine (0.0002 percent and 0.001 percent, respectively).

Because the relatively small population and employment increases associated with implementation of the proposed Campus Master Build-Out Plan Update are within the

regional and local projections, and most of the increase in student population would include full-time students living in on campus residence halls, the proposed Project would not place an additional burden on the City of Irvine's ability to satisfy its share of regional housing needs during the time frame of the proposed Campus Master Build-Out Plan Update. Implementation of the proposed Project would not induce substantial population, housing, or employment growth, directly or indirectly and no mitigation is required.

2. Would the project displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere? (Initial Study Impact XIII.b.)

3. Would the project displace substantial numbers of people, necessitating the construction of replacement housing elsewhere? (Initial Study Impact XIII.c.)

Finding: No impact. (Initial Study, p. 34.)

Facts in Support of Finding: There are currently four student residence halls (256 institutional dwelling units/1,024 beds) located on the campus that would remain with the proposed Project. The project proposes an additional residence hall that would provide 74 units/296 beds for student housing. The proposed Project would not result in the displacement of housing or people necessitating the construction of replacement housing elsewhere.

N. Public Services

1. Would the project result in substantial adverse physical impacts associated with the provision of new physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable levels of service ratios, response times or other performance objectives for fire protection? (EIR Impacts 12.1a and 12.1b)

Finding: The proposed Project would increase the demand for fire protection and emergency services and the associated demand on fire protection and emergency service apparatus, equipment, and personnel compared to existing levels. With incorporation of PPPs 12-1 and 12-2, impacts would be less than significant. No mitigation is required. (DEIR, pp. 5.12-10, -11.)

Facts in Support of Finding: The proposed Project, and associated increase in the on-campus population, would increase the demand for fire protection and emergency services and the associated demand on fire protection and emergency service apparatus, equipment, and personnel compared to existing levels. However, there would not be a change in types or substantial increase in the number of service calls at the main campus. The Orange County Fire Authority (OCFA) has indicated that Station 4, with Stations 36, 47 and 6 providing backup fire protection service, would be able to adequately serve the proposed Project within the established response times and distances. According to the

OCFA, the proposed Project would not require the provision of new or physically altered fire protection facilities. Therefore, there would be no physical impact to the environment.

In compliance with OCFA standard requirements, the University is required to enter into a Secured Fire Protection Agreement (SFPA) with the OCFA (refer to PPP 12-2). The SFPA would specify the University's pro-rata fair funding of capital improvements necessary to maintain adequate fire protection services in the area. In compliance with PPP 12-1, the proposed Project would be designed in accordance with OCFA codes, ordinances, and standard conditions regarding fire prevention and suppression measures; water improvement plans; fire hydrants; automatic fire extinguishing systems; fire access; access gates; combustible construction; water availability; and fire sprinkler systems. With adherence to OCFA requirements (PPP 12-1), and execution of the required SFPA (PPP 12-2), there would be adequate provision of fire protection and emergency services/access to the campus and surrounding areas.

PPPs:

Phases 1 through 4

PPP 12-1 Prior to the issuance of the first building permit, the Project Applicant shall comply with all applicable Orange County Fire Authority (OCFA) codes, ordinances, and standard conditions including but not limited to fire prevention and suppression measures, water improvement plans, fire hydrants, automatic fire extinguishing systems, fire access, access gates, combustible construction, water availability, and fire sprinkler systems. Compliance with this PPP shall be verified by the Chief Building Official.

PPP 12-2 Prior to issuance of any grading permit, the Project Applicant shall enter into a Secured Fire Protection Agreement (SFPA) with the OCFA. The SFPA shall cover all future development under the Campus Master Build-Out Plan Update (Phases 1 through 4). A copy of the executed SFPA shall be provided to the Community Development Director.

2. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable levels of service ratios, response times or other performance objectives for police protection? (EIR Impact 12.2a and 12.2b)

Finding: The proposed Project would increase the demand for law enforcement services and the associated demand for personnel compared to existing levels. With incorporation of PPPs 12-3 and 12-4, impacts would be less than significant. No mitigation is required. (DEIR, pp. 5.12-12, -13.)

Facts in Support of Finding: The proposed new institutional, institutional dwelling units (dormitory units), and athletic uses and expected increase in the on-campus

population with the proposed Campus Master Build-Out Plan Update (Phases 1 through 4) would not change the types or substantially increase the number of service calls at the main campus. The proposed Project would not result in the need for new or expanded law enforcement facilities. No physical impacts to the environment would result.

The University is required to comply with Section 5-9-521 of the *Irvine Uniform Security Code*, which addresses emergency access and construction site security (refer to PPP 12-3). Compliance with PPP 12-3 would contribute to a reduction in calls for police services during construction activities. The University would also be required to continue to comply with lighting requirements established in the Irvine Uniform Security Code for safety and security purposes (refer PPP 12-4). With adherence to PPPs 12-3 and 12-4, the impacts of the Proposed Project related to police protection would be less than significant.

With respect to the Department of Campus Safety, during Phases 3 and 4, the Department would need to be relocated to a different facility on campus (if not already relocated near the end of Phase 2). As part of this relocation, the overall square footage occupied by the Department of Campus Safety may be slightly expanded as compared to the total square footage that the Department currently occupies. However, this would occur in existing or planned buildings, as addressed in the Draft EIR. No new or expanded facilities beyond those assumed for the proposed Project would be required.

PPPs:

Phases 1 through 4

PPP 12-3 Prior to the issuance of the first building permit, a Construction Site Security Plan, per the Irvine Uniform Security Code, Section 5-9-521, shall be approved by the Chief of Police. Said plan shall be incorporated into the plan set approved for building permits. *(City of Irvine Standard Condition 3.20)*

PPP 12-4 Prior to the issuance of building permits, the applicant shall demonstrate they have met the Irvine Uniform Security Code requirements for lighting by providing the below listed items for a complete review by the Police Department. Failure to provide a complete lighting package will result in the delay of satisfaction of this condition. *(City of Irvine Standard Condition 3.6)*

a. Electrical plan showing light fixture locations, type of light fixture, height of light fixture, and point-by-point photometric lighting analysis overlaid on the landscape plan with a tree legend. The photometric plan should only show those fixtures used to meet the Irvine Uniform Security Code requirements.

b. Corresponding fixture cut-sheets (specifications) of those lights used to meet the Irvine Uniform Security Code.

c. Site plan demonstrating that landscaping shall not be planted so as to obscure required light levels.

d. Site plans that are full-scale and legible.

3. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for schools? (Initial Study Impact XIV.a.iii.)

Finding: No impact. (Initial Study, p. 35.)

Facts in Support of Finding: The proposed Project does not involve the development of new residential uses that would generate new Kindergarten through 12th grade students; new dorm rooms are for individual Concordia University students, not families. Therefore, the proposed Project would not directly create a source of students and no direct impact on school services and facilities would occur. Additionally, if it is determined by IUSD that the project is not exempt, appropriate developer impact fees, as required by State law, shall be assessed and paid to the school district. Section 65995(b) of the California Government Code establishes the base amount of allowed developer fees and allows increases in the base fee every two years. School districts are placed into a specific "level" based on school impact fee amounts that are imposed on the development. With the payment of these fees, if required, and with no additional students directly generated from the proposed Project, no significant impacts to school services would result. The proposed Project would not require the construction of new or expanded school facilities beyond that proposed on campus as part of the project, and no environmental impacts would result.

4. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for parks? (Initial Study Impact XIV.a.iv.)

Finding: No impact. (Initial Study, p. 35.)

Facts in Support of Finding: There would be an increase in the student population and associated faculty and staff population on campus with the proposed Project, compared to current conditions. However, the proposed Project would not directly or indirectly induce substantial population growth in the City beyond that currently anticipated by local and regional population projections. The proposed non-residential project would not require the dedication and/or construction of new or expanded recreational facilities owned and operated by the City of Irvine or OC Parks. However, the proposed Campus Master

Build-Out Plan Update includes the provision of new athletic fields and other facilities to better serve students, faculty, and staff.

5. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for other public facilities? (Initial Study Impact XIV.a.v.)

Finding: No impact. (Initial Study, p. 35.)

Facts in Support of Finding: Orange County Public Library (OCPL) provides library services to municipalities and unincorporated parts of Orange County. Although, there would be an increase in on-campus students and associated faculty and staff compared to existing conditions, the existing Concordia University library located on campus would adequately serve existing and future students, faculty and staff and no new library facilities are required.

O. Recreation

1. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? (Initial Study Impact XI.a.)

Finding: No impact. (Initial Study, p. 36.)

Facts in Support of Finding: The proposed Campus Master Build-Out Plan Update includes the provision of new, improved and/or relocated athletic and recreational facilities to better serve students, faculty, and staff. Additionally, it should be noted that the campus gymnasium is the only facility currently used by the City under the existing Joint Use Agreement between the City and Concordia for use of athletic facilities. The proposed Project does not involve any uses or development activities that would preclude continued use of the gymnasium. The proposed Project would not increase the use of existing neighborhood and regional parks or other recreational facilities.

P. Transportation/Traffic

1. Would the project conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways? (EIR Impacts 13.2a and 13.2b)

Finding: No impact. (DEIR, p. 5.13-49.)

Facts in Support of Finding: The proposed Project is forecast to generate approximately 1,509 additional average daily trips (ADT) compared to existing conditions. Since the proposed Project would not generate more than 2,400 daily trips and there would be no direct access to a Congestion Management (CMP) facility (consistent with existing conditions), a CMP-level analysis is not required. Additionally, based on the analysis conducted for the proposed Project there would be no impact to I-405, the only CMP facility in the vicinity of the campus. No impacts on the Orange County Congestion Management Program Highway System intersections or facilities would occur; therefore, the proposed Project would not conflict with the Orange County CMP and no mitigation is required.

2. Would the project result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks? (Initial Study Impact XVI.a.)

Finding: No impact. (Initial Study, p. 37.)

Facts in Support of Finding: The proposed Project would not include any uses that would change air traffic patterns or locations and would not increase the amount of air traffic. John Wayne Airport is the closest airport to the project site and is located approximately 3.2 miles northwest of the project site.

Q. Utilities and Service Systems

1. Would the project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board? (Initial Study Impact XVII.a.)

Finding: No impact. (Initial Study, p. 38.)

Facts in Support of Finding: Wastewater originating from the project site would be generated by proposed uses allowed by the Campus Master Build-Out Plan and would ultimately be treated by facilities owned and operated by the IRWD. The wastewater treatment requirements issued by the California Regional Water Quality Control Board (RWQCB) for the IRWD's treatment plant were developed to ensure that adequate levels of treatment would be provided for the wastewater flows emanating from all land uses in its service area. Concordia University does not discharge prohibited substances or allow such substances to be discharged into the wastewater system. Prohibited substances are disposed of by a third party in compliance with applicable regulations. Consistent with existing conditions, implementation of the proposed Project would not result in the development of any uses that would result in the discharge of prohibited substances into the wastewater system or cause the treatment plant to exceed the applicable treatment requirements.

2. Would the project have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed (EIR Impacts 14.2a and 14.2b).

Finding: Less than significant impact. (DEIR, p. 5.14-12.)

Facts in Support of Finding: The Irvine Ranch Water District (IRWD), supplies water to the City of Irvine, including the campus. Development of the proposed Project would result in both temporary construction-related and long-term operational increases in water demand. Construction activities require minimal water as compared to water consumption associated with long-term operations of the proposed Project and are not expected to have any adverse impacts on the existing water system or available water supplies. Therefore, sufficient water supplies are available for temporary construction activities, and impacts are considered less than significant.

IRWD's 2010 UWMP identifies available existing and planned sources of water available to the IRWD through the year 2035. With existing available supplies and the completion of supplies currently under development, the total water supplies available to the IRWD during normal, single-dry, and multiple-dry years through 2035 would meet the projected water demand of existing and other planned future uses, which include the currently entitled 321,320 sf of institutional use and 330 institutional dwelling units/1,320 beds (4 beds per unit) at the Concordia University campus. Implementation of the Campus Master Build-Out Plan Update (Phases 1 through 4) would result in a net increase of 77,649 sf of institutional use on campus and would also include development of a 74-unit (296-bed) residence hall. These uses would increase the potable water demand by approximately 10,597 gallons per day (gpd) compared to existing conditions; however, the proposed type and amount of development is consistent with that assumed by IRWD in its WRMP and 2010 UWMP based on the existing City of Irvine General Plan. Additionally, this is a conservative water demand estimate; the actual water demand would likely be less when taking into consideration use of high efficiency fixtures and compliance with current water conservation requirements. Therefore, sufficient water supplies are available for long-term project operational activities, and potential impacts of the proposed Project are considered less than significant and no mitigation is required.

The long-range planning efforts of IRWD take into account current and proposed projects to eliminate the potential for cumulative impacts. The development proposed by the Campus Master Build-Out Plan Update is consistent with the development anticipated in the City's General Plan and used in IRWD's planning (321,320 sf of intuitional use and residential component of 330 units [1,320 beds]). Additionally, on-campus infrastructure improvements would be limited to that necessary to serve the proposed development on campus. Therefore, the proposed Project's demand for water would be less than significant, and the proposed Project would not result in a cumulatively considerable contribution to a significant cumulative impact.

3. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments? (EIR Impacts 14.3a and 14.3b).

Finding: Less than significant impact. (DEIR, p. 5.14-13.)

Facts in Support of Finding: The proposed Project would result in a net increase of 77,649 sf of institutional uses on campus, and a new residence hall (74 units/296 beds). Development of the campus with 321,320 sf of institutional use and residential component of 330 units (1,320 beds) is already assumed by IRWD in its existing commitments for wastewater service based on anticipated development assumed in the City's General Plan. The proposed Project's increase in wastewater generation from Phases 1 through 4 would represent approximately 0.1 percent of the existing excess daily capacity of IRWDs Michelson Water Reclamation Plan (MWRP). Therefore, the IRWD has sufficient capacity in the MWRP to treat wastewater flows from the campus with implementation of Phases 1 through 4, in addition to existing commitments. Additionally, on-campus infrastructure improvements would be limited to that necessary to serve the proposed development on campus. Therefore, the proposed Project's demand for wastewater collection and treatment services would be less than significant and would not result in a cumulatively considerable contribution to a significant cumulative impact.

4. Would the project be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs? (Initial Study Impact XVII.f.)

Finding: Less than significant impact. (Initial Study, p. 39.)

Facts in Support of Finding: The project site is located within the OC Waste & Recycling service area. Development of uses allowed by the proposed Campus Master Build-Out Plan Update would result in an increased volume of solid waste and would increase the demand for solid waste disposal service during construction and operation. OC Waste & Recycling has indicated that solid waste disposal generated with the proposed Project could be accommodated within the permitted capacity of the County's landfill system.

5. Would the project comply with federal, state, and local statutes and regulations related to solid waste? (Initial Study Impact XVII.g.)

Finding: Less than significant impact. (Initial Study, p. 40.)

Facts in Support of Finding: In accordance with the California Green-Building Code and the City's Construction and Demolition Debris and Recycling and Reuse Ordinance, the proposed Project would require preparation of a Waste Management Plan. Unrelated to the proposed Project, Concordia University is in the process of developing an expanded waste management and recycling program for the campus. The project site would continue to be served by Waste Management of Orange County, the campus' service provider, for the collection of solid waste and recyclables, and the proposed

Project would be required to comply with ongoing waste management programs/requirements implemented by the City, as well as comply with applicable regulations, as described above. In addition, the City of Irvine has standard conditions (Standard Conditions 2.24 and 3.7), which require solid waste recycling in compliance with Title 6, Division 7 of the Irvine Municipal code, and the campus is required to comply with other solid waste regulations applicable to the project. The waste recycler is also required to meet or exceed the diversion requirements set forth in, AB 939 (Integrated Waste Management Act of 1989), AB 341(Mandatory Commercial Recycling), and AB 1829 (Mandatory Organics Recycling).

VII. FINDINGS REGARDING IMPACTS DETERMINED TO HAVE A LESS THAN SIGNIFICANT IMPACT AFTER THE INCORPORATION OF MITIGATION

The Final EIR determined that the proposed project would result in less than significant impacts for certain impact categories with (1) incorporation of design features into the proposed project to reduce potential environmental impacts (project design features [PDFs]); (2) incorporation of City of Irvine existing Plans, Programs, and Policies (PPPs), including standard conditions (SCs); and, (3) implementation of additional project-level MMs identified to reduce potentially significant project impacts to a less than significant level. PDFs, PPPs and MMs will be implemented pursuant to the Mitigation Monitoring and Reporting Program (MMRP) prepared for the proposed project.

The City of Irvine having reviewed and considered the information contained in the Final EIR, the Technical Appendices and the administrative record, finds, pursuant to Section 21081(a)(1) of the *California Public Resources Code* and Section 15091(a)(1) of the State CEQA Guidelines that

> *"changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR"*

for the impacts discussed below.

A. Aesthetics (Section 5.1 of the Draft EIR)

1. Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area? (EIR Impacts 1.3a and 1.3b)

Finding: Implementation of the proposed Project would introduce new light sources and potential glare on campus and surrounding area. However, the proposed development, and installation of new lighting would occur in an area with existing sources of light and glare and would be conducted in compliance with the City's requirements. Incorporation of identified PPPs and PDFs would reduce impacts; however, additional MMs are required to reduce the impact to a less than significant level. (DEIR, pp. 5.1-34, -36; see also Final EIR, Topical Response 6.)

Facts in Support of Finding: Lighting would likely be used within the construction areas (notably the construction staging areas) to provide security for construction equipment and construction materials. This type of temporary security lighting is often unshielded and may shine onto adjacent properties and roadways. Due to the proximity of residential neighborhoods to the campus, such security lighting may cause a significant impact in the form of a nuisance to the residents. MM 1-1 requires that temporary nighttime lighting that is installed for security purposes be downward-facing and hooded or shielded to prevent security lighting from spilling outside the staging area or from directly broadcasting security lighting into the sky or onto adjacent residential properties. With implementation of MM 1-1, potential lighting impacts during construction would be reduced to a less than significant level.

The proposed project involves the installation of exterior site lighting as necessary for safety, security, and ambience, including lighting for new and reconfigured parking areas, pedestrian walkways, bikeways, architectural elements, and landscape features and the installation of athletic facility lighting. The proposed exterior lighting would comply with requirements of the City's Uniform Security Code (Irvine Municipal Code, Title 5, Division 9, Chapter 5) (refer to PPP 1-2, as modified by the Final EIR). As required, the lighting would be designed and installed so that all direct rays are confined to the site and adjacent properties are protected from glare. This lighting would be consistent with existing conditions on campus and in the adjacent residential community communities and would not create a new source of substantial light that would adversely affect nighttime views in the area. With incorporation of PPP 1-2, this impact would be less than significant for Phases 1 through 4, and no additional mitigation is required.

Athletic field lighting would be installed at the following existing athletic facilities as part of Phase 1: baseball field, softball field, practice field, and track/soccer field. The proposed sand volleyball courts and associated athletic field lighting would be installed in Phase 2. The proposed lighting associated with the tennis court deck would occur in Phase 3 and would be limited to the four courts in the eastern and central portion of the tennis court deck (refer to PDF 1-2and also included as a Condition of Approval). The tennis court lighting and practice field lighting would be designed to allow for nighttime recreational play, and would not comply with NCAA standards, which would require a higher level of lighting. The two courts on the western portion of the tennis court deck are not proposed to be lighted due to their proximity to the campus boundary; lighting of these courts would result in lighting levels exceeding City's standards. The athletic field lighting is proposed to maximize the use of campus facilities by allowing for safe use of the athletic fields in the evening hours (no later than 9:00 p.m.), while also minimizing impacts to off-campus uses, including spill light and glare light.

A detailed lighting analysis was prepared by Musco Lighting to estimate light and glare levels associated with the installation of athletic field lighting and to compare these to the City's lighting standards as identified in the *City's Parks and Park Facilities Standards* (as described in Section 5.1 of the Draft EIR). The lighting analysis is included in Appendix C of the Draft EIR and was prepared to address the City's standards. To address comments on the Draft EIR, an expanded analysis was conducted and is included in Attachment B of the Final EIR. The expanded analysis takes into consideration light

and glare levels off campus (outside the campus boundary), including the varying topography.

For purposes of a worst-case scenario analysis, the DEIR assumed that all of the athletic fields/facilities would be lit at the same time (baseball, softball, track, soccer, tennis, sand volleyball, and practice). However, sports seasons for various sports vary, thus it is not expected or intended that all fields be lit at the same time. (See Final EIR Topical Response 6.)

The proposed lighting system that would be used consists of light-emitting diode (LED) fixtures and not metal halide which is an older technology (refer to PDF 1-2); use of metal halide fixtures would result in higher lighting levels. The light fixtures would include reflectors that direct the light onto the field, reducing sky glow and spill light onto neighboring properties, and a visor assembly that works in conjunction with the reflector to provide more light control and reduce glare on and off the field. As shown in lighting analysis included in the Draft EIR and the expanded lighting analysis included in the Final EIR, the measured horizontal footcandles at the property boundary are 0.0, which is lower than the City's established criteria of 1.5 footcandles at the property line. Therefore, impacts from spill light would be less than significant. Additionally, MM 1-2 requires that the installed lighting be evaluated to ensure that it is consistent with the lighting plan, including the features identified in PDF 1-2, and that the lighting levels are in compliance with the City's established criteria.

To address potential issues associated with daylight glare from buildings and other facilities, the University's *Narrative of Proposed Architectural Styles* has been developed to provide direction regarding the physical design of building elements, including exterior building materials. With adherence to these architectural guidelines (required by PPP 1-3), which require that building materials and finishes reduce glare and minimize reflectivity wherever possible, and installation of planned landscaping around the buildings, exterior building materials would not result in potentially significant glare impacts within the campus or surrounding areas, consistent with existing conditions.

With respect to lighting glare during construction, MM 1-1 requires that temporary nighttime lighting that is installed for security purposes be downward-facing and hooded or shielded to prevent security lighting from spilling outside the staging area or from directly aiming security lighting into the sky or onto adjacent residential properties. These measures would also serve to reduce potential glare impacts during construction to a less than significant level. The potential increase in glare from campus safety and security lighting and vehicles headlights would not represent a new source of substantial glare, and this impact would be less than significant.

The potential glare from proposed athletic facility lighting would be the most notable visual change associated with on-campus lighting to be installed as part of the proposed project. Based on the City's standards for glare light, the maximum acceptable glare is determined by candlepower limitations at the light source. When viewed from any location outside the property line of the property on which the fields are to be lighted, and when the cumulative total of the candlepower of all the luminaries on any single pole for

the luminaries aimed at any one field exceeds 30,000 candlepower, then the average of all the fixtures aimed at measurement point, on the single pole, shall not exceed 4,000 candlepower per fixture. Because the candlepower of all the luminaires on any proposed single pole would exceed 30,000 candlepower, the analysis for the proposed project is based on the average candlepower per fixture.

As shown in the lighting analyses prepared for the Draft EIR and Final EIR, the maximum candela would occur along the western campus boundary and would be associated with the baseball field lighting. However, the maximum candela (approximately 3,133) would not exceed 4,000 candlepower, which is the criteria established by the City, as described previously. The proposed athletic facility lighting system and operations have also been designed to reduce the potential impact from the glare to a less than significant level. As identified in PDF 1-2, the athletic facility lighting would be programmed to automatically turn off at 9:00 PM but could be manually or remotely turned off earlier. Additionally, a remote scheduling, monitoring system and data management system would be installed that allows the University to schedule, report, and track usage of athletic field lighting. Furthermore, a multi-watt dimming control system that operates by adjusting the total electrical consumption of the driver allowing for different light levels for intercollegiate play (i.e., high mode - 100 percent power), practices (i.e., medium mode– 50 percent power), and clean-up activities (i.e., low mode- 15 percent power) that can be operated through on-site and remote control links. Lastly, MM 1-2 requires that the installed lighting be evaluated to ensure that it is consistent with the lighting plan, and that the lighting levels (including glare as measured by the candlepower or candela levels) are in compliance with the City's established criteria. Therefore, while proposed athletic facility lighting would create a new source of glare, based on the proposed lighting plan and with incorporation of MM 1-2 into the proposed project, it would not adversely affect nighttime views in the area based on the criteria established by the City. The impact would be less than significant.

With the respect to the analysis of spill light, because the lighting analysis included in Appendix C of the Draft EIR and shown on Exhibit 5.1-28, Property Boundary Spill Light – Footcandles, and discussed in Section 5.1, Aesthetics, documents that there was no spill light at the University property boundaries nearest the athletic fields, it was not necessary to show the footcandles beyond those areas. This is because spill light decreases with distance. While no further analysis of this issue is required, in response to comments received and to further demonstrate that the spill light does not extend past the University property boundaries, the lighting analysis study area has been expanded. The expanded lighting study is included in Attachment B of this Final EIR. The expanded lighting study demonstrates that there would be no horizontal or vertical spill light off campus in the adjacent residential communities (pages 13 and 14), the residences east of French Hill (pages 17 and 18), or along French Hill (pages 21, 22, 25 and 26) as shown by the 0.0 footcandle measurement, which is lower than the City's established criteria of 1.5 footcandles at the property line. (See FEIR, p. 2-36.)

With respect to the analysis of potential glare, because the glare analysis in Appendix C of the Draft EIR and shown on Exhibit 5.1-29, Glare Impact-Candela, and 5.1-30, Boundary Glare Impact-Candela, and discussed in Section 5.1, Aesthetics, documents

that there would be no glare impacts based on the City's criteria at the University boundaries nearest the athletic fields, it was not necessary to show the glare in additional areas. However, in response to comments received, the lighting study has also been expanded to include the entire campus boundary, adjacent residential communities and areas on French Hill and also takes into consideration the varying topography. (See FEIR, p. 2-36.)

PPPs, PDFs, and MMs:

Phases 1 through 4

Refer to PPP 1-1 and PPP 1-3, above.

PPP 1-2 Prior to approval of each building permit, the Community Development Department shall confirm compliance with requirements outlined in Section 3-16-1 of the Irvine Zoning Ordinance. As required, outdoor lighting shall be designed and installed so that all direct rays are confined to the site and adjacent properties are protected from glare. Lighting trespass levels as measured at adjacent residential and open space land use boundaries shall be 0.0 footcandles. The level of lighting on the site shall comply with the requirements of the City's Uniform Security Code, which establishes standards for the minimum lighting levels for safety purposes.

PDF 1-2 Prior to approval of building permits for installation of athletic facility lighting, the Project Applicant shall submit for review and approval by the Director of Community Development lighting plans for existing and proposed athletic facilities, demonstrating compliance with requirements outlined in the City of Irvine Parks and Public Facilities Standards Manual (also refer to MM 1-2). A third-party lighting consultant may be retained at the discretion of the Director of Community Development to review the athletic field lighting plans. The Project Applicant shall be responsible for all costs associated with the review by the City-hired third-party lighting consultant. A copy of this submittal shall be provided to the Concordia East Community Association's Board of Directors concurrently with the submission of the same to the City.

As shown on Exhibit 3-24, Conceptual Athletic Field Lighting Plan, in Section 3.0, Project Description, the proposed project would involve installation of athletic field lighting at each of the existing athletic fields (soccer/track, softball, baseball, and practice), at the two proposed sand volleyball courts and on the proposed tennis court deck (four courts out of six). With the exception of tennis courts and practice field, the lighting shall comply with lighting requirements established by the National Collegiate Athletic Association (NCAA) for competition intercollegiate play (no broadcast), as shown in Appendix C, NCAA Best Lighting Practices, of the Draft EIR, or as modified by the NCAA in the future.

The lighting system and associated operation of the lighting system include the following features which serve to reduce potential impacts:

- Installation of light emitting diode (LED) light fixtures or other industry approved best available technology, and not metal halide.
- Lighting shall only be installed on the four tennis courts in the eastern portions of the tennis court deck (closest to the baseball field), and shall be designed to accommodate nighttime play for recreation and practice.
- Tennis court lighting shall not exceed an average light level of 50 footcandles and shall not be designed to comply with NCAA requirements.
- Practice field lighting shall not exceed an average light level of 30 footcandles and shall not be designed to comply with NCAA requirements.
- Reflectors for the light fixtures that direct the light onto the field, reducing sky glow and spill light onto neighboring properties, and a visor assembly that works in conjunction with the reflector to provide more light control and reduce glare on and off the field.
- A remote scheduling, monitoring and data management system that allows the University to schedule, report, and track usage of athletic field lighting, including by special user groups.
- A multi-watt dimming control system that operates by adjusting the total electrical consumption of the driver allowing for different light levels for intercollegiate play (i.e., high mode – 100 percent power), practices (i.e., medium mode – 50 percent power), and clean-up activities (i.e., low mode – 15 percent power), that can be operated through on-site and remote control links.
- A lighting curfew of 9:00 PM to limit nighttime operational hours for all field use. All events shall be scheduled to conclude before the curfew and the automated lighting system shall be designed to and shall turn off athletic field lights no later than 9:00 PM each day. If scheduled events are concluded before 9:00 PM, the lights shall be turned off at the earliest time possible.

MM 1-1 Prior to the issuance of grading and/or building permits, the Project Applicant shall provide evidence to the City that the contractor specifications require any temporary nighttime lighting installed during construction for security or any other purpose be downward-facing and hooded or shielded to prevent light from spilling outside the staging area and from directly broadcasting security light into the sky or onto adjacent residential properties. Compliance with this measure shall be verified by the City's Building and Safety Department during inspections of the construction site.

MM 1-2 During installation of the lighting system, and prior to operation of the athletic facility lighting, the University shall retain a registered Lighting Engineer or lighting professional with certification that indicates proficiency in outdoor lighting design to provide on-site verification that lighting installation conforms to submitted plans (i.e., number of poles and fixtures, mounting heights, spill light footcandles, and glare candela or candlepower) and is in compliance with applicable criteria established in the City's *Parks and Park Facilities Standards*. Written verification of compliance shall be provided to the Community Development Department prior to approval of use of the athletic field lighting. A copy of this submittal shall be provided to the Concordia East Community Association's Board of Directors concurrently with the submission of the same to the City. The City may request written verification by a registered Lighting Engineer of the lighting operations on the campus at any time to ensure continued compliance and/or address any community concerns.

B. Biological Resources (Section 5.3 of the Draft EIR)

1. Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? (EIR Impacts 3.1a, 3.1b and 3.1c)

Finding: The proposed Project improvements and construction activities would not result in direct impacts to riparian habitat, but would potentially impact sensitive coastal sage scrub habitat. Indirect impacts to riparian habitat and coastal sage scrub habitat may also occur. These potentially significant impacts would be reduced to less than significant levels with incorporation of PPPs, PDFs and MMs into the proposed Project. (DEIR, p. 5.3-33, -34, -36.)

Facts in Support of Finding: Implementation of Phase 1 (on campus roadway improvements) would potentially impact 0.01 acre of special status vegetation covered by the NCCP/HCP (coastal sage scrub) that provides habitat for the coastal California gnatcatcher (*Polioptila californica californica*), and construction of the proposed Project would be in proximity to coastal sage scrub and disturbed coastal sage scrub/annual grassland vegetation. Since the survey area is outside of the NCCP/HCP Reserve System, take of coastal sage scrub is authorized for a nonparticipating landowner (e.g., Concordia University) whose lands are located within the jurisdiction of a signatory local government (e.g., the City of Irvine) and who elects to pay the NCCP/HCP mitigation fee. With payment of the NCCP/HCP mitigation fee (PPP 3-1), and implementation of construction-related minimization measures (PPP 3-2), direct and indirect impacts to coastal sage scrub habitat would be less than significant.

Direct impacts to jurisdictional areas, including riparian habitat (southern willow scrub), would be avoided by project design (refer to PDF 3-2). Inadvertent impacts on riparian habitat would be avoided by fencing/flagging areas to be protected during construction (MM 3-1). Removal of suitable and marginally suitable habitat for special status species

(annual grassland, ornamental, and ornamental/developed) would result in less than significant habitat impacts. Potential indirect impacts related to water quality, human activity, and invasive plant species would be less than significant with implementation of PDF 3-1 and PPPs 3-1 and 3-2, and PPPs 8-1 and 8-2 in Section 5.8, Hydrology and Water Quality.

Fuel modification and additional fire protection activities would not result in the loss of riparian, coastal sage scrub, or other sensitive habitat. Inadvertent impacts on riparian habitat would be avoided by fencing/flagging areas to be protected during construction (MM 3-1). Removal of suitable and marginally suitable habitat for special status species (annual grassland, ornamental, and ornamental/developed) would result in less than significant habitat impacts.

PPPs, PDFs and MMs:

Phase 1 Only

PPP 3-1 Prior to the issuance of any grading permit that involves removal of coastal sage scrub habitat associated with the Dorm Road realignment, the Project Applicant shall provide proof of the mitigation fee payment to the Director of Community Development. The Project Applicant shall comply with the requirements set forth in the Central-Coastal Natural Community Conservation Plan/Habitat Conservation Plan (NCCP/HCP) and its associated Implementation Agreement (IA). As a nonparticipating landowner whose lands are located within the jurisdiction of a signatory local government (i.e., the City of Irvine), the Project Applicant shall pay the mitigation fee pursuant to Section 7 of the NCCP/HCP IA. This fee shall be paid to the NCCP non-profit corporation. Take is then authorized by the Section 10(a) Permit(s) issued by the U.S. Fish and Wildlife Service (USFWS) and the California Department of Fish and Wildlife (CDFW) Management Authorization is granted to the signatory local government.

Phases 1 through 4

PPP 3-2 Prior to the issuance of any grading permits for activities within 500 feet of coastal sage scrub habitat, the Project Applicant shall provide letters from a United States Fish and Wildlife Service (USFWS)/CDFW-approved Biologist to the Director of Community Development. The letters shall state that the Biologist has been retained by the Project Applicant and shall monitor all grading and other significant ground-disturbing activities in or adjacent to coastal sage scrub habitats. The Biologist shall monitor these activities to ensure that the Project Applicant complies with the NCCP/HCP IA that specifies measures that must be taken to minimize construction impacts to coastal sage scrub and its

subassociation during construction, including but not limited to the following: [1]

- To the maximum extent practicable, no grading of coastal sage scrub or southern cactus scrub habitat that is occupied by nesting gnatcatchers will occur during the breeding season (January 15 through July 15). It is expressly understood that this provision and the remaining provisions of these "construction-related minimization measures" are subject to public health and safety considerations. These considerations include unexpected slope stabilization, erosion control measures, and emergency facility repairs. In the event of such public health and safety circumstances, landowners or public agencies/utilities will provide USFWS/CDFW with the maximum practicable notice (or such notice as is specified in the Central-Coastal NCCP/HCP) to allow for capture of gnatcatchers, cactus wrens, and any other coastal sage scrub or southern cactus scrub Covered Species that are not otherwise flushed and will carry out the following measures only to the extent as practicable in the context of the public health and safety considerations.
- Prior to the commencement of grading operations or other activities involving significant soil disturbance, all areas of coastal sage scrub or southern cactus scrub habitat to be avoided under the provisions of the Central-Coastal NCCP/HCP shall be identified with temporary fencing and other markers clearly visible to construction personnel.
- Prior to the commencement of grading operations or other activities involving disturbance of coastal sage scrub or southern cactus scrub, a survey will be conducted to locate gnatcatchers and cactus wrens within 100 feet of the outer extent of projected soil disturbance activities and the locations of any such species shall be clearly marked and identified on the construction/grading plans.
- A Monitoring Biologist, acceptable to USFWS/CDFW, will be on site during any clearing of coastal sage scrub or southern cactus scrub. The landowner or relevant public agency/utility will advise USFWS/CDFW at least 7 calendar days (and preferably 14 calendar days) prior to the clearing of any habitat occupied by Covered Species to allow USFWS/CDFW to work with the Monitoring Biologist in connection with bird flushing/capture activities. The Monitoring Biologist will flush Covered Species (avian or other mobile Covered Species) from occupied habitat areas immediately prior to brush-clearing and earth-moving activities. If birds cannot be flushed, they will be captured in mist nets, if feasible, and relocated to areas of the site to be protected or to the NCCP/HCP Reserve System.

[1] From NCCP/HCP Construction-Related Minimization Measures per NCCP/HCP Final Joint Environmental Impact Report and Environmental Impact Statement, Section 7.5.3 (Orange 1996).

It will be the responsibility of the Monitoring Biologist to ensure that Covered (bird) Species will not be directly impacted by brush-clearing and earth-moving equipment in a manner that also allows for construction activities on a timely basis.

- Following the completion of initial grading/earth-movement activities, all areas of coastal sage scrub or southern cactus scrub habitat to be avoided by construction equipment and personnel will be marked with temporary fencing and other appropriate markers clearly visible to construction personnel. No construction access, parking, or storage of equipment or materials will be permitted within such marked areas.
- In areas bordering the NCCP/HCP Reserve System or Special Linkage/Special Management areas containing significant coastal sage scrub or southern cactus scrub identified in the Central-Coastal NCCP/HCP for protection, vehicle transportation routes between cut-and-fill locations will be restricted to a minimum number during construction consistent with project construction requirements. Waste dirt or rubble will not be deposited on adjacent coastal sage scrub or southern cactus scrub identified in the Central-Coastal NCCP/HCP for protection. Preconstruction meetings involving the Monitoring Biologist, construction supervisors, and equipment operators will be conducted and documented to ensure maximum practicable adherence to these measures.
- Coastal sage scrub or southern cactus scrub identified in the Central-Coastal NCCP/HCP for protection and located within the likely dust-drift radius of construction areas shall be periodically sprayed with water to reduce accumulated dust on the leaves as recommended by the Monitoring Biologist.

PDF 3-1 Prior to issuance of landscape permits, the Director of Community Development shall confirm that final landscape plans are in compliance with the Conceptual Planting Plan. Exhibit 3-23 in Section 3.0, Project Description, of the Draft Environmental Impact Report (EIR), depicts the Conceptual Planting Plan included in the proposed Campus Master Build-Out Plan Update. This planting plan does not include exotic, invasive species (i.e., those on the California Invasive Plant Council's invasive plant inventory) that would potentially degrade the quality of the surrounding natural open space. Landscaping installed for the proposed project shall only include species on the approved planting plan.

PDF 3-2 Prior to issuance of grading permits, the Director of Community Development shall confirm that the limits of work/impact limits avoid sensitive biological areas, consistent with the project design. As shown on Exhibit 5.3-5, the proposed project limits of work/impact limits are outside of, and avoid direct impacts to, Sand Canyon Wash, which is designated

"Non-Reserve Open Space" by the Central-Coastal Natural Community Conservation Plan/Habitat Conservation Plan (NCCP/HCP), and areas within the jurisdiction of the U.S. Army Corps of Engineers (USACE), the Regional Water Quality Control Board (RWQCB), and the California Department of Fish and Wildlife (CDFW).

MM 3-1 Southern Willow Scrub/Jurisdictional Resources. Prior to the issuance of a grading permit for areas within 500 feet of special status vegetation, the Project Applicant shall provide written evidence to the City of Irvine that a qualified Biologist has been retained to observe grading activities and to ensure that adjacent special status vegetation (i.e., southern willow scrub) and jurisdictional resources are not impacted. Prior to issuance of any building or demolition permit, the qualified Biologist shall monitor the installation of protective fencing/flagging by the Contractor. Fencing/flagging shall be installed around all special status vegetation and jurisdictional resources to be avoided.

2. Would the project have a substantial adverse effect, either directly or through habitat modification, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? (EIR Impacts 3.2a, 3.2b, and 3.2c)

Finding: Implementation of the proposed Project would not directly impact habitat that supports sensitive species beyond the coastal sage scrub impacted by Phase 1 (0.01 acre). However, given the proximity of the impact area for Phase 1 to adjacent riparian vegetation, there is the potential for species that use this habitat to be inadvertently impacted during construction and operation. The proposed Project also has the potential to impact active nests of migratory birds and/or raptors. With incorporation of PPPs and MMs, these impacts would be reduced to a level considered less than significant. (DEIR, p. 5.3-41 through -43.)

Facts in Support of Finding: Based on focused surveys conducted during preparation of the Draft EIR, and lack of suitable habitat, there are no sensitive plant species located on campus or expected to occur, and no impacts would result. With the exception of the species identified below, there is not suitable habitat on campus for other wildlife species or the species is not expected to occur because they were not observed during focused surveys.

Phase 1 of the proposed Project would impact approximately 0.01 acre of coastal sage scrub vegetation, which supports the coastal California gnatcatcher, a federally threatened and state species of special concern. The coastal California gnatcatcher is covered by the NCCP/HCP. This impact would be potentially significant. Compliance with provisions of the NCCP/HCP, including payment of the required mitigation fee for loss of habitat (PPP 3-1), and incorporation of PPP 3-2 discussed above for coastal sage scrub vegetation, would avoid inadvertent impacts on coastal California gnatcatcher, resulting in a less than significant impact.

As previously identified, no riparian habitat would be directly impacted by implementation of the proposed Project; however, given the proximity of the impact area for Phase 1 to adjacent southern willow scrub habitat, which supports least Bell's vireo (*Vireo bellii pusillus*), there is the potential for this habitat to be inadvertently impacted during construction. The least Bell's vireo is a federally and state endangered species and is conditionally covered by the NCCP/HCP. Inadvertent impacts during construction would be potentially significant. Implementation of MM 3-1, that was discussed above for southern willow scrub, would avoid inadvertent impacts on least Bell's vireo, resulting in a less than significant impact.

Suitable or limited suitable foraging habitat is present for four special status bird species, including raptors, which are not covered by the NCCP/HCP: Cooper's hawk (*Accipiter cooperii*), white-tailed kite (*Elanus leucurus*), western yellow-billed cuckoo (*Coccyzus americanus occidentalis*), and yellow-breasted chat (*Icteria virens*). Phases 1 and 2 would impact a total of approximately 1.99 acres of suitable foraging habitat (i.e., annual grassland and coastal sage scrub) for Cooper's hawk and white-tailed kite. In addition, a total of approximately 10.92 acres of marginally suitable habitat (i.e., ornamental and ornamental/developed areas) for these species would be impacted. The impact resulting from Phases 3 and 4 would be the loss of an additional 14.45 acres of marginally suitable habitat for Cooper's hawk and white-tailed kite (i.e., ornamental and ornamental/developed) above the 10.92 acres impacted by Phases 1 and 2. These impacts would be considered adverse but less than significant given the status of the species and the limited amount of potential impacts relative to the habitat available in the region. Therefore, no mitigation would be required.

The yellow-breasted chat and yellow-billed cuckoo may nest in southern willow scrub vegetation. However, as discussed above, there would be no direct impacts to this vegetation type and implementation of MM 3-1 would avoid inadvertent impacts on species using this vegetation, resulting in a less than significant impact

Further, active nests of these and common migratory bird species, regardless of the sensitivity of the habitat, are protected by the MBTA. In addition, the loss of an active raptor nest, including common raptor species, would be a potentially significant impact and considered a violation of Sections 3503, 3503.5, and 3513 of the *California Fish and Game Code.* Compliance with PPPs 3-3 and 3-4, which address the time frames that construction could occur to avoid nesting raptors and include a requirement for a preconstruction survey for active nests, would ensure that impacts on active nests are less than significant.

Suitable foraging and roosting habitat is also present for two special status mammal species that are not covered by the NCCP/HCP: hoary bat (*Lasiurus cinereus*) and western bonneted bat (*Eumops perotis californicus*). Phases 1 and 2 would impact a total of approximately 1.99 acres of potential foraging habitat (i.e., annual grassland and coastal sage scrub) for these species. This loss of foraging habitat would contribute to the ongoing regional loss of foraging habitat; however, these species are tolerant of developed areas and abundant foraging habitat remains available in the project region.

Therefore, this impact would be considered adverse but less than significant, and no mitigation would be required.

The various buildings and structures as well as mature trees located in the survey area also provide potentially suitable roosting habitat for structure-roosting bat species (western bonneted bat) and for tree-roosting bat species (including hoary bat). The destruction of occupied maternity or day roosts has the potential to result in the loss of a local bat population. Demolition or removal of roosts may be considered significant, depending on the size of the roost. Implementation of MM 3-2, which includes preconstruction surveys and bat exclusion, would reduce impacts to a less than significant level by avoiding impacts on active roosts.

The proposed Project has the potential to indirectly affect species utilizing adjacent habitat. These effects may result from temporary or long-term increases in noise, human activity, and night lighting. These potential indirect impacts would be less than significant with implementation of PPP 3-1, which requires compliance with the provisions of the NCCP/HCP; PPP 3-2, which ensures avoidance of unimpacted coastal sage scrub through construction-related minimization measures; MM 3-3, which requires that construction-related noise does not impact species in riparian habitat; and PPP 1-2, which requires light to be directed away from adjacent areas.

In addition, fuel modification and other fire protection activities have the potential to impact active nests of migratory birds and/or raptors and active bat roosts. However, impacts would be less than significant with implementation of PPPs 3-3 and 3-4 and MM 3-2. It should also be noted that the Non-native Vegetation Removal and Planting Plan (MM 3-4) which addresses the removal of non-native vegetation and the planting of native vegetation in the annual grassland habitat has the potential to enhance the habitat in this area, potentially providing suitable habitat for special status species that doesn't currently exist.

PPPs and MMs:

Phases 1 through 4

Refer to PPP 1-2, PPP 3-1 through 3-4 and MM 3-1 presented previously.

MM 3-2 **Special Status Bat Species.** To the extent practicable, trimming or removal of mature trees shall not occur during the bat maternity season (i.e., between March 1 and August 31). One month prior to any building demolition, a preconstruction survey for roosting bats shall be conducted. The survey shall consist of one diurnal (i.e., daytime) survey, followed by an evening emergence survey. The survey will determine if any bats are day roosting in the buildings proposed for removal. If direct impacts to day roosting bats are anticipated, bat-exclusionary devices shall be installed prior to construction or demolition activities. The bat exclusionary devices shall be designed to allow for bats to exit the roost

areas but not re-enter. All designs shall be approved by a qualified Bat Specialist and installation shall be monitored by a qualified Bat Specialist.

MM 3-3 **Least Bell's Vireo.** Prior to the issuance of a grading permit, if grading and/or construction activities are scheduled to occur during the breeding season for the least Bell's vireo (March 15 to September 15), the Director of Community Development shall verify that the following requirements regarding least Bell's vireo are shown on the grading and/or building permit plans:

A. No clearing, grubbing, grading, or other construction shall occur between March 15 and September 15, until the following requirements have been met to the satisfaction of the Director of Community Development:

i. The project certified-Biologist shall survey all riparian areas that would be subject to construction noise levels exceeding 60 A-weighted decibels (dBA) hourly average for least Bell's vireo. Preconstruction surveys shall be conducted by a qualified Biologist once per week within suitable habitat beginning four weeks prior to construction (or the week of March 15 if construction is in progress) and continuing through September 15 or until 10 consecutive visits have had negative survey results. Surveys shall be conducted between dawn and 11:00 AM during suitable weather conditions as outlined in the U.S. Fish and Wildlife Service (USFWS) survey protocol for the species. If a preconstruction focused survey is not conducted, all riparian habitat shall be considered occupied.

ii. Between March 15 and September 15, no construction activities shall occur within any portion of the site where construction activities would result in noise levels exceeding 60 db(A) hourly average (or at the current existing noise level) at the edge of occupied least Bell's vireo habitat. An analysis showing noise generated by construction activities shall not exceed 60 db(A) (or current existing noise level) at the edge of riparian habitat shall be completed by an acoustician deemed qualified by the Director of Community Development (e.g., possessing a noise engineer license with experience monitoring noise levels with listed animal species). OR

iii. No less than two weeks prior to the commencement of construction activities (or by March 15 if construction is in progress), under the direction of a qualified Acoustician, noise attenuation measures shall be implemented to ensure

noise levels from construction activities will not exceed 60 db(A) (or at the current existing noise level) at the edge of habitat occupied or potentially occupied by the least Bell's vireo. Concurrent with construction and the noise attenuation measures, noise monitoring shall be conducted at the edge of riparian habitat to ensure that noise levels do not exceed 60 db(A) hourly average (or current existing noise level). If noise attenuation measures implemented are determined to be inadequate by a qualified Acoustician or project Biologist, then the associated construction activities shall cease until such time that adequate noise attenuation is achieved or until the end of the breeding season (September 16).

B. If preconstruction surveys demonstrate that the least Bell's vireo is not present, the project Biologist shall submit a report with substantial evidence to the Community Development Department that demonstrates noise attenuation measures are not necessary between March 15 and September 15. The report shall describe the methodology and results of the 10 consecutive negative preconstruction survey visits. If evidence indicates the potential is high for least Bell's vireo to be present based on prior focused survey(s) or site conditions, the City shall require implementation of measures in item A above.

MM 3-4 Prior to the initiation of fuel modification and other fire protection activities adjacent to coastal sage scrub and southern willow scrub habitat, a Non-native Vegetation Removal and Planting Plan addressing the removal of non-native vegetation and planting of native vegetation, shall be prepared by a qualified Restoration Ecologist. The Plan shall be submitted to the Community Development Director, and shall, at a minimum, include the following items:

A. The responsibilities of the landowner, specialists, and personnel that would supervise and implement the plan shall be specified.

B. A schedule that requires removal of non-native and ornamental vegetation in late fall and early winter to avoid the nesting season for nesting birds, including the California gnatcatcher and least Bell's vireo. These activities shall not occur during the nesting season (January 15 through September 15).

C. A requirement for installation temporary fencing or other appropriate markers around any sage scrub or southern willow scrub vegetation to ensure it is not impacted during non-native vegetation removal activities.

D. A requirement for vegetation removal to be conducted once per year utilizing hand tools.

E. A requirement for a qualified Biologist to observe/monitor non-native vegetation removal activities to ensure (1) appropriate placement of fencing or other markers, and (2) adjacent special status vegetation (i.e., southern willow scrub and coastal sage scrub) are not impacted.

F. A requirement for maintenance training for any individuals involved in the removal of non-native vegetation.

3. Would the project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? (EIR Impact 3.3)

Finding: The proposed Project has been designed to avoid federally protected wetlands, and other areas under the jurisdiction of the United States Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB), and the CDFW (refer to PDF 3-2). With incorporation of PDFs, PPPs and MMs, potential inadvertent direct impacts and indirect impacts would also be less than significant. (DEIR, p. 5.3-44).

Facts in Support of Finding: As shown on Exhibit 5.3-5 of the Draft EIR and identified in PDF 3-2, no federally protected wetlands, as defined by Section 404 of the Clean Water Act (CWA), or other waters under the jurisdictional authority of the USACE, the RWQCB, or the CDFW would be directly impacted by implementation of the proposed Project. Therefore, no direct impacts would occur, and no mitigation would be required. However, given the proximity of the impact footprint to adjacent jurisdictional resources, there is the potential for these areas to be inadvertently impacted during construction; these inadvertent impacts would be potentially significant. Implementation of MM 3-1, which requires monitoring of grading activities and installation of protective fencing/flagging, would ensure that inadvertent construction impacts due to construction activities do not impact jurisdictional resources, resulting in a less than significant impact.

Implementation of the proposed Project has the potential to indirectly impact jurisdictional resources in the survey area due to changes in water quality. Indirect impacts on jurisdictional resources would be less than significant with the application of Best Management Practices (BMPs) pursuant to the National Pollutant Discharge Elimination System (NPDES) Construction General Permit, which would protect water quality (refer to PPPs 8-1 and 8-2 under the discussion of Hydrology and Water Quality).

Additionally, given the proximity of the potential impact area for the Concordia East roadway/Ridgeline Drive intersection and roadway improvements to adjacent jurisdictional resources, there is the potential for these areas to be inadvertently impacted during construction. These inadvertent impacts would be potentially significant and would be reduced to less than significant levels with implementation of MM 3-1.

PPPs, PDFs and MMs:

Refer to PPPs 8-1 and 8-2 under the discussion of Hydrology Water Quality later in this section, and PDF 3-2 and MM 3-1 identified previously.

C. Cultural Resources (Section 5.4 of the Draft EIR)

1. Would the project cause a substantial adverse change in the significance of a historical resource as defined in §15064.5? (EIR Impacts 4.1a and 4.1b)

Finding: There are no historic resources, including significant historic structures, within the boundaries of the Concordia campus; however, undiscovered resources may be discovered during earthwork. Incorporation of PPP 4-1 and MM 4-1 would reduce this impact to a less than significant level. (DEIR, p. 5.4-9.)

Facts in Support of Finding: There are no historic resources, including significant historic structures, within the boundaries of the Concordia campus, including the areas to be developed. The project would not cause substantial adverse change to known historical resources outside the campus boundaries. However, it is possible that buried and undiscovered historical resources are present within the construction impact areas for Phases 1 through 4, resulting in a potentially significant impact. Implementation of PPP 4-1 and MM 4-1 would include retaining a qualified Archaeologist to address the monitoring of site grading for potential archaeological/historical resources and in the event that such resources are discovered, no further grading shall occur in the area of the discovery until the Director of Community Development is satisfied that adequate provisions are in place to protect/recover those resources. As such, potential significant impacts to undiscovered historical or archaeological resources, if any, would be less than significant.

PPP and MM:

Phases 1 through 4

PPP 4-1 Prior to the issuance of the first preliminary or precise grading permit for a project that is located on land that includes potentially significant archaeological and/or paleontological sites, and for any subsequent permit involving excavation to increased depth, the Project Applicant shall provide letters from an Archaeologist and/or a Paleontologist. The letters shall state that the Project Applicant has retained these individuals, and that the consultant(s) will be on call during all grading and other significant ground-disturbing activities. Determination of the need for these consultants shall be based on the environmental analysis for the project. These consultants shall be selected from the roll of qualified Archaeologists and Paleontologists maintained by the County of Orange (OC Public Works/OC Planning). The Archaeologist and/or Paleontologist shall meet with Community Development staff and shall submit written recommendations specifying procedures for cultural/scientific resource surveillance. These recommendations shall be reviewed and approved by

the Director of Community Development prior to issuance of the grading permit and prior to any surface disturbance on the campus. Should any cultural/scientific resources be discovered during grading, no further grading shall occur in the area of the discovery until the Director of Community Development is satisfied that adequate provisions are in place to protect the resources. This condition and the approved recommendations shall be incorporated on the cover sheet of the grading plan under the general heading: "Conditions of Approval". (*City of Irvine Standard Condition 2.5)*

MM 4-1 Prior to issuance of a grading permit, the following requirement shall be incorporated on the cover sheet of the Grading Plan under the general heading "Conditions of Approval":

a. Prior to the issuance of any grading permit, the Project Applicant shall provide written evidence to the City of Irvine that a qualified Archaeologist and a Native American Monitor have been retained to observe grading activities in native sediments, at a depth of five feet or deeper, and salvage and catalog artifacts as necessary. The Archaeologist and Native American Monitor shall be present at the pre-grade conference; shall establish procedures for archaeological resources surveillance; and shall establish, in cooperation with the Project Applicant, procedures for temporarily halting or redirecting work to permit sampling, identification, and evaluation of artifacts.

   The qualified Archaeologist shall be responsible for maintaining daily field notes and a photographic record and for reporting all finds in a timely manner. The Archaeologist shall also be equipped to record and salvage cultural resources that may be unearthed during initial ground-disturbing activities. Non-Native American artifacts shall be inventoried, assessed, and analyzed for cultural affiliation, personal affiliation (prior ownership), function, and temporal placement. Subsequent to analysis and reporting, these artifacts shall be subjected to curation at an accredited curation facility approved by the City of Irvine or returned to the Project Applicant, as deemed appropriate. All artifacts discovered shall be inventoried and analyzed by the professional Archaeologist. The Native American Monitor shall assist in the analysis of any Native American artifacts for identification as everyday life and/or religious or sacred items, cultural affiliation, temporal placement and function, as much as possible. The significance of Native American resources shall be evaluated in accordance with the provisions of CEQA and shall consider the religious beliefs, customs, and practices of the affected tribes. All items found in association with Native American human remains shall be considered grave goods or sacred in origin and subject to special handling. Native American artifacts that cannot be avoided or relocated at the campus will be prepared in a manner for curation and

shall be delivered to an accredited curation facility approved by the City of Irvine within a reasonable amount of time.

Once ground-disturbing activities exceeding five feet in depth in native sediments have ceased or the qualified Archaeologist, in consultation with the Native American Monitor, determines that monitoring activities are no longer necessary, monitoring activities may be discontinued following notification to the City of Irvine. A report of findings, including the period of inspection; a catalog and analysis of the artifacts found; and the repository of the artifacts shall be prepared upon completion of the steps outlined above. The report shall include a discussion of the significance of all recovered artifacts. The report and inventory, when submitted to the City of Irvine, will signify completion of the program to mitigate impacts to archaeological and/or cultural resources.

2. Would the project cause a substantial adverse change in the significance of an archaeological resource as defined in §15064.5? (EIR Impacts 4.2a and 4.2b)

Finding: Excavation activities required for the proposed Project have the potential to impact unknown archaeological and Native American resources, resulting in a potentially significant impact. Incorporation of PPP 4-1, PPP 4-2, and MM 4-1 would reduce this impact to a less than significant level. (DEIR, pp. 5.4-10, -11.)

Facts in Support of Finding: Eight prehistoric sites have been identified within a half mile of the project area. Of those, three have been recorded within or immediately adjacent to the campus. Two of the sites, CA-ORA-376 and CA-ORA-377, no longer exist. The third, CA-ORA-378, is extant and has been preserved in perpetuity off campus through soil capping. No impacts to CA-ORA-378 would occur with implementation of the proposed project.

No cultural resources were seen during the field examination; however, the presence of significant sites in the immediate vicinity indicates that prehistoric-era peoples made use of the project area. Therefore, buried cultural resources may exist in the subsurface. Previous grading activities have occurred within the boundaries of the campus, but not to a depth that would destroy all the archaeology that might be impacted by future ground disturbance. Excavation activities for Phases 1 and 2 could extend to 16 feet below the ground surface (bgs), and excavation activities for Phases 3 and 4 could extend up to 20 feet bgs. Although no significant cultural resources are recorded within the campus, presently unknown resources may exist in the subsurface and could potentially be disturbed during construction activities (e.g., grading and/or deep trenching for utilities), resulting in a potentially significant impact.

Implementation of PPP 4-1 includes retaining a qualified Archaeologist who would provide written recommendations specifying procedures for cultural/scientific resource surveillance based on proposed grading activities. Because there are project components that could involve excavation in native sediments to depths up to 16 feet, implementation

of MM 4-1 is also required. MM 4-1 requires monitoring of grading activities that extend below five feet from the ground surface and outlines steps to take if archaeological resources are discovered during construction. Further, for the proposed project, the City of Irvine and Concordia University has agreed to the request for Native American monitoring as identified in MM 4-1. In the event that archaeological resources are discovered, no further grading would occur in the area of the discovery until the Director of Community Development is satisfied that adequate provisions are in place to protect/recover those resources. PPP 4-2 identifies State requirements when potentially significant features or sites (as opposed to isolates) are discovered. With incorporation of PPP 4-1 and PPP 4-2 into the project and implementation of MM 4-1, potential impacts to archaeological resources would be less than significant.

PPPs and MMs:

Phases 1 through 4

Refer to PPP 4-1 and MM 4-1 presented previously.

PPP 4-2 During ground disturbance activities, if potentially significant features or sites, as opposed to isolates, are discovered, testing to determine significance is required by Sections 21083.2 and 21084.4 of the *California Public Resource Code* (PRC) and Section 15064.5(c) of Title 14 of the *California Code of Regulations* (i.e., the State CEQA Guidelines). If the features or sites are determined to meet significance criteria, then data recovery excavations would also be required unless the project is redesigned to avoid impacts. Testing and the results of data recovery excavations shall be reviewed and approved by the Director of Community Development.

3. Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? (EIR Impacts 4.3a and 4.3b)

Finding: Excavation activities required for the proposed Project have the potential to impact non-renewable paleontological resources, resulting in a potentially significant impact. Incorporation of PPP 4-1 and MM 4-2 would reduce this impact to a less than significant level. (DEIR, p. 5.4-11.)

Facts in Support of Finding: The campus has been previously graded and disturbed; however, Figure E-2, Paleontological Sensitivity Zones of the Cultural Resources Element of the City's General Plan, identifies the campus as an area with "high" paleontological sensitivity. This zone contains sedimentary rocks that have yielded significant fossils in the area. Excavation activities required for the proposed Project have the potential to impact non-renewable paleontological resources, resulting in a potentially significant impact. Implementation of PPP 4-1 includes retaining a qualified Paleontologist to provide written recommendations specifying procedures for cultural/scientific resource surveillance. In the event that such resources are discovered, no further grading shall occur in the area of the discovery until the Director of Community

Development is satisfied that adequate provisions are in place to protect/recover those resources. Implementation of MM 4-2 further requires monitoring of grading activities on the campus (specifically where these activities have the potential to encounter the Vaqueros Formation) and identifies actions to be taken in the event resources are discovered. With implementation of PPP 4-1 and MM 4-2, impacts to paleontological resources would be less than significant.

PPP and MM:

Phases 1 through 4

Refer to PPP 4-1 presented previously.

MM 4-2 Prior to issuance of a grading permit, the following requirements shall be incorporated on the cover sheet of the Grading Plan under the general heading "Conditions of Approval":

a. A qualified Paleontologist and Paleontological Monitor shall be present at the pre-grade meeting to consult with the grading contractor and other consultants prior to the start of earth-moving activities. At the meeting, the Paleontologist shall establish procedures for paleontological resources surveillance based on the location and depths of paleontologically sensitive sediments, and shall establish, in cooperation with the City, procedures for temporarily halting or redirecting work to permit the sampling, identification, and evaluation of the fossils as appropriate.

b. A qualified Paleontological Monitor shall be present at the site when grading and excavation in the Vaqueros Formation exceeds five feet in depth. Paleontological monitoring is not required in areas where excavation does not exceed five feet.

c. The Monitor shall have the authority to temporarily direct, divert, or halt grading to allow recovery of paleontological resources. In areas rich in micro-vertebrates, collection of large bulk samples of matrix for later water screening to recover small bones and teeth shall be part of the paleontological salvage program.

d. Fossils recovered from this project shall be cleaned, stabilized, identified, and documented. A report on the paleontological resources recovered from the parcels shall be prepared by the Paleontologist and submitted to the Community Development Department.

e. Fossils with their contextual data must be deposited at a recognized museum or institution.

4. Would the project cause a substantial adverse change in the significance of a Tribal Cultural Resource as defined in Public Resources Code 21074 and that is: (i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or (ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code section 5024.1?

Finding: Excavation activities required for the proposed Project have the potential to impact unknown Native American resources, resulting in a potentially significant impact to Tribal Cultural Resources. Incorporation of PPP 4-1, PPP 4-2, and MM 4-1 would reduce this impact to a less than significant level. (DEIR, pp. 5.4-10, -11.)

Facts in Support of Finding: To determine potential impacts on Tribal Cultural Resources, various Native American coordination efforts were completed for the proposed project. On March 24, 2015, a Sacred Lands File (SLF) search by the NAHC was requested. The response received from the NAHC on April 3, 2015, indicated that the SLF search was completed with negative results, and a list of Native American groups and individuals that may have knowledge of the religious and/or cultural significance of resources that may be on and/or near the campus was provided. Each of the groups and individuals identified by the NAHC was mailed an informational letter on April 22, 2015, describing the project and requesting any information regarding resources that may exist on and/or near the campus. No responses from this initial outreach were received

Further, consistent with AB 52, the NAHC was contacted for a current SLF search and a list of tribal representatives for AB 52 project notification. The response from the NAHC was received on October 1, 2015, and a list of Native American tribes was provided. Letters of project notification were sent to each of the tribal representatives on this list on October 7, 2015.

Responses to the AB 52 project notification were received from two of the tribes: the Juaneño Band of Mission Indians, Acjachemen Nation and the Soboba Band of Luiseño Indians. They requested additional project information, including an aerial map and records search results. Available information was provided to the tribes.

A letter dated October 9, 2015, was received from Joseph Ontiveros, Cultural Resources Director of the Soboba Band of Luiseño Indians (Ontiveros 2015). The Soboba Band's response indicates that although the project is outside of the existing reservation, it does fall within the boundaries of the tribe's Traditional Use Areas. The Soboba Band does not have any immediate concerns with the proposed project at this time; however, the tribe requests notification of any inadvertent discoveries that are made during the course of the project.

An email response was received from Joyce Perry, Cultural Resources Director of the Juaneño Band of Mission Indians, Acjachemen Nation on October 8, 2015 (Perry 2015).

The Juaneño Band requests that Native American and archaeological monitoring be a condition of the project.

Additionally, as discussed previously, NOP comment letters addressing cultural resources were received from the CCRPA and the United Coalition to Protect Panhe. These letters acknowledge that an existing archaeological site east of the campus is being protected, that there is a potential for additional resources to be encountered during construction, and that these resources should be avoided or preserved. The commenters requested the results of the archaeological and cultural investigations and to participate in the environmental review process. (DEIR, pp. 5.4-4, -5.)

During the public review period for the Draft EIR, comment letters were submitted to the City from the United Coalition to Protect Panhe and the Gabrieleno Band of Mission Indians – Kizh Nation. (See Comment Letters 10 and 11 of the FEIR.) The comment letter from the Gabrieleno Band of Mission Indians – Kizh Nation discussed the sensitivity of the project area as it relates to archaeological and Tribal Cultural Resources, and the potential to encounter previously unknown resources during construction. The Response to Comment Letter 11 in the Final EIR states to address any potential impact to these resources, the City of Irvine is requiring that a Native American Monitor, along with an Archaeological Monitor, be present during grading activities in native sediment, consistent with the request made by in this comment letter. The Gabrieleno Band of Mission Indians – Kizh Nation will be considered to conduct this monitoring, along with other tribes that have made the same request. (See FEIR, p. 2-91.)

Based on the results of consultation and the public comment period, as well as the results of surveys and field examination, it is determined that impacts to Tribal Cultural Resources will be less than significant, with the incorporation of PPP 4-1, PPP 4-2, and MM 4-1.

PPPs and MMs:

Refer to PPPs 4-1 through 4-3, MM 4-1 and MM 4-2 presented previously.

D. Geology & Soils (Section 5.5 of the Draft EIR)

1. Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury or death involving strong seismic ground shaking? (EIR Impacts 5.1a and 5.1b)

Finding: The Concordia campus is located in the highly seismic southern California region, due to the proximity of known active faults. With incorporation of PPPs 5-1 through 5-8 and MM 5-1, potential impacts would be less than significant. (DEIR, p. 5.5-10.)

Facts in Support of Finding: The campus, as with Southern California in its entirety, could be subject to ground shaking in the event of an earthquake. Given the proximity of the campus to fault zones within 50 miles of the campus, intense ground shaking should be expected in the future. The possibility of ground acceleration or shaking on campus,

including the areas to be developed and/or improved as part of the proposed Project, is considered similar to that for all of Southern California and is considered a potentially significant impact. Adherence to current CBC requirements, the City of Irvine *Grading Code*, and the City's Grading Manual, as specified in PPPs 5-1 through 5-7; and implementation of all recommendations presented in the Preliminary Geotechnical Report for the Music, Worship and Theology Building and CU Center Addition (refer to MM 5-1) and any future site-specific geotechnical investigations (refer to PPP 5-1); would ensure a less than significant impact related to strong ground shaking for the proposed Project. In addition, in Phase 3 of development, compliance with the Special Development Requirement included in Chapter 9-21, of the Zoning Ordinance (included as PPP 5-8) would ensure that impacts related to unstable soils during development of the recreation/lap pool are reduced to a less than significant level.

PPPs and MMs:

Phases 1 through 4

PPP 5-1 Prior to the issuance of grading permits, the Project Applicant shall provide to the Chief Building Official a site-specific geotechnical study for each proposed structure. The Geotechnical Report shall be prepared by a registered Civil Engineer or certified Engineering Geologist, having competence in the field of seismic hazard evaluation and mitigation. The Geotechnical Report shall contain site-specific evaluations of the seismic hazard affecting the project and shall identify portions of the project site containing seismic hazards. The report shall also identify any known off-site seismic hazards that could adversely affect the site in the event of an earthquake. The contents of the Geotechnical Report shall include, but shall not be limited to, the following:

a. A project description.

b. A description of the geologic and geotechnical conditions at the site, including an appropriate site location map.

c. An evaluation of site-specific seismic hazards based on geological and geotechnical conditions, in accordance with current industry standards of practice.

d. Recommendations for earthwork and construction.

e. The name(s) of report preparer(s) and signature(s) of a certified Engineering Geologist and/or registered Civil Engineer, having competence in the field of seismic hazard evaluation and mitigation.

f. The official professional registration or certification number and license expiration date of each report preparer in the signature block of the report (City of Irvine Standard Condition 2.6).

PPP 5-2 Prior to issuance of a grading permit, the Project Applicant shall demonstrate compliance with the following requirement to the satisfaction of the Chief Building Official, and this requirement shall be included on the cover sheet of the grading permit. During grading and construction activities, all grading operations and construction will be conducted in conformance with the applicable City of Irvine Grading Code (Municipal Code Title 5, Division 10) and Grading Manual and the most recent version of the California Building Code (CBC). Grading operations shall also be consistent with the recommendations included in the most current Geotechnical Report for the project area prepared by the Engineer of Record.

PPP 5-3 Prior to issuance of a grading permit, the Project Applicant shall demonstrate compliance with the following requirement to the satisfaction of the Chief Building Official, and this requirement shall be included on the cover sheet of the grading permit. During grading and earthwork activities, in accordance with the City of Irvine Grading Code (Municipal Code Title 5, Division 10) and Grading Manual, grading and earthwork shall be performed under the observation of a Registered Civil Engineer specializing in Geotechnical Engineering in order to achieve proper subgrade preparation; selection of satisfactory fill materials; placement and compaction of structural fill; stability of finished slopes; design of buttress fills; subdrain installation; and incorporation of data supplied by the Engineering Geologist.

PPP 5-4 Prior to issuance of a grading permit, the Project Applicant shall demonstrate compliance with the following requirement to the satisfaction of the Chief Building Official, and this requirement shall be included on the cover sheet of the grading permit. During grading and earthwork activities, in accordance with the City of Irvine Grading Code (Municipal Code Title 5, Division 10) and Grading Manual, grading and earthwork shall also be performed under the observation of a certified Engineering Geologist to provide professional review and written approval of the adequacy of natural ground for receiving fills; the stability of cut slopes with respect to geological matters; and the need for subdrains or other groundwater drainage devices. The Geologist shall geologically map the exposed earth units during grading to verify the anticipated conditions and, if different, provide findings to the Geotechnical Engineer for possible design modifications. If recommendations are modified they shall be submitted to the City Engineer for review and approval.

PPP 5-5 Prior to issuance of a building permit, the Project Applicant shall submit to the Chief Building Official for review and approval documentation prepared by a licensed Geotechnical Engineer certifying the suitability of the graded site, as required in the City of Irvine Building Code (Municipal Code Title 14, Buildings and Construction).

PPP 5-6 Prior to the issuance of grading permits, the Project Applicant shall demonstrate compliance with the following requirement to the satisfaction of the Chief Building Official. Grading level details of the proposed cut and fill slopes shall be evaluated by a licensed Geotechnical Engineer for stability. If adverse conditions are anticipated, remedial measures will be provided to stabilize the slopes. Revegetation of cut and fill slopes shall be required in accordance with the City of Irvine Grading Code (Municipal Code Title 5, Division 10) and Grading Manual.

PPP 5-7 Prior to the issuance of a building permit, the Project Applicant shall demonstrate compliance with the following requirement to the satisfaction of the Chief Building Official. Future buildings and structure, including retaining walls, shall be designed in accordance with the all applicable State Codes with City of Irvine Amendments. The design of the structures shall include lateral load analysis using the most restrictive seismic and wind loads as determined by the California Building Code (CBC).

Phase 3 Only

PPP 5-8 Prior to issuance of a grading permit for the proposed recreation/lap pool, and as required by the Special Development Requirement included in Chapter 9-21, Planning Area 21 (Turtle Rock), of the Zoning Ordinance:

a. In conjunction with submittal of swimming pool or spa plans, the Project Applicant shall submit a soil report prepared and signed by a licensed civil and/or geotechnical engineer. The report shall include, but not be limited to, the following information:

   (1) A plot showing the location of all test borings and/or excavations.

   (2) Descriptions and classifications of the materials/soils encountered.

   (3) Elevation of the water table, if encountered.

   (4) Recommendations for foundation type and design criteria, including bearing capacity, provisions to minimize the effects of expansive soils, and the effects of adjacent loads.

   (5) Expected total differential settlement.

b. Exception: The City Building Official may waive the requirement for submission of a soil report if the following conditions are met:

   (1) A hydrostatic valve is installed in the pool to relieve hydrostatic pressure.

   (2) The pool is designed to accommodate the effects of expansive soils.

MM 5-1 Prior to the issuance of a grading permit, recommendations from the *Preliminary Geotechnical Engineering Report for the Music, Worship and Theology and CU Center Projects, Concordia University Irvine*

(November 2015) prepared by Geotechnical Solutions, Inc. and any forthcoming geotechnical studies (required pursuant to PPP 5-1) shall be included in the site preparation and building design specifications. Compliance with this requirement shall be verified by the City's Chief Building Official. Preliminary recommendations to be included in the project specifications include, but are not limited to:

- Evaluation of Foundation Types and Foundation Recommendations
  - Spread Footing Foundations
  - Caisson Recommendations
  - Conventional Foundations on Engineering Compacted Fill
- Floor Slab
- Retaining Wall Recommendations
  - Lateral Passive Resistance
  - Active Pressure
  - At-Rest Earth Pressure
  - Seismic Force
- Pavement Recommendations
- Pavement Grading Recommendations
  - Subgrade Preparation
  - Aggregate Base
  - Asphalt Concrete Pavement
  - Site Drainage
  - Exterior Concrete Flatwork
  - Corrosion and Sulfate Attack Protection
  - Concrete
- Grading Recommendations
- Construction Verification Procedures
  - Pre-Grading Meeting
  - Footing Observations
  - Earthwork Observations
  - Temporary Support of Excavations

2. Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury or death involving seismic-related ground failure, including liquefaction? (Impacts 5.2a and 5.2b)

Finding: Secondary effects of earthquakes can lead to ground deformation or failure including liquefaction, and may cause potential impacts. With incorporation of PPPs 5-1 through 5-7 and MM 5-1, potential impacts would be less than significant. (DEIR, pp. 5.5-11, -12.)

Facts in Support of Finding: With the exception of the extension of Parking Lot A proposed as part of Phase 1 and the proposed tennis deck over Parking Lot A (Phase 3), no other project components included as part of the proposed Project would be susceptible to seismically induced liquefaction. However, since these project components are located in an elevated area underlain by bedrock and no groundwater has been encountered, liquefaction is not considered to be a concern. Although seismically induced liquefaction is not expected, design and construction following the recommendations contained in the site-specific geotechnical study for each proposed structure on campus and compliance with applicable local and State regulations would ensure the potential for significant geologic and geotechnical hazards related to seismic-related ground failure, including liquefaction, is less than significant. Grading and construction associated with the proposed Project would be required to comply with applicable provisions of the CBC standards, the City of Irvine *Grading Code*, and the City's Grading Manual (refer to PPPs 5-1 through 5-7). Following the recommendations contained in the project-specific geotechnical studies (PPP 5-1) and compliance with applicable local and State regulations (as required by PPPs 5-2 through 5-7) would ensure the potential for significant geologic and geotechnical hazards related to seismic-related ground failure, including liquefaction, is less than significant for the proposed Project.

PPPs and MMs:

Refers to PPPs 5-1 through 5-7 and MM 5-1 presented previously.

3. Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving landslides? (EIR Impacts 5.3a and 5.3b)

Finding: Secondary effects of earthquakes can lead to landslides, which may cause potential impacts. With incorporation of PPPs 5-1 through 5-7, and MM 5-1 potential impacts would be less than significant. (DEIR, pp. 5.5-13, -14.)

Facts in Support of Finding: As shown on the State of California Seismic Hazards Zones, Tustin 7.5-Minute Quadrangle Map (refer to Exhibit 5.5-1 of the Draft EIR), an area in the southern portion of the campus (primarily undeveloped but including an area developed with the baseball and track/soccer fields) and the area north of the campus (slope into Mason Regional Park) are mapped by the State as being in a designated seismically induced landslide area. Besides these areas, there are no areas proposed for development/improvements as part of the Campus Master Build-Out Plan Update within

a designated seismically induced landslide hazard area. The slope along the western portion of the northern campus boundary is not a landslide and would not be subject to any construction activities; however, adjacent parking areas on campus would be modified and slope stability would need to be taken into consideration during design.

As discussed in the Preliminary Geotechnical Report prepared for the Music, Worship and Theology Building (Phase 1) and CU Center Addition (Phase 2), these proposed structures are not located in a designated seismically induced landslide hazard area. Therefore, for these project components, there is no impact and no mitigation required.

The other components of the proposed Project would not involve any structural development in the designated seismically induced landslide hazard area on campus. Therefore, based on available information, seismically induced landsliding is not considered to be a concern and no mitigation is required with adherence to required project-specific analysis.

Compliance with applicable local and State regulatory requirements would ensure that potential impacts are less than significant. The potential for landslides is common in Southern California and can be mitigated by typical design and construction practices (such as design in accordance with the CBC). With the exception of the Music, Worship and Theology and CU Center Addition, which are addressed in the preliminary geotechnical report included in Appendix F of the Draft EIR, project-specific geotechnical and geologic investigations are required for each development proposed as part of the Campus Master Build-Out Plan Update (refer to PPP 5-1). Design and construction following the recommendations contained in project-specific geotechnical studies and compliance with applicable local and State regulations (as required by PPPs 5-2 through 5-7) reduce the potential for significant geologic and geotechnical hazards related to seismically induced landslides to a less than significant level. Compliance with applicable local and State regulatory requirements as outlined in PPPs 5-1 through 5-7 and implementation of site-specific recommendations/requirements outlined in any Geotechnical Reports or Grading Plans (see MM 5-1) would ensure that potential impacts are less than significant.

PPPs:

Refers to PPPs 5-1 through 5-7 and MM 5-1 presented previously.

4. Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on-site or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse? (EIR Impacts 5.4a and 5.4b)

Finding: The potential for liquefaction and landslides is addressed above, and the impact would be less than significant with incorporation of identified PPPs 5-1 through 5-8 and MM 5-1. There is a potential for other impacts related to unstable soils, which would also be less than significant with incorporation of the identified PPPs and MM. (DEIR, pp. 5.5-15, -16.)

Facts in Support of Finding: There is no potential for lateral spreading since there is not a continuous and laterally unconstrained liquefiable zone. In addition, the lack of a thick sequence of compressible materials, depth of groundwater, and no historical record of oil operations on the project site preclude the problems associated with possible subsidence across the campus.

The fill materials that overlay bedrock would undergo settlement upon loading, which could result in a significant impact related to unstable soil. Fill material would need to be entirely removed to bedrock within the planned construction areas for the proposed buildings and recompacted back with new import, non-expansive soil. For parking and driveway areas, recommendations are also made for removal of surficial deposits of loose soil material, excavation, recompaction, and removal of unsuitable materials. Standard corrective grading practices include ensuring that the Geotechnical Engineer of Record oversees grading operations and performs additional field testing and observations on site during grading in order to provide direction on removal and recompaction of compressible materials discovered during grading.

The results of preliminary testing of soil hydrogen potential (pH) and resistivity also indicate that on-site soil materials are generally medium acidic (pH value 6.0) and the minimum soil resistivity is low. This indicates that the on-site soils may be severely corrosive to ferrous metals and copper.

Under Phases 1 through 4, potential for on-site soils to result in unstable soil conditions, including compressible soils, the potential for settlement, and the potential for corrosion, is a potentially significant impact if remediation is not implemented. Compliance with applicable regulations and all recommendations presented in project-specific geotechnical investigations and Grading Plan submittals (PPPs 5-1 through 5-8 and MM 5-1) would ensure that potential impacts are less than significant. MM 5-1 is required to ensure that recommendations from the Preliminary Geotechnical Report are included in site preparation and building design specifications to ensure that potential impacts associated with compressible soils are reduced to a less than significant level. In addition, in Phase 3 of development, compliance with the Special Development Requirement included in Chapter 9-21, of the Zoning Ordinance (included as PPP 5-8) would ensure that impacts related to unstable soils during development of the recreation/lap pool are reduced to a less than significant level.

PPPs and MMs:

Refers to PPPs 5-1 through 5-8 and MM 5-1 presented previously.

5. Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property? (EIR Impacts 5.5a and 5.5b)

Finding: Based on available information for the campus for previous and current project-specific geotechnical investigations, soils throughout the campus are expected to have a medium expansion potential. The presence of expansive soils in areas proposed for

construction would be considered a potentially significant impact. The impact would be less than significant with incorporation of identified PPPs 5-1 through 5-7 and MM 5-1. (DEIR, p. 5.5-17.)

Facts in Support of Finding: The potential for expansive soils will be addressed in project-specific geotechnical studies (required by PPP 5-1) and during final geotechnical investigation laboratory tests would be performed on samples obtained during drilling. Further testing would be performed on near-surface soil to determine the expansion index. Recommendations to compensate for the potential adverse effects of expansive soils would be provided for each area based on the results of this testing. Compliance with recommendations from project-specific Geotechnical Reports and applicable local and state regulations (CBC, City of Irvine Grading Code, and City Grading Manual), as outlined in PPPs 5-1 through 5-7; and implementation of MM 5-1 would ensure that potential impacts related to expansive soils are less than significant.

PPPs and MMs:

Refers to PPPs 5-1 through 5-7 and MM 5-1 presented previously.

E. Hazards and Hazardous Materials (Section 5.7 of the Draft EIR)

1. Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment? (EIR Impacts 7.1a and 7.1b)

Finding: Construction activities could result in the accidental release of hazardous materials, and operations would involve the use, storage and transport of hazardous materials and hazardous wastes. All construction and operation would follow applicable regulations and existing campus procedures and the potential to create a significant hazard to the public or the environment from reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment would be less than significant. (DEIR, p. 5.5-17.)

Facts in Support of Finding: There are no listed hazardous materials sites on campus that could pose a hazard during construction. However, transite pipes manufactured with asbestos could be encountered during site grading and preparation for Phases 1 through 4. Additionally, Phases 3 and 4 would involve the demolition of seven existing buildings that may have asbestos containing materials (ACMs) and/or lead in the building materials. The potential for asbestos and lead release would be considered a significant impact if not properly handled, and if proper precautions are taken to minimize exposure. In compliance with PPP 7-1, the University is required to complete pre-demolition surveys, inspection and analyses for ACMs and lead-based paint, performed by fully licensed and qualified individuals for any structures or facilities to be demolished. This shall be accomplished in accordance with all applicable federal, State, and local regulations, including, but not limited to California Occupational Safety and Health Administration (CalOSHA) requirements and SCAQMD Rule 1403. Compliance with the

requirements of PPP 7-1 would reduce the potential impact of accidental release of hazardous materials to a less than significant level.

There is a potential to encounter polychlorinated biphenyls (PCBs) during demolition and grading activities associated with Phases 3 and 4 as a result of their potential use in existing buildings on campus and in electrical equipment, resulting in a potentially significant impact. Implementation of MM 7-1 requires that soil having the potential for PCB exposure be tested and any detectable concentrations be compared to appropriate regulatory screening levels and if detected, coordination with the applicable regulatory agency as to the proper abatement and disposal of impacted soil would be performed. Additionally, MM 7-2, as modified by the Final EIR, requires pre-demolition soil sampling for organochlorine (legacy) pesticides (OCPs) and lead. If levels of lead or OCPs in excess of established screening are identified within the sampled areas, the applicable oversight agency(ies) shall be consulted to determine further screening and remediation requirements. Any required remediation would be conducted to ensure that onsite soils do not pose a risk to the public or the environment, including construction workers and future occupants prior to the commencement of demolition activities. With incorporation of MM 7-2, potential impacts would be less than significant.

Operations associated with the use and storage and transport of hazardous materials and hazardous wastes would follow applicable regulations and existing campus procedures, as outlined in the Draft EIR, and the potential to create a significant hazard to the public or the environment from reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment would be less than significant

PPPs, PDFs and MMs:

Phases 1 through 4

PPP 7-1 Prior to issuance of a demolition permit or grading permit, whichever occurs first, pre-demolition surveys, inspections, and analyses for asbestos-containing materials (ACMs) and lead-based paint (LBP) shall be performed by fully licensed and qualified individuals for any structures or facilities to be demolished. This shall be accomplished in accordance with all applicable federal, State, and local regulations, including, but not limited to California Occupational Safety and Health Administration (CalOSHA) requirements and South Coast Air Quality Management District (SCAQMD) Rule 1403. Dependent on the results of the surveys, ACM and LBP abatement or management measures shall be implemented in accordance with all applicable regulations, summarized below.

Should ACM be identified in any of the surveyed buildings or facilities intended for demolition, workers shall comply with the requirements of Title 8 of the *California Code of Regulations* (Section 1529), which regulates asbestos exposure. Any damaged ACM shall be removed, repaired, encapsulated, or enclosed. Removal of materials reported to contain detectable amounts of asbestos shall be performed by a licensed

asbestos abatement contractor prior to demolition activities. In addition, asbestos-containing waste shall be disposed of by a licensed asbestos abatement contractor and manifested as hazardous waste. Dry sawing, sanding, and drilling of ACM shall be avoided to minimize airborne asbestos exposure. Building materials containing asbestos may be exposed during demolition activities, and shall be sampled and analyzed prior to further disturbance.

Should LBP be identified in any of the surveyed buildings or facilities intended for demolition, workers shall comply with the requirements of Title 8 of the *California Code of Regulations* (Section 1532.1), which provides exposure limits, exposure monitoring, respiratory protection, and good working practice by workers exposed to lead. LBP debris and other waste shall be managed and disposed of in accordance with the applicable provision of the *California Health and Safety Code.*

Prior to issuance of a demolition or grading permit, whichever comes first, the Project Applicant shall submit to the Director of Community Development evidence that the requirement to adhere to all applicable regulations is included in the contractor specifications.

Prior to issuance of any demolition permit or grading permit for activities that involve the removal of structures or facilities with ACM or LBP, the results of ACM and lead surveys shall be provided to the Director of the Community Development Department.

MM 7-1 Prior to issuance of a demolition permit or grading permit, whichever occurs first, the Project Applicant shall provide documentation to the Director of Community Development that appropriately qualified individuals have been retained to manage the identified materials in accordance with all applicable regulations.

Soils encountered during demolition and earth-moving activities having the potential to contain polychlorinated biphenyls (PCBs) (this includes property within 25 feet of a possible historic source of PCBs or where visual and/or other evidence of contamination is noted) shall be tested for PCBs using U.S. Environmental Protection Agency (USEPA) Method 8082. If detectable concentrations of PCBs are identified, these shall be compared to appropriate regulatory screening levels (i.e., EPA Regional Screening Levels [RSLs] or California Human Health Screening Levels [CHHSLs]).

In addition, coordination with the applicable regulatory oversight agency(ies) shall be initiated and the agency(ies) direction/recommendation regarding the proper abatement and disposal of PCB-impacted soil shall be implemented. This requirement shall be

included in the construction contractor's specifications, and its performance shall be the responsibility of the Project Applicant.

MM 7-2 Prior to issuance of a demolition permit, the Project Applicant shall provide evidence that the onsite soils do not contain concentrations of organochlorine pesticides (OCPs) or lead above the applicable levels shall be provided to the Director of the Community Development Department for review and approval. Pre-demolition soil sampling for OCPs and lead shall be performed by a licensed contractor. The sampling shall be conducted under the guidance of the sampling requirements identified in the California Department of Toxic Substances Control's (DTSC's) *Interim Guidance Evaluation of School Sites with Potential Soil Contamination as a Result of Lead from Lead-Based Paint, Organochlorine Pesticides from Termiticides, and Polychlorinated Biphenyls from Electrical Transformers.* If OCP and/or lead levels within the sampled areas are identified in excess of screening values identified in the guidance document, a Health Risk Assessment (HRA) shall be prepared to the satisfaction of the Directory of the Community Development Department and, if required, remediation shall be conducted to ensure that applicable levels are achieved.

F. Land Use (Section 5.9 of the Draft EIR)

1. Would the project conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect? (EIR Impact 9.1)

Finding: Implementation of the CUP Major Modification and Zone Change for the Campus Master Build-Out Plan Update would not conflict with an applicable plan, policy or regulation. However, an exceedance of the modified average daily vehicle trip limit has the potential to result in significant impacts. With incorporation of MM 9-1, this impact would be less than significant. (DEIR, p. 5.9-48; see also FEIR.)

Facts in Support of Finding: Section 5.9, Land Use and Planning, including Table 5.9-2 provides a detailed discussion of how the proposed Project is consistent with the policies of the City's General Plan and any applicable land use plan, policy, or regulation of an agency with jurisdiction, including the City's Zoning Ordinance (Chapter 3-37: Zoning District Land use Regulations and Development Standards; Chapter 5-4: Hillside Overlay District; and Division 9: Planning Area) and plans/regulations associated with Concordia University Irvine (Existing Campus Master Build-Out Plan; Joint-Use Agreement with the City of Irvine; and Agreements/Easements for Entry Gates and Use of Concordia East and West.

The proposed Project does not require a change to the land use zoning map or the statistical analysis relevant to the campus. However, a Zone Change is being requested to

revise Section 9-21-7.B of the Zoning Ordinance, Special Development Requirements for Concordia University (Christ College Irvine) General Plan Amendment 4237-GA and Zone Change 5232-ZC. A consistency analysis of the proposed Project with the Special Development Requirements (SDRs) applicable to the University was provided in Section 5.9 of the Draft EIR. The purposes for any proposed revisions are also explained. SDRs 5, 10, 20, 21 and 25 are proposed to be removed from the Zoning and replaced, and otherwise addressed through the Project Conditions of Approval. With the elimination of SDRs 10 and 20, the previously established trip cap would be removed. An exceedance of the proposed modified trip cap, which is the basis for the TIA conducted for the project, has the potential to result in significant impacts not addressed in the Draft EIR. Therefore, to ensure the proposed maximum allowed ADT is not exceeded, MM 9-1 is provided to ensure that the University conducts the annual traffic counts and adheres to the requirements outlined in MM 9-1/proposed Condition of Approval. With the proposed Zoning Ordinance Amendment, no land use impact would result. The proposed Project would not conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the Project adopted for the purpose of avoiding or mitigating an environmental effect.

MM:

MM 9-1 ***Incremental Daily Trip Cap***

The maximum daily trip cap shall be determined by the actual existing square footage (i.e., buildings with temporary or final certificate of occupancy) on the campus on the starting date of the vehicle trip count provided, however, that 4,732 maximum daily trips shall be the initial maximum daily trip cap until Concordia adds any additional institutional building square footage beyond the existing 243,571 square feet, at which time the below maximum Daily Trip Cap ("Daily Trip Cap") will exclusively apply and govern provided the Daily Trip Cap calculation yields no less than 4,732 maximum daily trips. As building square footage is allowed to be occupied and compliance with the trip cap is verified, the trip cap will increase incrementally for the campus. Vehicle trips generated by the Concordia University campus shall be calculated as follows:

Daily trip cap = 17.12 trips x existing institutional square footage/1,000 square feet

(note: institutional square footage excludes dormitory unit square footage)

Maximum Daily Trip Cap

If Daily Trip Cap compliance is successfully and continuously demonstrated with the occupancy of each new or expanded building, the daily trip generation shall not exceed 5,500 daily trips at full-campus build-out (i.e., 321,220 square feet of institutional uses and 330 dormitory units).

Vehicle Trip Counts

Concordia and all its successors shall conduct a count of vehicles entering and exiting the campus two times annually. The first count of vehicles shall be taken during the month of October on three successive days (Tuesday, Wednesday and Thursday). The second count of vehicles shall be taken on a weekend day (Friday or Saturday) in the Spring when a special event or special events with the largest attendance and largest vehicle trip generation is/are anticipated. The proposed dates of each count shall be reviewed and approved by City staff a minimum of 30 days in advance of commencing any actual counts.

This "cordon count" shall be conducted via a mixture of electronic and mechanical means (e.g., magnetic road loops, video and/or rubber hose counting systems). All trips entering and exiting the campus, including those associated with pass-through traffic (e.g., community HOA vehicles traversing the campus to travel from one location to another), shall be recorded. Furthermore, counts from all residential neighborhood streets (i.e., Ascension for Concordia East and Daystar, Faith and Joy for Concordia West) shall be deducted from the overall gate volumes.

Vehicle Trip Monitoring Reports

Concordia University shall submit to the Community Development Director (and provide copies directly to the Board of Directors of the Concordia East and West Community Associations) two comprehensive trip monitoring reports summarizing the completed counts of vehicles entering and exiting the campus ("Vehicle Trip Monitoring Report"). The Vehicle Trip Monitoring Reports for the October and Spring counts shall be submitted no later than 30 calendar days after completion of each count and, in the case of the City, submitted as a Pre-Application case type.

Actual count data for each day shall be included in the Vehicle Trip Monitoring Report. The highest 24-hour count for each collection period (October and Spring) shall be used in determining compliance with the Daily Trip Cap, and daily counts shall not be averaged between the count days for that year. Each Vehicle Trip Monitoring Report shall include a summary description of all events and activities occurring on campus each day that traffic counts were taken. At the discretion of the Director of Community Development, additional traffic counts and reports beyond the October and Spring Vehicle Trip Monitoring Reports may be required, if deemed necessary.

Non-Compliance

Should any October or Spring Vehicle Trip Monitoring Report or specially requested report submitted to the City evidence noncompliance with the applicable maximum trip count limitation, within 30 calendar days of the Director of Community Development's receipt of the Vehicle Trip Monitoring Report, University representatives shall meet with the Director of Community Development and Concordia East and West Community

Associations' Board of Directors, if interested, to review actions including but not limited to reducing on-campus activities and implementing transportation demand management measures (e.g., carpooling, use of alternative modes of transportation, parking management) that shall be immediately taken to comply with the trip count limitations.

Additionally, prior to issuance of all grading/building permit and approval of all development applications for uses within the campus, the applicant shall demonstrate to the satisfaction of the Director of Community Development that the projected total daily traffic from the site will not exceed 4,732 daily trips or 17.12 daily trips per thousand square feet of existing and/or proposed institutional square footage (whichever is greater). In the event of non-compliance with the applicable trip cap, the applicant shall be prohibited from further implementing the campus build-out plan regardless of the (approved) status of such permit(s) and/or development plan(s) until compliance with the trip cap is demonstrated.

Additional Requirements

Additionally, where the applicant is required to submit a traffic analysis by any federal, state, or local law or policy, including but not limited to the City Traffic Impact Analysis Guidelines and/or California Environmental Quality Act, the applicant shall submit such traffic analysis in addition to the above requirements.

Finally, see Condition of Approval 6.25 regarding Special Events and Condition of Approval 6.24 regarding Non-University Events for details on additional reporting requirements for those activities.

G. Noise (Section 5.10 of the Draft EIR)

1. Would the project result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project? (EIR Impacts 10.1a and 10.1b)

Finding: Excavation, grading, and other construction activities associated with implementation of the proposed Campus Master Build-Out Plan Update (Phases 1 through 4) have the potential to generate temporary noise levels above the existing ambient noise levels, including at on- and off-campus campus sensitive receptors. Blasting noise has the potential for temporary annoyance to on- and off-campus sensitive receptors. With incorporation of PPPs, PDFs and MMs, impacts would be less than significant. (DEIR, pp. 5.10-27, -30.)

Facts in Support of Finding: Construction activities associated with implementation of the proposed Campus Master Build-Out Plan Update (Phases 1 through 4) would have the potential to generate temporary noise levels above the existing ambient noise levels, including at on-campus sensitive receptors, at residences in the Concordia East and Concordia West communities, and along the trail in Mason Regional Park north of the campus. The duration of the construction-noise impact and the level of increased noise would vary based on the stage of construction, equipment being used, and the distance to

the sensitive receptor from the construction activities. The construction activities that generate the loudest noise include demolition and grading, which would last between 1 and 4 months depending on the project component. Typical building construction would last between 4 and 20 months, depending the project component. In compliance with PPP 10-1, demolition, excavation, grading, and other construction activities would be conducted during the hours identified in Section 6-8-205(a) of the City of Irvine Municipal Code, which states that construction activities may occur between 7:00 AM and 7:00 PM Mondays through Fridays and between 9:00 AM and 6:00 PM on Saturdays. In compliance with PPP 10-2, the Construction Traffic Routing Plan requires routing construction traffic away from residential areas using Ridgeline Drive to University Avenue and directly to the I-405 freeway. While the temporary noise increases may be a nuisance, the impact is less than significant with adherence to the requirements outlined in PPPs 10-1 and 10-2, and with implementation of MM 10-1, which requires the preparation and submittal of a construction-related noise mitigation plan.

Due to the presence of bedrock at or near the surface, it is possible that limited, site-specific blasting would be necessary to accommodate construction of proposed structures and facilities. Based on available information, blasting is not expected to be required for the Music, Worship and Theology Building or the CU Center Addition, which would be constructed during Phases 1 and 2. The quantity of blasting required and the various parameters, such as frequency, charge weight, are not known and cannot be quantified until site conditions, including geological and atmospheric data, and project requirements are reviewed by a blasting expert when blasting is required. Therefore, there would be a potentially significant noise impact and mitigation is required. In order to ensure that blasting impacts are minimized, MM 10-2 would be incorporated into the Project. MM 10-2 requires the services of a certified blasting expert to develop and execute a blasting program that would limit blasting noise at any residence and sensitive on-campus building to the limits recommended by the Office of Surface Mining Reclamation and Enforcement. MM 10-2 also requires public outreach. With the implementation of MM 10-2, blasting noise impacts would be less than significant.

PPP and MMs:

Refer to PPP 10-1 presented previously.

PPP 10-2 In compliance with Special Development Requirement No. 9 included in Chapter 9-21 of the City's Zoning Ordinance, prior to issuance of any grading permits, the Project Applicant shall submit for review and approval by the Chief Building Official a Construction Traffic Routing Plan that routes construction traffic away from residential areas. The routing plan shall be shown as a map on the grading and building plans and shall specify that construction traffic is to be routed to Ridgeline Drive, to University Avenue, and directly to the Interstate (I) 405 freeway.

MM 10-1 Prior to the issuance of each grading permit and building permit, the Project Applicant or its contractor shall submit a construction-related

noise mitigation plan to the Director of Community Development for review and approval. The plan must depict the location of construction equipment and how the noise from this equipment shall be mitigated during construction of the project, through the use of such methods as the following:

- Temporary noise attenuation fences.
- Preferential location of equipment.
- Use of current technology and noise suppression equipment.

MM 10-2 Prior to the commencement of any blasting activities, the Project Applicant shall submit a blasting plan prepared by a qualified blasting specialist to the Orange County Fire Authority and City of Irvine Department of Building and Safety for review and approval. A blasting permit shall be obtained from OCFA. A copy of the approved blasting plan shall be submitted to the Community Development Department. The Project Applicant shall be responsible for all costs associated with the preparation and implementation of the blasting plan to the satisfaction of OCFA. The blasting plan shall be prepared in accordance with the U. S. Department of Interior, Office of Surface Mining Reclamation and Enforcement standards and shall include, but not be limited to the following:

a. Pre-blast survey of on- and off-site conditions and determination of structures that would be in the area subject to potential damage from blasting activities.

b. The condition of any structures subject to potential damage shall be documented to provide a baseline for evaluating post-blast conditions.

c. Site and location of planned blasting and hours of operation (blasting to be conducted during the daylight hours only)

d. Notification of blasting activities to all property owners within one-half mile of the blasting area, which may include (depending on location of blasting) private residents, and Orange County Parks, any other persons/agencies determined appropriate by OCFA. This notification shall describe expected period and frequency that the blasting shall occur and give a contact phone number for any questions or complaints. All complaints shall be responded to in a method deemed satisfactory to the City of Irvine Community Development Director.

e. Types and amounts of explosives

f. Warning system information. For example, pre-blast alarms shall be sounded. Immediately before blasting, the construction contractor shall sound a signal announcing the blast. Construction contractors shall

follow the construction safety plan that will provide for these measures.

g. Methods of transportation and handling of explosives

h. Minimum acceptable weather conditions

i. Procedures for handling, setting, wiring and firing explosives

k. Procedures for clearing and controlling access to blast danger

j. Procedures for handling misfires and other unusual occurrences

l. Emergency action plan

m. Material safety data sheet for all explosives or other hazardous materials expected to be used.

n. Compliance with local, state and federal laws

o. Measures to assess, control, and monitor noise and ground vibration from blasting, including:

- The project contractor shall use current state-of-the-art technology to keep blast-related vibration and air blast at off-site residential and other occupied structures as low as possible, consistent with blasting safety. In no instance shall blast vibration or air blast, measured on the ground adjacent to a residential or other occupied structure, be allowed to exceed the frequency dependent limits contained in the USOSM regulations.
- The project contractor shall use a blasting seismograph to monitor and record air blast and vibration for blasts within 1,000 feet of residences and other occupied structures to verify that measured levels are within the recommended limits at those locations. If blasting is found to exceed specified levels, blasting shall cease, and alternative blasting or excavation methods that result in the specified levels not being exceeded shall be employed.
- Air blast and vibration monitoring shall take place at the nearest off-site residential or other occupied structure. If vibration levels are expected to be lower than those required to trigger the seismograph at that location, or if permission cannot be obtained to record at that location, recording shall be accomplished at some closer site in line with the structure. Specific locations and distances where air blast and vibration are measured shall be documented in detail along with measured air blast and vibration amplitudes.

p. At the conclusions of blasting activities, a post-blast survey shall be conducted to identify vibration-caused damage. In the unanticipated event of discovery of vibration-caused damage, necessary repairs shall

be recommended. The Project Applicant shall be responsible for all repairs associated with vibration-caused damage.

2. Would the project expose persons to or generate excessive groundborne vibration or groundborne noise levels? (EIR Impacts 10.3a and 10.3b)

Finding: Excavation, grading, and other construction activities associated with implementation of proposed Project, including blasting, have the potential to cause vibration, which would be considered a potentially significant impact. Incorporation of MM 10-2 and MM 10-3 would reduce this impact to a less than significant level. (DEIR, pp. 5.10-43, -44.)

Facts in Support of Finding: Demolition, grading, and construction of new structures and facilities would occur on campus and would be close to the existing buildings. In order to avoid a potentially significant vibration annoyance impacts during demolition and grading and other construction activities, MM 10-3 would be incorporated into the proposed Project. MM 10-3 requires that equipment to be used within 200 feet of a residence or 100 feet of a non-residential building would not include vibratory rollers, large bulldozers, or similar heavy equipment. Vibratory rollers operated in the static mode would be allowed. Because the annoyance impact threshold is lower than the structural impact threshold, avoidance of a potential annoyance impact would also avoid a potential structural impact. MM 10-3 would reduce potential demolition and grading vibration impacts to a less than significant level.

There would be a potentially significant vibration impact related to structural damage from blasting, and mitigation is required. In order to ensure that blasting-related vibration impacts are minimized and there is no potential for structural damage, MM 10-2 would be incorporated into the Project. MM 10-2 requires the services of a certified blasting expert to develop and execute a blasting program that would limit blasting vibration at any residence and sensitive on-campus building to the limits recommended by the Office of Surface Mining Reclamation and Enforcement. MM 10-2 also requires public outreach. With the implementation of MM 10-2, vibration impacts related to blasting would be less than significant.

MMs:

Refer to MM 10-2 presented previously.

MM 10-3 Prior to issuance of each grading permit, the Community Development Department shall confirm that the following requirement is included on the contract specifications and indicated as a note on the cover sheet of the grading plan. Compliance by the contractor shall be confirmed by the Building and Safety Department during construction.

"Equipment to be used for demolition and grading that would occur within 200 feet of a residence or 100 feet of a non-residential building shall not include vibratory rollers, large bulldozers, or similar large or heavy equipment. Vibratory rollers operated in the static mode shall be allowed."

H. Public Services and Recreation (Section 5.12 of the Draft EIR)

1. Would the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment? (EIR Impact 12.3a and 12.3b)

Finding: The proposed Project involves new and relocated athletic facilities. Direct and indirect impacts associated with construction and operation of these facilities would occur. As evaluated through the analysis in the Draft EIR, these impacts would be less than significant with incorporation of PPPs, PDFs and MMs. (DEIR, pp. 5.12-14, -15.)

Facts in Support of Finding: The proposed Project would require the relocation of the existing bike trail easement located on campus, would include construction of a Field Restrooms and Locker Building and an adjacent viewing deck, construction of two sand volleyball courts, the construction of a recreation/lap pool and associated pool service/restroom building, and construction of a tennis court deck over the expanded Parking Lot A. Direct and indirect impacts associated with construction and operation of these facilities are evaluated in the respective sections of the Draft EIR. Project-related short-term, construction-related local and regional air quality impacts are addressed in Section 5.2, Air Quality; construction-related noise impacts are addressed in Section 5.10, Noise; and construction-related traffic impacts are addressed in Section 5.13, Transportation and Traffic. Potential impacts resulting from the installation of sports field lighting are addressed in Section 5.1, Aesthetics. No additional impacts would occur with beyond those addressed in the Draft EIR. No direct impacts to Mason Regional Park would occur with implementation of the proposed Project, and potential indirect impacts, including to biological resources, are addressed in Section 5.3, Biological Resources, and Section 5.10, Noise.

As identified through the analysis presented in these sections, impacts resulting from construction and operation of proposed new and modified athletic and recreational facilities would be less than significant with incorporation of identified PPPs and MMs.

PPPs, PDFs and MMs:

Refer to PPPs, PDFs and MMs identified for Air Quality, Noise, Transportation/Traffic, Aesthetics (lighting), and Biological Resources.

I. Transportation/Traffic

1. Would the project conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit? (EIR Impacts 13.1a, 13.1b, 13.1c, 13.1d)

Finding: The proposed Campus Master Build-Out Plan (Phases 1 through 4) would increase the average daily trips (ADT), AM peak hour trips, and PM peak hour trips generated by campus operations, resulting in potentially significant impacts at study area intersections and roadway segments. With incorporation of identified PPPs, PDFs and MMS, the impacts would be less than significant. (DEIR, pp. 5.13-25, -32, -46, -48.)

Facts in Support of Finding:

Existing Plus Project Traffic Analysis

Intersection Analysis

Full implementation of the Campus Master Build-Out Plan Update (Phases 1 through 4), which is the basis for the Existing Plus Project traffic analysis, would result in a net increase of 1,509 ADT, including 115 AM peak hour trips (80 inbound and 35 outbound trips) and 134 PM peak hour trips (45 inbound and 89 outbound trips). The Existing Plus Project LOS analysis (Table B of the Traffic Impact Analysis [TIA]) in Appendix J of the Draft EIR) identifies the traffic conditions at study area intersections under this scenario. This analysis assumes implementation of intersection improvements included as part of the proposed Project, including the potential installation of a traffic signal (warranted under existing conditions) and an added shared left/right eastbound lane at the intersection of Ridgeline Drive/Concordia East. However, the intersection improvement at Ridgeline Drive/Concordia East is not a mitigation measure for project impacts. As is reflected in PDF 13-2, prior to the issuance of Certificates of Use and Occupancy for the Music, Worship and Theology building, that the Project Applicant to enter into an agreement with the City and post security in a form and in an amount acceptable to the City Engineer guaranteeing construction of a traffic signal at Concordia East and Ridgeline Drive. Timing of construction of the signal and actual construction will be determined based upon a review of necessity by the Transportation Commission. If a signal is determined not to be needed, the agreement will terminate, the security will be released, and the signal at this intersection will not be constructed as part of the Project.

As shown in Table 5.13-9 of the Draft EIR, all study area intersections would operate at a satisfactory level of service (LOS) with the proposed Project, except for the Ridgeline Drive/University Drive (LOS E in the PM peak hour). The recommended improvements at the intersection of Ridgeline Drive/University Drive for future scenarios, which are consistent with the City's approved intersection improvement project (University Drive

and Ridgeline Drive/Rosa Drew Lane Improvement Project), would address the proposed Project's impact under the Existing Plus Project condition. MMs 13-1 and 13-3 ensure that if the required intersection improvements are not approved by the City as currently proposed (with fair share payment by the Project Applicant), the Project Applicant would be responsible for completing the improvements consistent with MMs 13-1 and 13-3. It should be noted that the intersection improvement project has been approved by the City; therefore, the Project Applicant would be responsible for its fair share payment. With incorporation of these MMs, this intersection impact would be less than significant.

Roadway Segment Analysis

As shown in Table 5.13-10, study area roadway segments would operate at satisfactory LOS under the Existing Plus Project condition, except for 5 segments. The same roadway segments currently operate at unsatisfactory LOS E or F. The volume to capacity (v/c) ratios would increase by 0.02 or greater at University Drive between the I-405 southbound ramps and Michelson Drive (0.95 to 0.97) and University Drive between Michelson Drive and Ridgeline Drive (1.40 to 1.42) with implementation of the proposed Campus Master Build-Out Plan Update (Phases 1 through 4) under the Existing Plus Project condition. However, based on the peak hour link analysis conducted for the Existing Plus Project traffic analysis, proposed Project impacts on roadway segments would be less than significant and no mitigation is required.

Year 2017 Approved Traffic Analysis

Intersection Analysis

Phases 1 and 2 of the proposed Project (including 48,580 sf of new institutional uses) are anticipated to generate approximately 944 ADT, with 72 AM peak hour trips (50 inbound and 22 outbound trips), and 84 PM peak hour trips (28 inbound and 56 outbound trips). Under the Year 2017 Approved Condition, projected future traffic volumes for 2017 are based on development applications that have been approved by the City.

With the addition of traffic generated by Phases 1 and 2, and incorporation of PDF 13-2, the following four intersections would operate at unsatisfactory LOS (refer to Table D in the TIA included in Appendix J to the Draft EIR):

- Jeffrey Road/Alton Parkway (LOS E in the AM peak hour)
- Michelson Drive/University Drive (LOS E in the PM peak hour)
- Ridgeline Drive/University Drive (LOS F in the PM peak hour)
- Yale Avenue/Michelson Drive (LOS E in the AM peak hour and LOS F in the PM peak hour)

As shown in Table 5.13-11 of the Draft EIR, the changes in the ICU or delay at the intersections of Jeffrey Road/Alton Parkway and Michelson Drive/University Drive would be less than 0.02. Thus, impacts would be less than significant. The intersection of Ridgeline Drive/University Drive is forecast to operate at unsatisfactory LOS F during

the PM peak hour. The deficient PM peak hour ICU at this intersection would increase by 0.010 (1.008 to 1.018). This is not considered a significant Project impact (less than 0.02) but rather a circulation phasing impact (0.01). Based on the City's TIA Guidelines, project mitigation at a Circulation Phasing Analysis Report intersection can include contribution of a fair share toward mitigating the intersection back to acceptable LOS.

The AM and PM peak hour delays at the unsignalized intersections of Yale Avenue/Michelson Drive are already deficient in the Year 2017 No Project condition. A traffic signal is not warranted for Yale Avenue/Michelson Drive. Therefore, a significant impact would not occur at this intersection.

As previously identified, improvements are currently planned and approved by the City for the Ridgeline Drive/University Drive intersection and include a second northbound right-turn lane and a third eastbound through lane, as this intersection was identified as deficient in the 2012 Citywide Circulation Phasing Analysis Report. With the addition of a second northbound right-turn lane and a third eastbound through lane, Ridgeline Drive/University Drive would operate at satisfactory LOS during both peak hours. The proposed Project would be responsible for a fair-share contribution toward the overall intersection improvements to Ridgeline Drive/University Drive (refer to MM 13-1). Impacts at the intersection Ridgeline Drive/University Drive would be less than significant after mitigation.

Roadway Segment Analysis

The analysis of ADT volumes and v/c ratios for the 2017 Approved (No Project) condition indicates that 10 roadway segments are forecast to operate at unsatisfactory LOS without implementation of allowed development under Phases 1 and 2. With the addition of Phases 1 and 2 of the proposed Project, the same roadway segments are forecast to continue operating at unsatisfactory LOS E or F. The roadway segment v/c ratios do not increase by 0.02 or greater at these locations. Therefore, no significant Project impacts are created with implementation of Phases 1 and 2 on roadway segments under the 2017 Approved traffic analysis scenario and no mitigation is required

Year 2017 Pending Traffic Analysis

Intersection Analysis

The analysis of intersection LOS for 2017 Pending conditions considers the LOS in Year 2017 with the addition of traffic from approved projects, as well as those that have been proposed but are currently under review by the City. With the addition of Phases 1 and 2 of the proposed Project, and incorporation of PDF 13-2, the same four intersections identified above for the 2017 Approved condition are forecast to continue operating at unsatisfactory LOS E or F (refer to Table F in the TIA included in Appendix J of the Draft EIR).

As shown in Table 5.13-13 of the Draft EIR, the deficient peak hour ICUs at the intersections of Jeffrey Road/Alton Parkway, Michelson Drive/University Drive, and Ridgeline Drive/University Drive would not increase by 0.01 or greater with the

proposed Project. Thus, impacts would be less than significant and no mitigation is required. Additionally, a traffic signal is not warranted for Yale Avenue/Michelson Drive. Therefore, a significant impact would not occur at this intersection.

Roadway Segment Analysis

The analysis of ADT volumes and v/c ratios for 2017 Pending (No Project) conditions indicates that ten roadway segments are forecast to operate at unsatisfactory LOS in the No Project condition. With the addition of traffic generated by Phases 1 and 2 of the proposed Project, the same roadway segments are forecast to continue operating at unsatisfactory LOS E or F. With the proposed Project, the roadway segment v/c ratios do not increase by 0.02 or greater at these locations. Therefore, no significant Project impacts are created on roadway segments with implementation of Phases 1 and 2 in the 2017 Pending With Project condition.

Year 2035 Approved Traffic Analysis

Intersection Analysis

The Year 2035 traffic model includes projected future traffic volumes for 2035 and the traffic generation of each application for development currently approved by the City. Under Year 2035 conditions, full implementation of the Campus Master Build-Out Plan Update (Phases 1 through 4) is assumed.

The analysis of intersection LOS for the 2035 Approved No Project traffic analysis scenario indicates that six intersections are forecast to operate at unsatisfactory LOS without the proposed Project. With the addition of vehicle trips from implementation of Phases 1 through 4, and incorporation of PDF 13-2, the following intersections are forecast to operate at unsatisfactory LOS E or F (refer to Table H in the TIA included in Appendix J of the Draft EIR):

- Campus Drive/University Drive (LOS E in the PM peak hour)
- Culver Drive/Alton Parkway (LOS E in the PM peak hour)
- Jeffrey Road/Alton Parkway (LOS E in the AM and PM peak hours)
- Michelson Drive/University Drive (LOS F in the PM peak hour)
- Ridgeline Drive/University Drive (LOS E in the AM peak hour and LOS F in the PM peak hour)
- Yale Avenue/Michelson Drive (LOS E in the AM peak hour)

The deficient peak hour ICUs at Campus Drive/University Drive, Culver Drive/Alton Parkway, Jeffrey Road/Alton Parkway, and Michelson Drive/University Drive would not increase by 0.02 or greater. Thus, impacts would be less than significant. The AM peak hour delay at the unsignalized intersections of Yale Avenue/Michelson Drive changes from LOS D to LOS E (acceptable LOS to unacceptable LOS); however, a traffic signal

is not warranted for Yale Avenue/Michelson Drive and the Project's impact is less than significant.

The deficient PM peak hour ICU at Ridgeline Drive/University Drive would increase by 0.02 with implementation of Phases 1 through 4 (1.09 to 1.11) resulting in a significant impact. As such, the proposed Project would be responsible for the addition of a second northbound right-turn lane as mitigation to offset this Project impact. As an alternative mitigation measure, the proposed Project would be required to pay its fair-share contribution for the identified improvements proposed as part of the City approved University Drive and Ridgeline Drive Improvement Project that would be constructed by the City. The alternative mitigation is the preferred mitigation (MM 13-3) since the City Council has approved the intersection improvement project. With incorporation of MM 13-3 this impact would be less than significant.

Roadway Segment Analysis

The analysis of ADT volumes and v/c ratios for the 2035 Approved No Project traffic analysis scenario indicates that ten roadway segments are forecast to operate at unsatisfactory LOS without the proposed Project. With the addition of traffic generated by Phases 1 through 4, the same roadway segments are forecast to continue operating at unsatisfactory LOS E or F (refer to Table I in the TIA included in Appendix J of the Draft EIR).

With the exception of the segment of University Drive between Michelson Drive and Ridgeline Drive, the roadway segments would experience increases in v/c ratios less than 0.02 and impacts would be less than significant. Because the deficient v/c ratio would increase by 0.02 along University Drive between Michelson Drive and Ridgeline Drive (1.62 to 1.64) with implementation of Phases 1 through 4, a peak hour link analysis was conducted for this roadway segment. University Drive between Michelson Drive and Ridgeline Drive would operate at satisfactory LOS D (0.90) in the eastbound direction during the PM peak hour. With the addition of Phases 1 through 4, this roadway segment would operate at unsatisfactory LOS E (0.91) in the eastbound direction during the PM peak hour, which is considered a significant impact.

The proposed Project would require a third eastbound through lane along University Drive between Ridgeline Drive and Michelson Drive to offset the proposed Project's impact under the 2035 Approved Plus Project traffic analysis scenario. The additional capacity of the third eastbound lane would result in satisfactory LOS A (0.60) along this segment of University Drive in the eastbound direction during the PM peak hour. As identified in MM 13-4, prior to issuance of a building permit for additional institutional square footage in Phases 3 and 4, the Project Applicant shall be responsible for implementing this improvement or demonstrating in a subsequent traffic analysis to the satisfaction of the Director of Community Development that the improvement is no longer needed. However, if the improvement has been identified or implemented in a short-term interim-year condition by others, the Project Applicant shall be responsible for a fair-share contribution toward implementation of this improvement (1.01 percent, as further discussed in the TIA included in Appendix J). The proposed Project's impact

along this roadway segment would be less than significant with implementation of MM 13-4.

Year 2035 Pending Traffic Analysis

Intersection Analysis

With the addition of the traffic generation with Phases 1 through 4 of the proposed Project, and incorporation of PDF 13-2, the following six intersections are forecast to continue operating at unsatisfactory LOS E or F (refer to Table J in the TIA included in Appendix J of the Draft EIR):

- Campus Drive/University Drive (LOS E in the PM peak hour)
- Culver Drive/Alton Parkway (LOS E in the PM peak hour)
- Jeffrey Road/Alton Parkway (LOS E in the AM and PM peak hours)
- Michelson Drive/University Drive (LOS F in the PM peak hour)
- Ridgeline Drive/University Drive (LOS E in the AM peak hour and LOS F in the PM peak hour)
- Yale Avenue/Michelson Drive (LOS E in the AM peak hour)

As shown in Table 5.13-17 of the Draft EIR, the deficient peak hour ICUs at Campus Drive/University Drive, Culver Drive/Alton Parkway, Jeffrey Road/Alton Parkway, Michelson Drive/University Drive, and Ridgeline Drive/University Drive would not increase by 0.02 or greater. Thus, impacts would be less than significant. The AM and PM peak hour delays at the unsignalized intersections of Yale Avenue/Michelson Drive are already deficient in the No Project condition. A traffic signal is not warranted for Yale Avenue/Michelson Drive; therefore, a significant impact does not occur at this intersection.

Roadway Segment Analysis

With the addition of traffic generated by Phases 1 through 4, the same 10 roadway segments are forecast to continue operating at unsatisfactory LOS E or F (refer to Table K in the TIA included in Appendix J of the Draft EIR). Table 5.13-18 of the Draft EIR shows the change in ADT volumes and v/c ratios under the No Project and Plus Project conditions for these ten roadway segments.

With the exception of the segment of University Drive between Michelson Drive and Ridgeline Drive, the roadway segments would experience increases in v/c ratios less than 0.02 and impacts would be less than significant. Because the deficient v/c ratio would increase by 0.02 at University Drive between Michelson Drive and Ridgeline Drive (1.64 to 1.66) with implementation of Phases 1 through 4, a peak hour link analysis was conducted for this roadway segment. University Drive between Michelson Drive and Ridgeline Drive would operate at satisfactory LOS D (0.90) in the eastbound direction

during the PM peak hour. With the additional traffic generated by Phases 1 through 4, this roadway segment would operate at unsatisfactory LOS E (0.91) in the eastbound direction during the PM peak hour, resulting in a significant impact. With incorporation of MM 13-4, discussed above, this impact would be less than significant.

Post-2035 Approved Traffic Analysis

Intersection Analysis

With the addition of the traffic generation with Phases 1 through 4 of the proposed Project, and incorporation of PDF 13-2, the following seven intersections are forecast to operate at unsatisfactory LOS E or F (refer to Table L in the TIA included in Appendix J of the Draft EIR):

- Campus Drive/University Drive (LOS E in the AM peak hour and LOS F in the PM peak hour)
- Culver Drive/Alton Parkway (LOS E in the PM peak hour)
- Jeffrey Road/Alton Parkway (LOS F in the AM peak hour and LOS E in the PM peak hour)
- Michelson Drive/University Drive (LOS F in the PM peak hour)
- Ridgeline Drive/University Drive (LOS E in the AM peak hour and LOS F in the PM peak hour)
- Yale Avenue/University Drive (LOS E in the AM peak hour)
- Yale Avenue/Michelson Drive (LOS E in the AM peak hour)

The deficient peak hour ICUs at Campus Drive/University Drive, Culver Drive/Alton Parkway, Jeffrey Road/Alton Parkway, Michelson Drive/University Drive, and Yale Avenue/University Drive would not increase by 0.02 or greater. Thus, impacts would be less than significant. The peak hour delays at the unsignalized intersections of Yale Avenue/Michelson Drive are already deficient under the No Project condition, and a traffic signal is not warranted at this intersection. Therefore, the Project's impact would be less than significant.

The deficient PM peak hour ICU at Ridgeline Drive/University Drive would increase by 0.02 (1.08 to 1.10) resulting in a significant impact. As such, the Project Applicant would be responsible for the addition of a second northbound right-turn lane as mitigation or fair share payment to offset this Project impact (refer to MM 13-3). With incorporation of MM 13-3, the impact would be less than significant.

Roadway Segment Analysis

With the exception of the roadway segment along University Drive between Michelson Drive and Ridgeline Drive, the deficient v/c ratio for these roadway segments would not increase by 0.02 and the Project impact would be less than significant. The deficient v/c ratio would increase by 0.02 along University Drive between Michelson Drive and Ridgeline Drive (1.60 to 1.62). However, a peak hour link analysis shows that this

roadway segment would operate at satisfactory LOS (with v/c ratios below 0.90) in both directions during both peak hours. Therefore, no significant Project impacts are created on roadway segments with implementation of Phases 1 through 4 under the Post-2035 Approved With Project traffic analysis scenario and no mitigation is required.

Post-2035 Pending Traffic Analysis

Intersection Analysis

With the addition of the traffic generation with Phases 1 through 4 of the proposed Project, and incorporation of PDF 13-2, the following eight intersections are forecast to operate at unsatisfactory LOS E or F (refer to Table N in the TIA included in Appendix J of the Draft EIR):

- California Avenue/University Drive (LOS E in the AM peak hour)
- Campus Drive/University Drive (LOS F in the AM and PM peak hours)
- Culver Drive/Alton Parkway (LOS E in the PM peak hour)
- Jeffrey Road/Alton Parkway (LOS F in the AM peak hour and LOS E in the PM peak hour)
- Michelson Drive/University Drive (LOS F in the PM peak hour)
- Ridgeline Drive/University Drive (LOS E in the AM peak hour and LOS F in the PM peak hour)
- Yale Avenue/University Drive (LOS E in the AM peak hour)
- Yale Avenue/Michelson Drive (LOS E in the AM peak hour)

The deficient peak hour ICUs at California Avenue/University Drive, Campus Drive/University Drive, Culver Drive/Alton Parkway, Jeffrey Road/Alton Parkway, Michelson Drive/University Drive, and Yale Avenue/University Drive would not increase by 0.02 or greater. Thus, impacts would be less than significant. The peak hour delays at the unsignalized intersections of Yale Avenue/Michelson Drive are already deficient under the No Project condition, and a traffic signal is not warranted at this intersection. Therefore, the Project's impact would be less than significant.

The deficient PM peak hour ICU at Ridgeline Drive/University Drive would increase by 0.03 (1.07 to 1.10) resulting in a significant impact. As such, the Project Applicant would be responsible for the addition of a second northbound right-turn lane as mitigation or fair share payment to offset this Project impact (refer to MM 13-3). With incorporation of MM 13-3, the impact would be less than significant.

Roadway Segment Analysis

With the exception of the roadway segment along University Drive between Michelson Drive and Ridgeline Drive, the deficient v/c ratio for these roadway segments would not increase by 0.02, and the Project impact would be less than significant. The deficient v/c ratio would increase by 0.02 at University Drive between Michelson Drive and Ridgeline

Drive (1.61 to 1.63). However, a peak hour link analysis shows that this roadway segment would operate at satisfactory LOS (with v/c ratios below 0.90) in both directions during both peak hours. Therefore, no significant Project impacts are created on roadway segments with implementation of Phases 1 through 4 under the Post-2035 Pending Plus Project traffic analysis scenario and no mitigation is required.

Construction-Related Traffic

The proposed Project (Phases 1 through 4) would generate temporary trips associated with construction activities. Construction-related traffic would primarily be associated with delivery of building materials and construction equipment; export of soil and import of sand; removal of demolition and construction debris; and construction workers commuting to and from the campus. As identified in PPP 13-3, which reflects the requirements outlined in SDR 9 in Section 9-21-7.B of the Zoning Ordinance, a traffic routing plan would be developed and would route traffic away from residential areas. Specifically, construction traffic would enter/exit the campus using the Concordia East roadway, Ridgeline Drive, and University Drive to I-405. Further, MM 13-5 requires that a Traffic Control Plan be prepared and submitted to the City. The Traffic Control Plan would provide for temporary traffic control during construction activities for the proposed Project. Construction work within any public rights-of-way would also require an encroachment permit from the City or the County of Orange (OC Parks), as applicable, to ensure that obstruction of City streets during construction activities is minimized and that public facilities are returned to their original conditions unless otherwise improved. Compliance with these requirements would reduce temporary construction-related traffic impacts to a less than significant level.

Special Event Traffic

The proposed Campus Master Build-Out Plan Update includes certain components that have the potential to increase weekend/special event traffic on campus. These proposed Project components include, but are not limited to, the CU Center addition that would increase the overall existing seating capacity from approximately 555 seats to approximately 800 seats (Phase 2); the provision of bleachers with seating for approximately 300 people on the proposed viewing deck at the soccer/track field (Phase 2); and the inclusion of a theatre (approximately 400 seats) for use by theatre students in the proposed Arts, Alumni, and Advancement Building (Phase 4). (See FEIR, Topical Response 2: On-Campus Events.)

Special events have the potential to attract a larger number of attendees and associated vehicle trips to the campus in concentrated time periods. The two gated intersections (Ridgeline Drive/Concordia East roadway and Turtle Rock Drive/Concordia West roadway) operate at LOS D or better during the peak Saturday inbound and outbound periods which meets the City's LOS standards. One reason for this is that traffic on Ridgeline Drive and Turtle Rock Drive is relatively low on Saturdays during peak times to allow vehicles to enter and exit the campus. With implementation of the proposed Project, the internal intersections are anticipated to continue operating at satisfactory LOS

during all other days and times, when special events and other campus activities are spread more evenly throughout the day.

The proposed Project includes internal circulation improvements on campus to improve the operation and safety along the Concordia East/West roadway during typical weekday operations, weekends, and special events. These improvements outlined in PDF 13-1, would ease traffic and congestion during typical weekday operations, as well as weekend and special event operations.

Several conditions of approval have been incorporated into the project approval that further ensure any (already mitigated) impacts associated with special events are even further reduced. This includes conditions requiring reporting of both non-university events (submit to a total cap/limit on non-university events) and special events reporting. (See FEIR, pp. 2-13 and 2-14.)

The proposed Project would not result in a significant impact related to inbound and outbound queuing at the campus entrance/exit. Queuing issues are addressed through management of the gate operation and through continued implementation of the University's Traffic and Parking Management Plan or TPMP (refer to PDF 13-1). Strategies identified in the University's TPMP that are implemented by the University on an ongoing basis, including at special events, would continue to be implemented to ensure that special events and other events on campus do not adversely impact on-campus traffic operations or result in substantial queuing during these events (refer to PDF 13-3).

PPPs, PDFs and MMs:

Phase 1

PDF 13-1 Prior to authorization to use, occupy, and/or operate any new institutional development or square footage on campus, the Project Applicant shall demonstrate to the satisfaction of the Director of Community Development that the following internal circulation improvements have been implemented:

- **Concordia East Roadway**. To improve traffic and parking management along Concordia East, the following improvements would be implemented, as conceptually shown on Exhibit 3-8a.
    - Add a stop-controlled intersection at Ascension/Concordia East with uncontrolled flow for inbound traffic, and a dedicated westbound left turn lane.
    - Relocate the Parking Lot E entrance to align with Dorm Road (4-way stop controlled intersection).
    - Add a dedicated westbound left turn lane at Dorm Road/Concordia East and eastbound left turn lane into the Parking Lot E.

- Relocate the driveway for the District Office from Concordia East to Dorm Road.
- Maintain and/or realign the public bicycle/pedestrian pathway (minimum 11-foot width) along the south side of Concordia East and west side of Dorm Road.

- **Concordia West Roadway**
  - Modify the Parking Lot A entry/exit to accommodate the expanded parking lot.

PDF 13-2 Prior to the issuance of Certificates of Use and Occupancy for the Music, Worship and Theology building, the applicant shall enter into an agreement with the City and post security in a form and in an amount acceptable to the City Engineer guaranteeing construction of a traffic signal at Concordia East and Ridgeline Drive. Timing of construction of the signal and actual construction will be determined based upon a review of necessity by the Transportation Commission. If a signal is determined not to be needed, the agreement will terminate and the security will be released.

MM 13-1 Prior to issuance of the first building permit for institutional uses in Phase 1, and if the University Drive and Ridgeline Drive/Rosa Drew Lane Improvement Project has been approved by the City of Irvine, the Project Applicant shall pay its fair share toward this improvement project (0.76 percent as presented in the TIA included in Appendix J). If this improvement project has not been approved at the time of issuance of the first building permit, prior to issuance of an occupancy permit, the Project Applicant shall extend the westbound turn lane at the Ridgeline Drive/University intersection by 25 feet per lane. Compliance with the applicable mitigation requirement shall be confirmed by the Community Development Department.

Phases 3 and 4

MM 13-3 Prior to issuance of a building permit for additional institutional square footage in Phases 3 and 4, if a second northbound right-turn lane at Ridgeline Drive/University Drive intersection is not being implemented by others, the Project Applicant shall install this improvement or demonstrate in a subsequent traffic analysis to the satisfaction of the Director of Community Development that the improvement is no longer needed. If it is demonstrated that the improvement has been or is being implemented by others prior to issuance of a building permit for additional institutional square footage in Phases 3 and 4, the Project Applicant shall pay its fair-share toward implementation of this improvement (2.7 percent as presented in the TIA included in Appendix J).

MM 13-4 Prior to issuance of a building permit for additional institutional square footage in Phases 3 and 4, the Project Applicant shall implement a third eastbound through lane on University between Ridgeline and Michelson, or demonstrate in a subsequent traffic analysis to the satisfaction of the Director of Community Development that the improvement is no longer needed. However, if the improvement has been identified or implemented as part of a short-term interim-year condition by others, the Project Applicant shall pay its fair-share contribution toward implementation of this improvement (1.01 percent as presented in the TIA included in Appendix J).

Phases 1 through 4

PPP 13-3 As required by Special Development Requirement (SDR) 3 included in Section 9-21-7.B of the Zoning Ordinance (originally SDR 9), Special Development Requirements for Concordia University (Christ College Irvine) General Plan Amendment 4237-GA and Zone Change 5232-ZC, prior to issuance of any grading permits, the Project Applicant shall submit for review and approval by the Chief Building Official a construction traffic routing plan that routes construction traffic away from residential areas. The routing plan shall be shown as a map on the grading and building plans and shall specify that construction traffic is to be routed to Ridgeline Drive, to University Avenue, and directly to the Interstate 405 freeway.

PDF 13-3 During operation of the Concordia University Main Campus, the Project Applicant shall continue to implement and refine the Concordia University Irvine Traffic and Parking Management Plan that outlines the traffic and parking regulations on campus and requires preparation of an Event Action Plan to regulate and facilitate traffic flow and parking during each scheduled special events. The Department of Campus Safety enforces the regulations and provisions in the Traffic and Parking Management Plan and Event Action Plans.

MM 13-5 Prior to the issuance of each grading permit or demolition permit, whichever occurs first, for each individual development project, the Project Applicant shall submit a Traffic Control Plan to the Building and Safety Department for review and approval. The Traffic Control Plan shall provide for temporary traffic control during construction activities for the project. To reduce traffic congestion, the Traffic Control Plan shall include, as necessary, appropriate, and practicable, the following: (1) temporary traffic controls (e.g., a flag person) during all phases of construction to maintain smooth traffic flow; (2) a requirement for at least one unobstructed lane to be maintained in both directions on roadways internal to campus and off-campus roadways subject to construction activity; (3) a requirement to maintain emergency access at all times; (4) scheduling of construction activities that affect traffic flow on the

arterial system to off-peak hours; (5) consolidation of truck deliveries; and (6) incorporation of the truck routing plan required by Plan, Policy, and Program (PPP) 13-3. Compliance with the Traffic Control Plan shall be verified by the Building and Safety Department during construction.

2. Would the project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? (EIR Impact 13.3)

Finding: The City has developed Transportation Design Procedures (TDPs) to assist with the design and review of transportation-related features of development projects in the City of Irvine. The TDP guidelines were used to evaluate the roadway design features that may be impacted by the proposed Project, including at the intersection of Turtle Rock Drive with the Concordia West roadway and the intersection of Ridgeline Drive with the Concordia East roadway, the two entrances to the campus. With incorporation of identified PDFs and MMs, potential impacts would be less than significant. (DEIR, p. 5.13-56.)

Facts in Support of Finding: Applicable design criteria for the proposed Project analysis include TDP-1 (Turn-Lane Pocket Lengths), TDP-3 (Left-Turn In/Out Access), TDP-4 (Right-Turn Lanes at Uncontrolled Driveways), TDP-9 (Distance between Signalized Intersections), TDP-10 (Distance between Driveways and Intersections), TDP-12 (Signal Warrants), TDP-13 (Left-Turn Signal Phasing), TDP-14 (Driveway Lengths), and TDP-15 (Gate Stacking Analysis). The evaluation of the Project access based on the City's TDP criteria is provided for the Existing Plus Project traffic analysis scenario.

TDP-1. Based on the TDP analysis provided in the Draft EIR, turn-lane pockets at the intersections of Ridgeline Drive/University Drive (westbound left-turn) and Turtle Rock Drive/Concordia West (southbound left-turn) do not meet the TDP-1 criteria. Incorporation of MM 13-1 (payment of fair-share contribution for City-proposed improvements at the intersection of Ridgeline Drive/University Drive or extension of the westbound left-turn lane), and MM 13-2 (extension of the southbound left-turn lane at the Turtle Rock Drive/Concordia West roadway intersection), would reduce this impact to a less than significant level.

TDP-3. Left-in access is acceptable at Ridgeline Drive/Concordia East roadway; however, left-out access would not meet the City's TDP-3 criteria. With installation of a traffic signal at this intersection (refer to PDF 13-2), the TDP-3 criteria for left-turn in/out access at Ridgeline Drive/Concordia East roadway would be met. Left-in/left-out access is acceptable at Turtle Rock Drive/Concordia West roadway per TDP-3.

TDP-4. Under Existing and Existing Plus Project conditions, a southbound right-turn lane would be required at the unsignalized intersection of Ridgeline Drive/Concordia East roadway based on the TDP-4 criteria. However, with installation of a traffic signal as part of the proposed Project (refer to PDF 13-2), Ridgeline Drive/Concordia East intersection would operate at satisfactory LOS with its current geometrics (i.e., shared southbound through/right-turn lane). Therefore, a southbound right-turn lane is neither

required nor recommended for Ridgeline Drive/Concordia East roadway. TDP-4 identifies that right-turn lanes are not required on Commuter Streets (i.e., Turtle Rock Drive). As such, a northbound right-turn lane is not required at Turtle Rock Drive/Concordia West roadway.

TDP-9. TDP-9 states that the recommended minimum spacing required for Secondary Streets (i.e., Ridgeline Drive) is 400 feet, as long as there are no road restrictions or extenuating circumstances (i.e., insufficient left-turn storage), which may dictate that the recommended minimum spacing cannot be met. The spacing between the signalized intersection of Ridgeline Drive/University Drive and the unsignalized intersection of Ridgeline Drive/Concordia East roadway is approximately 500 feet. As such, with the installation of a traffic signal at Ridgeline Drive/Concordia East roadway (PDF 13-2), the TDP-9 criteria for distance between signalized intersections would be satisfied.

TDP-10. The TDP-10 criteria for distance between driveways and intersections is met for the Project driveways (Concordia East and Concordia West roadways) and adjacent driveways along Ridgeline Drive and Turtle Rock Drive. No mitigation is required.

TDP-12. TDP-12 provides guidance to determine whether installation of a traffic signal is justified at a particular location. TDP-12 has been evaluated based on the LOS analysis for deficient unsignalized intersections (Ridgeline Drive/Concordia East, Yale Avenue/Michelson Drive, and Turtle Rock Drive/Concordia West).

The peak hour signal warrant analysis indicates a signal is warranted at the intersection of Ridgeline Drive/Concordia East without the Project, for existing, approved and pending conditions. The Project Applicant has agreed that prior to the issuance of Certificates of Use and Occupancy for the Music, Worship and Theology building, that the Project Applicant shall enter into an agreement with the City and post security in a form and in an amount acceptable to the City Engineer guaranteeing construction of a traffic signal at the intersection of Ridgeline Drive/Concordia East roadway (refer to PDF 13-2). Timing of construction of the signal and actual construction will be determined based upon a review of necessity by the Transportation Commission. If a signal is determined not to be needed, the agreement will terminate and the security will be released. With installation of a traffic signal at the intersection of Ridgeline Drive/Concordia East roadway, no further intersection improvements are required under any of the traffic analysis scenarios (for Phases 1 and 2 or for implementation of the proposed Campus Master Build-Out Plan Update in its entirety). This conclusion is supported by this TDP analysis. However, based on input during the scoping process, a potential intersection improvement that would further improve the operations at this intersection was conceptually designed and is presented in Exhibit 3-8b, in Section 3.0, Project Description, of the Draft EIR. This conceptual intersection improvement would involve the addition of an added shared left/right eastbound lane that would improve the operation of the intersection by providing a second outbound lane for residential and University traffic at the new signal. The additional intersection improvement is included as part of the proposed Project (refer to PDF 13-2).

Based on the signal warrant analysis, a signal is not warranted at Yale Avenue/Michelson Drive for the 2017, 2035, or Post-2035 horizon years, with or without the proposed Project, for Approved and Pending conditions.

A signal is warranted for the AM peak hour at the intersection of Turtle Rock Drive/Concordia West under Existing and Existing Plus Project conditions. However, this intersection is forecast to operate at satisfactory LOS under the Existing, 2017, 2035, and Post-2035 traffic analysis scenarios, with and without the proposed Project, for Approved and Pending conditions. Therefore, a traffic signal is neither required nor recommended.

TDP-13. Because the opposing southbound volume of fewer than 800 peak hour vehicles is below the threshold of 1,000 peak hour vehicles, left-turn signal phasing is not required per TDP-13 at the intersection of Ridgeline Drive/Concordia East.

TDP-14. Existing driveways at Ridgeline Drive/Concordia East and Turtle Rock Drive/Concordia West would meet TDP-14 criteria for driveway lengths with implementation of the proposed Project.

TDP-15. TDP-15 is met at the gated entry along the Concordia East and Concordia West roadways for all students, residents, and visitors with implementation of the proposed Project.

PDFs and MMs:

Refer to PDF 13-2 and MM 13-1 presented previously.

MM 13-2 Prior to authorization to use, occupy, and/or operate for any institutional uses in Phase 1, the Project Applicant shall lengthen the southbound left-turn lane at the Turtle Rock Drive/Concordia West roadway intersection from 110 feet to 140 feet (an addition of 30 feet) to meet Transportation Design Procedure (TDP)-1 design criteria. The design and implementation of this mitigation improvement shall be to the satisfaction of the Director of Community Development Department.

3. Would the project result in inadequate emergency access? (EIR Impacts 13.4a and 13.4b)

Finding: Access to the campus, including emergency access, is provided via two gated entries at the intersections of Ridgeline Drive/Concordia East roadway and Turtle Rock Drive/Concordia West roadway. The public bicycle/pedestrian pathway that extends through campus connecting the Concordia West roadway to Dorm Road also serves as a fire access lane. There is also a fire access that connects the southern end of Dorm Road on campus with the Blessing roadway cul-de-sac in the Concordia East residential community. With incorporation of identified PPPs, PDFs and MMs, the impact would be less than significant. (DEIR, p. 5.13-57, -58; see also FEIR Topical Response 5.)

Facts in Support of Finding: Access to the campus, including emergency access, is provided via two gated entries at the intersections of Ridgeline Drive/Concordia East

roadway and Turtle Rock Drive/Concordia West roadway. The primary route of travel within the campus is the Concordia East/West roadway, a two-lane private roadway that is owned by the University, and that residents and guests of the Concordia East and Concordia West communities use, subject to the provisions of executed agreements between the University and the respective Community Associations (further discussed in Section 5.9, Land Use and Planning, of the Draft EIR). Evacuation routes at the east gate and west gate have at least two different directions of travel from these campus entrances. Additionally, the network of internal roads and pathways on campus, which provide access to various campus facilities, offer additional evacuation routes within a relative short distance from the project entries. Notably, the public bicycle/pedestrian pathway that extends through campus connecting the Concordia West roadway to Dorm Road serves as an emergency access and meets OCFA's weight requirements for emergency access roads (refer to the OCFA-approved Fire Master Plan included in Attachment A to the Final EIR). Existing manual gates at the east and west sides of this pathway would continue to be used, and the sub-keyed knox padlock would continue to be accessible.

Construction-Related Traffic

Construction activities associated with implementation of the proposed Project along on- and off-campus roadways may result in temporary closure of traffic lanes or roadway segments along roadways internal to the campus and along University Drive, Ridgeline Drive, and Turtle Rock Drive and could impair emergency access, resulting in a potentially significant impact. However, with implementation of PPP 13-3 and MM 13-5, this impact would be less than significant. PPP 13-3 requires construction trucks to follow the truck routes previously established and included in SDR 9 in Section 9-21.7B of the Zoning Ordinance: Ridgeline Drive, to University Avenue, and directly to I-405. MM 13-5 requires the preparation of a Traffic Control Plan that addresses access during construction, including emergency access.

There are no cumulative development projects identified in proximity to the campus that would result in cumulative impacts related to construction traffic. However, the City's approved University Drive/Ridgeline Drive Improvement Project could be under construction at the same time as certain components of Phases 1 and 2. The potential construction-related traffic impacts resulting from the proposed Project would be less than significant with implementation of MM 13-5, which requires the preparation of a Traffic Control Plan. The requirement for a Traffic Control Plan during construction is a standard requirement for construction projects in the City and would also be required of the intersection improvement project. The proposed Project would not result in a cumulatively considerable contribution to a significant cumulative construction-related traffic impact.

Operation-Related Traffic

With respect to emergency access during operation, campus entries at Ridgeline Drive/Concordia East roadway and Turtle Rock Drive/Concordia West roadway would continue to provide vehicular access to the campus, along with the Concordia East/West roadway, and the network of internal roadways to the campus. On-campus roadway

improvements along Concordia East/West roadways would be implemented as part of the proposed Project, as described in PDF 13-1, and provisions for the potential installation of a traffic signal at the intersection of Ridgeline Drive/Concordia East roadway would be in place through an agreement between the City and the Project Applicant (PDF 13-2). The signal improvement would include installation of an optical emergency vehicle preemption device. Access along the bike path would be maintained at all times during construction and operation. These project design features would improve emergency access on campus by improving all transportation access and service, maintaining multiple access alternatives, even during construction, and allowing faster and more efficient responses from emergency vehicles. Additionally, prior to the issuance of the first building permit, the Project Applicant is required to prepare an Emergency Access Plan (refer to PPP 13-1). Compliance with this plan would be verified by Irvine Police Department and Orange County Fire Authority (OCFA; refer to PPP 13-2). Project impacts on emergency access during operation would be less than significant. Implementation of the proposed Project would not result in inadequate emergency access during operation.

Although not required at this stage of project entitlement, a Conceptual Fire Master Plan has been prepared for the Campus Master Build-Out Plan Update, which also addresses emergency access. It was submitted to OCFA for review and was approved on January 6, 2017. In addition to the emergency access identified above, as part of the Conceptual Fire Master Plan, it has also been determined that the existing vehicular gate at Blessing will be unlocked at all times, and "Fire Lane No Parking" signs and "Emergency Evacuation" signs will be provided on each side of the gate

The proposed Campus Master Build-Out Plan would result in less than significant impacts related to emergency access with implementation of the PPPs 13-1 through 13-3, PDF 13-1, PDF 13-2, and MM 13-5. There are no cumulative projects in the vicinity of the proposed Project that would result in cumulative impacts related emergency access. The use of the Concordia East/West roadway by the University and the adjacent communities is an existing condition described in the Draft EIR. The potential increase in traffic that would be generated by the implementation of the proposed Project has been taken into consideration, and there are not cumulative projects identified for the Concordia East or West communities that would increase traffic or otherwise alter traffic conditions causing cumulative impacts. Further, as discussed in Section 5.7, Hazards and Hazardous Materials, of the Draft EIR, construction of new or replacement buildings in a designated fire hazard area may increase the potential for exposure of people and property to wildland fires. Although the proposed Project would be introducing additional people into a part of a designated fire hazard area, as would other cumulative projects, all new projects, including the proposed Project, must comply with applicable fire safety and fuel modification requirements (i.e., adequate access, fire hydrants, fire flows, fuel modification). With implementation of the approved Conceptual Fuel Modification Plan and Fire Protection Plan, Conceptual Fire Master Plan, and University Evacuation Plan, fire hazard impacts resulting from the proposed Project would be less than significant. Therefore, the proposed Project would not result in a cumulatively considerable contribution to a significant cumulative impact related to fire hazards/protection, emergency access or evacuation.

Further, in addition to the City of Irvine, the University has coordinated with the appropriate agencies responsible for addressing emergency access, emergency evacuation and fire protection on campus (i.e., OCFA and the Irvine Police Department). The Campus Master Build-Out Plan Update and associated Conceptual Fuel Modification Plan and Fire Protection Plan; Conceptual Fire Master Plan (including emergency access), and University Evacuation Plan included in Attachment A to the Final EIR provide the information necessary to ensure the safety of the campus population, and do not jeopardize the safety of the adjacent residential communities. Further, consistent with standard requirements of the City and OCFA, future development of campus will be subject to subsequent review at the appropriate stages of the construction process. After the incorporation of mitigation, impacts would be less than significant.

PPPs, PDFs and MMs:

Refer to PPP 13-3, PDF 13-1, PDF 13-2, and MM 13-5 presented previously.

PPP 13-1 Prior to the issuance of the first building permit, the Project Applicant shall submit and have approved by the Chief of Police an Emergency Access Plan, which identifies and locates all Knox Boxes, Knox key switches, and Click2Enter radio access control receivers. This plan shall be incorporated into the plan set approved for building permits (City of Irvine Standard Condition 3.17).

PPP 13-2 Prior to authorization to use, occupy, and/or operate, the Project Applicant shall arrange for and have passed an inspection, to be performed by the Police Department and the Orange County Fire Authority, to ensure compliance with the Emergency Access Plan requirements. The inspector shall verify test acceptance and locations of all Knox boxes and key switches as depicted on the approved plan (City of Irvine Standard Condition 4.9).

4. Would the project conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities? (EIR Impact 13.5)

Finding: Increased use of pedestrian and bicycle facilities would occur with implementation of the proposed Project (Phases 1 through 4); however, with incorporation of PDF 13-2 and 13-4, the impacts would be less than significant. Increased use of transit services could potentially occur with the proposed Project, but impacts would be less than significant. There would be no conflict with goals and polices related to non-vehicular transportation. (DEIR, p. 5.13-59.)

Facts in Support of Finding: There are sidewalks, pathways, and bikeways on campus that connect to sidewalks, bikeways, trails, and bus stops in the surrounding area. As with existing conditions, students, residents, and visitors would be able to walk or bicycle to locations on campus and adjacent uses at all times. The existing public pedestrian/bicycle trail that traverses the campus and connects the Turtle Rock Vistas development to the

east and Ridgeline Drive to the west would remain open and would continue to be maintained during development and construction of the proposed Project (refer to PDF 13-4). Additionally, with installation of the signal at the intersection of Ridgeline Drive/Concordia East, a crosswalk would be added across Ridgeline Drive at the south leg of the intersection, which would improve non-vehicular and pedestrian circulation in this area. Although increased use of pedestrian and bicycle facilities could occur with the proposed Project and associated increase in the on campus population, impacts would be less than significant.

Transit facilities are currently located approximately one mile from the campus at the intersections of Michelson Drive/University Drive and Culver Drive/Campus Drive. Transit services are accessible to and from the campus via sidewalks along the Concordia East roadway, the Concordia West roadway, Ridgeline Drive, Turtle Rock Drive, University Drive, Campus Drive, Culver Drive, and Michelson Drive. Increased use of transit services could occur with implementation of the proposed Project; however, based on the distance to these facilities, and the relatively small increase in the estimated daily on campus population associated with the proposed Project (approximately 363 individuals), impacts would be less than significant. Further, the proposed Project does not conflict with these applicable goals and policies from the City's General Plan related to non-vehicular modes of transportation, as evaluated in Table 5.9-2 of the Draft EIR.

There would be no conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, and the proposed Project would not otherwise decrease the performance or safety of such facilities. Impacts on alternative transportation systems would be less than significant.

PDFs:

Refer to PDF 13-2 presented previously.

PDF 13-4 Prior to the issuance of grading permits and building permits, the Project Applicant shall demonstrate to the satisfaction of the Director of Community Development that the minimum 11-foot wide bicycle/pedestrian trail is maintained during construction and operation of the Concordia University Main Campus. The Project Applicant shall maintain the public bicycle/pedestrian trail that extends through the campus (connecting Turtle Rock Vistas development to Ridgeline) in its current location, or realigned as necessary to accommodate all construction activities and/or final trail alignment with campus build-out implementation.

J. Utilities and Service Systems (Section 5.14 of the Draft EIR)

1. Would the proposed Project require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? (EIR Impacts 14.1a and 14.1b)

Finding: Implementation of the proposed Campus Master Build-Out Plan (Phases 1 through 4) would result in an increase in water consumption and wastewater generation on campus. The installation of infrastructure necessary to serve the project would occur within the impact area analyzed in the Draft EIR. With the incorporation of PPPs, PDFs and MMs, impacts would be less than significant. (DEIR, pp. 5.14-8, -10.)

Facts in Support of Finding: It is estimated that the net increase in potable water demand and wastewater generation for Phases 1 and 2 would be approximately 2,000 gallons per day (gpd), and approximately 10,597 gpd (7,400 gpd for the residence hall and 3,197 gpd for the institutional uses) for the Campus Master Build-Out Plan Update (Phases 1 through 4). The existing IRWD water system, including the pipelines along the Concordia East/West roadways, have adequate pressure and capacity to serve the proposed uses for Phases 1 through 4.

The recycled water use with implementation of the Campus Master Build-Out Plan Update (Phases 1 through 4) is assumed to be reduced compared to existing conditions because there would be an overall reduction in undeveloped/landscaped area on campus. Additionally, proposed landscaped areas would include native and/or drought-tolerant plants.

With respect to sewer lines, the increase in flow from Phase 1 and Phase 2 would not contribute significantly to peak flows in the tributary IRWD pipelines. Given the small increase in sewer flow and land use generating off-peak flows relative to the tributary pipelines, the collection system would have adequate capacity to accommodate the increase in wastewater generated by Phase 1 and 2 uses and would not require new or expanded IRWD sewer lines.

For Phases 3 and 4, the current state of the tributary sewer system would need to be evaluated based on IRWD sewer facilities and tributary flow rates in place at the time proposed uses, and notably the residence hall is developed (refer to MM 14-1). With proposed IRWD capital improvements in place, the off-site collection system would have adequate capacity to accommodate the increase in wastewater generated by Phase 1 through 4 uses and would not require new or expanded IRWD sewer lines.

Implementation of the proposed Project would also involve removal, upsizing, and/or rerouting of existing water (potable and reclaimed) and sewer lines and installation of new lines on campus to serve proposed uses; these lines are owned and maintained by the University. The construction of the proposed utility lines has the potential for impacts such as construction-related dust, noise, and traffic. Since utility installations are within the limits of the campus, the potential impacts associated with the construction of utility

lines are accounted for in other sections of the Draft EIR (Sections 5.1 through 5.13). The construction-related impacts from utility installations would be less than significant. Additionally, any applicable PDFs, PPPs, and MMs for construction identified would address potential significant impacts associated with construction of utilities (in particular see Sections 5.2, Air Quality; 5.10, Noise; and 5.13, Transportation/Traffic, of the Draft EIR). Therefore, through consistent implementation of a variety of measures related to construction impacts, no additional impacts related to construction and operation of utility systems would occur. Impacts would be less than significant.

As identified above, no new or expanded water (potable and reclaimed) and wastewater backbone infrastructure provided by IRWD is required to serve the proposed project (Phases 1 through 4), beyond that already planned by IRWD. The long-range planning efforts of IRWD take into account current and proposed projects to eliminate the potential for cumulative impacts. The development proposed by the Campus Master Build-Out Plan Update is consistent with the development anticipated in the City's General Plan and used in IRWD's planning (321,320 sf of intuitional use and residential component of 330 units [1,320 beds]). Additionally, on-campus infrastructure improvements would be limited to that necessary to serve the proposed development on campus. Therefore, the proposed project's demand for water, wastewater collection, and treatment services would be less than significant and would not be cumulatively considerable.

MMs:

Phases 3 and 4

MM 14-1 Prior to issuance of the first grading permit for development of proposed buildings in Phases 3 and 4, the Project Applicant shall provide written evidence to the satisfaction of the Director of Community Development Department indicating that the Irvine Ranch Water District has determined there is sufficient transmission capacity to accept sewage flows from future campus development, particularly the new 74-unit dormitory building.

VIII. FINDINGS REGARDING CUMULATIVE IMPACTS

A. Aesthetics

Based on the cumulative project's list in Table 5-1 of the Draft EIR, there are no cumulative projects that would be in the same viewshed as the proposed project. Cumulative conversion of undeveloped land to urban uses resulting from implementation of the proposed project and other approved and planned projects in the City would occur within the provisions of the Conservation and Open Space Phased Dedications Districts program. In so doing, the growth anticipated in the General Plan will occur in areas that the City has determined to be suitable for development, including the campus in PA 21.

The proposed project, along with other future development in the City, would involve the installation of exterior lighting for safety and security in compliance with the City requirements and consequently could result in the creation of new sources of substantial light or glare. As

with existing development, light and glare impacts from the proposed project and future development in the area would be reduced through adherence to applicable lighting and design standards. However, there are no cumulative development projects identified in the vicinity of the campus. Implementation of the PPPs, PDFs, and MMs identified in Section 5.1 of the Draft EIR would result in less than significant construction-related and operational light and glare impacts.

Therefore the proposed project would not result in a cumulatively considerable aesthetic impact. (DEIR, pp. 5.1-36, -37.)

B. Agriculture and Forestry Resources

No portion of the project site is located on land designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance according to the California Department of Conservation. No portion of the project site or adjacent areas is zoned for agricultural use or currently under Williamson Act contract. The site is not designated or zoned for forestland, timberland, or timberland zoned Timberland Production. There are no forestlands on the project site or in the surrounding area. The proposed Project would not result in the conversion of farmland to nonagricultural use or conversion of forestland to non-forest use. Because these resources are not present, no direct impact would occur. For the same reason, no cumulatively impact would occur as well.

C. Air Quality

There are no cumulative developments identified in the vicinity of the campus (refer to Table 5-1 in Section 5.0 of the Draft EIR) and, with implementation of the identified PPPs, the proposed project would not exceed the established thresholds for project impacts. Therefore, the cumulative air quality impacts from the proposed Project would be less than significant and no additional mitigation is required.

Specifically, with incorporation of PPPs 2-1 and 2-2 to reduce project construction-related impacts to a less than significant level, no additional mitigation would be required. Further, there are no development projects in the vicinity of the campus that would be under construction concurrently with the proposed Project. With respect to local concentrations of CO, the analysis described above is also a cumulative analysis because it considers traffic from existing and all future sources as well as traffic from the project. The impact would be less than significant. The project's contribution to both regional and local TAC concentrations would be negligible. With incorporation of PPP 2-3, the proposed Project would not result in a significant impact related to TAC concentrations, and would not have a cumulatively considerable contribution to a significant cumulative impact for air quality. (DEIR, p. 5.2-34.)

D. Biological Resources

The City of Irvine is a participant in the NCCP/HCP and the IA, and the proposed Project would be implemented in compliance with all applicable NCCP/HCP and associated IA requirements. In addition, the campus is designated "development areas" under the NCCP/HCP. As such, any impacts to Covered Habitats, Identified Species, and wildlife connections for such species are fully mitigated by participation in the NCCP/HCP. As a result, with mitigation, the

proposed Project would not result in a cumulatively considerable contribution to a significant cumulative impact related to biological resources.

The geographic scope for biological resources includes the County of Orange Central-Coastal NCCP/HCP Planning Area. The primary cumulative impact on biological resources is the fragmentation of ecosystems resulting from the incremental loss of native habitats. The result will be that connectivity between patches of habitat and the wildlife populations they support will be lost. The proposed Project is within the area designated for development under the NCCP/HCP and is consistent with the provisions of the NCCP/HCP. The implementation of the NCCP, dedication of lands, and endowment by the participating landowners mitigate impacts of proposed and future development on covered habitats and identified species.

The City of Irvine is a participant in the NCCP/HCP and the IA, and the proposed Project would be implemented in compliance with all applicable NCCP/HCP and associated IA requirements. In addition, the campus is designated "development areas" under the NCCP/HCP. As such, any impacts to Covered Habitats, Identified Species, and wildlife connections for such species are fully mitigated by participation in the NCCP/HCP.

With incorporation of the identified PDFs, PPPs and MMs, the proposed Project would not result in a cumulatively considerable contribution to a significant cumulative impact related to biological resources. (DEIR, p. 5.3-47.)

E. Cultural Resources and Tribal Cultural Resources

The proposed Project, in conjunction with the effects of past projects, other current projects, and probable future projects, may result in an increase in the local population that could lead to accelerated degradation of previously unknown archaeological resource sites and paleontological resources. With incorporation of PPPs and MMs, potential cumulative impacts would be less than significant.

Direct impacts to on-site cultural resources are site specific. Neither the proposed project nor other cumulative developments are expected to result in significant impacts to cultural or paleontological resources provided site-specific surveys, cultural resources monitoring, and test and evaluation excavations are conducted. As such, the proposed project would not result in a cumulatively considerable contribution to a significant cumulative impact to archaeological or paleontological resources. (DEIR, p. 5.4-12.)

F. Geology and Soils

Geology and soil impacts are generally site specific and there is typically little, if any, cumulative relationship between the development of the proposed project and development within a larger cumulative area, such as city-wide development.

As with the proposed Project, future development would also be required to have site-specific geotechnical investigations prepared to identify the geologic and seismic characteristics on a site and to provide recommendations for engineering design and construction to ensure the structural integrity of proposed development; these recommendations would be incorporated into project design (refer to PPPs 5-1 through 5-7). Therefore, the proposed Project would not result

in a cumulatively considerable contribution to a significant cumulative impact related to geology and soils. Impacts would be less than significant and mitigation is not required. (DEIR, p. 5.5-17.)

G. Greenhouse Gas Emissions

Greenhouse gas emissions impacts are inherently cumulative. The proposed Project would generate an increase of GHG emissions; however, the net increase would not exceed the thresholds of significance. The proposed Project would also not conflict with applicable plans, policies, or regulations for the purpose of reducing the emissions of GHGs. Because project impacts are less than significant, there will also be no cumulatively considerable impacts associated with greenhouse gas emissions. (DEIR, p. 5.6-18.)

H. Hazards and Hazardous Materials

The proposed Project would not result in a cumulatively considerable contribution to a significant cumulative impact related to hazardous materials or fire hazards. The nearest cumulative project is approximately 1.5 miles from the campus and the remaining cumulative projects are over 2.0 miles from the campus. Therefore, while the proposed project would have the potential to release hazardous materials during construction, this impact is less than significant with implementation of identified PPP 7-1 and MMs 7-1 and 7-2, and would not result in cumulative impacts associated with construction activities.

Although each cumulative project has potentially unique hazardous materials considerations, it is expected that these uses would also comply with the range of federal, State, and local statutes and regulations applicable to hazardous materials, and would be subject to existing and future enforcement by the appropriate regulatory agencies. For these reasons, the proposed Project would not result in a cumulatively considerable contribution to a significant cumulative impact related to hazardous materials.

Construction of new or replacement buildings in a designated VHFHSZ areas may increase the potential for exposure of people and property to wildland fires. With implementation of the approved Conceptual Fuel Modification Plan (PDF 7-1) for the proposed Project, which includes measures to address requirements for proposed structure and existing non-confirming areas, fire hazard impacts resulting from the proposed Project would be less than significant. Therefore, the proposed Project would not result in a cumulatively considerable contribution to a significant cumulative impact related to fire hazards. (DEIR, p. 5.7-18.)

I. Hydrology and Water Quality

The proposed project and other new development anticipated in the General Plan would result in changes to on-site land uses, primarily the conversion of undeveloped vacant land to urban uses. Such land conversion would result in increased impervious surfaces and would increase the amount and velocity of surface runoff.

The provision of drainage system improvements as a component of each individual project that are sized to accommodate anticipated increase in storm water flow, including the proposed Project, would ensure that project-specific impacts would be less than significant. With

on-site storm water detention systems (refer to PDF 8-1), the drainage from the proposed Campus Master Build-Out Plan Update (Phases 1 through 4) would not exceed existing conditions.

Any future urban development occurring in the San Diego Creek Watershed, including the proposed Project, must prepare a WQMP and also comply with these requirements (refer to PPP 8-2). Therefore, cumulative impacts on surface water quality of receiving waters from the proposed Project and future urban development in the San Diego Creek Watershed are addressed through compliance with the MS4 Permit requirements; Construction General Permit requirements (refer to PPP 8-1); and TMDLs, which are intended to protect the beneficial uses of the receiving waters. Based on compliance with these requirements designed to protect beneficial uses, cumulative water quality and hydromodification impacts would be less than significant.

Therefore, the proposed Project would not result in a cumulatively considerable contribution to a significant cumulative impact related to hydrology or water quality within the San Diego Creek Watershed. (DEIR, p. 5.8-22.)

J. Land Use and Planning

The geographic context for the analysis of cumulative land use impacts is the City of Irvine. The Concordia University main campus is in an anticipated development area identified in the City of Irvine General Plan, and there are no cumulative projects specifically identified in proximity to the Concordia University main campus in PA21. The proposed Project would not result in any significant cumulative impacts.

Future development on- and off-campus would be reviewed for consistency with adopted land use plans and policies by the City of Irvine (including General Plan policies and zoning requirements), in accordance with the requirements of CEQA, the state Zoning and Planning Law, and the State Subdivision Map Act, all of which require findings of plan and policy consistency prior to approval of entitlements for development. Future development in the City would also be governed by policies, implementation measures, and programs to ensure orderly urban development. (DEIR, p. 5.9-49.)

K. Mineral Resources

There are no locally important mineral resource recovery sites designated in the City. Therefore, implementation of the proposed Project would not result in the loss of such mineral resources, individually or cumulatively.

L. Noise

The proposed Project would contribute to cumulative traffic noise impacts, but would not result in cumulative stationary source or construction noise.

Cumulative traffic noise impacts are measured based on projected long-term future traffic noise level increases over existing conditions. As shown in Table 5.10-18 in the Draft EIR, the cumulative noise level increases greater than 1 dBA are projected to occur along 7 roadway segments. There is no substantial cumulative noise increase of more than 3 dBA between Post-

2035 With-Project and the existing conditions, therefore, the proposed Project would not result in a cumulatively considerable contribution to a significant cumulative impact due to traffic noise.

There are no cumulative projects identified that are close enough to result in cumulative operational noise impacts (the closest cumulative project is approximately 1.5 miles away).

There would be a potential for significant cumulative construction noise impacts if construction from a cumulative project would occur near a sensitive receptor concurrently with project-related construction near that same receptor. There are no cumulative projects identified that are close enough to result in cumulative construction noise. There may be some construction phase overlapping from on-campus construction. However, the cumulative construction activity would be farther away from the off-site campus residences or cumulative construction activity would be in a phase of lower construction noise. Additionally, all construction activities would be conducted in compliance with the City's requirements related to the timing of construction activities (refer to PPP 10-1) and use of haul truck routes (refer to PPP 10-2). Therefore, the proposed Project would not result in a cumulatively considerable contribution to a significant cumulative impact due to construction noise.

Construction vibration is a local impact and impacts are generally less than significant when the receptor is more than 25 feet from the vibration source. There are no identified projects anticipating construction concurrently with the proposed Project and within 50 feet of the sensitive receptors that could be affected by the proposed Project. As such, the proposed Project would not result in a cumulatively considerable contribution to a significant cumulative impact due to construction vibration. (DEIR, p. 5.10-45.)

M. Population and Housing

The proposed project could result in an increase of up to 292 full-time students and 71 full-time faculty/staff. This represents a negligible amount of the future growth forecasts in the County and the City. Further, the proposed development on campus is anticipated in the local and regional growth projections for the City. Therefore, no significant cumulative adverse impacts related to substantial population, housing, or employment growth and displacement would occur with implementation of the proposed project. (DEIR, p. 5.11-12.)

N. Public Services and Recreation

As additional development occurs in the City of Irvine, there will be an overall increase in the demand for fire protection services, police protection services and recreation. Future regional growth will result in increased demand for public services and facilities. Service providers will continue to evaluate levels of service desired and potential funding sources to meet this demand. Long-range planning for the provisions of public services and facilities is typically based on growth projections that reflect General Plan growth projections.

As additional development occurs in the City of Irvine, there will be an overall increase in the demand for law enforcement and fire protection services, including personnel, equipment, and/or facilities. However, increases in demand are routinely assessed by the OCFA and IPD as part of standard monitoring and budgeting process, and law enforcement and fire protection

services in the City are anticipated to be adequate to serve the proposed project and cumulative projects. Additionally, the proposed Project's contribution to cumulative impacts would be less than significant since the campus would continue to be adequately served with existing personnel, equipment and facilities. No new or expanded OCFA or IPD facilities would be required to serve the proposed project, and there would be no associated physical environmental impacts. With respect to police services, the campus would also continue to be served by professional security services provided by the Department of Campus Safety; this Department would increase staff, equipment and facilities as necessary to serve the increase in demand generated by the proposed Campus Master Build-Out Plan Update (Phases 1 through 4).

Because implementation of the proposed Campus Master Build-Out Plan Update (Phases 1 through 4) can be accommodated by the existing and projected OCFA and IPD service capabilities, and because existing requirements for security and fire safety (as identified in PPPs 12-1 through 12-4) would be implemented as part of the proposed Project, which continue to ensure the adequate provision of services, the proposed project would not result in a cumulatively considerable contribution to a significant cumulative impact related to fire and police protection.

In order to accommodate future cumulative demand, additional park and recreational facilities would be developed and constructed throughout the City of Irvine, including on the Concordia University Irvine campus for students and faculty/staff. Because the size, location, and type of these future facilities in the City of Irvine is not known at this time, it is speculative to assess the magnitude of cumulative impacts associated with the construction of these facilities. However, the City's General Plan and Subdivision Ordinance (in accordance with the Quimby Act) requires residential developers to dedicate park land and/or improvements/amenities, and/or pay fees in-lieu of dedication, at a rate of five acres per thousand population. The allocation of land and improvements is apportioned at 2 acres to community parks and 3 acres to public and/or private neighborhood parks. Additionally, it is reasonable to expect that all these facilities would undergo CEQA review in accordance with California law, and that project-specific impacts associated with development of each of these facilities would be mitigated to the extent feasible.

As previously discussed, the proposed Campus Master Build-Out Plan Update includes the provision of new and modified on campus athletic and recreational facilities. The potential impacts from construction and operation of these facilities are fully analyzed in each appropriate section of this Draft EIR. The construction and operational impacts from these facilities would be limited to uses on campus and immediately adjacent to the campus; there are no cumulative projects that have been identified in the vicinity of the campus that would result in a significant cumulative impacts. As a result, the proposed project would not result in a cumulatively considerable contribution to a significant cumulative impact related of park and recreational facilities. (DEIR, p. 5.12-15.)

O. Transportation/Traffic

The cumulative traffic analysis determined that the proposed project would result in potentially significant impacts when considered with cumulative projects; however these impacts would be reduced to less than significant levels with implementation of MMs 13-1, 13-3, and 13-4.) Specifically the potentially significant impacts would occur at Ridgeline Drive/University

Drive Intersection and University Drive eastbound roadway segment between Ridgeline Drive and Michelson Drive.

There are no cumulative development projects identified in proximity to the campus that would result in cumulative impacts related to construction traffic. Regardless, the potential construction-related traffic impacts resulting from the proposed project would be less than significant with implementation of MM 13-5, which requires the preparation of a Traffic Control Plan. The proposed project would not result in a cumulatively considerable contribution to a significant cumulative construction-related traffic impact. (5.13-60.)

P. Utilities and Service Systems

No new or expanded water (potable and reclaimed) and wastewater backbone infrastructure is required to serve the proposed project. The long-range planning efforts of IRWD take into account current and proposed projects to eliminate the potential for cumulative impacts. The proposed project is consistent with the development anticipated in the City's General Plan and used in IRWD's planning. Therefore, the proposed project's demand for water, wastewater collection, and treatment services would be less than significant and would not be cumulatively considerable. (DEIR, p. 5.14-13.)

Further, the IRWD's water supply and facilities planning is consistent with the City of Irvine General Plan, and the proposed project does not involve any development beyond that assumed in the City's General Plan. Thus, the project would have a less than significant impact related to water supply and would not result in a cumulatively considerable contribution to a significant cumulative water supply impact. (DEIR, p. 5.14-14.)

IX. FINDINGS REGARDING SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES

Section 15126(c) of the State CEQA Guidelines requires that an EIR describe any significant irreversible environmental changes which would occur as a result of the proposed action should it be implemented. The Concordia University main campus in the City of Irvine is currently developed with various uses including 16 institutional buildings (243,571 square feet [sf]); residence halls that accommodate 256 institutional dormitory units/1,024 beds; various athletic and recreation facilities; and surface parking lots. The long-term commitment of land resources to a university campus has already occurred with previous development on campus, which began in the late 1970's. Additionally, as described in Section 3.0, Project Description, of the Draft EIR, the currently approved Campus Master Build-Out Plan allows for the development of up to 321,220 sf of institutional uses and 330 institutional dwelling units/1,320 beds. This represents an increase of 77,649 sf of institutional uses and 74 units/296 beds, compared to existing conditions. With implementation of the proposed Campus Master Build-Out Plan Update (Phases 1 through 4), there would be new buildings constructed and some existing buildings would be removed; however, there would not be any change to the amount of allowed development on the campus (321,220 sf of institutional buildings and 330 units/1,320 beds).

The proposed Project would convert existing developed and undeveloped areas on the campus to uses that would further serve the University, resulting in a continuation of the long-term commitment of land resources to these uses. Construction and long-term operation of the proposed Project would require the commitment and reduction of nonrenewable and/or slowly renewable resources, including petroleum fuels, and natural gas (for vehicle emissions, construction, lighting, heating, and cooling of structures); and lumber, sand/gravel, steel, copper, lead, and other metals (for use in the building construction, piping, and roadway infrastructure). Other resources that are slow to renew and/or recover from environmental stresses would also be impacted by proposed Project implementation, such as air quality through the combustion of fossil fuels and production of greenhouse gases; and water supply through the increased potable water demands for drinking, cooking, cleaning, landscaping, and general maintenance needs. An increased commitment of public services (e.g., police, fire, and sewer and water services) would also be required. Therefore, implementation of the proposed Project results in an irreversible commitment of land, energy resources and public services. Restoration of the campus to pre-developed conditions would not be feasible given the degree of disturbance, the urbanization of the area, and the level of capital investment.

X. FINDINGS REGARDING GROWTH-INDUCING IMPACTS

Pursuant to Sections 15126(d) and 15126.2(d) of the State CEQA Guidelines, the EIR is required to examine ways in which the proposed Project could foster economic or population growth, or the construction of additional development, either directly or indirectly, in the surrounding environment. Growth-inducing effects are examined through analysis of the questions below.

1. Would this project remove obstacles to growth (e.g., through the construction or extension of major infrastructure facilities that do not presently exist in the project area, or through changes in existing regulations pertaining to land development)?

The proposed Project will not remove obstacles to growth and therefore no impacts will occur. As discussed in Section 3.0, Project Description, of the Draft EIR, no major new infrastructure facilities are required specifically to accommodate the proposed Project. Roadway and intersection improvements are proposed at the intersection of Ridgeline Drive and the Concordia East roadway, which currently operates at a deficient level of service, and warrants a signal under existing conditions based on the City's Transportation Design Procedures (TDP)-12 (Signal Warrants) analysis. These improvements are proposed as part of the project to address existing conditions, and they would also address the increased traffic that would be generated by the proposed Project. However, the proposed intersection and roadway improvements would not provide additional capacity that would induce unplanned growth.

Existing utility infrastructure and facilities are available on campus or in the vicinity. However, new utility infrastructure would be required on campus, and along University Drive (dry utilities) to serve the proposed uses and to connect to existing utilities. The utility infrastructure installed as part of the proposed Project would be sized and located expressly to serve the campus (existing and proposed uses), and would not, therefore, induce growth in the project vicinity.

The proposed Campus Master Build-Out Plan Update project involves (1) a Major Modification to the existing Conditional Use Permit for Concordia University Irvine (described in Section 3.4.1), and (2) a Zone Change to revise Special Development Requirements (SDRs) identified in Section 9-21-7.B of the City of Irvine Zoning Ordinance. As discussed above, the total amount of allowed development on campus would remain the same as existing entitlements; therefore, the proposed actions would not have implications associated with facilitating growth beyond the 321,220 sf of development that is currently approved. Approval of the proposed Project and associated discretionary actions would not remove an existing regulatory obstacle to growth, but rather, would redefine the nature of such growth. The continued development of the campus pursuant to existing entitlements would not encourage growth through the provision of new and essential public services or access opportunities, nor would it result in urbanization of land in a remote location. The proposed Project is not, therefore, considered to be growth inducing with respect to removal of obstacles to growth. Additionally, as discussed in Section 5.9, Land Use and Planning, the proposed Project would be consistent with the goals/policies of the City's General Plan and other relevant planning documents that address development within the City.

2. Would this project result in the need to expand one or more public services to maintain desired levels of service?

The proposed Project will not necessitate the expansion of existing public service facilities in order to maintain desired levels of service. As discussed in Section 5.12, Public Services and Recreation, in the Draft EIR, the proposed Project would potentially increase the demand for public services (police and fire), but would not necessitate the expansion of existing public service facilities in order to maintain desired levels of service. In the event that these facilities or associated resources do need to be expanded, funding mechanisms are in place through existing regulations and standard practices to accommodate such growth. The proposed Project would not, therefore, have significant growth-inducing consequences with respect to public services.

3. Would this project encourage or facilitate economic effects that could result in other activities that could significantly affect the environment?

The proposed Project would have no substantial adverse impact or facilitate economic effects that could result in other activities that could significantly affect the environment. During project construction, a number of design, engineering, and construction-related jobs would be created, which would last until project construction is completed. This would provide economic stimulus in the area; however, these jobs are typically filled by existing residents of the region and would not be substantial enough to foster other activities that would have significant effects on the environment.

In addition, the proposed Project would result in the addition of approximately 363 individuals on campus full time (292 full-time undergraduate students and 71 faculty/staff). However, as discussed in Section 5.11, Population and Housing, of the Draft EIR, this proposed increase in individuals on campus is within regional population projections. Additionally, the faculty/staff positions are generally found in most areas, and may not offer a unique enough opportunity to induce job seekers to relocate to the area for the sole purpose of filling these

positions. While some faculty/staff may transfer into the area to fill these positions, it is expected that qualified area residents would fill the vast majority of additional faculty and staff positions. Similarly, it is anticipated that construction employees would commute from elsewhere in the region, rather than relocate to the Irvine area for a temporary construction job. Nonetheless, implementation of the proposed Project may result in the creation of indirect and induced jobs. Indirect jobs are those that would be created when the campus purchases goods and services from businesses in the region, and induced jobs are those that are created when wage incomes of those employed in direct and indirect jobs are spent on the purchase of goods and services in the region.

As discussed in Section 5.11, Population and Housing, in the Draft EIR, the campus also has a visitor population that varies on a daily basis and based on the time of year. This temporary population is not expected to change substantially with implementation of the proposed Project. Regardless, any increase in visitors does not represent a permanent relocation of people that would create a substantial population growth in the area or necessitate the expansion or construction of new public service facilities.

4. Would approval of this project involve some precedent-setting action that could encourage and facilitate other activities that could significantly affect the environment?

The Project does not propose any precedent-setting actions that, if approved, would specifically allow or encourage other projects and resultant growth to occur. As discussed previously, the proposed Project involves a Major Modification to the existing Conditional Use Permit for the University and a Zone Change to revise SDRs. The proposed Project does not involve any changes in the type or amount of allowed development on campus, in Planning Area 21 (Turtle Rock), or the City. Additionally, these actions, which include new and different restrictions to campus operations, are project-specific and would not encourage and facilitate other activities. The campus would continue to function as a University and would be consistent with existing land use and planning policies.

No changes to any of the City's building safety standards (i.e., building, grading, plumbing, mechanical, electrical, fire codes) are proposed or required to implement the proposed Project. PPPs, which also include City of Irvine Standard Conditions of Approval, and project-specific mitigation measures have been identified in Sections 5.1 through 5.14 of the Draft EIR to ensure that implementation of the proposed Project complies with all applicable City plans, policies, and ordinances to ensure that there are no conflicts with adopted land development regulations and that environmental impacts are minimized. The proposed Project does not propose any precedent-setting actions that, if approved, would specifically allow or encourage other projects and resultant growth to occur.

XI. FINDINGS REGARDING ALTERNATIVES

In compliance with Section 15126.6(a) of the California Environmental Quality Act (CEQA) Guidelines, an Environmental Impact Report (EIR) must "describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any significant effects of the project, and evaluate the comparative merits of the alternatives." The City, as the CEQA lead agency, is responsible for selecting a range of project alternatives.

The analysis in the Final EIR concludes that implementation of Phases 1 and 2, which are addressed at a project level, and implementation of the proposed Campus Master Build-Out Plan Update would result in less than significant impacts for each topical issue with incorporation of City of Irvine plans, policies, and programs (PPPs), including current standard conditions (SCs); project design features (PDFs), and project-specific mitigation measures (MMs) for each topical area evaluated in the Draft EIR. No significant and unavoidable impacts would result. Notwithstanding the lack of significant impacts, the City has evaluated potential alternatives to the proposed Project.

As described in section 3.2 of the EIR, the proposed Project's objectives include:

(1) Implement the remaining development allowed on campus by existing City of Irvine General Plan and Zoning entitlements and ensure that development of the site is consistent with applicable goals and objectives of the City as set forth in the General Plan.

(2) Update the current Campus Master Build-Out Plan to accommodate the physical resources needed to support Concordia University's Strategic Plan and to accomplish this in a manner that preserves the environmental quality of the main campus and the surrounding community while maintaining the currently allowed maximum development of 321,220 sf of institutional buildings.

(3) Provide the previously approved 74 residential units/296 beds to address current and anticipated demand for undergraduate student on campus housing, and to improve the quality of student life and academic experience.

(4) Replace aging infrastructure and buildings at the main campus to allow for the development of state of the art, and Americans with Disabilities Act of 1990 (ADA) compliant, academic facilities and co-curricular facilities, including science, visual arts and performing arts facilities, which will also facilitate recruitment of faculty and students.

(5) Provide new, relocated and/or improved athletic facilities at the main campus to better serve Concordia's sports teams and the student athletes, including the provision of athletic field lighting to allow use of fields in the evening to facilitate student athlete's academic schedules.

(6) Provide additional recreational opportunities at the main campus to support the existing and anticipated future increase in the campus population.

(7) Improve pedestrian and vehicular access and circulation on campus, including on-site parking, and strengthen the public bicycle linkage that traverses the campus.

(8) Improve traffic operations at the intersection of Ridgeline Drive/Concordia East, which currently operates at a deficient level of service, and warrants a signal based on the City's Transportation Design Procedures (TDP)-12 (Signal Warrants) analysis.

The alternatives presented in the Final EIR constitute a reasonable range of alternatives necessary to permit a reasoned choice among the options available to the City and/or the Project proponent. Based upon the administrative record for the Project, the City makes the following findings concerning the alternatives to the proposed Project.

A. Alternatives Considered But Not Carried Forward for Detailed Analysis

Section 15126.6(c) of the State CEQA Guidelines specifies that an EIR should (1) identify alternatives that were considered by the lead agency but were eliminated from detailed consideration because they were determined to be infeasible during the scoping process; and (2) briefly explain the reasons underlying the lead agency's determination. Among the factors that may be used to eliminate alternatives from detailed consideration in an EIR are: (i) failure to meet most of the basic project objectives; (ii) infeasibility; and/or (iii) inability to avoid significant environmental impacts.

The following alternatives were considered during the scoping and planning process but were not selected for detailed analysis in the Draft EIR. In addition to an alternative site, alternatives that were considered but not carried forward for analysis in the Draft EIR include previous iterations of the proposed Campus Master Build-Out Plans that were submitted to the City but were ultimately eliminated from further consideration due to potential impacts, which would be greater than the proposed Project, and due to concerns raised by the adjacent residential communities.

i) Alternative Site

An "Alternative Site" alternative was considered during the scoping and planning process, but was not selected for detailed analysis in the EIR. Only locations that would avoid or substantially lessen any of the significant effects of the proposed Project need be considered for inclusion in the EIR. State CEQA Guidelines, Section 15126.6(f)(2)(B).

There is currently 243,571 sf of institutional development on campus along with four residence halls (256 units/1,024 beds) that has been constructed in stages since 1974. The currently approved Campus Master Build-Out Plan allows for the development of up to 321,220 sf of institutional square footage and 330 institutional dwelling units (1,320 beds). This amount of development in PA 21 for the campus is reflected in the existing General Plan and Zoning development allocations. Therefore, based on existing entitlements, there is only 77,649 sf of institutional uses and 74 units/296 beds yet to be developed. The proposed Project does not involve an increase in the type or amount (square footage or units) of allowed development on campus. As further discussed in Section 3.3, Project Background, of the Draft EIR, the proposed Campus Master Build-Out Plan Update involves an update to the existing Campus Master Build-

Out Plan to address changes in the future of higher education and the need to replace aging infrastructure on campus. It should be noted that this alternative assumes development of only the proposed net increase in square footage and residential uses at an alternate site, not relocation of the Concordia University main campus in its entirety.

As identified above, the project objectives focus on implementing the development currently allowed by the City's General Plan and Zoning and making these improvements on the existing main campus. Implementation of the remaining institutional and residential development allocation (77,649 sf of institutional uses and 74 units/296 beds) at any other location in the City would not meet these key project objectives and would not implement Concordia University's Strategic Plan (which addresses academic enterprise, student experience, institutional identity, and institutional operations). Further, the on-campus student growth will primarily be in the traditional undergraduate program, and this growth would primarily consist of full-time undergraduate students who live in on-campus residence halls. Therefore, the facilities provided must meet traditional undergraduate student educational and extracurricular expectations, including maintaining and enhancing the synergy that comes from providing necessary resources in the same location on campus. Implementing the proposed uses associated with the Campus Master Build-Out Plan Update, including a new residence hall, at another site would not accomplish this. Because the campus already has existing administrative and student support operations, it would not be efficient to develop these facilities at an alternative site, which would be necessary to support the proposed uses at an off campus location. Additionally, implementing the remaining development allocation for institutional uses at an alternate site would not allow for the removal of aging buildings and infrastructure and replacement of these buildings with state-of-the-art and ADA-compliant buildings, which is also an objective of the project.

With respect to environmental impacts, the proposed Campus Master Build-Out Plan Update (Phases 1 through 4) would not result in any significant and unavoidable impacts from construction or operation. Operation of the proposed Project at an alternative site would also have similar impacts as the proposed Project. This includes, but is not limited to, operational impacts related to increased traffic, such as air quality, GHG emissions, and noise. The less than significant impacts of the project would be similar at an alternative site because development of the proposed Project at an alternative site would only move project impacts to a different location, thus resulting in a similar construction impact area, types of land use, and project size and would be subject to the same regulatory requirements and MMs. Development within the existing boundaries of the campus provides an infill type of development which would typically result in less impacts than new construction at an undeveloped site.

The Project Applicant does not own other land in the City that would accommodate the proposed Project and meet the project objectives. CEQA does not require the consideration of sites not owned by the landowner or which could not be reasonably acquired by the landowner as alternatives to the proposed Project (State CEQA Guidelines, Section 15126.6[f][1]).

Finding: The City Council rejects the Alternative Site Alternative, on the following grounds, each of which individually provides sufficient justification for rejection of this alternative: (1) the alternative does not avoid any significant and unavoidable impacts (the project as proposed has none), (2) the alternative would likely not further reduce any of the proposed project's already less than significant impacts; (3) the alternative is technically,

financially, and legally infeasible given that the Project Applicant does not own other land that would accommodate the proposed Project; and (4) the alternative fails to meet any of the basic project objectives. Therefore, the Alternative Site Alternative is eliminated from further consideration.

ii) July 2014 Proposed Campus Master Build-Out Plan Update

The proposed Project, as described in Section 3.0, of the Draft EIR, is the outcome of an effort that started in July 2012 when Concordia University initiated preparation of planning concepts for updating the Campus Master Build-Out Plan. By October 2013, the planning concepts were developed to the point that Concordia University was ready to discuss the plan with its residential neighbors. Over a period of 8 months (from October 2013 until June 2014, prior to the original submittal of the initial development application to the City in July 2014), Concordia hosted 12 meetings to review planning concepts with local homeowners and the Boards of Directors for the homeowners/community associations. As a result of these initial planning and coordination processes, a proposed Campus Master Build-Out Plan Update was prepared and submitted to the City in July 2014. The July 2014 proposed Campus Master Build-Out Plan Update is presented in Exhibit 6-1 in Section 6.5 of the Draft EIR and included the following requested approvals:

- General Plan Revision to allow for up to 336,785 sf of institutional development on campus; this included an increase of up to 15,565 of additive square footage (from 321,220 sf to 336,785 sf).
- Zone Change to revise Section 9-21-7-B, Special Development Requirements: Concordia University (Christ College Irvine) General Plan Amendment 4237-GA and Zone Change 5232-ZC, since many of these SDRs have been completed, or are not applicable to the University. It was identified that applicable Specific Development Requirements could become conditions of approval for the proposed Project. Additionally, the request included an increase of up to 15,565 of additive square feet.
- Major Modification to CUP 12273-CPU (approved in August 1993 and subsequently modified through 2005), to allow for up to 336,785 sf of institutional development on campus and new residence hall, consistent with the development shown in Exhibit 6-1. The July 2014 Campus Master Build-Out Plan Update submittal included demolition of existing buildings (74,231 sf), construction of new institutional buildings (141,200 sf – 154,800 sf), and construction of new accessory/support buildings (10,000 sf – 12,000 sf).

In addition, the proposed July 2014 Campus Master Build-Out Plan Update submittal included on- and off-campus circulation improvements and on-campus parking improvements. The July 2014 development application was discussed at a Planning Commission meeting on October 2, 2014. Based on input received from the communities, the proposed July 2014 Campus Master Build-Out Plan Update was eliminated from further consideration and Concordia University initiated additional planning efforts to address the concerns raised, as discussed below. Concordia University continued to meet with leadership on the Concordia East and West Community Association Boards and the City in an effort to further refine the development proposal. As described in Section 6.5.2 of the Draft EIR, Concordia University made significant revisions to the proposed Campus Master Build-Out Plan between October 2014 and April 2016.

The April 2016 submittal represents the proposed Project as described in Section 3.0, Project Description, and evaluated in the Draft EIR.

Finding: The City Council rejects the July 2014 Proposed Campus Master Build-Out Plan Update Alternative, on the following grounds, each of which individually provides sufficient justification for rejection of this alternative: (1) the alternative does not avoid any significant and unavoidable impacts (the project as proposed has none), and (2) the alternative would likely not reduce any of the already less than significant impacts of the proposed project. Therefore, the Alternative Site Alternative is eliminated from further consideration.

B. Alternatives Selected for Further Analysis

As discussed in Section 6.6 of the EIR, based on the criteria listed previously and the fact that the proposed Project would not result in any significant and unavoidable impacts, the alternatives described below have been determined to represent a reasonable range of alternatives. The EIR considered the following alternatives to the proposed Campus Master Build-Out Plan Update:

- Alternative 1: No Project/No Development
- Alternative 2: No Project/Development Pursuant to Existing General Plan and Zoning
- Alternative 3: Reduced Grading Alternative
- Alternative 4: Reduced Development Alternative
- Alternative 5: Gate Relocation Alternative
- Alternative 6: Reduced Athletic Field Lighting Alternative

Each of the alternatives is discussed below. With respect to the No Project alternatives, Section 15126.6(e) of the State CEQA Guidelines requires than an EIR evaluate a "no project" alternative to allow decision makers to compare the impacts of approving a proposed Project with the impacts of not approving that project. Section 15126.6(e)(3) of the State CEQA Guidelines describes the two general types of no project alternative: (1) when the project is the revision of an existing land use or regulatory plan, policy, or ongoing operation, the no project alternative would be the continuation of that plan and (2) when the project is other than a land use/regulatory plan, such as a specific development on an identifiable property, the no project alternative is the circumstance under which that project is not processed (i.e., no development). Both types of no project alternatives are addressed in the Draft EIR (refer to Alternatives 1 and 2).

iii) Alternative 1: No Project/No Development

Description: Under the No Project/No Development Alternative, as required by CEQA, no further development would occur at the Concordia University Irvine main campus, including institutional and residential development currently allowed by the City's General Plan and Zoning. This No Project alternative is evaluated in accordance with Section 15126.6(e)(3)(A) of the State CEQA Guidelines.

Finding: The City Council rejects Alternative 1: No Project/No Development, on the following grounds, each of which individually provides sufficient justification for rejection of this alternative: (1) the alternative does not avoid any significant and unavoidable impacts (the project as proposed has none), and (2) the alternative fails to meet any of the basic project objectives. Therefore, Alternative 1 is eliminated from further consideration.

Facts in Support of Finding: The No Project/No Development Alternative would avoid most of the potential project impacts from the proposed Campus Master Build-Out Plan Update (Phases 1 through 4), which are less than significant for each environmental topic with adherence to PPPs and implementation of PDFs and project-specific MMs. It is expected that impacts related to population and housing and public services and recreation would be less than the proposed Project, because although there may be some growth in the on campus population, it would be limited based on the capacity of the existing facilities. With this alternative, there would be no roadway or intersection improvements implemented, and the Ridgeline Drive/Concordia East roadway intersection would continue to operate at an unsatisfactory LOS E in the AM peak hour and LOS F in the PM peak hour resulting in a potentially greater impact than the proposed Project, which would improve operations at this intersection to LOS A. The No Project/No Development would not attain any of the project objectives.

iv) Alternative 2: No Project/Development Pursuant to Existing General Plan and Zoning

Description: This alternative assumes that the remaining allowed development under the original CUP 12273-CPU and subsequently approved modifications would be implemented, consistent with the currently approved Campus Master Build-Out Plan, as shown in the Exhibit 4-3 in Section 4, Environmental Setting, of the Draft EIR. In summary, this includes approximately 77,649 sf of approved but unbuilt institutional square footage (4 buildings), 1 residence hall (74 units/296 beds), and additional surface parking. Approved but unbuilt development on campus as identified on the currently approved Campus Master Build-Out Plan includes the following institutional and residential uses:

- Library Classroom Addition (41,500 sf) located south of the existing Library, Fine Arts and Theatre Building;
- Founders Hall Classroom Addition (11,500 sf) located south of the existing Founders Hall Building;
- Early Childhood Center (8,000 sf) located in the northeast portion of the campus, west of Parking Lot E;
- Maintenance Building Addition (2,400 sf) located west of the existing Maintenance Building;
- Unallocated, approved square footage (14,249); and
- Residence Hall with 74 units/296 beds in the southwest portion of the campus, adjacent to existing Parking Lot A.

In addition, the currently approved Campus Master Build-Out Plan includes construction of a pool (a specific type is not identified) southeast of the existing gymnasium. This No Project

Alternative is evaluated in accordance with Section 15126.6(e)(3)(B) of the State CEQA Guidelines.

Finding: The City Council rejects Alternative 2: No Project/Development Pursuant to Existing General Plan and Zoning, on the following grounds, each of which individually provides sufficient justification for rejection of this alternative: (1) the alternative does not avoid any significant and unavoidable impacts (the project as proposed has none), and (2) the alternative only meets three of the eight basic project objectives. Therefore, the Alternative Site Alternative is eliminated from further consideration.

Facts in Support of Finding: The No Project/Development Pursuant to Existing General Plan and Zoning Alternative would have reduced construction-related impacts compared to the proposed Project because there would be no demolition of existing buildings. New development would be limited to 77,649 sf of institutional uses, compared to 148,880 sf of new institutional uses with the proposed Project. This alternative and the proposed Project would both involve a new residence hall.

Because the physical impact area and site conditions for this alternative are generally the same as the proposed Project, the total amount of development and population growth at build-out and on-campus operations would be the same and operations would be similar and the impacts related to the various topical issues addressed in the Draft EIR would also be similar. However, this alternative does not involve the installation of athletic field lighting so there would be reduced impact related to light/glare and noise in the evening hours associated with athletic facilities.

The proposed Project's construction-related and operational impacts would be less than significant with adherence to PPPs and implementation of the PDFs and project-specific mitigation measures. Therefore, while this alternative would reduce construction-related impacts, light and glare impacts, and evening noise impacts, there are no significant impacts associated with the proposed Project that would be avoided or reduced with this alternative.

Additionally, this Alternative would not meet the Project objectives to the same extent as the proposed Project. Under the No Project/Development Pursuant to Existing General Plan and Zoning Alternative the current Campus Master Build-Out Plan would not be updated, and while some new buildings would be constructed along with new infrastructure, aging infrastructure and buildings would not be replaced. The proposed new science, visual arts, and performing arts facilities could potentially be accommodated in the currently planned library classroom addition and/or the Founders Hall addition; however, this would not meet the project objectives to the same extent as the proposed project. Additionally, while a new pool would be constructed, this alternative would not involve any other new, relocated, and/or improved athletic facilities that are proposed as part of the project, and athletic field lighting would not be installed. Additionally, the proposed Campus Master Build-Out Plan Update includes the potential installation of a signal at the intersection of Ridgeline Drive/Concordia East roadway; however, this signal is not included as a component of the currently approved Campus Master Plan.

v) Alternative 3: Reduced Grading Alternative

Description: Due to soil conditions on campus, a substantial amount of soil not suitable for reuse would need to be exported, and sand would be imported to mix with the soil. Notably, the Science, Nursing and Healthcare Building (F1), Student Center Addition (F4), and associated parking would require 15,000 cy of cut and 1,200 cy yards of fill and the Arts, Alumni and Advancement Building (F2) and Parking Lot C improvements would require 20,500 cy of cut and 1,500 cy of fill. To reduce the amount of earthwork required and associated construction impacts, including from haul trucks, this alternative includes modifications to Phases 3 and 4 of the proposed Campus Master Build-Out Plan Update to reduce the amount of required grading. The total amount of proposed institutional development on campus (321,220 sf) would remain the same as the proposed Project.

A comparison of the statistical information for Reduced Grading Alternative to the proposed Project is provided in Table 6-1 in Section 6, Alternatives to the Proposed Project, of the Draft EIR. This alternative involves the following key modifications compared to the proposed Campus Master Build-Out Plan Update:

- The Science, Nursing and Healthcare Building (F3) would be developed on the site of the existing tennis courts.
- The Chi Alpha and Chi Beta Buildings (Buildings 13 and 14) would be demolished, and the proposed residence hall (F7) would be developed on the site of these buildings. The residence hall would be smaller than proposed with the project (up to 50 units/200 beds compared to 74 units/296 beds).
- The recreation and lap pool and associated pool service and restroom building (F6) would not be developed.
- Founders Hall and the Administration Building (Buildings 11 and 12) would be demolished and a smaller Arts, Alumni and Advancement Building (F2) would be developed on the site of these buildings. The building would be approximately 28,145 sf.
- Buildings 18, 19, and 20 would be retained.
- The tennis court deck at Parking Lot A would not be developed.

With these modifications, under the Reduced Grading Alternative, there would still be a net increase of 77,649 sf of institutional uses and 1 residence hall (reduced to approximately 50 units/200 beds) implemented, consistent with the net increase in development resulting from the proposed Project. However, this alternative would involve a reduction in demolition (59,376 sf compared to 71,231 sf with the proposed Project) and new construction (137,025 sf compared 148,880 sf with the proposed Project). Additionally, the earthwork/grading for Phases 3 and 4 would be reduced to approximately 5,600 cy of cut and 4,200 cy of fill compared to the proposed Project, and the associated number of truck trips would be reduced from 3,081 to 245 over the course of the construction activities.

Finding: The City Council rejects the Alternative 3: Reduced Grading, on the following grounds, each of which individually provides sufficient justification for rejection of this alternative: (1) the alternative does not avoid any significant and unavoidable impacts (the

project as proposed has none), and (2) the alternative would only meet five out of the eight basic project objectives. Therefore, Alternative 3 is eliminated from further consideration.

Facts in Support of Finding: The Reduced Grading Alternative would have reduced construction-related impacts compared to the proposed Project because there would be a reduction in grading/earthwork, a reduction in demolition, and a reduction in new building construction, and an associated heavy truck trips. However, the construction-related impacts of this alternative would be less than those of the proposed Campus Master Build-Out Plan Update (Phases 1 through 4).

Because the physical impact area and site conditions for this alternative are generally the same as the proposed Project, the total amount of development and population growth at build-out and on campus operations would be the same. Additionally, operations would be similar and the impacts related to the various topical issues addressed in the Draft EIR would also be similar.

The project's construction-related and operational impacts would be less than significant with adherence to PPPs and implementation of the PDFs and project-specific MMs. Therefore, while this alternative would reduce construction-related impacts, it would not avoid any significant impacts.

Although this alternative would have similar or reduced impacts for most environmental topics when compared to the proposed Project, it would not the Project objectives to the same extent as the proposed Project. Specifically, this alternative would involve construction of smaller residence hall (up to 50 units/200 beds compared to 74 units/296 beds), and would not implement the amount of on campus housing proposed with the project, and allowed by the existing General Plan and zoning. Additionally, this alternative would include some, but not all of the athletic and recreational facilities proposed with the project; it would not include construction of a recreation/lap pool or tennis court deck and would not meet the goals related to the provision of athletic and recreational facilities to the same extent as the proposed Project.

vi) Alternative 4: Reduced Development Alternative

Description: The purpose of this alternative is primarily to reduce the amount of traffic generated by the proposed Campus Master Build-Out Plan Update. A comparison of the statistical information for the Reduced Development Alternative and the proposed Project is provided in Table 6-2 in Section 6.0, Alternatives to the Proposed Project, in the Draft EIR. This alternative would include the following key modifications compared to the proposed Campus Master Build-Out Plan Update:

- The proposed Project would be implemented in three phases.
- The proposed 40,000 sf Arts, Alumni and Advancement Building (F2) would not be constructed.
- The proposed Science, Nursing and Healthcare Building (F3) would be increased from 49,000 sf to approximately 60,000 to 65,000 sf to accommodate some proposed functions of the Arts, Alumni and Advancement Building. The Science, Nursing and

Healthcare Building would be located on the building sites for Buildings 11 and 12, which would be demolished.

- The Chi Beta Building (Building 14) would be retained and renovated to accommodate some office space proposed to be included in the Arts, Alumni and Advancement Building.

The total net increase in square footage on campus would be 62,554 sf to 67,554 sf compared to 77,649 sf with the proposed Project (a reduction of 15 to 24 percent). Under this alternative, the increase in daily traffic resulting from the proposed Project would be reduced from 1,509 daily trips with the proposed Project, to approximately 1,215 daily trips to 1,313 daily trips.

This alternative would also result in a reduction in construction activities. There would be a reduction in demolition (57,326 sf compared to 71,231 sf with the proposed Project) and new construction (119,880–124,880 sf compared to 148,880 with the proposed Project). Additionally, the earthwork/grading for Phases 3 and 4 would be reduced to approximately 14,760 cy of cut and 15,960 cy of fill, and the associated number of truck trips would be reduced from 3,081 to 1,124.

Finding: The City Council rejects Alternative 4: Reduced Development, on the following grounds, each of which individually provides sufficient justification for rejection of this alternative: (1) the alternative does not avoid any significant and unavoidable impacts (the project as proposed has none), and (2) the alternative would only meet five out of the eight basic project objectives. Therefore, Alternative 4 is eliminated from further consideration.

Facts in Support of Finding: As described above and summarized in Table 6-4 in Section 6.0, Alternatives to the Proposed Project, in the Draft EIR, the Reduced Development Alternative would have reduced construction-related impacts compared to the proposed Project (i.e., air quality, GHG emissions, noise, traffic) because there would be a reduction in grading/earthwork, a reduction in demolition, and a reduction in new building construction.

Because the site conditions and operations for this alternative are generally the same as the proposed Project (with a slight reduction in impact area), physical impacts resulting from this alternative would also be similar to the proposed Project. This alternative would not substantially lessen impacts related to aesthetics, biological resources, cultural resources, geology/soils, hazards and hazardous materials, hydrology and water quality, land use and planning, and utilities and service systems. However, the impacts from the proposed Project and this alternative would be less than significant.

Although there would an overall decrease in the amount of development on campus with the Reduced Development Alternative, the estimated amount of population growth at build-out would be similar to the proposed Project. Therefore, the project's impacts related to population and housing and public service and recreation would be similar to the proposed Project and would be less than significant.

With the reduction in development associated with the Reduced Development Alternative, there would be a reduction in trip generation (daily trips, PM peak hour, and AM

peak hour). Therefore, this alternative would result in an overall reduction in operational air quality, GHG emissions, traffic-related noise, and traffic impacts. However, the proposed Project would not result in significant and unavoidable impacts for these or any other environmental issues.

This alternative would achieve some but not all of the Project objectives. Under the Reduced Development Alternative, the currently approved Campus Master Build-Out Plan would be updated; however, with the reduction in net new development on campus, this alternative would not implement or maintain the amount of institutional development allowed by and assumed in the City's General Plan and Zoning (321,220 sf). While existing aging buildings and buildings not ADA-compliant would be demolished and new buildings would be constructed, the Arts, Alumni and Advancement Building would not be developed under this alternative. Some of the uses proposed in this building would be accommodated in the larger Science, Nursing and Healthcare Building and renovated Chi Beta Building; however, this would not meet the University's needs for visual arts and performing arts facilities to the same extent as the proposed Project, notably because a new theater would not be provided.

vii) Alternative 5: Gate Relocation Alternative

Description: During the scoping process, a number of comments were raised about the existing gate operations. While no traffic impacts have been identified relative to the current gate operations, to address this concern, this alternative involves implementation of the proposed Campus Master Build-Out Plan Update (Phases 1 through 4) consistent with the proposed Project, but with relocation of the existing gate houses along the Concordia East and West roadways so that only campus access is regulated by the gate operations.

To improve traffic operations on the Concordia East and Concordia West roadways, and as shown on Exhibit 6-2 in Section 6.0 of the Draft EIR, the West Gate House would be relocated to a location near the Good Shepherd Chapel, and the East Gate House would be relocated farther to the east near the improved intersection of Dorm Road with the Parking Lot E driveway. This would allow vehicles accessing residential streets from the Concordia East/West roadways to do so without potential conflict with gate operations. The existing gate houses would be removed and the roadway restriped accordingly.

Access to the main parking lot west of Grimm Hall and Parking Lot A (west of the baseball fields) would be card-activated to prohibit unauthorized access to the campus.

Finding: The City Council rejects the Alternative 5: Gate Relocation, on the following grounds, each of which individually provides sufficient justification for rejection of this alternative: (1) the alternative does not avoid any significant and unavoidable impacts (the project as proposed has none), (2) the alternative would like not further reduce any of the proposed project's already less than significant impacts and would instead result in increased construction impacts.

Facts in Support of Finding: The Gate Relocation Alternative would have the same operational impacts as the proposed Campus Master Build-Out Plan Update (Phases 1 through

4), which are less than significant for each environmental topic with adherence to PPPs and implementation of PDFs and project-specific MMs.

This alternative would require a slight increase in construction activities to remove the existing gate houses and construct new ones, and would have greater impacts to coastal sage scrub habitat due to the need for additional fuel modification. However, these construction and fuel modification activities would be similar to those that would occur with the proposed Project and would be less than significant with adherence to PPPs and implementation of MMs.

Because the Gate Relocation Alternative essentially implements the proposed Project, with the only difference being the relocation of the gates, this alternative would attain the project objectives. However, it has the potential to result in increased construction-related impacts and would not avoid significant impacts because no significant and unavoidable impacts would result from implementation of the proposed Project.

viii) Alternative 6: Reduced Athletic Field Lighting Alternative

Description: The proposed Project involves the installation and operation of athletic field lights at six facilities (baseball, softball, track/soccer, sand volleyball, practice field, and tennis court deck). Under the Reduced Athletic Field Lighting Alternative, the number of athletic fields that could use nighttime lighting at any one time would be restricted to three fields to reduce the amount of light/glare. As with the Proposed Project, lighting would only be installed on four of the six tennis courts (not the two western courts) and would be designed to accommodate nighttime play for recreation and practice only. All other components of the proposed Campus Master Build-Out Plan Update (Phases 1 through 4) would be the same.

Finding: The City Council rejects the Alternative 6: Reduced Athletic Field Lighting, on the following grounds, each of which individually provides sufficient justification for rejection of this alternative: (1) the alternative does not avoid any significant and unavoidable impacts (the project as proposed has none), and (2) the alternative fails to meet the basic project objectives to the same extent as the project. Therefore, Alternative 6 is eliminated from further consideration.

Facts in Support of Finding: This alternative would have the same impacts as the proposed Project for all of the respective topical issues and checklist questions, with the exception of light and glare. Although the project's impacts would be less than significant, this alternative would have reduced potential light and glare impacts. However, this alternative would not avoid significant impacts because no significant and unavoidable impacts would result from implementation of the proposed Project.

This alternative would meet most of the Project objectives to the same extent as the proposed Project; however, with the restricted use of the athletic fields (only three at a time), this alternative would not meet the objective to provide athletic facilities to better serve Concordia's sports teams and student athletes to the same extent as the proposed project.

3. Environmentally Superior Alternative

Section 15126.6(e)(2) of the State CEQA Guidelines indicates that an analysis of alternatives to a proposed Project shall identify an environmentally superior alternative among the alternatives evaluated in an EIR.

Here, the proposed Project does not present any significant and unavoidable impacts. Therefore none of the alternatives would eliminate a potentially significant and unavoidable impact. However, Alternative 4: Reduced Development Alternative would result in further reduced impacts as compared to the proposed project. (See Section 6.7 of the Draft EIR.)

MITIGATION MONITORING AND REPORTING PROGRAM

CONCORDIA UNIVERSITY CUP MODIFICATION AND ZONE CHANGE CAMPUS MASTER BUILD-OUT PLAN UPDATE

1.0 INTRODUCTION

Section 21081.6 to the State of California Public Resources Code requires a lead or responsible agency that approves or carries out a project where an environmental impact report (EIR) has identified significant environmental effects to adopt a "reporting or monitoring program for adopted or required changes to mitigate or avoid significant environmental effects." The City of Irvine is the Lead Agency for the Concordia University Conditional Use Permit (CUP) Modification and Zone Change for the Campus Master Build-Out Plan Update EIR, and therefore is responsible for implementation of the Mitigation Monitoring and Reporting Program (MMRP). An EIR has been prepared for this project which addresses potential environmental impacts and, where appropriate, recommends measures to mitigate these impacts. As such, a mitigation reporting or monitoring program is required to ensure that adopted mitigation measures are implemented.

2.0 PROJECT LOCATION

The project site is the existing Concordia University campus at 1530 Concordia West in Planning Area 21, Turtle Rock, in the City of Irvine, Orange County, California. The project site is generally located north of Turtle Rock Drive, south of University Drive and Mason Regional Park, east of Culver Drive/Concordia West, and west of Ridgeline Drive. Access to the project site will continue to be provided via two gated access points off of Ridgeline Drive to the east and Turtle Rock Drive to the west.

3.0 PROJECT SUMMARY

The project site is approximately 72.8 acres and zoned 6.1, Institutional. The existing campus is comprised of 16 institutional buildings totaling approximately 243,571 square feet and 256 dormitory units (1,024 beds). Original Conditional Use Permit 12273-CPU and subsequently approved modifications approved a maximum 321,220 square feet of institutional buildings and 330 institutional dormitory units (1,320 beds) for the campus. The proposed project does not involve any change in the maximum square footage or number of dormitory units allowed pursuant to existing entitlements.

The proposed Conditional Use Permit modification updates the current Campus Master Plan. Seven (7) existing buildings totaling approximately 71,231 square feet total are proposed to be demolished. Additionally, seven (7) new buildings or additions to existing buildings totaling approximately 148,880 square feet total are proposed to be constructed. Furthermore, one future residence hall for 74 dormitory units (296 beds) is proposed. Therefore, consistent with existing entitlements, the proposed project would allow for up to 321,220 sf of institutional buildings on campus, and 330 institutional dormitory units (1,320 beds).

Various athletic facilities will be added, relocated or improved, including but not limited to a new lap and recreational pool with kidney-shaped "play" area for students and staff only as well as two new sand volleyball courts and two new tennis courts with four relocated tennis courts on a deck over the southwest parking area. On-campus surface parking lots will provide all parking. New parking areas are proposed to be added and existing parking areas will remain, be reconfigured,

or removed. As proposed, the number of on-site parking spaces will increase from 1,218 existing spaces to approximately 1,436 spaces, or a net increase of approximately 218 spaces. Lastly, internal campus roadway improvements and improvements at the Ridgeline Drive/Concordia East roadway intersection, including installation of a traffic signal and addition of a second eastbound shared left/right-turn lane, are also proposed.

The requested Zone Change application proposes to revise or remove Special Development Requirements from City Zoning Ordinance Section 9-21-7.B, Special Development Requirements for Concordia University (Christ College Irvine) General Plan Amendment 4237-GA and Zoning Change 5232-ZC. No change in the zoning designation of 6.1, Institutional, is proposed.

The proposed project would generally be implemented in four phases with Phases 1 and 2 estimated to be implemented between 2017 and 2020, and Phases 3 and 4 estimated to be implemented between 2020 and 2035. Additional project description information is provided in the Draft Environmental Impact Report.

4.0 PROGRAM MANAGEMENT

The MMRP for the Concordia University CUP Modification and Zone Change for the Campus Master Build-Out Plan Update will be in place through all phases of project approval. Enforcement of the MMRP will be the responsibility of a Project Manager (PM) at the City of Irvine.

GENERAL PROCEDURES

MMRP Program Definitions

The MMRP consists of key program elements. The elements are summarized below.

- **MMRP Files.** Files are established to document and retain records of the MMRP. The file organization is established by the PM according to PPPs, PDFs, MMs, and project phases.

- **Reporting and Implementation Forms.** Reporting and Implementation (R&I) Forms are designed to record the monitoring activity in a manner consistent with the sequence of approvals in the MMRP. An R&I form is prepared for each potential significant impact and its corresponding PPP, PDF and/or MM. The R&I Forms are placed in the MMRP files.

- **Mitigation Monitoring and Reporting Program Procedures.** The policies and procedures for the MMRP described herein are intended to provide focused, yet flexible guidelines for monitoring the implementation of the PPPs, PDFs and MMs discussed in the Final EIR. The attached MMRP Matrix (Table 1) lists each PPP, PDF and MM, the party responsible for monitoring efforts, and the timing of implementation. The MMRP Matrix also provides a column for the PM to verify that a PPP, PDF or MM has been completed. After each measure is verified for compliance/completion, no further action is required, pursuant to the MMRP, for the specific phase.

- **Disposition of Monitoring Forms.** Documentation of all actions and completed R&I Forms are kept in the MMRP file with the City of Irvine during the pre-design, design, construction, and operational phases of the project. Reports will be available from the city upon request at the following address:

City of Irvine (Lead Agency)
Community Development Department
One Civic Center Plaza
Irvine, California 92623

ROLES AND RESPONSIBILITIES: PROJECT MANAGER

The role is assigned by the Community Development Director. The PM assigned to the Project will supervise the MMRP during design, construction, and operation of the project and is responsible for the overall management of the MMRP. The PM is thoroughly familiar with the project and qualified to determine if an adopted measure is being properly implemented. The PM oversees the MMRP and reviews the Reporting and Implementation (R&I) Forms to ensure they are filled out correctly and proper action is being taken on each measure. The PM and/or an assignee will also be responsible for preparing and updating the R&I Forms during all phases of the project. The responsibilities of the PM and/or assignee(s) include the following:

1. An R&I Form will be prepared for each potential significant impact and its corresponding Plans, Programs, and Policies (PPPs), Project Design Features (PDFs), and Mitigation Measures (MMs), as identified in the attached MMRP Matrix (Table 1).

2. Appropriate specialists will be retained, as needed, to monitor specific mitigation activities and provide appropriate written approvals to the PM.

3. The PM and/or an assignee will approve, by signature and date, the completion of each action item that was identified on the R&I Form.

4. Should unanticipated circumstances arise, or it otherwise be determined that a PPP, PDF, or MM is impracticable or unworkable, the PM, in coordination with a mitigation specialist (if technical expertise beyond the PM's expertise is required), will determine the need for the PPP, PDF or MM to be deleted, substituted or modified, or for a new MM to be added. The PM shall confirm:

    (1) the deletion, substitution, modification or addition would achieve the same or greater reduction in potential project impacts of the project as the original PPP, PDF or MM

    (2) the deletion, substitution, modification or addition would not cause any impacts that were not otherwise analyzed in this EIR, and

    (3) the City publicly provides a legitimate reason for making the deletion, substitution, modification or addition and supports the reason with substantial evidence.

    The PM will make a recommendation to the decision-making body (City Council) to approve the deletion, substitution, modification or addition of the PPP, PDF or MM.

5. If it is determined that the deletion, substitution, or modification of a PPP, PDF, or MM or addition of a new MM would cause an impact that was not otherwise analyzed in this EIR, the PM shall ensure that appropriate environmental documentation pursuant to CEQA (e.g., addendum) is completed, prior to the City Council taking action on the deletion, substitution or modification.

6. If it is found that an adopted PPP, PDF or MM is not being properly implemented, the PM will require corrective actions to ensure adequate implementation.

7. The PM has the authority to stop the work of construction contractors if compliance with any aspects of the MMRP is not occurring after written notification has been issued. The PM also has authority to hold certificates of occupancies if compliance with a PPP, PDF or MM attached herein is not occurring. The PM also has authority to hold the issuance of a building permit until all PPPs, PDFs and MMs are implemented. Should the applicant/contractor disagree with the findings and actions of the PM, an appeal to the Community Development Director can be submitted within 15 days of the PM's determination. Appeals of the Community Development Director decision can be made to the Planning Commission and City Council in accordance with the procedures outlined in Section 2-5 of the City of Irvine Zoning Code.

8. An R&I Form will be completed by the PM and/or an assignee. The completed form will be provided to the appropriate design, construction, or operational personnel.

9. Each PPP, PDF, and MM requiring no further monitoring will be signed off as completed by the PM and/or an assignee in the last column of the attached MMRP Matrix (Table 1).

TABLE 1
MITIGATION MONITORING AND REPORTING PROGRAM
CONCORDIA UNIVERSITY CUP MODIFICATION AND ZONE CHANGE
CAMPUS MASTER BUILD-OUT PLAN UPDATE

TIMING FOR PPP, PDF, OR MITIGATION MEASURE	PLANS, PROGRAMS, AND POLICIES (PPPs), PROJECT DESIGN FEATURES (PDFs), AND MITIGATION MEASURES		RESPONSIBLE FOR MONITORING	METHOD OF IMPLEMENTATION	COMPLETION DATE
5.1 AESTHETICS					
Existing Plans, Programs, and Policies					
Phases 1 through 4 Prior to the issuance of each building permit	**PPP 1-1**	Prior to issuance of each building permit, the Community Development Department shall confirm compliance with requirements outlined in Chapter 3-37, Zoning District Land Use Regulations and Development Standards, of the City's Zoning Ordinance, related to maximum site coverage for buildings (50 percent), maximum allowed building height (50 feet), minimum required building setbacks, and minimum site landscaping (15 percent).	Community Development Department	The Community Development Department shall confirm compliance with requirements outlined in Chapter 3-37, Zoning District Land Use Regulations and Development Standards, during plan review.	
Phases 1 through 4 Prior to approval of each building permit	**PPP 1-2**	Prior to approval of each building permit, the Community Development Department shall confirm compliance with requirements outlined in Section 3-16-1 of the Irvine Zoning Ordinance. As required, outdoor lighting shall be designed and installed so that all direct rays are confined to the site and adjacent properties are protected from glare. Lighting trespass levels as measured at adjacent residential and open space land use boundaries shall be 0.0 footcandles. The level of lighting on the site shall comply with the requirements of the City's Uniform Security Code, which establishes standards for the minimum lighting levels for safety purposes.	Community Development Department	The Community Development Department shall confirm compliance with requirements outlined in Section 3-16-1, Lighting, of the Irvine Zoning Ordinance during plan review.	

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

TIMING FOR PPP, PDF, OR MITIGATION MEASURE	PLANS, PROGRAMS, AND POLICIES (PPPs), PROJECT DESIGN FEATURES (PDFs), AND MITIGATION MEASURES		RESPONSIBLE FOR MONITORING	METHOD OF IMPLEMENTATION	COMPLETION DATE
Phases 1 through 4 Prior to approval of any modification application and/or issuance of grading and/or building permits	**PPP 1-3**	Prior to approval of any modification application and/or issuance of grading and/or building permits for future buildings on campus, the Community Development Department shall review any proposed revisions, if applicable, to Conditional Use Permit modification 00612052-PCPU pursuant to Zoning Ordinance Chapter 2-19, Minor/Major Modification Procedure. Future buildings shall also comply with the University's *Narrative of Proposed Architectural Styles*, included in Appendix C of this Draft Environmental Impact Report (EIR).	Community Development Department	The Community Development Department shall review any proposed revisions to Conditional Use Permit modification 00612052-PCPU pursuant to Zoning Ordinance Chapter 2-19, Minor/Major Modification Procedure. Future buildings shall comply with the University's *Narrative of Proposed Architectural Styles*, included in Appendix C of the Draft EIR.	
Project Design Features					
Phases 1 through 4 Prior to issuance of grading permits and/or building permits	**PDF 1-1**	Prior to issuance of grading permits and/or building permits, the Community Development Department shall confirm that the contractor specifications include installation of screened perimeter fencing around construction staging areas and construction sites to obstruct views from adjacent ground-level vantage points during construction. Implementation of the required fencing shall be verified by the City's Building and Safety Department during construction.	Community Development Department	The Community Development Department shall confirm that the contractor specifications include installation of screened perimeter fencing around construction staging areas and construction sites to obstruct views from adjacent ground-level vantage points during construction. Implementation shall be verified by the City's Building and Safety Department during construction.	

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

TIMING FOR PPP, PDF, OR MITIGATION MEASURE	PLANS, PROGRAMS, AND POLICIES (PPPs), PROJECT DESIGN FEATURES (PDFs), AND MITIGATION MEASURES	RESPONSIBLE FOR MONITORING	METHOD OF IMPLEMENTATION	COMPLETION DATE
Phases 1 through 4 Prior to approval of building permits for installation of athletic facility lighting the lighting plans shall be review. Confirmation following installation. Monitoring of curfew ongoing during operation.	**PDF 1-2** Prior to approval of building permits for installation of athletic facility lighting, the Project Applicant shall submit for review and approval by the Director of Community Development lighting plans for existing and proposed athletic facilities, demonstrating compliance with requirements outlined in the City of Irvine Parks and Public Facilities Standards Manual (also refer to MM 1-2). A third-party lighting consultant may be retained at the discretion of the Director of Community Development to review the athletic field lighting plans. The Project Applicant shall be responsible for all costs associated with the review by the City-hired third-party lighting consultant. A copy of this submittal shall be provided to the Concordia East Community Association's Board of Directors concurrently with the submission of the same to the City. As shown on Exhibit 3-24, Conceptual Athletic Field Lighting Plan, in Section 3.0, Project Description, the proposed project would involve installation of athletic field lighting at each of the existing athletic fields (soccer/track, softball, baseball, and practice), at the two proposed sand volleyball courts and on the proposed tennis court deck (four courts out of six). With the exception of tennis courts and practice field, the lighting shall comply with lighting requirements established by the National Collegiate Athletic Association (NCAA) for intercollegiate play (no broadcast), as shown in Appendix C, NCAA Best Lighting Practices, of the Draft EIR, or as modified by the NCAA in the future.	Community Development Department	The Community Development Department shall review lighting plans prior to approval of building permits to install lighting for existing and proposed athletic facilities, demonstrating compliance with requirements outlined in the City of Irvine Parks and Public Facilities Standards Manual. A third-party lighting consultant may be retained to review the athletic field lighting plans. Confirmation of implementation of lighting plan requirements shall be conducted by the Community Development Department on-site following installation. The Community Development Department shall periodically review compliance with the lighting curfew on-site, and through public input for any violation.	

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

TIMING FOR PPP, PDF, OR MITIGATION MEASURE	PLANS, PROGRAMS, AND POLICIES (PPPs), PROJECT DESIGN FEATURES (PDFs), AND MITIGATION MEASURES	RESPONSIBLE FOR MONITORING	METHOD OF IMPLEMENTATION	COMPLETION DATE
	The lighting system and associated operation of the lighting system include the following features which serve to reduce potential impacts: • Installation of light emitting diode (LED) light fixtures or other industry approved best available technology, and not metal halide. • Lighting shall only be installed on the four tennis courts in the eastern portions of the tennis court deck (closest to the baseball field), and shall be designed to accommodate nighttime play for recreation and practice. • Tennis court lighting shall not exceed an average light level of 50 footcandles and shall not be designed to comply with NCAA requirements. • Practice field lighting shall not exceed an average light level of 30 footcandles and shall not be designed to comply with NCAA requirements. • Reflectors for the light fixtures that direct the light onto the field, reducing sky glow and spill light onto neighboring properties, and a visor assembly that works in conjunction with the reflector to provide more light control and reduce glare on and off the field. • A remote scheduling, monitoring and data management system that allows the University to schedule, report, and			

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

TIMING FOR PPP, PDF, OR MITIGATION MEASURE	PLANS, PROGRAMS, AND POLICIES (PPPs), PROJECT DESIGN FEATURES (PDFs), AND MITIGATION MEASURES	RESPONSIBLE FOR MONITORING	METHOD OF IMPLEMENTATION	COMPLETION DATE
	track usage of athletic field lighting, including by special user groups. • A multi-watt dimming control system that operates by adjusting the total electrical consumption of the driver allowing for different light levels for intercollegiate play (i.e., high mode – 100 percent power), practices (i.e., medium mode – 50 percent power), and clean-up activities (i.e., low mode – 15 percent power), that can be operated through on-site and remote control links. • A lighting curfew of 9:00 PM to limit nighttime operational hours for all field use. All events shall be scheduled to conclude before the curfew and the automated lighting system shall be designed to and shall turn off athletic field lights no later than 9:00 PM each day. If scheduled events are concluded before 9:00 PM, the lights shall be turned off at the earliest time possible.			
Mitigation Measures				
<u>Phases 1 through 4</u> Prior to the issuance of grading and/or building permits	**MM 1-1** Prior to the issuance of grading and/or building permits, the Project Applicant shall provide evidence to the City that the contractor specifications require any temporary nighttime lighting installed during construction for security or any other purpose be downward-facing and hooded or shielded to prevent light from spilling outside the staging area and from directly broadcasting security light into the sky or onto adjacent residential properties. Compliance with this measure shall be	Community Development Department	The Project Applicant shall provide evidence to the City that the contractor specifications require any temporary nighttime lighting installed during construction for security or any other purpose be downward-facing and hooded or shielded to prevent light from spilling outside the staging area and from directly broadcasting security light into the	

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

TIMING FOR PPP, PDF, OR MITIGATION MEASURE	PLANS, PROGRAMS, AND POLICIES (PPPs), PROJECT DESIGN FEATURES (PDFs), AND MITIGATION MEASURES		RESPONSIBLE FOR MONITORING	METHOD OF IMPLEMENTATION	COMPLETION DATE
		verified by the City's Building and Safety Department during inspections of the construction site.		sky or onto adjacent residential properties. Compliance with this measure shall be verified by the City's Building and Safety Division during inspections of the construction site.	
Phases 1 through 4 During installation of the lighting system and prior to operation of the athletic facility lighting and on an as needed basis in perpetuity	**MM 1-2**	During installation of the lighting system, and prior to operation of the athletic facility lighting, the University shall retain a registered Lighting Engineer or lighting professional with certification that indicates proficiency in outdoor lighting design to provide on-site verification that lighting installation conforms to submitted plans (i.e., number of poles and fixtures, mounting heights, spill light footcandles, and glare candela or candlepower) and is in compliance with applicable criteria established in the City's *Parks and Park Facilities Standards*. Written verification of compliance shall be provided to the Community Development Department prior to approval of use of the athletic field lighting. A copy of this submittal shall be provided to the Concordia East Community Association's Board of Directors concurrently with the submission of the same to the City. The City may request written verification by a registered Lighting Engineer of the lighting operations on the campus at any time to ensure continued compliance and/or address any community concerns.	Community Development Department	The University shall retain a registered Lighting Engineer or lighting professional with certification that indicates proficiency in outdoor lighting design. Written verification of compliance shall be provided to the Community Development Department prior to approval of use of the athletic field lighting.	

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

TIMING FOR PPP, PDF, OR MITIGATION MEASURE	PLANS, PROGRAMS, AND POLICIES (PPPs), PROJECT DESIGN FEATURES (PDFs), AND MITIGATION MEASURES		RESPONSIBLE FOR MONITORING	METHOD OF IMPLEMENTATION	COMPLETION DATE
5.2 AIR QUALITY					
Existing Plans, Programs, and Policies					
Phases 1 through 4 Prior to issuance of each demolition or grading permit, whichever occurs first, and during construction	**PPP 2-1**	During construction of future development on campus (i.e., proposed project), the Project Applicant and its contractors shall comply with South Coast Air Quality Management District (SCAQMD) Rules 402 and 403, in order to minimize short-term emissions of dust and particulates. SCAQMD Rule 402 requires that air pollutant emissions not be a nuisance off site. SCAQMD Rule 403 requires that fugitive dust be controlled with the best available control measures so that the presence of such dust does not remain visible in the atmosphere beyond the property line of the emission source. This requirement shall be included as notes on the contractor specifications. Table 1 of Rule 403 prescribes the Best Available Control Measures that are applicable to all construction projects and is included in Appendix D. Prior to issuance of each demolition permit or grading permit, whichever occurs first, the Project Applicant shall provide the City of Irvine with a SCAQMD-approved Dust Control Plan and/or other sufficient proof of compliance with Rule 403 as deemed sufficient by the Director of Community Development.	Community Development Department	The Project Applicant shall comply with SCAQMD Rules 402 and 403 and provide the City of Irvine with a SCAQMD-approved Dust Control Plan and/or other sufficient proof of compliance with Rule 403 as deemed sufficient by the Community Development Department. Compliance with this measure shall be verified by the City's Building and Safety Division during inspections of the construction site.	
Phases 1 through 4 Prior to the issuance of each building permit	**PPP 2-2**	Prior to the issuance of each building permit for each project on campus, the Project Applicant shall demonstrate compliance with Rule 1113 (i.e., Super Compliant Paints) to the satisfaction of the Director of the Community Development. Architectural coatings and solvents shall	Community Development Department	The Project Applicant shall demonstrate compliance with SCAQMD Rule 1113. This requirement shall be included as notes on the contractor specifications and architectural building plans and verified by the	

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

TIMING FOR PPP, PDF, OR MITIGATION MEASURE	PLANS, PROGRAMS, AND POLICIES (PPPs), PROJECT DESIGN FEATURES (PDFs), AND MITIGATION MEASURES		RESPONSIBLE FOR MONITORING	METHOD OF IMPLEMENTATION	COMPLETION DATE
		be selected so that the volatile organic compound (VOC) content of the coatings is compliant with SCAQMD Rule 1113. This requirement shall be included as notes on the contractor specifications and architectural building plans.		Community Development Department.	
Phase 3 Prior to the issuance of a building permit for the Science, Nursing and Healthcare Building	**PPP 2-3**	Prior to the issuance of a building permit for the Science, Nursing and Healthcare Building, the Project Applicant shall provide the City of Irvine with the SCAQMD-approved Permit to Construct and Permit to Operate or other sufficient proof of compliance with Regulation XIV and Rules 1401, 201, and 203. New sources of toxic chemicals that may be emitted into the outside air at the campus shall comply with SCAQMD Rule 1401 and Regulation XIV (Toxics and Other Non-Criteria Pollutants) along with Rule 201 and Regulation II (requiring a Permit to Construct prior to the installation of any equipment that may cause air contaminants) as well as Rule 203 (requiring a Permit to Operate prior to the use of any equipment that may cause air contaminants). These rules and regulations are required unless the equipment or aspects of the project are exempt under Rule 219, which identifies those equipment, processes, or operations that do not require permits.	Community Development Department	The Project Applicant shall provide the Community Development Department with the SCAQMD-approved Permit to Construct and Permit to Operate or other sufficient proof of compliance with Regulation XIV and Rules 1401, 201, and 203.	

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

TIMING FOR PPP, PDF, OR MITIGATION MEASURE	PLANS, PROGRAMS, AND POLICIES (PPPs), PROJECT DESIGN FEATURES (PDFs), AND MITIGATION MEASURES		RESPONSIBLE FOR MONITORING	METHOD OF IMPLEMENTATION	COMPLETION DATE
5.3 BIOLOGICAL RESOURCES					
Existing Plans, Programs, and Policies					
Phase 1 Prior to the issuance of any grading permit that involves removal of coastal sage scrub habitat associated with the Dorm Road realignment	**PPP 3-1**	Prior to the issuance of any grading permit that involves removal of coastal sage scrub habitat associated with the Dorm Road realignment, the Project Applicant shall provide proof of the mitigation fee payment to the Director of Community Development. The Project Applicant shall comply with the requirements set forth in the Central-Coastal Natural Community Conservation Plan/Habitat Conservation Plan (NCCP/HCP) and its associated Implementation Agreement (IA). As a nonparticipating landowner whose lands are located within the jurisdiction of a signatory local government (i.e., the City of Irvine), the Project Applicant shall pay the mitigation fee pursuant to Section 7 of the NCCP/HCP IA. This fee shall be paid to the NCCP non-profit corporation. Take is then authorized by the Section 10(a) Permit(s) issued by the U.S. Fish and Wildlife Service (USFWS) and the California Department of Fish and Wildlife (CDFW) Management Authorization is granted to the signatory local government.	Community Development Department	The Project Applicant shall provide proof of the mitigation fee payment pursuant to Section 7 of the NCCP/HCP IA to the Community Development Department.	

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

TIMING FOR PPP, PDF, OR MITIGATION MEASURE	PLANS, PROGRAMS, AND POLICIES (PPPs), PROJECT DESIGN FEATURES (PDFs), AND MITIGATION MEASURES	RESPONSIBLE FOR MONITORING	METHOD OF IMPLEMENTATION	COMPLETION DATE
Phases 1 through 4 Prior to the issuance of any grading permit for activities within 500 feet of coastal sage scrub habitat Monitoring to occur during all grading and other significant ground disturbing activities Protective measures to be installed or completed prior to all grading and during all construction activities as well as following completion of initial grading/earth-movement activities	**PPP 3-2** Prior to the issuance of any grading permits for activities within 500 feet of coastal sage scrub habitat, the Project Applicant shall provide letters from a United States Fish and Wildlife Service (USFWS)/CDFW-approved Biologist to the Director of Community Development. The letters shall state that the Biologist has been retained by the Project Applicant and shall monitor all grading and other significant ground-disturbing activities in or adjacent to coastal sage scrub habitats. The Biologist shall monitor these activities to ensure that the Project Applicant complies with the NCCP/HCP IA that specifies measures that must be taken to minimize construction impacts to coastal sage scrub and its subassociation during construction, including but not limited to the following: • To the maximum extent practicable, no grading of coastal sage scrub or southern cactus scrub habitat that is occupied by nesting gnatcatchers will occur during the breeding season (January 15 through July 15). It is expressly understood that this provision and the remaining provisions of these "construction-related minimization measures" are subject to public health and safety considerations. These considerations include unexpected slope stabilization, erosion control measures, and emergency facility repairs. In the event of such public health and safety circumstances, landowners or public agencies/utilities will provide USFWS/CDFW with the	Community Development Department	The Project Applicant shall provide letters from an approved Biologist to the Community Development Department identifying that the Biologist has been retained by the Project Applicant to monitor all grading and other significant ground-disturbing activities in or adjacent to coastal sage scrub habitats. The Project Applicant and Biologist will comply with specific measures in the NCCP/HCP IA related to coastal sage scrub and its subassociation during construction as outlined but not limited to as outlined in PPP 3-2. The City and Biologist, if needed, shall conduct periodic inspections during construction to ensure compliance with these requirements.	

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

TIMING FOR PPP, PDF, OR MITIGATION MEASURE	PLANS, PROGRAMS, AND POLICIES (PPPs), PROJECT DESIGN FEATURES (PDFs), AND MITIGATION MEASURES	RESPONSIBLE FOR MONITORING	METHOD OF IMPLEMENTATION	COMPLETION DATE
	maximum practicable notice (or such notice as is specified in the Central-Coastal NCCP/HCP) to allow for capture of gnatcatchers, cactus wrens, and any other coastal sage scrub or southern cactus scrub Covered Species that are not otherwise flushed and will carry out the following measures only to the extent as practicable in the context of the public health and safety considerations. • Prior to the commencement of grading operations or other activities involving significant soil disturbance, all areas of coastal sage scrub or southern cactus scrub habitat to be avoided under the provisions of the Central-Coastal NCCP/HCP shall be identified with temporary fencing and other markers clearly visible to construction personnel. • Prior to the commencement of grading operations or other activities involving disturbance of coastal sage scrub or southern cactus scrub, a survey will be conducted to locate gnatcatchers and cactus wrens within 100 feet of the outer extent of projected soil disturbance activities and the locations of any such species shall be clearly marked and identified on the construction/grading plans. • A Monitoring Biologist, acceptable to USFWS/CDFW, will be on site during any clearing of coastal sage scrub or southern cactus scrub. The landowner			

TABLE 1 (Continued)
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TIMING FOR PPP, PDF, OR MITIGATION MEASURE	PLANS, PROGRAMS, AND POLICIES (PPPs), PROJECT DESIGN FEATURES (PDFs), AND MITIGATION MEASURES	RESPONSIBLE FOR MONITORING	METHOD OF IMPLEMENTATION	COMPLETION DATE
	or relevant public agency/utility will advise USFWS/CDFW at least 7 calendar days (and preferably 14 calendar days) prior to the clearing of any habitat occupied by Covered Species to allow USFWS/CDFW to work with the Monitoring Biologist in connection with bird flushing/capture activities. The Monitoring Biologist will flush Covered Species (avian or other mobile Covered Species) from occupied habitat areas immediately prior to brush-clearing and earth-moving activities. If birds cannot be flushed, they will be captured in mist nets, if feasible, and relocated to areas of the site to be protected or to the NCCP/HCP Reserve System. It will be the responsibility of the Monitoring Biologist to ensure that Covered (bird) Species will not be directly impacted by brush-clearing and earth-moving equipment in a manner that also allows for construction activities on a timely basis. • Following the completion of initial grading/earth-movement activities, all areas of coastal sage scrub or southern cactus scrub habitat to be avoided by construction equipment and personnel will be marked with temporary fencing and other appropriate markers clearly visible to construction personnel. No construction access, parking, or storage of equipment or materials will be permitted within such marked areas.			

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

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	• In areas bordering the NCCP/HCP Reserve System or Special Linkage/Special Management areas containing significant coastal sage scrub or southern cactus scrub identified in the Central-Coastal NCCP/HCP for protection, vehicle transportation routes between cut-and-fill locations will be restricted to a minimum number during construction consistent with project construction requirements. Waste dirt or rubble will not be deposited on adjacent coastal sage scrub or southern cactus scrub identified in the Central-Coastal NCCP/HCP for protection. Preconstruction meetings involving the Monitoring Biologist, construction supervisors, and equipment operators will be conducted and documented to ensure maximum practicable adherence to these measures. • Coastal sage scrub or southern cactus scrub identified in the Central-Coastal NCCP/HCP for protection and located within the likely dust-drift radius of construction areas shall be periodically sprayed with water to reduce accumulated dust on the leaves as recommended by the Monitoring Biologist.			

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

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Phases 1 through 4 During construction activities	**PPP 3-3** All construction activities shall comply with the federal Migratory Bird Treaty Act of 1918 (MBTA); the Golden Eagle Protection Act; and California Fish and Game Code Sections 3503, 3511 and 3513. Compliance with these regulations shall be accomplished by completing the following: • Construction activities involving vegetation removal shall be conducted between September 1 and February 15, to the extent feasible. If construction occurs inside the peak nesting season (between February 15 and August 31), a preconstruction survey (or possibly multiple surveys) by a qualified Biologist shall be conducted within 72 hours prior to construction activities to identify any active nesting locations. If the Biologist does not find any active nests, the construction work shall be allowed to proceed. The Biologist conducting the clearance survey shall document a negative survey with a report indicating that no impacts to active avian nests shall occur. If the Biologist finds an active nest and determines that the nest may be impacted, the Biologist shall delineate an appropriate buffer zone around the nest. The size of the buffer shall be determined by the Biologist, in consultation with CDFW, and shall be based on the nesting species, its sensitivity to disturbance, and expected types of disturbance. These buffers are typically 300 feet from the nests of non-listed species and 500	Community Development Department	All construction activities shall comply with applicable requirements. If construction occurs inside the peak nesting season, a preconstruction survey (or surveys) by a qualified Biologist shall be conducted within 72 hours prior to construction activities. If the Biologist finds an active nest and determines that the nest may be impacted, the Biologist shall delineate an appropriate buffer zone around the nest. Results of the preconstruction survey and any subsequent monitoring shall be provided to the Project Applicant, CDFW, and the City.	

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

TIMING FOR PPP, PDF, OR MITIGATION MEASURE	PLANS, PROGRAMS, AND POLICIES (PPPs), PROJECT DESIGN FEATURES (PDFs), AND MITIGATION MEASURES	RESPONSIBLE FOR MONITORING	METHOD OF IMPLEMENTATION	COMPLETION DATE
	feet from the nests of listed species. Any active nests observed during the survey shall be mapped on an aerial photograph. Only construction activities (if any) that have been approved by the Biologist shall take place within the buffer zone until the nest is vacated. The Biologist shall serve as a Construction Monitor when construction activities take place near active nest areas to ensure that no inadvertent impacts on these nests occur. Results of the preconstruction survey and any subsequent monitoring shall be provided to the Project Applicant, CDFW, and the City. The monitoring report shall summarize the results of the nest monitoring, describe construction restrictions currently in place, and confirm that construction activities can proceed within the buffer area without jeopardizing the survival of the young birds. Construction within the designated buffer area shall not proceed until written authorization is received by the Project Applicant from CDFW.			

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

TIMING FOR PPP, PDF, OR MITIGATION MEASURE	PLANS, PROGRAMS, AND POLICIES (PPPs), PROJECT DESIGN FEATURES (PDFs), AND MITIGATION MEASURES	RESPONSIBLE FOR MONITORING	METHOD OF IMPLEMENTATION	COMPLETION DATE
Phases 1 through 4 During construction activities	**PPP 3-4** All construction activities shall comply with Sections 3503, 3503.5, 3511, and 3513 of the *California Fish and Game Code,* which protect active nests of any raptor species (i.e., white-tailed kite), including common raptor species. Compliance with these codes shall be accomplished by completing the following: • If vegetation is to be cleared during the potential raptor nesting season (February 1 to August 31), all suitable habitat within 500 feet of the project site shall be thoroughly surveyed for the presence of nesting raptors by a qualified Biologist within 72 hours prior to clearing. If the Biologist does not find any active nests, the construction work shall be allowed to proceed. The Biologist conducting the clearance survey shall document a negative survey with a report indicating that no impacts to active avian nests shall occur. If any active nests are detected, the area shall be flagged or fenced and mapped on the construction plans with a buffer. The size of the buffer shall be determined by the Biologist, in consultation with CDFW, and shall be based on the nesting species, its sensitivity to disturbance, and expected types of disturbance. These buffers are typically 500 feet from the nests of raptors. The buffer area shall be avoided until the nesting cycle is complete or until it is determined that the nest has failed. Results of the preconstruction survey and any	Community Development Department	All construction activities shall be conducted in a manner to protect active nests of any raptor species (i.e., white-tailed kite), including common raptor species. If vegetation is cleared during the potential raptor nesting season, all suitable habitat within 500 feet of the project site shall be surveyed by a qualified Biologist within 72 hours prior to clearing. If any active nests are detected, the area shall be flagged or fenced and mapped on the construction plans with a buffer. Results of the preconstruction survey and any subsequent monitoring shall be provided to the Project Applicant, CDFW, and the City. If active nests are present, the Community Development Department and Biologist, if needed, shall confirm on-site that protective flags/fences have been installed as required by the Biologist.	

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

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		subsequent monitoring shall be provided to the Project Applicant, CDFW, and the City. The monitoring report shall summarize the results of the nest monitoring, describe construction restrictions currently in place, and confirm that construction activities can proceed within the buffer area without jeopardizing the survival of the young birds. Construction within the designated buffer area shall not proceed until authorization is received by the Project Applicant from CDFW.			
Phases 1 through 4 Prior to removal of any significant trees	**PPP 3-5**	Prior to removal of any significant trees on public or private land as part of the proposed project, the Project Applicant shall obtain a Tree Removal Permit, pursuant to Sections 5-7-407 and 5-7-410 (Urban Forestry) of the City's Municipal Code and associated Urban Forestry Guideline Manual. This permit may require the replacement of removed trees to ensure compliance with Chapter 4, Urban Forestry, of Municipal Code.	Community Development Department	The Project Applicant shall obtain a Tree Removal Permit, pursuant to Sections 5-7-407 and 5-7-410 (Urban Forestry) of the City's Municipal Code and associated Urban Forestry Guideline Manual.	
Project Design Features					
Phases 1 through 4 Prior to issuance of landscape permits	**PDF 3-1**	Prior to issuance of landscape permits, the Director of Community Development shall confirm that final landscape plans are in compliance with the Conceptual Planting Plan. Exhibit 3-23 in Section 3.0, Project Description, of this Draft Environmental Impact Report (EIR), depicts the Conceptual Planting Plan included in the proposed Campus Master Build-Out Plan Update. This planting plan does not include exotic, invasive species (i.e., those on the California Invasive Plant Council's invasive plant inventory) that would potentially	Community Development Department	The Community Development Department shall review and confirm that final landscape plans are in compliance with the Conceptual Planting Plan.	

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

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		degrade the quality of the surrounding natural open space. Landscaping installed for the proposed project shall only include species on the approved planting plan.			
Phases 1 through 4 Prior to issuance of grading permits	**PDF 3-2**	Prior to issuance of grading permits, the Director of Community Development shall confirm that the limits of work/impact limits avoid sensitive biological areas, consistent with the project design. As shown on Exhibit 5.3-5, the proposed project limits of work/impact limits are outside of, and avoid direct impacts to, Sand Canyon Wash, which is designated "Non-Reserve Open Space" by the Central-Coastal Natural Community Conservation Plan/Habitat Conservation Plan (NCCP/HCP), and areas within the jurisdiction of the U.S. Army Corps of Engineers (USACE), the Regional Water Quality Control Board (RWQCB), and the California Department of Fish and Wildlife (CDFW).	Community Development Department	The Community Development Department shall confirm that the limits of work/impact limits avoid sensitive biological areas, consistent with the project design.	
Mitigation Measures					
Phases 1 through 4 Prior to the issuance of a grading permit for areas within 500 feet of special status vegetation Prior to issuance of any building or demolition permit monitor and confirm the installation of protective fencing/flagging	**MM 3-1**	**Southern Willow Scrub/Jurisdictional Resources.** Prior to the issuance of a grading permit for areas within 500 feet of special status vegetation, the Project Applicant shall provide written evidence to the City of Irvine that a qualified Biologist has been retained to observe grading activities and to ensure that adjacent special status vegetation (i.e., southern willow scrub) and jurisdictional resources are not impacted. Prior to issuance of any building or demolition permit, the qualified Biologist shall monitor the installation of protective fencing/flagging by the Contractor. Fencing/flagging shall be installed around all special status	Community Development Department and biologist	The Project Applicant shall provide written evidence to the City of Irvine that a qualified Biologist has been retained to observe grading activities and to ensure that adjacent special status vegetation and jurisdictional resources are not impacted. The qualified Biologist shall monitor the installation of protective fencing/flagging by the Contractor. The Community Development Department and Biologist, if	

TABLE 1 (Continued)
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		vegetation and jurisdictional resources to be avoided.		needed, shall confirm on-site that protective fencing/flagging has been installed.	
Phases 1 through 4 One month prior to any building demolition conduct pre-construction survey Protective measures to be installed prior to construction or demolition, if needed	**MM 3-2**	**Special Status Bat Species.** To the extent practicable, trimming or removal of mature trees shall not occur during the bat maternity season (i.e., between March 1 and August 31). One month prior to any building demolition, a preconstruction survey for roosting bats shall be conducted. The survey shall consist of one diurnal (i.e., daytime) survey, followed by an evening emergence survey. The survey will determine if any bats are day roosting in the buildings proposed for removal. If direct impacts to day roosting bats are anticipated, bat-exclusionary devices shall be installed prior to construction or demolition activities. The bat exclusionary devices shall be designed to allow for bats to exit the roost areas but not re-enter. All designs shall be approved by a qualified Bat Specialist and installation shall be monitored by a qualified Bat Specialist.	Community Development Department and biologist	The Project Applicant shall provide written evidence to the City of Irvine that a qualified Bat Specialist has been retained to conduct a preconstruction survey for roosting bats which shall occur one month prior to any building demolition. If direct impacts to day roosting bats are anticipated, bat-exclusionary devices shall be installed prior to construction or demolition activities.	
Phases 1 through 4 Prior to the issuance of grading permits, if grading and/or construction activities are scheduled to occur during the breeding season for the least Bell's vireo (March 15 to September 15) Prior to construction, completion of required noise surveys/analysis and installation of noise	**MM 3-3**	**Least Bell's Vireo.** Prior to the issuance of a grading permit, if grading and/or construction activities are scheduled to occur during the breeding season for the least Bell's vireo (March 15 to September 15), the Director of Community Development shall verify that the following requirements regarding least Bell's vireo are shown on the grading and/or building permit plans: A. No clearing, grubbing, grading, or other construction shall occur between March 15 and September 15, until the following requirements have	Community Development Department	If grading and/or construction activities are scheduled to occur during the breeding season for the least Bell's vireo, the Community Development Department shall verify that the requirements as outlined in MM 3-3 regarding least Bell's vireo are shown on the grading and/or building permit plans. Should construction occur between March 15 and September 15, the City shall confirm that required pre-	

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

TIMING FOR PPP, PDF, OR MITIGATION MEASURE	PLANS, PROGRAMS, AND POLICIES (PPPs), PROJECT DESIGN FEATURES (PDFs), AND MITIGATION MEASURES	RESPONSIBLE FOR MONITORING	METHOD OF IMPLEMENTATION	COMPLETION DATE
attenuation measures, if needed	been met to the satisfaction of the Director of Community Development: i. The project certified-Biologist shall survey all riparian areas that would be subject to construction noise levels exceeding 60 A-weighted decibels (dBA) hourly average for least Bell's vireo. Preconstruction surveys shall be conducted by a qualified Biologist once per week within suitable habitat beginning four weeks prior to construction (or the week of March 15 if construction is in progress) and continuing through September 15 or until 10 consecutive visits have had negative survey results. Surveys shall be conducted between dawn and 11:00 AM during suitable weather conditions as outlined in the U.S. Fish and Wildlife Service (USFWS) survey protocol for the species. If a preconstruction focused survey is not conducted, all riparian habitat shall be considered occupied. ii. Between March 15 and September 15, no construction activities shall occur within any portion of the site where construction activities would result in noise levels exceeding 60 db(A) hourly average (or at the current existing noise level) at the edge of occupied least Bell's vireo habitat. An analysis showing noise generated by		construction surveys and noise analysis be conducted or noise attenuation measures installed.	

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

TIMING FOR PPP, PDF, OR MITIGATION MEASURE	PLANS, PROGRAMS, AND POLICIES (PPPs), PROJECT DESIGN FEATURES (PDFs), AND MITIGATION MEASURES	RESPONSIBLE FOR MONITORING	METHOD OF IMPLEMENTATION	COMPLETION DATE
	construction activities shall not exceed 60 db(A) (or current existing noise level) at the edge of riparian habitat shall be completed by an acoustician deemed qualified by the Director of Community Development (e.g., possessing a noise engineer license with experience monitoring noise levels with listed animal species). OR iii. No less than two weeks prior to the commencement of construction activities (or by March 15 if construction is in progress), under the direction of a qualified Acoustician, noise attenuation measures shall be implemented to ensure noise levels from construction activities will not exceed 60 db(A) (or at the current existing noise level) at the edge of habitat occupied or potentially occupied by the least Bell's vireo. Concurrent with construction and the noise attenuation measures, noise monitoring shall be conducted at the edge of riparian habitat to ensure that noise levels do not exceed 60 db(A) hourly average (or current existing noise level). If noise attenuation measures implemented are determined to be inadequate by a qualified Acoustician or project Biologist, then the associated construction activities shall cease until such time that adequate noise			

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

TIMING FOR PPP, PDF, OR MITIGATION MEASURE	PLANS, PROGRAMS, AND POLICIES (PPPs), PROJECT DESIGN FEATURES (PDFs), AND MITIGATION MEASURES	RESPONSIBLE FOR MONITORING	METHOD OF IMPLEMENTATION	COMPLETION DATE
	attenuation is achieved or until the end of the breeding season (September 16). B. If preconstruction surveys demonstrate that the least Bell's vireo is not present, the project Biologist shall submit a report with substantial evidence to the Community Development Department that demonstrates noise attenuation measures are not necessary between March 15 and September 15. The report shall describe the methodology and results of the 10 consecutive negative preconstruction survey visits. If evidence indicates the potential is high for least Bell's vireo to be present based on prior focused survey(s) or site conditions, the City shall require implementation of measures in item A above.			
Phases 1 through 4 Prior to the initiation of fuel modification and other fire protection activities and other fire protection activities adjacent to coastal sage scrub and southern willow scrub habitat	**MM 3-4** Prior to the initiation of fuel modification and other fire protection activities adjacent to coastal sage scrub and southern willow scrub habitat, a Non-native Vegetation Removal and Planting Plan addressing the removal of non-native vegetation and planting of native vegetation, shall be prepared by a qualified Restoration Ecologist. The Plan shall be submitted to the Community Development Director, and shall, at a minimum, include the following items: A. The responsibilities of the landowner, specialists, and personnel that would supervise and implement the plan shall be specified.	Community Development Department	A Non-native Vegetation Removal and Planting Plan addressing the removal of non-native vegetation and planting of native vegetation, shall be prepared by a qualified Restoration Ecologist. The Plan shall be submitted to the Community Development Department and shall, at a minimum, include the items A through F as listed in MM 3-4.	

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

TIMING FOR PPP, PDF, OR MITIGATION MEASURE	PLANS, PROGRAMS, AND POLICIES (PPPs), PROJECT DESIGN FEATURES (PDFs), AND MITIGATION MEASURES	RESPONSIBLE FOR MONITORING	METHOD OF IMPLEMENTATION	COMPLETION DATE
	B. A schedule that requires removal of non-native and ornamental vegetation in late fall and early winter to avoid the nesting season for nesting birds, including the California gnatcatcher and least Bell's vireo. These activities shall not occur during the nesting season (January 15 through September 15). C. A requirement for installation temporary fencing or other appropriate markers around any sage scrub or southern willow scrub vegetation to ensure it is not impacted during non-native vegetation removal activities. D. A requirement for vegetation removal to be conducted once per year utilizing hand tools. E. A requirement for a qualified Biologist to observe/monitor non-native vegetation removal activities to ensure (1) appropriate placement of fencing or other markers, and (2) adjacent special status vegetation (i.e., southern willow scrub and coastal sage scrub) are not impacted. F. A requirement for maintenance training for any individuals involved in the removal of non-native vegetation.			

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

TIMING FOR PPP, PDF, OR MITIGATION MEASURE	PLANS, PROGRAMS, AND POLICIES (PPPs), PROJECT DESIGN FEATURES (PDFs), AND MITIGATION MEASURES		RESPONSIBLE FOR MONITORING	METHOD OF IMPLEMENTATION	COMPLETION DATE
5.4 CULTURAL RESOURCES					
Existing Plans, Programs, and Policies					
Phases 1 through 4 Prior to the issuance of the first preliminary or precise grading permit for a project that is located on land that includes potentially significant archaeological and/or paleontological sites, and for any subsequent permit involving excavation to increased depth	**PPP 4-1**	Prior to the issuance of the first preliminary or precise grading permit for a project that is located on land that includes potentially significant archaeological and/or paleontological sites, and for any subsequent permit involving excavation to increased depth, the Project Applicant shall provide letters from an Archaeologist and/or a Paleontologist. The letters shall state that the Project Applicant has retained these individuals, and that the consultant(s) will be on call during all grading and other significant ground-disturbing activities. Determination of the need for these consultants shall be based on the environmental analysis for the project. These consultants shall be selected from the roll of qualified Archaeologists and Paleontologists maintained by the County of Orange (OC Public Works/OC Planning). The Archaeologist and/or Paleontologist shall meet with Community Development staff and shall submit written recommendations specifying procedures for cultural/scientific resource surveillance. These recommendations shall be reviewed and approved by the Director of Community Development prior to issuance of the grading permit and prior to any surface disturbance on the campus. Should any cultural/scientific resources be discovered during grading, no further grading shall occur in the area of the discovery until the Director of Community Development is satisfied that adequate provisions are in place to protect the resources. This condition and the approved	Community Development Department	The Project Applicant shall provide letters from an Archaeologist and/or a Paleontologist. The Archaeologist and/or Paleontologist shall meet with Community Development staff and shall submit written recommendations specifying procedures for cultural/scientific resource surveillance. These recommendations shall be reviewed and approved by the Director of Community Development, or his/her designee, prior to issuance of the grading permit and prior to any surface disturbance on the campus. The Community Development Department shall verify that this condition and the approved recommendations shall be incorporated on the cover sheet of the grading plan under the general heading: “Conditions of Approval”.	

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

TIMING FOR PPP, PDF, OR MITIGATION MEASURE	PLANS, PROGRAMS, AND POLICIES (PPPs), PROJECT DESIGN FEATURES (PDFs), AND MITIGATION MEASURES		RESPONSIBLE FOR MONITORING	METHOD OF IMPLEMENTATION	COMPLETION DATE
		recommendations shall be incorporated on the cover sheet of the grading plan under the general heading: "Conditions of Approval". (*City of Irvine Standard Condition 2.5)*			
Phases 1 through 4 During ground disturbance activities	**PPP 4-2**	During ground disturbance activities, if potentially significant features or sites, as opposed to isolates, are discovered, testing to determine significance is required by Sections 21083.2 and 21084.4 of the *California Public Resource Code* (PRC) and Section 15064.5(c) of Title 14 of the *California Code of Regulations* (i.e., the State CEQA Guidelines). If the features or sites are determined to meet significance criteria, then data recovery excavations would also be required unless the project is redesigned to avoid impacts. Testing and the results of data recovery excavations shall be reviewed and approved by the Director of Community Development.	Community Development Department	If potentially significant features or sites are discovered, testing to determine significance is required by Sections 21083.2 and 21084.4 of the *California Public Resource Code* and Section 15064.5(c) of Title 14 of the *California Code of Regulations*. Testing and the results of data recovery excavations shall be reviewed and approved by the Director of Community Development.	
Phases 1 through 4 During ground disturbance activities	**PPP 4-3**	During ground disturbance activities, in the event of the accidental discovery or recognition of human remains in any location other than a dedicated cemetery, the steps listed below shall be taken: a. There shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until the Orange County Coroner is contacted to determine if the remains are prehistoric and that no investigation of the cause of death is required. If the Coroner determines the remains to be	Community Development Department	In the event of the accidental discovery or recognition of human remains, the steps listed in items a and b of PPP 4-3 shall be taken.	

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

TIMING FOR PPP, PDF, OR MITIGATION MEASURE	PLANS, PROGRAMS, AND POLICIES (PPPs), PROJECT DESIGN FEATURES (PDFs), AND MITIGATION MEASURES	RESPONSIBLE FOR MONITORING	METHOD OF IMPLEMENTATION	COMPLETION DATE
	Native American, then s/he shall contact the Native American Heritage Commission (NAHC) within 24 hours, and the NAHC shall identify the person or persons it believes to be the most likely descendant from the deceased Native American. The most likely descendant may make recommendations to the landowner or the person responsible for the excavation work, for means of treating or disposing of the human remains and any associated grave goods with appropriate dignity, as provided in Section 5097.98 of the PRC, or b. Where the following conditions occur, the landowner or his/her authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity either in accordance with the recommendations of the most likely descendant or on the property in a location not subject to further subsurface disturbance: 1. The Native American Heritage Commission (NAHC) is unable to identify a most likely descendant or the most likely descendant failed to make a recommendation within 48 hours after being granted access to the site;			

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

TIMING FOR PPP, PDF, OR MITIGATION MEASURE	PLANS, PROGRAMS, AND POLICIES (PPPs), PROJECT DESIGN FEATURES (PDFs), AND MITIGATION MEASURES		RESPONSIBLE FOR MONITORING	METHOD OF IMPLEMENTATION	COMPLETION DATE
		2. The identified descendent fails to make a recommendation; or 3. The landowner or his/her authorized representative rejects the recommendation of the descendant, and mediation by the NAHC fails to provide measures acceptable to the landowner (State CEQA Guidelines, Section 15064.5[e]).			
Mitigation Measures					
<u>Phases 1 through 4</u> Prior to the issuance of a grading permit, during ground disturbing activities, and reporting following construction	**MM 4-1**	Prior to issuance of a grading permit, the following requirement shall be incorporated on the cover sheet of the Grading Plan under the general heading "Conditions of Approval": a. Prior to the issuance of any grading permit, the Project Applicant shall provide written evidence to the City of Irvine that a qualified Archaeologist and a Native American Monitor have been retained to observe grading activities in native sediments, at a depth of five feet or deeper, and salvage and catalog artifacts as necessary. The Archaeologist and Native American Monitor shall be present at the pre-grade conference; shall establish procedures for archaeological resources surveillance; and shall establish, in cooperation with the Project Applicant, procedures for temporarily halting or redirecting work to permit sampling,	Community Development Department	The Community Development Department shall confirm that requirements listed in MM 4-1 are incorporated on the cover sheet of the Grading Plan under the general heading "Conditions of Approval". The Archaeologist and Native American shall participate in pre-grading activities; conduct monitoring and reporting during construction; record, salvage, curation of any discovered resources (with assistance from the Native American Monitor for Native American artifacts); and prepare the required monitoring report.	

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

TIMING FOR PPP, PDF, OR MITIGATION MEASURE	PLANS, PROGRAMS, AND POLICIES (PPPs), PROJECT DESIGN FEATURES (PDFs), AND MITIGATION MEASURES	RESPONSIBLE FOR MONITORING	METHOD OF IMPLEMENTATION	COMPLETION DATE
	identification, and evaluation of artifacts. The qualified Archaeologist shall be responsible for maintaining daily field notes and a photographic record and for reporting all finds in a timely manner. The Archaeologist shall also be equipped to record and salvage cultural resources that may be unearthed during initial ground-disturbing activities. Non-Native American artifacts shall be inventoried, assessed, and analyzed for cultural affiliation, personal affiliation (prior ownership), function, and temporal placement. Subsequent to analysis and reporting, these artifacts shall be subjected to curation at an accredited curation facility approved by the City of Irvine or returned to the Project Applicant, as deemed appropriate. All artifacts discovered shall be inventoried and analyzed by the professional Archaeologist. The Native American Monitor shall assist in the analysis of any Native American artifacts for identification as everyday life and/or religious or sacred items, cultural affiliation, temporal placement and function, as much as possible. The significance of Native American resources shall be evaluated in accordance with the provisions of CEQA and shall		The Community Development Department shall confirm the monitoring report is submitted.	

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

TIMING FOR PPP, PDF, OR MITIGATION MEASURE	PLANS, PROGRAMS, AND POLICIES (PPPs), PROJECT DESIGN FEATURES (PDFs), AND MITIGATION MEASURES	RESPONSIBLE FOR MONITORING	METHOD OF IMPLEMENTATION	COMPLETION DATE
	consider the religious beliefs, customs, and practices of the affected tribes. All items found in association with Native American human remains shall be considered grave goods or sacred in origin and subject to special handling. Native American artifacts that cannot be avoided or relocated at the campus will be prepared in a manner for curation and shall be delivered to an accredited curation facility approved by the City of Irvine within a reasonable amount of time. Once ground-disturbing activities exceeding five feet in depth in native sediments have ceased or the qualified Archaeologist, in consultation with the Native American Monitor, determines that monitoring activities are no longer necessary, monitoring activities may be discontinued following notification to the City of Irvine. A report of findings, including the period of inspection; a catalog and analysis of the artifacts found; and the repository of the artifacts shall be prepared upon completion of the steps outlined above. The report shall include a discussion of the significance of all recovered artifacts. The report and inventory, when submitted to the City of Irvine, will signify completion of the program to			

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

TIMING FOR PPP, PDF, OR MITIGATION MEASURE	PLANS, PROGRAMS, AND POLICIES (PPPs), PROJECT DESIGN FEATURES (PDFs), AND MITIGATION MEASURES	RESPONSIBLE FOR MONITORING	METHOD OF IMPLEMENTATION	COMPLETION DATE
	mitigate impacts to archaeological and/or cultural resources.			
Phases 1 through 4 Prior to issuance of a grading permit and during ground disturbing activities	**MM 4-2** Prior to issuance of a grading permit, the following requirements shall be incorporated on the cover sheet of the Grading Plan under the general heading "Conditions of Approval": a. A qualified Paleontologist and Paleontological Monitor shall be present at the pre-grade meeting to consult with the grading contractor and other consultants prior to the start of earth-moving activities. At the meeting, the Paleontologist shall establish procedures for paleontological resources surveillance based on the location and depths of paleontologically sensitive sediments, and shall establish, in cooperation with the City, procedures for temporarily halting or redirecting work to permit the sampling, identification, and evaluation of the fossils as appropriate. b. A qualified Paleontological Monitor shall be present at the site when grading and excavation in the Vaqueros Formation exceeds five feet in depth. Paleontological monitoring is not required in areas where excavation does not exceed five feet. c. The Monitor shall have the authority to temporarily direct,	Community Development Department	The requirements listed in MM 4-2 shall be incorporated on the cover sheet of the Grading Plan under the general heading "Conditions of Approval". The qualified Paleontologist shall participate in pre-grading activities; conduct monitoring and reporting during construction; clean, stabilize, identify and document fossils; and prepare the required monitoring report. The Community Development shall confirm the monitoring report is submitted.	

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

TIMING FOR PPP, PDF, OR MITIGATION MEASURE	PLANS, PROGRAMS, AND POLICIES (PPPs), PROJECT DESIGN FEATURES (PDFs), AND MITIGATION MEASURES	RESPONSIBLE FOR MONITORING	METHOD OF IMPLEMENTATION	COMPLETION DATE
	divert, or halt grading to allow recovery of paleontological resources. In areas rich in micro-vertebrates, collection of large bulk samples of matrix for later water screening to recover small bones and teeth shall be part of the paleontological salvage program. d. Fossils recovered from this project shall be cleaned, stabilized, identified, and documented. A report on the paleontological resources recovered from the parcels shall be prepared by the Paleontologist and submitted to the Community Development Department. e. Fossils with their contextual data must be deposited at a recognized museum or institution.			
5.5 GEOLOGY AND SOILS				
Existing Plans, Programs and Policies				
Phases 1 through 4 Prior to the issuance of grading permits	**PPP 5-1** Prior to the issuance of grading permits, the Project Applicant shall provide to the Chief Building Official a site-specific geotechnical study for each proposed structure. The Geotechnical Report shall be prepared by a registered Civil Engineer or certified Engineering Geologist, having competence in the field of seismic hazard evaluation and mitigation. The Geotechnical Report shall contain site-specific evaluations of the seismic hazard affecting the project and shall identify portions of the project site containing seismic hazards. The report shall also	Chief Building Official	The Project Applicant shall provide to the Chief Building Official a site-specific geotechnical study for each proposed structure. The contents of the Geotechnical Report shall include, but shall not be limited to, items a through f listed in PPP 5-1.	

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

TIMING FOR PPP, PDF, OR MITIGATION MEASURE	PLANS, PROGRAMS, AND POLICIES (PPPs), PROJECT DESIGN FEATURES (PDFs), AND MITIGATION MEASURES	RESPONSIBLE FOR MONITORING	METHOD OF IMPLEMENTATION	COMPLETION DATE
	identify any known off-site seismic hazards that could adversely affect the site in the event of an earthquake. The contents of the Geotechnical Report shall include, but shall not be limited to, the following: a. A project description. b. A description of the geologic and geotechnical conditions at the site, including an appropriate site location map. c. An evaluation of site-specific seismic hazards based on geological and geotechnical conditions, in accordance with current industry standards of practice. d. Recommendations for earthwork and construction. e. The name(s) of report preparer(s) and signature(s) of a certified Engineering Geologist and/or registered Civil Engineer, having competence in the field of seismic hazard evaluation and mitigation. f. The official professional registration or certification number and license expiration date of each report preparer in the signature block of the report *(City of Irvine Standard Condition 2.6).*			

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

TIMING FOR PPP, PDF, OR MITIGATION MEASURE	PLANS, PROGRAMS, AND POLICIES (PPPs), PROJECT DESIGN FEATURES (PDFs), AND MITIGATION MEASURES		RESPONSIBLE FOR MONITORING	METHOD OF IMPLEMENTATION	COMPLETION DATE
Phases 1 through 4 Prior to issuance of a grading permit for inclusion of note During grading and construction activities for compliance with City requirements	**PPP 5-2**	Prior to issuance of a grading permit, the Project Applicant shall demonstrate compliance with the following requirement to the satisfaction of the Chief Building Official, and this requirement shall be included on the cover sheet of the grading permit. During grading and construction activities, all grading operations and construction will be conducted in conformance with the applicable *City of Irvine Grading Code* (Municipal Code Title 5, Division 10) and Grading Manual and the most recent version of the *California Building Code* (CBC). Grading operations shall also be consistent with the recommendations included in the most current Geotechnical Report for the project area prepared by the Engineer of Record.	Chief Building Official	The Project Applicant shall include the required note on the cover sheet of the grading plan. The Building Official shall confirm compliance with the City's grading requirements consistent with standard review procedures.	
Phases 1 through 4 Prior to issuance of a grading permit for inclusion of note During grading and earthwork activities for compliance with City requirements	**PPP 5-3**	Prior to issuance of a grading permit, the Project Applicant shall demonstrate compliance with the following requirement to the satisfaction of the Chief Building Official, and this requirement shall be included on the cover sheet of the grading permit. During grading and earthwork activities, in accordance with the *City of Irvine Grading Code* (Municipal Code Title 5, Division 10) and Grading Manual, grading and earthwork shall be performed under the observation of a Registered Civil Engineer specializing in Geotechnical Engineering in order to achieve proper subgrade preparation; selection of satisfactory fill materials; placement and compaction of structural fill; stability of finished slopes; design of buttress fills; subdrain installation; and incorporation of data supplied by the Engineering Geologist.	Chief Building Official	The Project Applicant shall include the required note on the cover sheet of the grading plan. The Building Official shall confirm compliance with the City's grading and earthwork requirements consistent with standard review procedures.	

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

TIMING FOR PPP, PDF, OR MITIGATION MEASURE	PLANS, PROGRAMS, AND POLICIES (PPPs), PROJECT DESIGN FEATURES (PDFs), AND MITIGATION MEASURES		RESPONSIBLE FOR MONITORING	METHOD OF IMPLEMENTATION	COMPLETION DATE
Phases 1 through 4 Prior to issuance of a grading permit for inclusion of note During grading and earthwork activities for compliance with City requirements	**PPP 5-4**	Prior to issuance of a grading permit, the Project Applicant shall demonstrate compliance with the following requirement to the satisfaction of the Chief Building Official, and this requirement shall be included on the cover sheet of the grading permit. During grading and earthwork activities, in accordance with the *City of Irvine Grading Code* (Municipal Code Title 5, Division 10) and Grading Manual, grading and earthwork shall also be performed under the observation of a certified Engineering Geologist to provide professional review and written approval of the adequacy of natural ground for receiving fills; the stability of cut slopes with respect to geological matters; and the need for subdrains or other groundwater drainage devices. The Geologist shall geologically map the exposed earth units during grading to verify the anticipated conditions and, if different, provide findings to the Geotechnical Engineer for possible design modifications. If recommendations are modified they shall be submitted to the City Engineer for review and approval.	Chief Building Official	The Project Applicant shall include the required note on the grading plan. The certified Engineering Geologist shall conduct on-site observations and required reporting to the City Engineer during construction.	
Phases 1 through 4 Prior to issuance of a building permit	**PPP 5-5**	Prior to issuance of a building permit, the Project Applicant shall submit to the Chief Building Official for review and approval documentation prepared by a licensed Geotechnical Engineer certifying the suitability of the graded site, as required in the *City of Irvine Building Code* (Municipal Code Title 14, Buildings and Construction).	Chief Building Official	The Project Applicant shall submit to the Chief Building Official for review and approval documentation prepared by a licensed Geotechnical Engineer certifying the suitability of the graded site, as required in the *City of Irvine Building Code*.	

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

TIMING FOR PPP, PDF, OR MITIGATION MEASURE	PLANS, PROGRAMS, AND POLICIES (PPPs), PROJECT DESIGN FEATURES (PDFs), AND MITIGATION MEASURES	RESPONSIBLE FOR MONITORING	METHOD OF IMPLEMENTATION	COMPLETION DATE
Phases 1 through 4 Prior to the issuance of grading permits Revegetation of cut and fill slopes after grading	**PPP 5-6** Prior to the issuance of grading permits, the Project Applicant shall demonstrate compliance with the following requirement to the satisfaction of the Chief Building Official. Grading level details of the proposed cut and fill slopes shall be evaluated by a licensed Geotechnical Engineer for stability. If adverse conditions are anticipated, remedial measures will be provided to stabilize the slopes. Revegetation of cut and fill slopes shall be required in accordance with the *City of Irvine Grading Code* (Municipal Code Title 5, Division 10) and Grading Manual.	Chief Building Official	The Project Applicant shall include the required note on the cover sheet of the grading plan. The Geotechnical Engineer shall be responsible for slope evaluation and identification of remedial measures. The Chief Building Official shall confirm compliance with the City's requirements consistent with standard review procedures.	
Phases 1 through 4 Prior to the issuance of a building permit	**PPP 5-7** Prior to the issuance of a building permit, the Project Applicant shall demonstrate compliance with the following requirement to the satisfaction of the Chief Building Official. Future buildings and structure, including retaining walls, shall be designed in accordance with the all applicable State Codes with *City of Irvine Amendments*. The design of the structures shall include lateral load analysis using the most restrictive seismic and wind loads as determined by the California Building Code (CBC).	Chief Building Official	The Project Applicant shall demonstrate compliance with the requirement that future buildings and structures, including retaining walls, are designed in accordance with the all applicable State Codes with City of Irvine Amendments. The Chief Building Official shall confirm compliance with the City's requirements consistent with standard review procedures.	
Phase 3 Prior to issuance of a grading permit for the proposed recreation/lap pool	**PPP 5-8** Prior to issuance of a grading permit for the proposed recreation/lap pool, and as required by the Special Development Requirement included in Chapter 9-21, Planning Area 21 (Turtle Rock), of the Zoning Ordinance: a. In conjunction with submittal of swimming pool or spa plans, the Project Applicant shall submit a soil report prepared and signed by a licensed civil and/or geotechnical	Chief Building Official	The Project Applicant shall submit a soil report for the swimming pool/spa to the City Building Official or demonstrate that the provisions for exceptions to this requirement have been met.	

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

TIMING FOR PPP, PDF, OR MITIGATION MEASURE	PLANS, PROGRAMS, AND POLICIES (PPPs), PROJECT DESIGN FEATURES (PDFs), AND MITIGATION MEASURES	RESPONSIBLE FOR MONITORING	METHOD OF IMPLEMENTATION	COMPLETION DATE
	engineer. The report shall include, but not be limited to, the following information: (1) A plot showing the location of all test borings and/or excavations. (2) Descriptions and classifications of the materials/soils encountered. (3) Elevation of the water table, if encountered. (4) Recommendations for foundation type and design criteria, including bearing capacity, provisions to minimize the effects of expansive soils, and the effects of adjacent loads. (5) Expected total differential settlement. b. Exception: The City Building Official may waive the requirement for submission of a soil report if the following conditions are met: (1) A hydrostatic valve is installed in the pool to relieve hydrostatic pressure. (2) The pool is designed to accommodate the effects of expansive soils.			

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

TIMING FOR PPP, PDF, OR MITIGATION MEASURE	PLANS, PROGRAMS, AND POLICIES (PPPs), PROJECT DESIGN FEATURES (PDFs), AND MITIGATION MEASURES	RESPONSIBLE FOR MONITORING	METHOD OF IMPLEMENTATION	COMPLETION DATE
Mitigation Measures				

Phases 1 and 2
 	
Prior to the issuance of a grading permit for the Music, Worship and Theology and Concordia University (CU) Center Addition
	MM 5-1 Prior to the issuance of a grading permit, recommendations from the *Preliminary Geotechnical Engineering Report for the Music, Worship and Theology and CU Center Projects, Concordia University Irvine* (November 2015) prepared by Geotechnical Solutions, Inc. and any forthcoming geotechnical studies (required pursuant to PPP 5-1) shall be included in the site preparation and building design specifications. Compliance with this requirement shall be verified by the City's Chief Building Official. Preliminary recommendations to be included in the project specifications include, but are not limited to:
	
	• Evaluation of Foundation Types and Foundation Recommendations
	  o Spread Footing Foundations
	  o Caisson Recommendations
	  o Conventional Foundations on Engineering Compacted Fill
	• Floor Slab
	• Retaining Wall Recommendations
	  o Lateral Passive Resistance
	  o Active Pressure
	  o At-Rest Earth Pressure
	  o Seismic Force
	• Pavement Recommendations
	• Pavement Grading Recommendations
	  o Subgrade Preparation
	  o Aggregate Base
	  o Asphalt Concrete Pavement
	  o Site Drainage
	  o Exterior Concrete Flatwork
		Chief Building Official	Recommendations from the *Preliminary Geotechnical Engineering Report for the Music, Worship and Theology and CU Center Projects, Concordia University Irvine* (November 2015) prepared by Geotechnical Solutions, Inc. and any forthcoming geotechnical studies (required pursuant to PPP 5-1) shall be included in the site preparation and building design specifications. Compliance with this requirement shall be verified by the City's Chief Building Official.	

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

TIMING FOR PPP, PDF, OR MITIGATION MEASURE	PLANS, PROGRAMS, AND POLICIES (PPPs), PROJECT DESIGN FEATURES (PDFs), AND MITIGATION MEASURES		RESPONSIBLE FOR MONITORING	METHOD OF IMPLEMENTATION	COMPLETION DATE
		○ Corrosion and Sulfate Attack Protection ○ Concrete • Grading Recommendations • Construction Verification Procedures ○ Pre-Grading Meeting ○ Footing Observations ○ Earthwork Observations ○ Temporary Support of Excavations			
4.6 GREENHOUSE GAS EMISSIONS					
Existing Plans, Programs and Policies					
Phases 1 through 4 Prior to the issuance of demolition and/or building permits, whichever occurs first	**PPP 6-1**	Prior to the issuance of demolition and/or building permits, whichever occurs first, the Project Applicant shall submit a Waste Management Plan for review and approval by the Director of Public Works demonstrating compliance with the requirements of Title 6, Division 7 (Refuse) of the *City of Irvine Municipal Code* relating to recycling and diversion of construction and demolition (C&D) debris as applicable. Over the course of demolition and construction, the Project Applicant shall ensure compliance with all code requirements related to the use of City-authorized waste haulers.	Public Works Department	The Project Applicant shall submit a Waste Management Plan for review and approval by the Director of Public Works demonstrating compliance with the requirements of Title 6, Division 7 (Refuse) of the *City of Irvine Municipal Code* relating to recycling and diversion of construction and demolition (C&D) debris.	
Phases 1 through 4 Prior to the issuance of each building permit	**PPP 6-2**	Prior to the issuance of each building permit, the Project Applicant shall be required to demonstrate that buildings have been designed in accordance with the applicable Title 24 Energy Efficiency Standards for Residential and Nonresidential Buildings (24 CCR 6).	Community Development Department	The Project Applicant shall be required to demonstrate that buildings have been designed in accordance with the applicable Title 24 Energy Efficiency Standards for Residential and Nonresidential Buildings (24 CCR 6).	

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

TIMING FOR PPP, PDF, OR MITIGATION MEASURE	PLANS, PROGRAMS, AND POLICIES (PPPs), PROJECT DESIGN FEATURES (PDFs), AND MITIGATION MEASURES		RESPONSIBLE FOR MONITORING	METHOD OF IMPLEMENTATION	COMPLETION DATE
Phases 1 through 4 Prior to the issuance of each building permit	**PPP 6-3**	Prior to the issuance of each building permit, the Project Applicant shall be required to demonstrate that the project meets the applicable California Green Building Standards (24 CCR 11).	Community Development Department	The Project Applicant shall be required to demonstrate that the project meets the applicable California Green Building Standards (24 CCR 11).	
5.7 HAZARDOUS AND HAZARDOUS MATERIALS					
Existing Plans, Programs and Policies					
Phases 1 through 4 Prior to issuance of a demolition permit or grading permit, whichever occurs first, surveys, inspections, and analyses for ACMs and LBP shall be conducted During construction for handling of ACM and lead, if present Prior to issuance of any demolition permit or grading permit for activities that involve the removal of structures or facilities with ACM or LBP provide results of surveys	**PPP 7-1**	Prior to issuance of a demolition permit or grading permit, whichever occurs first, pre-demolition surveys, inspections, and analyses for asbestos-containing materials (ACMs) and lead-based paint (LBP) shall be performed by fully licensed and qualified individuals for any structures or facilities to be demolished. This shall be accomplished in accordance with all applicable federal, State, and local regulations, including, but not limited to California Occupational Safety and Health Administration (CalOSHA) requirements and South Coast Air Quality Management District (SCAQMD) Rule 1403. Dependent on the results of the surveys, ACM and LBP abatement or management measures shall be implemented in accordance with all applicable regulations, summarized below. Should ACM be identified in any of the surveyed buildings or facilities intended for demolition, workers shall comply with the requirements of Title 8 of the California Code of Regulations (Section 1529), which regulates asbestos exposure. Any damaged ACM shall be removed, repaired, encapsulated, or enclosed. Removal of materials reported to contain detectable amounts of asbestos shall be performed by a licensed asbestos abatement contractor	Community Development Department	Fully licensed and qualified individuals, commissioned by the Project Applicant shall conduct pre-demolition surveys, inspections, and analyses for asbestos-containing materials (ACMs) and lead-based paint (LBP), in accordance with applicable regulation, for any structures or facilities to be demolished. The results of these efforts shall be provided to the Community Development Department. If present, ACM and LBP abatement or management measures shall be implemented in accordance with all applicable regulations summarized in PPP 7-1. The Project Applicant shall demonstrate that requirements for ACM and LBP abatement are included in the contractor specifications.	

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

TIMING FOR PPP, PDF, OR MITIGATION MEASURE	PLANS, PROGRAMS, AND POLICIES (PPPs), PROJECT DESIGN FEATURES (PDFs), AND MITIGATION MEASURES	RESPONSIBLE FOR MONITORING	METHOD OF IMPLEMENTATION	COMPLETION DATE
	prior to demolition activities. In addition, asbestos-containing waste shall be disposed of by a licensed asbestos abatement contractor and manifested as hazardous waste. Dry sawing, sanding, and drilling of ACM shall be avoided to minimize airborne asbestos exposure. Building materials containing asbestos may be exposed during demolition activities, and shall be sampled and analyzed prior to further disturbance. Should LBP be identified in any of the surveyed buildings or facilities intended for demolition, workers shall comply with the requirements of Title 8 of the California Code of Regulations (Section 1532.1), which provides exposure limits, exposure monitoring, respiratory protection, and good working practice by workers exposed to lead. LBP debris and other waste shall be managed and disposed of in accordance with the applicable provision of the California Health and Safety Code. Prior to issuance of a demolition or grading permit, whichever comes first, the Project Applicant shall submit to the Director of Community Development evidence that the requirement to adhere to all applicable regulations is included in the contractor specifications. Prior to issuance of any demolition permit or grading permit for activities that involve the removal of structures or facilities with ACM or LBP, the results of ACM and lead surveys shall be provided to the Director of the Community Development Department.			

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

TIMING FOR PPP, PDF, OR MITIGATION MEASURE	PLANS, PROGRAMS, AND POLICIES (PPPs), PROJECT DESIGN FEATURES (PDFs), AND MITIGATION MEASURES		RESPONSIBLE FOR MONITORING	METHOD OF IMPLEMENTATION	COMPLETION DATE
Project Design Features					
Phases 1 through 4 Prior to the issuance of temporary or final certificate of occupancy permits The Conceptual Fuel Modification Plan (SR #207374) was approved by OCFA on December 28, 2016.	**PDF 7-1**	Prior to the issuance of temporary or final certificate of occupancy permits for each building on campus, fuel modification requirements identified in the approved Fuel Modification Plan shall be installed and inspected to ensure they are in conformance with the approved Fuel Modification Plan, to the satisfaction of OCFA. A Conceptual Fuel Modification Plan has been prepared for the proposed project (refer to Exhibits 3-26 and 3-27 and Appendix G of this Draft EIR) and shall be approved by OCFA prior to issuance of a grading permit	Community Development Department	Fuel modification requirements identified in the approved Conceptual Fuel Modification Plan shall be installed by the Project Applicant. Post-installation inspection shall be completed by the Community Development Department to ensure the fuel modification requirements have been completed.	
Mitigation Measures					
Phases 3 and 4 Prior to issuance of a demolition permit or grading permit, whichever occurs first, for documentation that qualified individuals have been retained During demolition/grading for completion of testing of soils, and abatement and disposal of soils, if needed.	**MM 7-1**	Prior to issuance of a demolition permit or grading permit, whichever occurs first, the Project Applicant shall provide documentation to the Director of Community Development that appropriately qualified individuals have been retained to manage the identified materials in accordance with all applicable regulations. Soils encountered during demolition and earth-moving activities having the potential to contain polychlorinated biphenyls (PCBs) (this includes property within 25 feet of a possible historic source of PCBs or where visual and/or other evidence of contamination is noted) shall be tested for PCBs using U.S. Environmental Protection Agency (USEPA) Method 8082. If detectable concentrations of PCBs are identified, these shall be compared to appropriate regulatory screening levels (i.e., EPA Regional Screening Levels	Community Development Department	The Project Applicant shall provide documentation to the Director of Community Development that appropriately qualified individuals have been retained to manage the identified materials in accordance with all applicable regulations. Testing of soils shall be conducted by qualified individuals during demolition and earth-moving activities. Coordination with the applicable regulatory oversight agency(ies) shall be initiated and the agency(ies) direction/ recommendation regarding the proper abatement and disposal of PCB-impacted soil shall be implemented. This requirement shall be included in the	

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

TIMING FOR PPP, PDF, OR MITIGATION MEASURE	PLANS, PROGRAMS, AND POLICIES (PPPs), PROJECT DESIGN FEATURES (PDFs), AND MITIGATION MEASURES		RESPONSIBLE FOR MONITORING	METHOD OF IMPLEMENTATION	COMPLETION DATE
		[RSLs] or California Human Health Screening Levels [CHHSLs]). In addition, coordination with the applicable regulatory oversight agency(ies) shall be initiated and the agency(ies) direction/recommendation regarding the proper abatement and disposal of PCB-impacted soil shall be implemented. This requirement shall be included in the construction contractor's specifications, and its performance shall be the responsibility of the Project Applicant.		construction contractor's specifications, and its performance shall be the responsibility of the Project Applicant. Inclusion of requirements on the contractor specifications shall be confirmed by the Community Development Department.	
<u>Phases 3 and 4</u> Prior to issuance of a demolition permit	**MM 7-2**	Prior to issuance of a demolition permit, the Project Applicant shall provide evidence that the onsite soils do not contain concentrations of organochlorine pesticides (OCPs) or lead above the applicable levels shall be provided to the Director of the Community Development Department for review and approval. Pre-demolition soil sampling for OCPs and lead shall be performed by a licensed contractor. The sampling shall be conducted under the guidance of the sampling requirements identified in the California Department of Toxic Substances Control's (DTSC's) *Interim Guidance Evaluation of School Sites with Potential Soil Contamination as a Result of Lead from Lead-Based Paint, Organochlorine Pesticides from Termiticides, and Polychlorinated Biphenyls from Electrical Transformers.* If OCP and/or lead levels within the sampled areas are identified in excess of screening values identified in the guidance document, a Health Risk Assessment (HRA) shall be prepared to the satisfaction of the Director of the	Community Development Department	The Project Applicant shall provide evidence to the Community Development Department that the onsite soils do not contain concentrations of OCPs or lead above the applicable levels, based on pre-demolition soil sampling by a licensed contractor. If OCP and/or lead levels within the sampled areas are identified in excess of screening values identified in the guidance document, a Health Risk Assessment (HRA) shall be prepared to the satisfaction of the Director of the Community Development Department and, if required, remediation shall be conducted to ensure that applicable levels are achieved.	

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

TIMING FOR PPP, PDF, OR MITIGATION MEASURE	PLANS, PROGRAMS, AND POLICIES (PPPs), PROJECT DESIGN FEATURES (PDFs), AND MITIGATION MEASURES		RESPONSIBLE FOR MONITORING	METHOD OF IMPLEMENTATION	COMPLETION DATE
		Community Development Department and, if required, remediation shall be conducted to ensure that applicable levels are achieved.			
5.8 HYDROLOGY AND WATER QUALITY					
Existing Plans, Programs and Policies					
Phases 1 through 4 Prior to the issuance of preliminary or precise grading permits for a project that will result in soil disturbance of one or more acres of land	**PPP 8-1**	Prior to the issuance of preliminary or precise grading permits for a project that will result in soil disturbance of one or more acres of land, the Project Applicant shall provide the Chief Building Official with evidence that a Notice of Intent (NOI) has been filed with the State Water Resources Control Board. Such evidence shall consist of a copy of the NOI stamped by the State Water Resources Control Board or the Regional Water Quality Control Board or a letter from either agency stating that the NOI has been filed. (*City of Irvine Standard Condition 2.12*)	Chief Building Official	The Project Applicant shall provide the Chief Building Official with evidence that a Notice of Intent (NOI) has been filed with the State Water Resources Control Board.	
Phases 1 through 4 Prior to the issuance of preliminary or precise grading permits	**PPP 8-2**	Prior to the issuance of preliminary or precise grading permits, the applicant shall submit to the Chief Building Official for review and approval, a Water Quality Management Plan (WQMP). The WQMP shall identify the Best Management Practices (BMPs) that will be used on the site to control predictable pollutant runoff. (*City of Irvine Standard Condition 2.13)*	Chief Building Official	The applicant shall submit to the Chief Building Official for review and approval, a WQMP.	

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

TIMING FOR PPP, PDF, OR MITIGATION MEASURE	PLANS, PROGRAMS, AND POLICIES (PPPs), PROJECT DESIGN FEATURES (PDFs), AND MITIGATION MEASURES		RESPONSIBLE FOR MONITORING	METHOD OF IMPLEMENTATION	COMPLETION DATE
Project Design Features					
Phases 1 through 4 Prior to issuance of each grading permit	**PDF 8-1**	Prior to issuance of each grading permit, the Community Development Department shall verify that required Low Impact Development (LID) structural and non-structural Best Management Practices (BMPs) required by project-specific Final Water Quality Management Plans (WQMPs) are incorporated into the grading plans and contractor specifications. The Municipal Separate Storm Sewer System (MS4) permit and Drainage Area Management Plan/Local Implementation Plan (DAMP/LIP) require the consideration and incorporation of site design practices to reduce runoff and to promote a hydrologically functional project that mimics the natural hydrologic regime to the extent feasible. The proposed project incorporates installation of LID structural BMPs (refer to Exhibit 3-32, Conceptual WQMP BMP Plan) and implementation of non-structural BMPs as identified in the preliminary WQMP included in Appendix H of this Draft EIR. The following BMPs are included as part of the proposed project. **LID BMPs** • Bio-retention system with underdrains • Stormwater planter boxes with underdrains • Vegetated swales • Vegetated filter strips • Proprietary bio-treatment (modular wetlands devices) **Non-Structural Source-Control BMPs**	Community Development Department	The Community Development Department shall verify that required LID structural and non-structural Best Management Practices (BMPs) required by project-specific Final WQMPs are incorporated into the grading plans and contractor specifications.	

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

TIMING FOR PPP, PDF, OR MITIGATION MEASURE	PLANS, PROGRAMS, AND POLICIES (PPPs), PROJECT DESIGN FEATURES (PDFs), AND MITIGATION MEASURES	RESPONSIBLE FOR MONITORING	METHOD OF IMPLEMENTATION	COMPLETION DATE
	• Property owner, tenant, and occupant education • Activity restrictions • Common area landscape management • BMP maintenance • Common area litter control • Employee training • Housekeeping of loading docks • Common area catch basin inspection • Street sweeping **Structural Source-Control BMPs** • Storm drain system stenciling and signage • Trash and waste storage areas to reduce pollution introduction • Efficient irrigation systems and landscape design, water conservation, smart controllers, and source control • Slope and channel protection and energy dissipation • Incorporation of requirements applicable to individual priority project categories (from Santa Ana Regional Water Quality Control Board NPDES Permit) • Loading dock areas • Hillside landscaping • Wash water control for food preparation areas			

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

TIMING FOR PPP, PDF, OR MITIGATION MEASURE	PLANS, PROGRAMS, AND POLICIES (PPPs), PROJECT DESIGN FEATURES (PDFs), AND MITIGATION MEASURES	RESPONSIBLE FOR MONITORING	METHOD OF IMPLEMENTATION	COMPLETION DATE
5.9 LAND USE AND PLANNING				
Mitigation Measures				
Phases 1 through 4 Ongoing monitoring and reporting of vehicular trips during operations. Vehicle trip counts to be conducted two times annually (October and Spring). Monitoring Reports also to be prepared two times annually following completion of trip counts.	**MM 9-1** ***Incremental Daily Trip Cap*** The maximum daily trip cap shall be determined by the actual existing square footage (i.e., buildings with temporary or final certificate of occupancy) on the campus on the starting date of the vehicle trip count provided, however, that 4,732 maximum daily trips shall be the initial maximum daily trip cap until Concordia adds any additional institutional building square footage beyond the existing 243,571 square feet, at which time the below maximum Daily Trip Cap ("Daily Trip Cap") will exclusively apply and govern provided the Daily Trip Cap calculation yields no less than 4,732 maximum daily trips. As building square footage is allowed to be occupied and compliance with the trip cap is verified, the trip cap will increase incrementally for the campus. Vehicle trips generated by the Concordia University campus shall be calculated as follows: Daily Trip Cap = 17.12 trips x existing institutional square footage/1,000 square feet *(note: institutional square footage excludes dormitory unit square footage)* ***Maximum Daily Trip Cap*** If Daily Trip Cap compliance is successfully and continuously demonstrated with the occupancy of each new or expanded building, the daily trip generation shall not exceed 5,500 daily trips at full-campus	Community Development Department	Applicable maximum daily trip cap based on identified formula shall be calculated by the City based on occupied square footage when the trip count is conducted. Vehicle trip counts to be conducted by the University two times annually, as reviewed/approved by City staff: (1) three successive days in October (Tuesday, Wednesday and Thursday); (2) a weekend day (Friday or Saturday) in the Spring Spring when a special event or special events with the largest attendance and largest vehicle trip generation is/are anticipated. The Vehicle Trip Monitoring Reports for the October and Spring counts shall be submitted no later than 30 calendar days after completion of each count and, in the case of the City, submitted as a Pre-Application case type. In the event of non-compliance with trip caps based on the annual counts, actions to be immediately taken by the University to comply with the trip count limitations shall be established based on coordination with the City and Concordia East and West	

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

TIMING FOR PPP, PDF, OR MITIGATION MEASURE	PLANS, PROGRAMS, AND POLICIES (PPPs), PROJECT DESIGN FEATURES (PDFs), AND MITIGATION MEASURES	RESPONSIBLE FOR MONITORING	METHOD OF IMPLEMENTATION	COMPLETION DATE
	build-out (i.e., 321,220 square feet of institutional uses and 330 dormitory units). ***Vehicle Trip Counts*** Concordia and all its successors shall conduct a count of vehicles entering and exiting the campus two times annually. The first count of vehicles shall be taken during the month of October on three successive days (Tuesday, Wednesday and Thursday). The second count of vehicles shall be taken on a weekend day (Friday or Saturday) in the Spring when a special event or special events with the largest attendance and largest vehicle trip generation is/are anticipated. The proposed dates of each count shall be reviewed and approved by City staff a minimum of 30 days in advance of commencing any actual counts. This "cordon count" shall be conducted via a mixture of electronic and mechanical means (e.g., magnetic road loops, video and/or rubber hose counting systems). All trips entering and exiting the campus, including those associated with pass-through traffic (e.g., community HOA vehicles traversing the campus to travel from one location to another), shall be recorded. Furthermore, counts from all residential neighborhood streets (i.e., Ascension for Concordia East and Daystar, Faith and Joy for Concordia West) shall be deducted from the overall gate volumes. ***Vehicle Trip Monitoring Reports*** Concordia University shall submit to the Community Development Director (and provide copies directly to the Board of		Homeowners Association presidents, if interested. In the event of non-compliance with the applicable trip cap, the applicant shall be prohibited from further implementing the campus build-out plan regardless of the (approved) status of permit(s) and/or development plan(s) until compliance with the trip cap is demonstrated. Traffic analysis shall be conducted in compliance with federal, state, or local law or policy, as applicable.	

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

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	Directors of the Concordia East and West Community Associations) two comprehensive trip monitoring reports summarizing the completed counts of vehicles entering and exiting the campus ("Vehicle Trip Monitoring Report"). The Vehicle Trip Monitoring Reports for the October and Spring counts shall be submitted no later than 30 calendar days after completion of each count and, in the case of the City, submitted as a Pre-Application case type. Actual count data for each day shall be included in the Vehicle Trip Monitoring Report. The highest 24-hour count for each collection period (October and Spring) shall be used in determining compliance with the Daily Trip Cap, and daily counts shall not be averaged between the count days for that year. Each Vehicle Trip Monitoring Report shall include a summary description of all events and activities occurring on campus each day that traffic counts were taken. At the discretion of the Director of Community Development, additional traffic counts and reports beyond the October and Spring Vehicle Trip Monitoring Reports may be required, if deemed necessary. ***Non-Compliance*** Should any October or Spring Vehicle Trip Monitoring Report or specially requested report submitted to the City evidence noncompliance with the applicable maximum trip count limitation, within 30 calendar days of the Director of Community Development's receipt of the Vehicle Trip Monitoring Report, University			

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

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	representatives shall meet with the Director of Community Development and Concordia East and West Community Associations' Board of Directors, if interested, to review actions including but not limited to reducing on-campus activities and implementing transportation demand management measures (e.g., carpooling, use of alternative modes of transportation, parking management) that shall be immediately taken to comply with the trip count limitations. Additionally, prior to issuance of all grading/building permit and approval of all development applications for uses within the campus, the applicant shall demonstrate to the satisfaction of the Director of Community Development that the projected total daily traffic from the site will not exceed 4,732 daily trips or 17.12 daily trips per thousand square feet of existing and/or proposed institutional square footage (whichever is greater). In the event of non-compliance with the applicable trip cap, the applicant shall be prohibited from further implementing the campus build-out plan regardless of the (approved) status of such permit(s) and/or development plan(s) until compliance with the trip cap is demonstrated. ***Additional Requirements*** Additionally, where the applicant is required to submit a traffic analysis by any federal, state, or local law or policy, including but not limited to the City Traffic Impact Analysis Guidelines and/or California Environmental Quality Act, the			

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

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		applicant shall submit such traffic analysis in addition to the above requirements. Finally, see Condition of Approval 6.25 regarding Special Events and Condition of Approval 6.24 regarding Non-University Events for details on additional reporting requirements for those activities.			
5.10 NOISE					
Existing Plans, Programs and Policies					
Phases 1 through 4 Prior to issuance of a grading permit for confirmation of note on contract plans and specifications Ongoing monitoring of compliance during construction	**PPP 10-1**	Prior to issuance of a grading permit, the Community Development Department shall confirm that the following requirement is included on the contract plans and specifications. "Construction activities occurring as part of the project shall be subject to the limitations and requirements of Section 6-8-205(a) of the Irvine Municipal Code, which states that construction activities may only occur between 7:00 AM and 7:00 PM Mondays through Fridays and 9:00 AM and 6:00 PM on Saturdays. No construction activities shall be permitted outside these hours or on Sundays and federal holidays unless a temporary waiver is granted by the Chief Building Official or an authorized representative. Trucks, vehicles, and equipment that are making or are involved with material deliveries, loading, or transfer of materials; equipment service; maintenance of any devices; or appurtenances for or within any construction project in the City shall not be operated or driven on City streets outside of these hours or on Sundays and federal holidays unless the City grants a temporary waiver. Any waiver granted shall consider	Community Development Department	The Community Development Department shall confirm that the requirement listed in PPP 10-1 is included on the contract plans and specifications. The Community Development Department shall periodically monitor compliance with these requirements on-site during construction.	

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

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		impacts upon the community. No construction activity, including maintenance work on the City rights-of-way that might be required, shall be permitted outside these hours except in emergencies." Compliance by the contractor shall be confirmed by the Community Development Department during construction.			
Phases 1 through 4 Prior to issuance of any grading permits for submittal of Traffic Routing Plan and inclusion on the grading and building plans Ongoing monitoring of compliance during construction	**PPP 10-2**	In compliance with Special Development Requirement No. 9 included in Chapter 9-21 of the City's Zoning Ordinance, prior to issuance of any grading permits, the Project Applicant shall submit for review and approval by the Chief Building Official a Construction Traffic Routing Plan that routes construction traffic away from residential areas. The routing plan shall be shown as a map on the grading and building plans and shall specify that construction traffic is to be routed to Ridgeline Drive, to University Avenue, and directly to the Interstate (I) 405 freeway.	Chief Building Official	The Project Applicant shall submit for review and approval by the Chief Building Official a Construction Traffic Routing Plan and shall include this on grading and building plans. The Community Development Department shall periodically monitor compliance with this Plan during construction.	
Phases 1 through 4 Prior to the issuance of building permits	**PPP 10-3**	Prior to the issuance of building permits for each structure or tenant improvement other than a parking structure, the Project Applicant shall submit a Final Acoustical Report prepared to the satisfaction of the Director of Community Development. The report shall demonstrate that the development will be sound-attenuated against present and projected noise levels, including stationary, roadway, aircraft, helicopter, and railroad noise to meet City interior and exterior noise standards. The Final Acoustical Report shall include all information required by the City's Acoustical Report Information Sheet (Form 42-48). The report shall be accompanied by a list	Community Development Department	The Project Applicant shall submit a Final Acoustical Report prepared to the satisfaction to the Community Development Department.	

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

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		identifying the sheet(s) of the building plans that include required sound attenuation measures *(City of Irvine Standard Condition 3.5)*.			
Phases 1 through 4 Prior to the issuance of building permits	**PPP 10-4**	Prior to the issuance of building permits for each structure, the Project Applicant shall submit for review and approval by the Chief Building Official, acoustical specifications or equivalent analysis that demonstrates that noise levels from heating, ventilation, and air conditioning (HVAC) equipment and similar equipment would not exceed the noise level limits of Section 6-8-204 B.2 of the Noise Ordinance as shown in Table 5.10-6 of this EIR.	Chief Building Official	The Project Applicant shall submit for review and approval by the Chief Building Official, acoustical specifications or equivalent analysis that demonstrates that noise levels from HVAC equipment and similar equipment would not exceed the noise level limits of Section 6-8-204 B.2 of the Noise Ordinance.	
Project Design Features					
Phases 1 through 4 During operation of existing and proposed on campus athletic facilities	**PDF 10-1**	During operation of existing and proposed outdoor on campus athletic facilities by the University, City of Irvine or private rental users, the University shall prohibit amplified music after 7:00 PM. Announcing shall be allowed until the completion of each outdoor game/competition or until 9:00 PM, whichever occurs first. This requirement shall be stipulated in all University, City of Irvine, or private rental agreements for use of the outdoor campus athletic fields.	Community Development Department	The University shall prohibit amplified music after 7:00 PM. Announcing shall be allowed until the completion of each outdoor game/competition or until 9:00 PM, whichever occurs first. The Community Development Department shall periodically monitor compliance with these requirements during operation.	
Mitigation Measures					
Phases 1 through 4 Prior to the issuance of each grading and building permit for submittal of construction-related noise mitigation plan	**MM 10-1**	Prior to the issuance of each grading permit and building permit, the Project Applicant or its contractor shall submit a construction-related noise mitigation plan to the Director of Community Development for review and approval. The plan must depict the location of construction equipment and how the noise from this equipment shall be mitigated during	Community Development Department	The Project Applicant or its contractor shall submit a construction-related noise mitigation plan to the Community Development Department, and implement plan requirements during construction.	

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

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During construction for implementation of noise attenuation measures		construction of the project, through the use of such methods as the following: • Temporary noise attenuation fences. • Preferential location of equipment. • Use of current technology and noise suppression equipment.		The Community Development Department shall periodically monitor compliance with the noise mitigation plan during construction.	
<u>Phases 1 through 4 with the Exception of the Music, Worship, and Theology Building and CU Center Addition</u> Prior to the commencement of any blasting activities for submittal of blasting plan After blasting for vibration-caused damage survey and completion of repairs	**MM 10-2**	Prior to the commencement of any blasting activities, the Project Applicant shall submit a blasting plan prepared by a qualified blasting specialist to the Orange County Fire Authority and City of Irvine Department of Building and Safety for review and approval. A blasting permit shall be obtained from OCFA. A copy of the approved blasting plan shall be submitted to the Community Development Department. The Project Applicant shall be responsible for all costs associated with the preparation and implementation of the blasting plan to the satisfaction of OCFA. The blasting plan shall be prepared in accordance with the U. S. Department of Interior, Office of Surface Mining Reclamation and Enforcement standards and shall include, but not be limited to the following: a. Pre-blast survey of on- and off-site conditions and determination of structures that would be in the area subject to potential damage from blasting activities. b. The condition of any structures subject to potential damage shall be documented to provide a baseline for evaluating post-blast conditions. c. Site and location of planned blasting and hours of operation (blasting to be	Community Development Department/OCFA	The Project Applicant shall submit a blasting plan prepared by a qualified blasting specialist to OCFA and the City as identified. The Project Applicant shall conduct post-blast survey to identify vibration-caused damage and repair recommendations, and shall complete necessary repairs. The Community Development Department shall confirm necessary repairs are made.	

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

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	conducted during the daylight hours only) d. Notification of blasting activities to all property owners within one-half mile of the blasting area, which may include (depending on location of blasting) private residents, and Orange County Parks, any other persons/agencies determined appropriate by OCFA. This notification shall describe expected period and frequency that the blasting shall occur and give a contact phone number for any questions or complaints. All complaints shall be responded to in a method deemed satisfactory to the City of Irvine Community Development Director. e. Types and amounts of explosives f. Warning system information. For example, pre-blast alarms shall be sounded. Immediately before blasting, the construction contractor shall sound a signal announcing the blast. Construction contractors shall follow the construction safety plan that will provide for these measures. g. Methods of transportation and handling of explosives h. Minimum acceptable weather conditions i. Procedures for handling, setting, wiring and firing explosives k. Procedures for clearing and controlling access to blast danger			

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

TIMING FOR PPP, PDF, OR MITIGATION MEASURE	PLANS, PROGRAMS, AND POLICIES (PPPs), PROJECT DESIGN FEATURES (PDFs), AND MITIGATION MEASURES	RESPONSIBLE FOR MONITORING	METHOD OF IMPLEMENTATION	COMPLETION DATE
	j. Procedures for handling misfires and other unusual occurrences l. Emergency action plan m. Material safety data sheet for all explosives or other hazardous materials expected to be used. n. Compliance with local, state and federal laws o. Measures to assess, control, and monitor noise and ground vibration from blasting, including: • The project contractor shall use current state-of-the-art technology to keep blast-related vibration and air blast at off-site residential and other occupied structures as low as possible, consistent with blasting safety. In no instance shall blast vibration or air blast, measured on the ground adjacent to a residential or other occupied structure, be allowed to exceed the frequency dependent limits contained in the USOSM regulations. • The project contractor shall use a blasting seismograph to monitor and record air blast and vibration for blasts within 1,000 feet of residences and other occupied structures to verify that measured levels are within the recommended limits at those locations. If blasting is found to exceed specified levels, blasting shall cease, and alternative			

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

TIMING FOR PPP, PDF, OR MITIGATION MEASURE	PLANS, PROGRAMS, AND POLICIES (PPPs), PROJECT DESIGN FEATURES (PDFs), AND MITIGATION MEASURES	RESPONSIBLE FOR MONITORING	METHOD OF IMPLEMENTATION	COMPLETION DATE
	blasting or excavation methods that result in the specified levels not being exceeded shall be employed. • Air blast and vibration monitoring shall take place at the nearest off-site residential or other occupied structure. If vibration levels are expected to be lower than those required to trigger the seismograph at that location, or if permission cannot be obtained to record at that location, recording shall be accomplished at some closer site in line with the structure. Specific locations and distances where air blast and vibration are measured shall be documented in detail along with measured air blast and vibration amplitudes. p. At the conclusions of blasting activities, a post-blast survey shall be conducted to identify vibration-caused damage. In the unanticipated event of discovery of vibration-caused damage, necessary repairs shall be recommended. The Project Applicant shall be responsible for all repairs associated with vibration-caused damage.			

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

TIMING FOR PPP, PDF, OR MITIGATION MEASURE	PLANS, PROGRAMS, AND POLICIES (PPPs), PROJECT DESIGN FEATURES (PDFs), AND MITIGATION MEASURES		RESPONSIBLE FOR MONITORING	METHOD OF IMPLEMENTATION	COMPLETION DATE
Phases 1 through 4 Prior to issuance of each grading permit for review of contractor specifications During construction for compliance verification	**MM 10-3**	Prior to issuance of each grading permit, the Community Development Department shall confirm that the following requirement is included on the contract specifications and indicated as a note on the cover sheet of the grading plan. Compliance by the contractor shall be confirmed by the Building and Safety Department during construction. "Equipment to be used for demolition and grading that would occur within 200 feet of a residence or 100 feet of a non-residential building shall not include vibratory rollers, large bulldozers, or similar large or heavy equipment. Vibratory rollers operated in the static mode shall be allowed."	Community Development Department	The Community Development Department shall confirm that the requirement in MM 10-3 is included on the contract specifications and indicated as a note on the cover sheet of the grading plan. Compliance by the contractor shall be confirmed by the Building and Safety Department on-site during construction.	
5.11 POPULATION AND HOUSING					
	There are no PPPs, PDFs or Mitigation Measures applicable to population and housing.				
5.12 PUBLIC SERVICES					
Existing Plans, Programs and Policies					
Phases 1 through 4 Prior to the issuance of the first building permit for each building	**PPP 12-1**	Prior to the issuance of the first building permit, the Project Applicant shall comply with all applicable Orange County Fire Authority (OCFA) codes, ordinances, and standard conditions including but not limited to fire prevention and suppression measures, water improvement plans, fire hydrants, automatic fire extinguishing systems, fire access, access gates, combustible construction, water availability, and fire sprinkler systems. Compliance with this PPP shall be verified by the Chief Building Official.	Chief Building Official	The Project Applicant shall ensure that applicable OCFA requirements are included on the building plans. The Chief Building Official shall complete required inspections to ensure compliance with OCFA requirements.	

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

TIMING FOR PPP, PDF, OR MITIGATION MEASURE	PLANS, PROGRAMS, AND POLICIES (PPPs), PROJECT DESIGN FEATURES (PDFs), AND MITIGATION MEASURES	RESPONSIBLE FOR MONITORING	METHOD OF IMPLEMENTATION	COMPLETION DATE
Phases 1 through 4 Prior to issuance of any grading permit	**PPP 12-2** Prior to issuance of any grading permit, the Project Applicant shall enter into a Secured Fire Protection Agreement (SFPA) with the OCFA. The SFPA shall cover all future development under the Campus Master Build-Out Plan Update (Phases 1 through 4). A copy of the executed SFPA shall be provided to the Community Development Director.	Community Development Department	The Project Applicant shall provide a copy of the executed SFPA to the Community Development Department.	
Phases 1 through 4 Prior to the issuance of the first building permit	**PPP 12-3** Prior to the issuance of the first building permit, a Construction Site Security Plan, per the Irvine Uniform Security Code, Section 5-9-521, shall be approved by the Chief of Police. Said plan shall be incorporated into the plan set approved for building permits. *(City of Irvine Standard Condition 3.20)*	Community Development Department	The Project Applicant shall provide a Construction Site Security Plan to the Police Department, and ensure that requirements are incorporated into the plan set for building permits. The Community Development Department shall confirm requirements are included in the plan set.	
Phases 1 through 4 Prior to the issuance of building permits	**PPP 12-4** Prior to the issuance of building permits, the applicant shall demonstrate they have met the Irvine Uniform Security Code requirements for lighting by providing the below listed items for a complete review by the Police Department. Failure to provide a complete lighting package will result in the delay of satisfaction of this condition. *(City of Irvine Standard Condition 3.6)* a. Electrical plan showing light fixture locations, type of light fixture, height of light fixture, and point-by-point photometric lighting analysis overlaid on the landscape plan with a tree legend. The photometric plan should only show those fixtures used to meet	Community Development Department	The Project Applicant shall demonstrate it has met the Irvine Uniform Security Code requirements for lighting by providing the items listed in PPP 12-4 for a complete review by the Police Department. The Community Development Department shall confirm these requirements have been completed.	

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

TIMING FOR PPP, PDF, OR MITIGATION MEASURE	PLANS, PROGRAMS, AND POLICIES (PPPs), PROJECT DESIGN FEATURES (PDFs), AND MITIGATION MEASURES		RESPONSIBLE FOR MONITORING	METHOD OF IMPLEMENTATION	COMPLETION DATE
		the Irvine Uniform Security Code requirements. b. Corresponding fixture cut-sheets (specifications) of those lights used to meet the Irvine Uniform Security Code. c. Site plan demonstrating that landscaping shall not be planted so as to obscure required light levels. d. Site plans that are full-scale and legible.			
5.13 TRANSPORTATION AND TRAFFIC					
Existing Plans, Programs, and Policies					
Phases 1 through 4 Prior to the issuance of the first building permit	**PPP 13-1**	Prior to the issuance of the first building permit, the Project Applicant shall submit and have approved by the Chief of Police an Emergency Access Plan, which identifies and locates all Knox Boxes, Knox key switches, and Click2Enter radio access control receivers. This plan shall be incorporated into the plan set approved for building permits (City of Irvine Standard Condition 3.17).	Community Development Department	The Project Applicant shall submit an Emergency Access Plan, and incorporate the requirements into the plan set approved for building permits. The Community Development Department shall confirm requirements are included in the plan set.	
Phases 1 through 4 Prior to authorization to use, occupy, and/or operate	**PPP 13-2**	Prior to authorization to use, occupy, and/or operate, the Project Applicant shall arrange for and have passed an inspection, to be performed by the Police Department and the Orange County Fire Authority, to ensure compliance with the Emergency Access Plan requirements. The inspector shall verify test acceptance and locations of all Knox boxes and key switches as depicted on the approved plan (City of Irvine Standard Condition 4.9).	Community Development Department	The Project Applicant shall arrange for and have passed an inspection, to be performed by the Police Department and the OCFA, to ensure compliance with the Emergency Access Plan requirements. The Community Development Department shall confirm the inspection results.	

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

TIMING FOR PPP, PDF, OR MITIGATION MEASURE	PLANS, PROGRAMS, AND POLICIES (PPPs), PROJECT DESIGN FEATURES (PDFs), AND MITIGATION MEASURES		RESPONSIBLE FOR MONITORING	METHOD OF IMPLEMENTATION	COMPLETION DATE
Phases 1 through 4 Prior to issuance of any grading permits for submittal of Traffic Routing Plan and inclusion on the grading and building plans Ongoing monitoring of compliance during construction	**PPP 13-3**	As required by Special Development Requirement (SDR) 3 included in Section 9-21-7.B of the Zoning Ordinance (originally SDR 9), Special Development Requirements for Concordia University (Christ College Irvine) General Plan Amendment 4237-GA and Zone Change 5232-ZC, prior to issuance of any grading permits, the Project Applicant shall submit for review and approval by the Chief Building Official a construction traffic routing plan that routes construction traffic away from residential areas. The routing plan shall be shown as a map on the grading and building plans and shall specify that construction traffic is to be routed to Ridgeline Drive, to University Avenue, and directly to the Interstate 405 freeway.	Chief Building Official	The Project Applicant shall submit a Construction Traffic Routing Plan and shall include this on grading and building plans. The Community Development Department shall periodically monitor compliance with this Plan during construction.	
Project Design Features					
Phase 1 Prior to authorization to use, occupy, and/or operate	**PDF 13-1**	Prior to authorization to use, occupy, and/or operate any new institutional development or square footage on campus, the Project Applicant shall demonstrate to the satisfaction of the Director of Community Development that the following internal circulation improvements have been implemented: • **Concordia East Roadway.** To improve traffic and parking management along Concordia East, the following improvements would be implemented, as conceptually shown on Exhibit 3-8a. o Add a stop-controlled intersection at Ascension/Concordia East with uncontrolled flow for inbound	Community Development Department	The Project Applicant shall install internal circulation improvements listed in PDF 13-1. The Community Development Department shall conduct a site review to ensure the improvements have been implemented.	

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

TIMING FOR PPP, PDF, OR MITIGATION MEASURE	PLANS, PROGRAMS, AND POLICIES (PPPs), PROJECT DESIGN FEATURES (PDFs), AND MITIGATION MEASURES	RESPONSIBLE FOR MONITORING	METHOD OF IMPLEMENTATION	COMPLETION DATE
	traffic, and a dedicated westbound left turn lane. o Relocate the Parking Lot E entrance to align with Dorm Road (4-way stop controlled intersection). o Add a dedicated westbound left turn lane at Dorm Road/Concordia East and eastbound left turn lane into the Parking Lot E. o Relocate the driveway for the District Office from Concordia East to Dorm Road. o Maintain and/or realign the public bicycle/pedestrian pathway (minimum 11-foot width) along the south side of Concordia East and west side of Dorm Road. • **Concordia West Roadway** o Modify the Parking Lot A entry/exit to accommodate the expanded parking lot.			
Phase 1 Prior to Certificates of Use and Occupancy for the Music, Worship and Theology building	**PDF 13-2** Prior to the issuance of Certificates of Use and Occupancy for the Music, Worship and Theology building, the applicant shall enter into an agreement with the City and post security in a form and in an amount acceptable to the City Engineer guaranteeing construction of a traffic signal at Concordia East and Ridgeline Drive. Timing of construction of the signal and actual construction will be determined based upon a review of necessity by the Transportation Commission. If a signal is determined not to be needed, the agreement will terminate and the security will be released.	Community Development Department	The Project Applicant shall enter into an agreement with the City and post security in a form and in an amount acceptable to the City Engineer guaranteeing construction of a traffic signal.	

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

TIMING FOR PPP, PDF, OR MITIGATION MEASURE	PLANS, PROGRAMS, AND POLICIES (PPPs), PROJECT DESIGN FEATURES (PDFs), AND MITIGATION MEASURES		RESPONSIBLE FOR MONITORING	METHOD OF IMPLEMENTATION	COMPLETION DATE
Phases 1 through 4 During operations	**PDF 13-3**	During operation of the Concordia University Main Campus, the Project Applicant shall continue to implement and refine the Concordia University Irvine Traffic and Parking Management Plan that outlines the traffic and parking regulations on campus and requires preparation of an Event Action Plan to regulate and facilitate traffic flow and parking during each scheduled special events. The Department of Campus Safety enforces the regulations and provisions in the Traffic and Parking Management Plan and Event Action Plans.	Community Development Department	The Project Applicant shall continue to implement and refine the Concordia University Irvine Traffic and Parking Management Plan. The Department of Campus Safety shall continue to enforce the Traffic and Parking Management Plan. The Community Development Department shall ensure compliance with the Traffic and Parking Management Plan requirements through periodic site inspections.	
Phases 1 through 4 Prior to the issuance of grading and building permits for inclusion of trail on plans Ongoing provision of trail in perpetuity	**PDF 13-4**	Prior to the issuance of grading permits and building permits, the Project Applicant shall demonstrate to the satisfaction of the Director of Community Development that the minimum 11-foot wide bicycle/pedestrian trail is maintained during construction and operation of the Concordia University Main Campus. The Project Applicant shall maintain the public bicycle/pedestrian trail that extends through the campus (connecting Turtle Rock Vistas development to Ridgeline) in its current location, or realigned as necessary to accommodate all construction activities and/or final trail alignment with campus build-out implementation.	Community Development Department	The Project Applicant shall include the bicycle/pedestrian trail on all plan sets. The Community Development Department shall conduct periodic site visits to ensure the trail is maintained during construction and ongoing campus operations.	

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

TIMING FOR PPP, PDF, OR MITIGATION MEASURE	PLANS, PROGRAMS, AND POLICIES (PPPs), PROJECT DESIGN FEATURES (PDFs), AND MITIGATION MEASURES		RESPONSIBLE FOR MONITORING	METHOD OF IMPLEMENTATION	COMPLETION DATE
Mitigation Measures					
Phase 1 Because the intersection improvement project has been approved, prior to issuance of the first building permit the fee shall be paid	**MM 13-1**	Prior to issuance of the first building permit for institutional uses in Phase 1, and if the University Drive and Ridgeline Drive/Rosa Drew Lane Improvement Project has been approved by the City of Irvine, the Project Applicant shall pay its fair share toward this improvement project (0.76 percent as presented in the TIA included in Appendix J). If this improvement project has not been approved at the time of issuance of the first building permit, prior to issuance of an occupancy permit, the Project Applicant shall extend the westbound turn lane at the Ridgeline Drive/University intersection by 25 feet per lane. Compliance with the applicable mitigation requirement shall be confirmed by the Community Development Department.	Community Development Department	The Project Applicant shall pay its fair share toward this improvement project (0.76 percent as presented in the TIA included in Appendix J), which has been approved by the City. The Community Development Department shall confirm payment of the required fee.	
Phase 1 Prior to authorization to use, occupy, and/or operate	**MM 13-2**	Prior to authorization to use, occupy, and/or operate for any institutional uses in Phase 1, the Project Applicant shall lengthen the southbound left-turn lane at the Turtle Rock Drive/Concordia West roadway intersection from 110 feet to 140 feet (an addition of 30 feet) to meet Transportation Design Procedure (TDP)-1 design criteria. The design and implementation of this mitigation improvement shall be to the satisfaction of the Director of Community Development Department.	Community Development Department	The Project Applicant shall implement the required improvement at the Turtle Rock Drive/Concordia West roadway intersection. The Community Development Department shall conduct a site visit to confirm the improvement has been implemented, as required.	
Phases 3 and 4 Prior to issuance of a building permit for additional institutional square footage in Phases 3 and 4	**MM 13-3**	Prior to issuance of a building permit for additional institutional square footage in Phases 3 and 4, if a second northbound right-turn lane at Ridgeline Drive/University Drive intersection is not being implemented by others, the Project Applicant shall install	Community Development Department	If the required improvement is not being implemented by others, the Project Applicant shall implement this improvement or demonstrate in a subsequent traffic analysis to the satisfaction of the Director of	

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

TIMING FOR PPP, PDF, OR MITIGATION MEASURE	PLANS, PROGRAMS, AND POLICIES (PPPs), PROJECT DESIGN FEATURES (PDFs), AND MITIGATION MEASURES		RESPONSIBLE FOR MONITORING	METHOD OF IMPLEMENTATION	COMPLETION DATE
		this improvement or demonstrate in a subsequent traffic analysis to the satisfaction of the Director of Community Development that the improvement is no longer needed. If it is demonstrated that the improvement has been or is being implemented by others prior to issuance of a building permit for additional institutional square footage in Phases 3 and 4, the Project Applicant shall pay its fair-share toward implementation of this improvement (2.7 percent as presented in the TIA included in Appendix J).		Community Development that the improvement is no longer needed. If it is demonstrated that the improvement has been or is being implemented by others prior to issuance of a building permit for additional institutional square footage in Phases 3 and 4, the Project Applicant shall pay its fair-share toward implementation of this improvement. The Community Development Department shall confirm compliance with the applicable requirement.	
Phases 3 and 4 Prior to issuance of a building permit for additional institutional square footage in Phases 3 and 4	**MM 13-4**	Prior to issuance of a building permit for additional institutional square footage in Phases 3 and 4, the Project Applicant shall implement a third eastbound through lane on University between Ridgeline and Michelson, or demonstrate in a subsequent traffic analysis to the satisfaction of the Director of Community Development that the improvement is no longer needed. However, if the improvement has been identified or implemented as part of a short-term interim-year condition by others, the Project Applicant shall pay its fair-share contribution toward implementation of this improvement (1.01 percent as presented in the TIA included in Appendix J).	Community Development Department	If the required improvement is not being implemented by others, the Project Applicant shall implement this improvement or demonstrate in a subsequent traffic analysis to the satisfaction of the Director of Community Development that the improvement is no longer needed. If it is demonstrated that the improvement has been or is being implemented by others prior to issuance of a building permit for additional institutional square footage in Phases 3 and 4, the Project Applicant shall pay its fair-share toward implementation of this improvement. The Community Development Department shall confirm compliance with the applicable requirement.	

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

TIMING FOR PPP, PDF, OR MITIGATION MEASURE	PLANS, PROGRAMS, AND POLICIES (PPPs), PROJECT DESIGN FEATURES (PDFs), AND MITIGATION MEASURES	RESPONSIBLE FOR MONITORING	METHOD OF IMPLEMENTATION	COMPLETION DATE
Phases 1 through 4 Prior to the issuance of each grading permit or demolition permit, whichever occurs first for submittal of a Traffic Control Plan Ongoing monitoring of compliance during construction	**MM 13-5** Prior to the issuance of each grading permit or demolition permit, whichever occurs first, for each individual development project, the Project Applicant shall submit a Traffic Control Plan to the Building and Safety Department for review and approval. The Traffic Control Plan shall provide for temporary traffic control during construction activities for the project. To reduce traffic congestion, the Traffic Control Plan shall include, as necessary, appropriate, and practicable, the following: (1) temporary traffic controls (e.g., a flag person) during all phases of construction to maintain smooth traffic flow; (2) a requirement for at least one unobstructed lane to be maintained in both directions on roadways internal to campus and off-campus roadways subject to construction activity; (3) a requirement to maintain emergency access at all times; (4) scheduling of construction activities that affect traffic flow on the arterial system to off-peak hours; (5) consolidation of truck deliveries; and (6) incorporation of the truck routing plan required by Plan, Policy, and Program (PPP) 13-3. Compliance with the Traffic Control Plan shall be verified by the Building and Safety Department during construction.	Building and Safety Department	The Project Applicant shall submit a Traffic Control Plan to the Building and Safety Department for review and approval. The Building and Safety Department shall periodically monitor compliance with this Plan during construction.	

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

TIMING FOR PPP, PDF, OR MITIGATION MEASURE	PLANS, PROGRAMS, AND POLICIES (PPPs), PROJECT DESIGN FEATURES (PDFs), AND MITIGATION MEASURES		RESPONSIBLE FOR MONITORING	METHOD OF IMPLEMENTATION	COMPLETION DATE
5.14 UTILITIES AND SERVICE SYSTEMS					
Phases 3 and 4 Prior to issuance of the first grading permit	**MM 14-1**	Prior to issuance of the first grading permit for development of proposed buildings in Phases 3 and 4, the Project Applicant shall provide written evidence to the satisfaction of the Director of Community Development Department indicating that the Irvine Ranch Water District has determined there is sufficient transmission capacity to accept sewage flows from future campus development, particularly the new 74-unit dormitory building.	Community Development Department	The Project Applicant shall provide written evidence to the satisfaction of the Director of Community Development Department indicating that the Irvine Ranch Water District has determined there is sufficient transmission capacity to accept sewage flows from future campus development, particularly the new 74-unit dormitory building.	

CITY COUNCIL ORDINANCE NO. 17-05

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, APPROVING ZONE CHANGE 00629029-PZC TO REVISE ZONING ORDINANCE SECTION 9-21-7.B, SPECIAL DEVELOPMENT REQUIREMENTS FOR CONCORDIA UNIVERSITY (CHRIST COLLEGE IRVINE); PLANNING AREA 21, (TURTLE ROCK); FILED BY CONCORDIA UNIVERSITY

WHEREAS, the Irvine City Council approved General Plan Amendment 4237-GA on April 14, 1992, and Zone Change 5232-ZC on April 28, 1992, to change the zoning of two vacant parcels of land located on the Concordia University Irvine campus (formerly Christ College) from a zoning classification of 6.1 Institutional to 2.2 Low Density Residential for a maximum of 69 single-family dwelling units for Chapel Hill Vista (Concordia West residential) and 85 single-family dwelling units for Hill Crest Vista (Concordia East residential) and increase the maximum development intensity for the Concordia University main campus to 310,980 square feet of institutional use (later modified to 321,220 square feet) and 330 institutional dwelling units; and

WHEREAS, Concordia University proposes Conditional Use Permit (CUP) Modification 00612052-PCPU and Zone Change 00629029-PZC for the Campus Master Build-Out Plan Update ("Project"); and

WHEREAS, an application for Zone Change 00629029-PZC has been filed by Concordia University to revise the Special Development Requirements (SDRs) in Zoning Ordinance Section 9-21-7.B for Concordia University (Christ College Irvine) General Plan Amendment 4237-GA and Zone Change 5232-ZC in Planning Area 21, Turtle Rock; and

WHEREAS, the Project has a General Plan land use designation of General Institutional and a Zoning Ordinance designation of 6.1 Institutional; and

WHEREAS, this Zone Change will specifically update Zoning Ordinance Section 9-21-7.B to omit SDRs that have been satisfied, update SDRs, and/or convert Concordia University related SDRs to CUP Modification (00612052-PCPU) conditions of approval as described in the proposed Zone Change attached hereto as Exhibit A.

WHEREAS, the Zone Change conforms with the City of Irvine General Plan and Zoning Ordinance, and no change in the Zoning District designation of 6.1, Institutional is proposed; and

WHEREAS, the Zone Change is considered a "project" under regulations of the State of California Environmental Quality Act (CEQA); and

ATTACHMENT 2

WHEREAS, a Final Environmental Impact Report (EIR) for Concordia University CUP Modification/Zone Change Campus Master Build-Out Plan Update (SCH No. 2015091023, File No. 00618828-PCLE) (the "Final EIR") that includes responses to comments and corrections to the Draft EIR has been prepared pursuant to CEQA to address potential environmental impacts associated with this Zone Change for the Project and the City released this Final EIR on or about February 21, 2017; and

WHEREAS, on March 16, 2017, the Planning Commission of the City of Irvine ("Planning Commission") held a duly noticed public hearing on the Final EIR and the corresponding Zone Change and CUP Modification, at which time oral and documentary evidence was introduced along with the written recommendations of the Community Development Department of the City of Irvine, and the Planning Commission received public testimony; and

WHEREAS, the Planning Commission considered information presented by the applicant, the Community Development Department, and other interested parties at that public hearing on March 16, 2017; and

WHEREAS, on March 16, 2017, the Planning Commission, by a 5-0-0 vote, approved PC Resolutions 17-3596, 17-3597, and 17-3598, which: (1) recommended the City Council approve the Zone Change, (2) recommended the City Council certify the Final EIR, and (3) approved the CUP Modification, contingent on the City Council approving the Zone Change and certifying the Final EIR; and

WHEREAS, on April 25, 2017 the City Council of the City of Irvine ("City Council") held a duly noticed public hearing on the Final EIR and the corresponding Zone Change, at which time oral and documentary evidence was introduced along with the written recommendations of the Planning Commission and Community Development Department of the City of Irvine, and the City Council received public testimony; and

WHEREAS, the City Council considered the Planning Commission's recommendations, and information presented by the applicant, the Community Development Department, and other interested parties at a public hearing held on April 25, 2017; and

NOW, THEREFORE, the City Council of the City of Irvine DOES HEREBY ORDAIN as follows:

SECTION 1. The Recitals above are true and correct and incorporated herein by this reference.

SECTION 2. That pursuant to Section 15161 and 15168 of the State CEQA Guidelines, the City Council reviewed and considered the Final EIR (SCH No. 2015091023, File No. 00618828-PCLE) in making its decision on the Zone Change.

SECTION 3. The Final EIR identifies significant effects that would result if the Project is approved, however, based on substantial evidence in the record all environmental effects can feasibly be avoided or mitigated and will be avoided or mitigated by the imposition of the mitigation measures in the Final EIR which would reduce the Projects impacts to a level of insignificance. The applicable mitigation measures are included as Exhibit B to CC Resolution 17-29, and have been incorporated into the Project or identified as requirements of the Project.

SECTION 4. In accordance with Section 8 of the City of Irvine CEQA Procedures, the City Council finds that the Final EIR has been completed in compliance with CEQA and the State CEQA Guidelines, and the City's CEQA Procedures. The City Council, having final approval authority over the Project, certifies as complete and adequate the Final EIR.

SECTION 5. Pursuant to Fish and Game Code Section 711.4(c) and the conclusions of the EIR, all required Fish and Game filing fees shall be paid subsequent to certification of the Final EIR for the Concordia University CUP Modification/Zone Change Campus Master Build-Out Plan Update (SCH No. 2015091023).

SECTION 6. The findings required for approval of a Zone Change as set forth in Section 2-38-7 of the City of Irvine Zoning Ordinance have been made as follows:

A. The proposed Zone Change is consistent with the City of Irvine General Plan.

   The proposed Zone Change is consistent with the goals and objectives of the General Plan. Modifications to the Special Development Requirements (SDRs) in Zoning Ordinance Section 9-21-7.B will revise the SDRs by eliminating already satisfied requirements, updating remaining requirements, and replacing five SDRs (5, 10, 20, 21 and 25) with Project CUP Modification conditions of approval as contained in Planning Commission Resolution 17-3598, while implementing the General Plan goals and objectives as well as ensuring land use compatibility. No change in the maximum development intensity of 321,220 square feet of institutional uses and 330 dormitory units is proposed. No change to the 6.1, Institutional Zoning designation is proposed.

B. The proposed Zone Change is consistent with any applicable concept plan.
   This finding is not applicable to the proposed Zone Change as there is no concept plan for Planning Area 21.

C. The proposed Zone Change meets all the requirements set forth within Division 8 for the dedication of permanent open space through a specified phased implementation program for affected planning areas and zoning districts.

   This finding is not applicable as Planning Area 21, including the Concordia University Project site, is not subject to the phased permanent open space dedication implementation program set forth in Zoning Ordinance Division 8-1.

D. The proposed Zone Change is in the best interest of the public health, safety and welfare of the community.

   The Zone Change will not negatively impact the health, safety, and welfare of the community. No change in the 6.1 Institutional Zoning designation is proposed. No increase in overall development intensity (i.e., square footage and dormitory units) results from the proposed Zone Change. Based on the analysis presented in the Final EIR, with incorporation of Project Design Features (PDFs); Plans, Policies, and Programs (PPPs), including current Standard Conditions (SCs); and Project-specific Mitigation Measures (MMs), implementation of the proposed Campus Master Build-Out Plan Update and associated Zone Change would not result in any significant unavoidable impacts for each of the topical issues evaluated.

E. Based upon information available at the time of approval, adequate sewer and water lines, utilities, sewage treatment capacity, drainage facilities, police protection, fire protection/emergency medical care, vehicular circulation and school facilities will be available to serve the area affected by the proposed Zone Change when development occurs.

   The existing campus is comprised of 16 institutional buildings totaling approximately 243,571 square feet and 256 dormitory units with 1,024 beds. The proposed Project updates the previously approved campus master build-out plan, while maintaining the previously approved 321,220-square-foot cap of institutional buildings and 330 dormitory units.

   With incorporation of Project Design Features (PDFs); Plans, Policies, and Programs (PPPs), including current Standard Conditions (SCs); and Project-specific Mitigation Measures (MMs), existing sewer and water lines, utilities, sewage treatment capacity, drainage facilities, police protection, fire protection/emergency medical care, vehicular circulation and school facilities are available and will be upgraded as needed to adequately serve the proposed Campus Master Build-Out Plan Update project when development occurs. On-site utility infrastructure (e.g., water [potable and recycled], wastewater, drainage, electricity, natural gas, and communications) would be provided, as necessary, to serve the proposed uses and would connect to the existing backbone

infrastructure which would require on-site improvements and off-site improvements along Ridgeline Drive and University Drive (for upgraded dry utility infrastructure).

F. If the proposed Zone Change affects land located within the coastal zone, the proposed Zone Change will comply with the provisions of the land use plan of the certified local coastal program.

The proposed Zone Change does not affect land located within the Coastal Zone.

SECTION 7. The City Clerk shall certify to the passage of this Ordinance and shall enter the Resolution into the book of original Resolutions.

NOW, THEREFORE, based on the above findings, the City Council of the City of Irvine DOES HEREBY APPROVE Zone Change 00629029-PZC, amending the Zoning Ordinance's applicable text consistent with Exhibit A.

PASSED AND ADOPTED by the City Council of the City of Irvine at a regular meeting held on the 9th day of May 2017.

_____
MAYOR OF THE CITY OF IRVINE

ATTEST:

_____
CITY CLERK OF THE CITY OF IRVINE

STATE OF CALIFORNIA)
COUNTY OF ORANGE) SS
CITY OF IRVINE)

I, MOLLY MCLAUGHLIN, City Clerk of the City of Irvine, HEREBY DO CERTIFY that the foregoing ordinance was introduced for first reading on the 25th day of April 2017, and duly adopted at a regular meeting of the City Council of the City of Irvine, held on the 9th day of May 2017.

AYES: COUNCILMEMBERS:

NOES: COUNCILMEMBERS:

ABSENT: COUNCILMEMBERS:

ABSTAIN: COUNCILMEMBERS:

Concordia University Zone Change 00629029-PZC

CHAPTER 9-21. - PLANNING AREA 21 (TURTLE ROCK)

Sec. 9-21-1. - Land use zoning map.

(See Planning Area 21 map following section 9-21-5.)

(Code 1976, § V.E-821.1; Ord. No. 92-3, 4-14-92; Ord. No. 92-4, § 3, 4-28-92; Ord. No. 94-7, § 3, 6-14-94; Ord. No. 95-4, 5-9-95; Ord. No. 95-22, § 3, 11-28-95; Ord. No. 97-05, 5-13-97)

Sec. 9-21-2. - Introduction.

Planning Area 21, Turtle Rock, is located in the southern area of the City. Boundaries include University Drive and Culver Drive to the west, University Drive and Ridgeline Drive to the north, Planning Area 22 to the east and Bonita Canyon Road to the south.

(Code 1976, § V.E-821.2; Ord. No. 92-3, 4-14-92; Ord. No. 92-4, § 3, 4-28-92; Ord. No. 94-7, § 3, 6-14-94; Ord. No. 95-4, 5-9-95; Ord. No. 95-22, § 3, 11-28-95)

Sec. 9-21-3. - Statistical analysis.

			Building Intensity Standard			
General Plan Category	Zoning Number	Zoning District	Maximum Regulatory Dwelling Units	Additive Dwelling Units[2]	Maximum Regulatory Square Feet	Additive Square Feet[2]
Conservation and Open Space:						
Recreation	1.5	Recreation	0	0	0	0
Water Bodies	1.6	Water Bodies	0	0	0	0
Residential:						
Low Density	2.2	Low Density	3,080	0	0	0
Low Density	2.3	Medium Density	44	0	0	0
Medium Density	2.3	Medium	77	0	0	0

EXHIBIT A

		Density				
Medium-High Density	2.3	Medium Density	252	0	0	0
Medium-High Density	2.4	Medium-High Density	470	0	0	0
Institutional:						
Educational Facilities	6.1	Institutional	0	0	227,941	0
Educational Facilities	6.1	Institutional	330	0	310,980	10,240
Public Facilities	2.3	Medium Density	0	0	30,000	0
Unallocated Dwelling Units[1]	n/a	n/a	0	0	0	0
PLANNING AREA TOTAL			4,253	0	568,921	10,240

Unallocated dwelling units represent those units remaining in a Planning Area that may be built anywhere in the same Planning Area. These units are within the maximum development intensity for the Planning Area; and, therefore placement of Unallocated dwelling units into any residential category within the planning area for purposes of development is determined to be consistent with the General Plan and Zoning Code with regard to intensity allocation only, provided that placement is otherwise consistent with site specific zoning regulations and that any potential environmental impacts are adequately addressed, including traffic impacts, pursuant to CEQA.

See Section 9-0-3.C. Building Intensity Standards.

(Code 1976, § V.E-821.3; Ord. No. 92-3, 4-14-92; Ord. No. 92-4, § 3, 4-28-92; Ord. No. 94-7, § 3, 6-14-94; Ord. No. 95-4, 5-9-95; Ord. No. 95-22, § 3, 11-28-95; Ord. No. 10-04, § 3, 4-13-10; Ord. No. 12-09, § 3(Exh. A), 5-22-12)

Sec. 9-21-4. - Land use regulations.

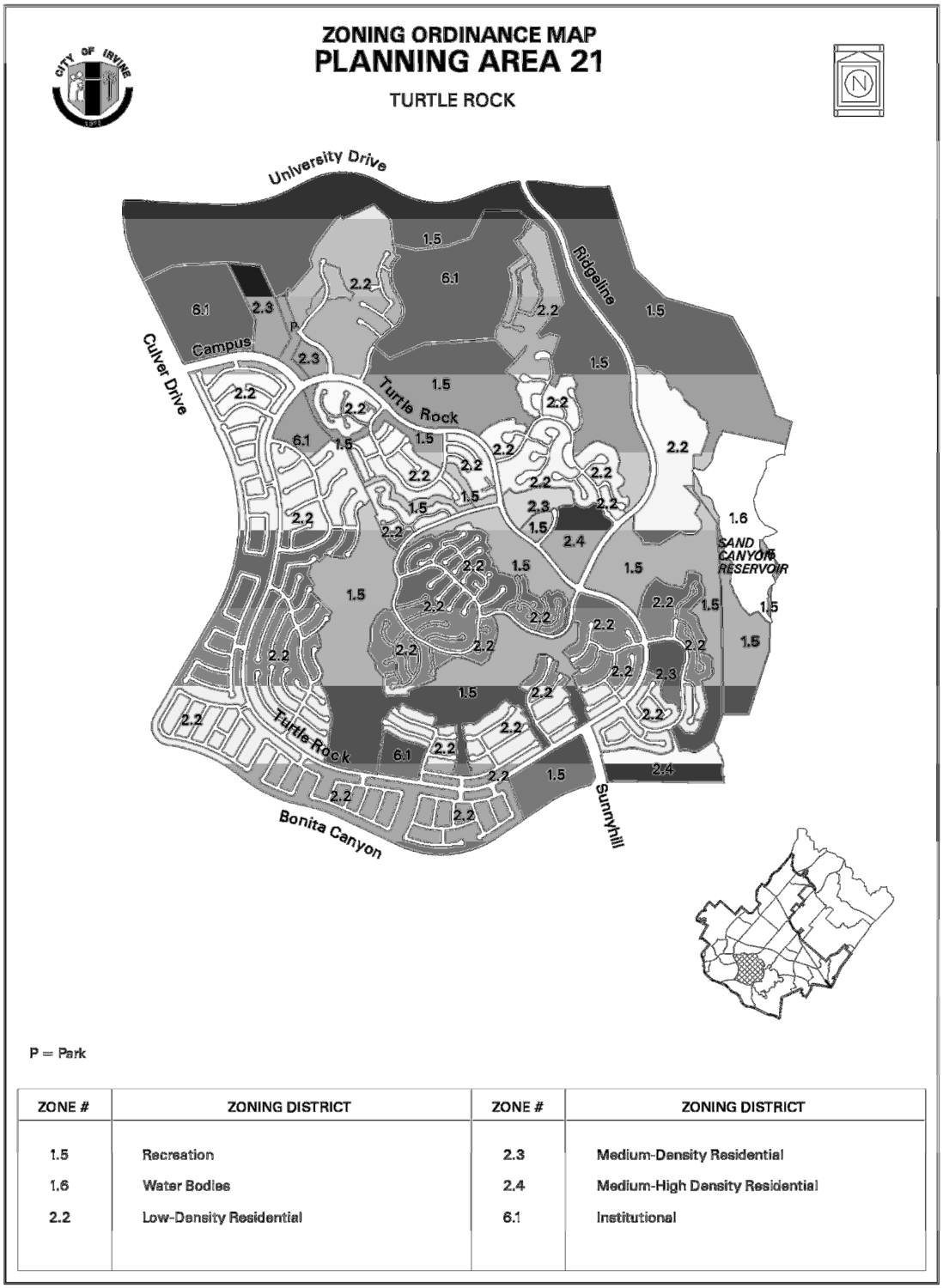
See section 3-3-1 (Land use matrix).

(Code 1976, § V.E-821.4; Ord. No. 92-3, 4-14-92; Ord. No. 92-4, § 3, 4-28-92; Ord. No. 94-7, § 3, 6-14-94; Ord. No. 95-4, 5-9-95; Ord. No. 95-22, § 3, 11-28-95)

Sec. 9-21-5. - Development standards.

See chapter 3-37 (Development Standards).

(Code 1976, § V.E-821.5; Ord. No. 92-3, 4-14-92; Ord. No. 92-4, § 3, 4-28-92; Ord. No. 94-7, § 3, 6-14-94; Ord. No. 95-4, 5-9-95; Ord. No. 95-22, § 3, 11-28-95)



ZONE #	ZONING DISTRICT	ZONE #	ZONING DISTRICT
1.5	Recreation	2.3	Medium-Density Residential
1.6	Water Bodies	2.4	Medium-High Density Residential
2.2	Low-Density Residential	6.1	Institutional

Planning Area 21, Turtle Rock

Sec. 9-21-6. - Reserved.

Sec. 9-21-7. - Special development requirements.

A. General.

1. See division 3 for applicable general development requirements.

2. All development within this planning area shall be in accordance with the Hillside Overlay District and any other hillside regulations in effect at the time of tentative map approval.

3. Prior to the issuance of building permits for 4,000 total dwelling units in this planning area, the City Council shall determine whether a fourth permanent access is needed after reviewing the recommendation of the Director of Public Works. The Director of Public Works shall base the recommendation on annual analysis of the existing and projected traffic conditions.

4. All areas designated for residential use may be developed at a lower density than that indicated without requiring a zone change.

B. Special development requirements: Concordia University (former Christ College Irvine) General Plan Amendment 4237-GA/Zone Change 5232-ZC and Campus Build-Out Plan 00612052-PCPU/Zone Change 00629029-PZC.

Concordia East & West Residential and Concordia University:

1. The open space areas around the edges of the project as depicted on Drawing 1, Constraints Summary Map (EIR 4237-GA, Appendix K: Graphics Appendix) shall be defined as lettered lots in any tentative and final maps, other than maps for financing and conveyance only. The lettered lots shall be restricted as follows:

   a. With the exception of the Keck Astronomy Center (approximately 500 square feet), no development of any type shall be permitted.

   b. With the exception of the Keck Astronomy Center (approximately 500 square feet), no grading within the open space area except remedial grading as permitted by staff on a case-by-case basis in the specific remedial areas shown in Drawing 15 (Appendix K of the EIR), Concordia East residential (former Hillcrest Vista) Conceptual Grading Plan.

   c. The open space area separating the Concordia West residential (former Chapel Hill Vista) development from the existing Vista homes shall be planted as a landscape buffer in accordance with Drawing 11, Conceptual Landscape Plan for Chapel Hill Vista (Appendix K).

   d. These restrictions shall not preclude implementation of any fuel modification requirements placed upon the project by the Orange County Fire Authority, if such requirements do not interfere with the primary purpose of either the landscape buffer, or open space corridor, as determined by the Director of Community Development.

   e. Provide for a minimum 70-foot unfenced open space corridor between French Hill and Mason Regional Park.

2. Prior to issuance of grading permits, the applicant shall submit for review and comment, to OC Parks, precise grading plans and sections relative to any infringement within park boundaries, and precise plans for drainage entering or affecting Mason Regional Park.

3. Prior to issuance of any grading permits, the applicant shall submit for review and approval by the Chief Building Official a construction traffic routing plan which routes construction traffic away from residential areas. The routing plan shall be shown as a map on the grading and building plans and shall specify that construction traffic is to be routed to Ridgeline Drive, to University Avenue, and directly to the I-405 freeway.

4. Prior to the issuance of building permits for residential uses, each applicant shall demonstrate that all rooftop mechanical and electrical equipment is screened from upper elevation vantage

points or integrated into the building design, and that all plumbing vents and ducts are grouped together in order to minimize roof penetration.

5. Where feasible (i.e., where reclaimed water line hookups are available), all landscaped common areas shall use reclaimed water when permanent irrigation is required and the supply of recycled water is adequate.

6. Acceptance and maintenance of all surface and subdrainage facilities for the Concordia West (former Chapel Hill Vista), Concordia East (former Hillcrest Vista) and Concordia University (former Christ College) campus, including the on-site perimeter drainage facilities for Concordia West, as described in the Law Environmental hydrogeologic evaluation dated January 24, 1992, shall be the responsibility of the landowner and/or homeowners association. No future dedication of these facilities will be accepted by the City of Irvine.

7. a. In conjunction with submittal of swimming pool or spa plans, the applicant shall submit a soil report prepared and signed by a licensed civil and/or geotechnical engineer. The report shall include, but not be limited to, the following information:

   (1) A plot showing the location of all test borings and/or excavations.

   (2) Descriptions and classifications of the materials/soils encountered.

   (3) Elevation of the water table, if encountered.

   (4) Recommendations for foundation type and design criteria, including bearing capacity, provisions to minimize the effects of expansive soils, and the effects of adjacent loads.

   (5) Expected total differential settlement.

   b. Exception: The City Building Official may waive the requirement for submission of a soil report if the following conditions are met:

   (1) A hydrostatic valve is installed in the pool to relieve hydrostatic pressure.

   (2) The pool is designed to accommodate the effects of expansive soils.

Concordia East and West Residential:

8. A landscape treatment shall be required for those facing either adjacent Enclave I (Vistas), Ridgeline Drive or Turtle Rock Drive which incorporates plant materials at the top of slopes at the intersection of rear and side property lines of heights sufficient to provide a visual break to continuous lot elevations.

9. In conjunction with submittal of any discretionary development application covering Concordia West (former Chapel Hill Vista), and/or Concordia East (former Hillcrest Vista), the applicant shall submit an adequate hydrology study of the area covered by the development application. The study shall substantiate the downstream drainage facilities to determine the adequacy and ownership to handle the proposed increase in runoff anticipated by such development.

Concordia East Residential:

10. Any future conditional use permit/master plan for Concordia East residential (former Hillcrest Vista) shall include provision for fencing which prohibits access to the open space area along Ridgeline Drive.

Concordia West Residential:

11. All homes built within Concordia West (former Chapel Hill Vista) will contain roof gutters, and said gutters will be connected to nonerosive devices as provided for in the Law Environmental report.

(Code 1976, § V.E-821.6; Ord. No. 92-3, 4-14-92; Ord. No. 92-4, § 3, 4-28-92; Ord. No. 94-7, § 3, 6-14-94; Ord. No. 95-4, 5-9-95; Ord. No. 95-22, § 3, 11-28-95; Ord. No. 09-02, § 3, 3-24-09)

CONCORDIA
UNIVERSITY IRVINE

April 25, 2017

Proposed Concordia Commitments

Concordia University Irvine supports the City staff recommendation to City Council, and requests that the Council adopt the resolution certifying the Environmental Impact Report and introduce for first reading the Ordinance revising the special development requirements in the Zoning Code.

Concordia University repeats its commitment to comply with all of the Planning Commission Conditions. Specifically, Concordia University is committed to compliance with Conditions 6.21, 6.24 and 6.25 of Planning Commission Resolution No. 17-3598 which impose new traffic and event management and reporting requirements on the University, and provide the City with effective measures to monitor and enforce our compliance. In addition, Concordia University Irvine commits to the following:

1. Concordia University understands and agrees that City approval of the campus build out plan is a phased approval. No construction of any improvements in phases 3 and 4 shall be permitted unless and until further discretionary approval of the City is obtained, and additional public review of phases 3 and 4 is completed.

2. Concordia University shall limit the additional Concordia traffic trips throughout phases 1 and 2 of our campus build out plan to the existing 4,732 trips ("net zero" additional trips through the end of phase 2, which coincides with the currently scheduled completion of the City-approved intersection improvements at University Drive and Ridgeline Drive/Rosa Drew Lane).

3. Any and all vehicle trip counts required by Condition 6.21 shall be conducted by an independent qualified entity that is approved by City staff at the same time that City staff approves the proposed dates for such vehicle counts.

4. The requirement in Condition 4.17 that Concordia University enter an agreement with the City and post security in a form and in an amount acceptable to the City Engineer guaranteeing possible future construction of a traffic signal at Concordia East and Ridgeline Drive, shall also require the University to contribute the same amount to another unfunded traffic improvement in the immediate area of the University, if the Transportation Commission determines a traffic signal at Concordia East and Ridgeline Drive is not needed. The specific location and traffic improvement(s) to be constructed with the use of such funds shall be determined by the Transportation Commission.

5. During phases 1 and 2, Concordia University shall limit the number of poles constructed for athletic field lighting to no more than 15.

ATTACHMENT 3

RECORDING REQUESTED BY
AND WHEN RECORDED MAIL TO:

CITY OF IRVINE
One Civic Center Plaza
P.O. Box 19575
Irvine, CA 92623-9575
Attn: City Clerk

(Space Above this Line is for Recorder's Use Only)

This Agreement is recorded at the request and for the benefit of the City of Irvine and is exempt from the payment of a recording fee pursuant to Government Code § 6103.

MEMORANDUM OF UNDERSTANDING AND COVENANTS

Between CITY OF IRVINE and CONCORDIA UNIVERSITY

For

Concordia University's Campus Master Build-Out Plan Update

(Conditional Use Permit Modification 00612052-PCPU, Zone Change 00629029-PZC, & Environmental Impact Report SCH No. 2015091023/File No. 00618828-PCLE)

AGREEMENT

THIS MEMORANDUM OF UNDERSTANDING AND COVENANTS ("MOU") is made this 9th day of May, 2017, by and between the CITY OF IRVINE, a California charter city ("City"), and CONCORDIA UNIVERSITY, a California nonprofit religious corporation ("Concordia"). The City and Concordia are sometimes referred herein individually as a "Party" and collectively as the "Parties."

RECITALS

The Parties enter into this MOU on the basis of the following facts, understanding, and intentions:

A. Concordia is the owner of that certain property located at 1530 Concordia West in Planning Area 21, Turtle Rock and more particularly described and depicted in Exhibit A, attached hereto and incorporated herein by this reference (the "Property"). The Property is generally south of University Drive, west of Ridgeline Drive, north of Turtle Rock Drive, and east of Culver Drive.

B. In 1992 and 1993, the City approved General Plan Amendment 4237-GA (on April 14, 1992), Zone Change 5232-ZC (on April 28, 1992), and Conditional Use Permit ("CUP") 12273-CPU (on August 5, 1993). Together, these entitlements provided for the "Campus Master Build-Out Plan" of Concordia's main campus.

C. In or around July 2014, Concordia proposed: (1) a major modification to its existing CUP to reflect its proposed "Campus Master Build-Out Plan Update" (CUP Modification 00612052-PCPU), and (2) a zone change to revise certain special development requirements ("SDRs") identified in Section 9-21-7.B of the Irvine Zoning Ordinance (Zone Change 00629029-PZC) (collectively, the "Project"). Pursuant to the California Environmental Quality Act (Pub. Res. Code §§ 21000 *et seq.*) ("CEQA") and State CEQA Guidelines (14 C.C.R. §§ 15000 *et seq.*), the City prepared an Environmental Impact Report ("EIR") to analyze all potential adverse environmental impacts of the proposed Project (SCH No. 2015091023, File No. 00618828-PCLE), as well as a Mitigation Monitoring and Reporting Program ("MMRP") and CEQA findings.

D. On March 16, 2017, the Planning Commission for the City of Irvine ("Planning Commission") approved Planning Commission Resolutions 17-3596 and 17-3597, which: (1) recommended the City Council certify the EIR and adopt the corresponding MMRP and CEQA findings, and (2) recommended the City Council approve Zone Change 00629029-PZC. On the same date, the Planning Commission also approved Planning Commission Resolution 17-3598, which approved CUP Modification 00612052-PCPU, contingent on the City Council approving Zone Change 00629029-PZC and certifying the EIR. Planning Commission Resolution 17-3598 is attached hereto as Exhibit B and incorporated herein by this reference.

E. The Planning Commission's approval of CUP Modification 00612052-PCPU was subject to numerous conditions of approval, including without limitation: Condition 2.34 relating

to future development approvals for the Project; Conditions 6.21, 6.24 and 6.25 relating to "trip counts"/traffic management and special events limits/reporting; Condition 4.17 relating to financial security for a potential traffic signal at the intersection of Ridgeline Drive and Concordia East; Conditions 3.33, 3.34 and 6.26 relating to athletic field lighting; and Condition 2.33 relating to construction staging and construction management plans.

F. On April 25, 2017, the City Council for the City of Irvine ("City Council") held a duly-noticed public hearing on Zone Change 00629029-PZC and the EIR for the Project. At that public hearing, authorized representatives for Concordia reaffirmed Concordia's commitment to comply with all of the conditions of approval of Planning Commission Resolution No. 17-3598. In addition, Concordia's authorized representatives — on Concordia's own accord — offered to make additional commitments (described in Section 2 and Exhibit D of this MOU). These additional commitments clarify, amplify, and supplement certain conditions of approval to Planning Commission Resolution No. 17-3598, and their corresponding CEQA findings (set forth in Exhibit A to City Council Resolution No. 17-29) and requirements in the MMRP (set forth in Exhibit B to City Council Resolution No. 17-29). The MMRP is attached hereto as Exhibit C and incorporated herein by this reference.

G. After closing the April 25, 2017 public hearing, the City Council: (1) directed City staff to prepare a memorandum of understanding with Concordia to memorialize the additional commitments proposed by Concordia's representatives; (2) approved City Council Resolution No. 17-29 certifying the EIR and adopting the MMRP and CEQA findings for the Project; and (3) approved the first reading of City Council Ordinance No. 17-05 approving Zone Change 00629029-PZC.

H. A table summarizing the conditions of approval to Planning Commission Resolution No. 17-3598 (Ex. B to this MOU) and provisions of the MMRP (Ex. C to this MOU) that are clarified, amplified, and supplemented by this MOU is attached hereto as Exhibit D for reference purposes only. This MOU does not alter in any manner those conditions of approval to Planning Commission Resolution No. 17-3598 (Ex. B to this MOU) and provisions of the MMRP (Ex. C to this MOU) which are not discussed in this MOU.

I. The purpose of this MOU is to memorialize the understanding of the City and Concordia regarding the additional commitments proposed by Concordia's representatives and accepted by the City Council at the April 25, 2017 City Council meeting (described in Section 2 and Exhibit D of this MOU) and to establish that these commitments are covenants running with the land.

NOW, THEREFORE, and in consideration of the mutual covenants contained herein, the Parties mutually agree to the following:

SECTION 1. INCORPORATION OF RECITALS.

The Recitals set forth above are incorporated herein by reference as if fully restated.

[AGREEMENT CONTINUES ON NEXT PAGE]

SECTION 2. CONCORDIA'S COVENANTS.

A. Discretionary Approvals are Required for Phases 3 and 4 of the Campus Master Build-Out Plan.

The City's approval of its Campus Master Build-Out Plan (as updated by the City's approval of the Project and any subsequent discretionary approvals) is a phased approval consisting of four phases, each of which is described in Section 3.4 of the Draft EIR for the Project. Concordia understands, agrees, and covenants that no permits shall be issued and no construction of any improvements shall be permitted for any portion of Project Phases 3 and 4 unless and until Concordia obtains further discretionary approval(s) from the City (such as a subsequent modification to CUP Modification 00612052-PCPU pursuant to Chapter 2-19 of the Irvine Zoning Ordinance). Concordia further understands, agrees, and covenants that additional public review (including, without limitation, any review required by the California Environmental Quality Act) shall be required for any discretionary approval related to any portion of Phases 3 or 4, and that any discretionary approval for any portion of Phases 3 or 4 shall, at a minimum, require a duly noticed public hearing before the City's Planning Commission.

The covenants set forth in this Section 2.A are intended to clarify, amplify, and supplement Condition 2.34 to Planning Commission Resolution 17-3598 (Ex. B) and Plan, Program, and Policy (PPP) Number 1-3 to the MMRP (Ex. C).

B. The Maximum Daily Trip Cap Cannot Exceed Pre-Project Conditions of 4,732 Vehicle Trips Per Day Until, At Earliest, Phase 3 of the Campus Master Build-Out Plan.

On-road traffic counts that the City conducted in October of 2014 indicate that, prior to the City's approval of the Project, Concordia's use of the Property generated a two-way volume of up to 4,732 vehicle trips per day. Concordia understands, agrees, and covenants that, until such time as it obtains approvals to proceed with Phase 3 of the Campus Master Build-Out Plan (as updated by the City's approval of the Project, and any subsequent discretionary approval), the maximum Daily Trip Cap (as that term is defined in Condition 6.21 to Planning Commission Resolution 17-3598) shall not exceed 4,732 trips per day, regardless of the amount of actual existing institutional square footage on the campus. Concordia understands, agrees, and covenants that, notwithstanding Condition 6.21 to Planning Commission Resolution 17-3598, increasing the actual existing square footage on the campus during Phases 1 and 2 beyond pre-Project conditions (of approximately 243,571 square feet) shall not increase the maximum Daily Trip Cap.

The intent of this covenant is to ensure "net zero" additional vehicle trips until, at the earliest, Concordia obtains approvals to proceed with Phase 3 of the Campus Master Build-Out Plan (as updated by the City's approval of the Project and any subsequent discretionary approval), which may coincide with completion of certain City-approved intersection improvements at University Drive and Ridgeline Drive/Rosa Drew Lane.

Concordia further understands, agrees, and covenants that failure to comply with the maximum Daily Trip Cap of 4,732 trips per day until, at the earliest, Concordia obtains approvals to proceed with Phase 3 of the Campus Master Build-Out Plan (as updated by the City's approval of the Project and any subsequent discretionary approval), entitles the City to utilize any or all of the enforcement mechanisms set forth in State, Federal or local law (including, without limitation, the City's Municipal Code and Zoning Ordinance), and in Condition 6.21 to Planning Commission Resolution 17-3598, including without limitation, requiring Concordia to reduce on-campus activities and/or implement transportation demand management measures (such as carpooling, use of alternative modes of transportation, and parking management) to ensure immediate compliance with trip cap limitations, and requiring Concordia to demonstrate compliance with trip cap limitations prior to obtaining development approvals (including without limitation grading and building permits) for uses within the campus.

The covenants set forth in this Section 2.B are intended to clarify, amplify, and supplement Conditions 6.21, 6.24 and 6.25 to Planning Commission Resolution 17-3598 (Ex. B) and Mitigation Measure (MM) Number 9-1 to the MMRP (Ex. C). The Parties further understand, agree, and covenant that, except as set forth above in this Section 2.B, this MOU does not change any requirement for "vehicle trip cap and monitoring" set forth in Condition 6.21 or Mitigation Measure Number 9-1, including, without limitation, the requirement that daily trip generation shall not exceed 5,500 daily trips at full campus build-out (i.e., 321,220 square feet of institutional uses and 330 dormitory units) for any approval Concordia may obtain for Phases 3 and/or 4 of the Campus Master Build-Out Plan (as updated by the City's approval of the Project and any subsequent discretionary approval).

C. The City Shall be Primarily Responsible for Conducting Biannual Vehicle Trip Counts On Dates Unilaterally Selected By The City.

Notwithstanding Condition 6.21 to Planning Commission Resolution 17-3598, the City and Concordia understand, agree, and covenant that the City shall conduct the biannual vehicle trip counts required by Condition 6.21, subject to the timing requirements set forth in Condition 6.21, using City personnel or an independent qualified entity selected and approved by the City. Concordia understands, agrees, and covenants that Concordia shall be responsible for reimbursing the City for the actual and necessary costs of the traffic counts within thirty (30) days of receiving a request for reimbursement. The Parties further understand, agree, and covenant that the City may conduct these traffic counts on dates the City unilaterally selects without prior notice to Concordia, provided those dates are during the month of October on three successive days (Tuesday, Wednesday and Thursday), and on a weekend day (Friday or Saturday) in the Spring when a special event or special events with the largest attendance and largest vehicle trip generation is/are anticipated. Upon request, Concordia shall provide the City with a list of upcoming University and Non-University special events to occur on campus, which includes the date(s), a description, anticipated attendance, and anticipated vehicle trip generation for each identified special event.

The Parties further understand, agree, and covenant that, if the City either notifies Concordia that the City will not conduct an upcoming biannual traffic count or neglects to

conduct a biannual traffic count, Concordia shall become responsible for employing an independent qualified entity to conduct the biannual traffic counts in accordance with the requirements set forth in Condition 6.21 until such time as the City notifies Concordia that the City will resume City-conducted traffic counts pursuant to and in accordance with this Section 2.C. To the extent that the City notifies Concordia that the City will not conduct an upcoming biannual traffic count or neglects to conduct a biannual traffic count, the City shall provide written notice of the same to the Board of Directors of the Concordia East Community Association and Concordia West Community Association either concurrent with notice to Concordia or as soon as possible after discovering that the City has neglected to conduct a biannual traffic count.

The Parties further understand, agree, and covenant that this MOU does not limit or restrict the City's rights, as set forth in Condition 6.21, to require or conduct additional traffic counts if the City determines such traffic counts are necessary.

The covenants set forth in this Section 2.C are intended to clarify, amplify, and supplement Condition 6.21 to Planning Commission Resolution 17-3598 (Ex. B) and Mitigation Measure (MM) Number 9-1 to the MMRP (Ex. C).

D. The City May Use The Traffic Signal Financial Security For Different Traffic Improvements.

Notwithstanding Condition 4.17 to Planning Commission Resolution 17-3598, Concordia understands, agrees, and covenants that, if the City determines a traffic signal is not needed at the intersection of Concordia East and Ridgeline Drive, the City may use the financial security Concordia provided for that proposed signal to pay for different unfunded traffic improvements in the immediate area of the Property. The Parties understand, agree, and covenant that the specific location and traffic improvement(s) to be constructed with the use of such funds shall be based upon the determination and/or recommendation of the Transportation Commission for the City of Irvine.

The covenants set forth in this Section 2.D are intended to clarify, amplify, and supplement Condition 4.17 to Planning Commission Resolution 17-3598 (Ex. B) and Project Design Feature (PDF) Number 13-2 to the MMRP (Ex. C).

E. Athletic Field Lighting On The Property Is Limited To Fifteen Poles Until, At Earliest, Phase 3 of the Campus Master Build-Out Plan.

Notwithstanding Condition 3.33 to Planning Commission Resolution 17-3598, Table 3-5 of the Draft EIR for the Project ("Athletic Field Lighting"), Exhibit 3-24 to the Draft EIR for the Project ("Conceptual Athletic Field Lighting Plan"), or any other approved planning document that addresses athletic field lighting on the Property, Concordia understands, agrees, and covenants that, until, at the earliest, such time as it obtains approvals to proceed with Phase 3 of the Campus Master Build-Out Plan (as updated by the City's approval of the Project and any subsequent discretionary approval), the number of athletic field lighting poles shall not exceed fifteen (15) permanent athletic field light poles on the entire Property, and no temporary lighting

apparatus may be used to illuminate any athletic facility for athletic purposes once the permanent athletic field light poles are in place and operational.

The Parties further understand, agree, and covenant that, except as set forth above in this Section 2.E, this MOU does not change any requirement for athletic field lighting set forth in Conditions 3.33, 3.34 and 6.26 to Planning Commission Resolution 17-3598, Table 3-5 of the Draft EIR for the Project ("Athletic Field Lighting"), Exhibit 3-24 to the Draft EIR for the Project ("Conceptual Athletic Field Lighting Plan"), Attachment B of the Final EIR ("Expanded Lighting Analysis"), or any other approved planning document, including without limitation, maximum pole heights, luminaire type, mounting height, and LED fixture quantity. Concordia understands, agrees and covenants that the locations and construction of the fifteen (15) permanent athletic field light poles must be consistent with the locations, maximum pole heights, luminaire type, mounting height, LED fixture quantity, light spillage, and total kW loads for each field, as analyzed in the lighting studies for the EIR for the Project and as reflected in the Expanded Lighting Analysis (Attachment B to the Final EIR). Concordia further understands, agrees and covenants that the amount and locations of any additional light poles beyond the fifteen (15) permanent athletic field light poles discussed in this Section 2.E shall require discretionary approval of the City's Planning Commission and will conform to or not exceed the amount (thirty three (33) total light poles inclusive of the fifteen (15) light poles discussed in this Section 2.E), physical characteristics (i.e., maximum pole heights, luminaire type, mounting height, LED fixture quantity), and locations set forth in Table 3-5 of the Draft EIR for the Project ("Athletic Field Lighting"), Exhibit 3-24 to the Draft EIR for the Project ("Conceptual Athletic Field Lighting Plan"), and Attachment B of the Final EIR ("Expanded Lighting Analysis").

The covenants set forth in this Section 2.E are intended to clarify, amplify, and supplement Conditions 3.33, 3.34 and 6.26 to Planning Commission Resolution 17-3598 (Ex. B) and Project Design Feature (PDF) 1-2 and Mitigation Measure (MM) 1-2 to the MMRP (Ex. C).

F. Concordia Will Seek Input From Concordia East and Concordia West on Construction Staging and Management Plans

Concordia understands, agrees, and covenants that, prior to issuance of each grading permits for Phases 1 and 2 of the Campus Master Build-Out Plan, it will meet with and seek input from the Board of Directors of the Concordia East Community Association and the Concordia West Community Association on the construction management plans required by Condition 2.33 to Planning Commission Resolution 17-3598.

The covenants set forth in this Section 2.F are intended to clarify, amplify, and supplement Condition 2.33 to Planning Commission Resolution 17-3598.

SECTION 3. BINDING ON SUCCESSORS; COVENANTS RUN WITH THE LAND; CONSENT TO RECORD MOU AGAINST PROPERTY

The provisions of this MOU shall constitute covenants which shall run with the land comprising the Property for the benefit thereof, and the burdens and benefits hereof shall bind

and inure to the benefit of each of the Parties hereto and all successors in interest to the Parties hereto.

Concordia covenants that it shall not transfer the Property to an agent, assign, transferee, grantee, lessee, or subsequent purchaser (collectively, "transferee") without notice to the transferee of the covenants set forth in this MOU. In order to impart constructive notice of this restriction, Concordia agrees that the City shall record this MOU against the Property, and Concordia consents to such recordation.

Concordia further covenants that it shall not transfer the Property to a successor in interest unless that successor covenants that he, she, they or it and his, her, their or its successors in interest shall not transfer the Property to a transferee without providing notice of the covenants set forth in this MOU.

Every person who now or hereafter owns or acquires any right, title, or interest in or to any portion of the Project or the Property is and shall be conclusively deemed to have consented and agreed to every provision contained herein, whether or not any reference to this MOU is contained in the instrument by which such person acquired an interest in the Project or the Property.

SECTION 4. THIRD PARTY LEGAL ACTION.

Concordia shall defend, indemnify, and hold harmless the City and its agents, officers, and employees from and against any claim, action, or proceeding against the City agency or its agents, officers, or employees to attack, set aside, void, or annul an approval by the City, including, without limitation, an action by an advisory agency, appeal board, or legislative body concerning this MOU. This defense and indemnification shall include the payment of all legal costs incurred on behalf of the City in connection with the application, and the defense of any claim, action or proceeding challenging the approval. The City will promptly notify Concordia of any claim, action, or proceeding and will cooperate fully in the defense.

In the event a legal challenge to this MOU or any related discretionary approval is successful, and an award of attorney fees is made to the challenger, Concordia shall be responsible to pay the full amount of such an award.

SECTION 5. NOTICES.

Any notice, request, approval or other communication to be provided under this MOU shall be in writing and provided by personal service or a form of express mail or service and addressed to:

[AGREEMENT CONTINUES ON NEXT PAGE]

If to City:

City of Irvine
P.O. Box 19575
Irvine, CA 92623-9575
Attention: Director of Community Development

If to Concordia University:

Concordia University
1530 Concordia West
Irvine, CA 92612
Attention: General Counsel

If to Concordia East Community Association:

Concordia East Community Association
c/o Berding & Weil LLP
575 Anton Blvd., Suite 460
Costa Mesa, CA 92626

If to Concordia West Community Association:

Concordia West Community Association
c/o Laguna Shores Management Corp.
26131 Marguerite Parkway, Suite D
Mission Viejo, CA 92692

Any entity listed above may change its address for receipt of notices, requests, approvals or other communications by providing written notice of the same and new mailing and service address to the other entities listed above.

SECTION 6. SEVERABILITY.

In the event that any one or more of the phrases, sentences, clauses, paragraphs, or sections contained in this MOU shall be declared invalid or unenforceable by a valid judgment or decree of a court of competent jurisdiction, such invalidity or unenforceability shall not affect any of the remaining phrases, sentences, clauses, paragraphs, or section of this MOU which are hereby declared as severable and shall be interpreted to carry out the intent of the parties hereunder.

SECTION 7. AUTHORITY TO EXECUTE.

Concordia warrants and represents that (i) it is duly organized and existing, (ii) it is duly authorized to execute and deliver this MOU, (iii) by so executing this MOU, Concordia is

formally bound to the provisions of this MOU, (iv) Concordia's entering into and performance of its obligations set forth in this MOU does not violate any provision of any other agreement to which Concordia is bound, and (v) there is no existing or threatened litigation or legal proceeding of which Concordia is aware which could prevent Concordia from entering into or performing its obligations set forth in this MOU.

SECTION 8. COUNTERPARTS.

This MOU may be executed simultaneously or in counterparts, each of which shall be deemed original, but all of which together shall constitute one and the same MOU.

[SIGNATURES FOLLOW ON NEXT PAGE]

IN WITNESS WHERE OF, the Parties have entered into this MOU as of the date first written above.

CITY OF IRVINE
a California charter city

By: _____

Name: Lynn Schott

Title: Mayor Pro Tem

ATTEST:

_____
City Clerk

APPROVED AS TO FORM:

RUTAN & TUCKER, LLP

_____
City Attorney

CONCORDIA UNIVERSITY,

a California nonprofit religious corporation

By: _____

Name: Kurt J. Krueger

Title: President

A Notary Public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California)
County of Orange)

On _____, before me, _____,
(insert name and title of the officer)
Notary Public, personally appeared _____,
who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature_____ (Seal)

A Notary Public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California)
County of Orange)

On _____, before me, _____,
(insert name and title of the officer)
Notary Public, personally appeared _____,
who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature_____ (Seal)

EXHIBIT A

[Legal Description of Property]

LEGAL DESCRIPTION

PARCEL 1: (APN: 463-212-14)

PARCEL C, AS SHOWN ON EXHIBIT "B" ATTACHED TO THAT CERTAIN LOT LINE ADJUSTMENT NO. LL 94-16622, RECORDED ON MARCH 25, 1994 AS INSTRUMENT NO. 94-0213963, OF OFFICIAL RECORDS OF ORANGE COUNTY, CALIFORNIA.

PARCEL 2: (APN: 463-711-46)

PARCEL A, AS SHOWN ON EXHIBIT "B" ATTACHED TO THAT CERTAIN LOT LINE ADJUSTMENT NO. LL 94-16622, RECORDED ON MARCH 25, 1994 AS INSTRUMENT NO. 94-0213963, OF OFFICIAL RECORDS OF ORANGE COUNTY, CALIFORNIA, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

LOT 'A' OF TRACT NO. 14860, IN THE CITY OF IRVINE, COUNTY OF ORANGE, STATE OF CALIFORNIA, AS SHOWN ON A MAP RECORDED IN BOOK 706, PAGES 30 AND 31 OF MISCELLANEOUS MAPS, RECORDS OF ORANGE COUNTY, CALIFORNIA.

TOGETHER WITH A PORTION OF PARCEL 2 OF PARCEL MAP NO. 91-230, IN THE CITY OF IRVINE, COUNTY OF ORANGE, STATE OF CALIFORNIA, AS SHOWN ON A MAP FILED IN BOOK 271, PAGES 7 AND 8 OF PARCEL MAPS, RECORDS OF ORANGE COUNTY, CALIFORNIA, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE MOST SOUTHWESTERLY CORNER OF SAID PARCEL 2 OF PARCEL MAP NO. 91-230, BEING ALSO THE MOST SOUTHERLY CORNER OF SAID LOT 'A' OF TRACT NO. 14860, AND BEING A POINT ON A NON-TANGENT CURVE, CONCAVE SOUTHEASTERLY, WITH A RADIUS OF 1500.00 FEET, A RADIAL LINE THRU SAID POINT BEARS NORTH 50°22'43" WEST; THENCE NORTHEASTERLY ALONG THE NORTHWESTERLY LINE OF SAID PARCEL 2 AND ALONG THE SOUTHEASTERLY LINE OF SAID LOT 'A' AND ALONG SAID CURVE THRU A CENTRAL ANGLE OF 04°51'13", AN ARC DISTANCE OF 127.07 FEET; THENCE, RADIALLY, SOUTH 45°31'30" EAST 28.00 FEET TO A POINT ON A CONCENTRIC CURVE, CONCAVE SOUTHEASTERLY, WITH A RADIUS OF 1472.00 FEET; THENCE SOUTHWESTERLY ALONG SAID CURVE THRU A CENTRAL ANGLE OF 04°51'13", AN ARC DISTANCE OF 124.70 FEET TO THE SOUTHWESTERLY LINE OF SAID PARCEL 2; THENCE ALONG SAID SOUTHWESTERLY LINE, NORTH 50°22'43" WEST 28.00 FEET TO THE POINT OF BEGINNING.

PARCEL 3: (APN: 463-711-84)

LOT 'C' OF TRACT NO. 14634, IN THE CITY OF IRVINE, COUNTY OF ORANGE, STATE OF CALIFORNIA, AS SHOWN ON A MAP RECORDED IN BOOK 715, PAGES 48, 49 AND 50 OF MISCELLANEOUS MAPS, RECORDS OF ORANGE COUNTY, CALIFORNIA.

LEGAL DESCRIPTION
(continued)

PARCEL 4: (APN: 463-731-55)

PARCEL 1, AS SHOWN ON EXHIBIT "B" ATTACHED TO THAT CERTAIN LOT LINE ADJUSTMENT NO. 24625-LL, RECORDED ON JUNE 19, 1996 AS INSTRUMENT NO. 19960311263, OF OFFICIAL RECORDS OF ORANGE COUNTY, CALIFORNIA, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

LOT "A" OF TRACT NO. 14682, IN THE CITY OF IRVINE, COUNTY OF ORANGE, STATE OF CALIFORNIA ALL AS SHOWN ON A MAP FILED IN BOOK 723, PAGES 47 TO 49 INCLUSIVE OF MISCELLANEOUS MAPS IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

TOGETHER WITH A PORTION OF LOT "J" OF SAID TRACT NO. 14682, LYING NORTHWESTERLY OF THE FOLLOWING DESCRIBED LINE:

BEGINNING AT THE MOST WESTERLY CORNER OF LOT 1 OF SAID TRACT NO. 14682; THENCE NORTHEASTERLY ALONG THE NORTHWESTERLY LINE OF SAID LOT 1, NORTH 50° 00' 00" EAST 92.45 FEET TO THE MOST NORTHERLY CORNER OF SAID LOT 1; THENCE NORTH 40° 43' 45" EAST 20.88 FEET; THENCE NORTH 50° 37' 48" WEST 7.61 FEET TO THE BEGINNING OF A NON-TANGENT 432.50 FOOT RADIUS CURVE, CONCAVE NORTHWESTERLY, A RADIAL THROUGH SAID POINT BEARS SOUTH 50° 37' 48" EAST; THENCE NORTHEASTERLY ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 06° 36' 37" AN ARC LENGTH OF 49.90 FEET; THENCE SOUTH 57° 50' 11" EAST 6.02 FEET; THENCE NORTH 32° 09' 49" EAST 9.00 FEET: THENCE NORTH 57° 50' 11" WEST 6.02 FEET TO THE BEGINNING OF A NON-TANGENT 432.50 FOOT RADIUS CURVE, CONCAVE NORTHWESTERLY, A RADIAL THROUGH SAID POINT BEARS SOUTH 58° 25' 57" EAST; THENCE NORTHEASTERLY ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 04° 06' 19" AN ARC LENGTH OF 30.99 FEET TO THE BEGINNING OF A 20.50 FOOT RADIUS REVERSING CURVE, A RADIAL THROUGH SAID POINT BEARS NORTH 62° 32' 16" WEST; THENCE NORTHEASTERLY ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 25° 46' 14" AN ARC LENGTH OF 9.22 FEET; THENCE SOUTH 24° 05' 14" EAST 5.50 FEET; THENCE NORTH 65° 54' 46" EAST 9.00 FEET; THENCE NORTH 24° 05' 14" WEST 5.36 FEET TO THE BEGINNING OF A NON-TANGENT 50.44 FOOT RADIUS CURVE, CONCAVE NORTHWESTERLY, A RADIAL THROUGH SAID POINT BEARS SOUTH 01° 19' 50" EAST; THENCE NORTHEASTERLY AND NORTHERLY ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 75° 38' 27" AN ARC LENGTH OF 66.59 FEET; THENCE NORTH 13° 01' 43" EAST 49.68 FEET TO THE BEGINNING OF A TANGENT 85.50 FOOT RADIUS CURVE, CONCAVE EASTERLY; THENCE NORTHERLY ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 26° 10' 09" AN ARC LENGTH OF 39.05 FEET TO A PONT ON THE NORTHEASTERLY LINE OF SAID LOT "J".

PARCEL 5: (APN: 463-731-53 AND 463-420-40)

LOT 'P' OF TRACT NO. 14682, IN THE CITY OF IRVINE, COUNTY OF ORANGE, STATE OF CALIFORNIA, AS SHOWN ON A MAP RECORDED IN BOOK 723, PAGES 47, 48 AND 49 OF MISCELLANEOUS MAPS, RECORDS OF ORANGE COUNTY, CALIFORNIA.

LEGAL DESCRIPTION
(continued)

PARCEL 6: (APN: 463-731-54)

LOT 'Q' OF TRACT NO. 14682, IN THE CITY OF IRVINE, COUNTY OF ORANGE, STATE OF CALIFORNIA, AS SHOWN ON A MAP RECORDED IN BOOK 723, PAGES 47, 48 AND 49 OF MISCELLANEOUS MAPS, RECORDS OF ORANGE COUNTY, CALIFORNIA.

END OF LEGAL DESCRIPTION

DUPLICATE

287 40

SHEET 1 OF 5
DATE OF SURVEY: MARCH 18, 2015

RECORD OF SURVEY NO. 2015-1209

IN THE CITY OF IRVINE, COUNTY OF ORANGE, STATE OF CALIFORNIA

BEING A SURVEY OF PARCELS 'A' AND 'C' OF LOT LINE ADJUSTMENT NO. 16622-LL, RECORDED MARCH 25, 1994 AS INSTRUMENT NO. 94-0213963, OF OFFICIAL RECORDS, PARCEL 'A' OF LOT LINE ADJUSTMENT NO. 24625-LL, RECORDED JUNE 19, 1996 AS INSTRUMENT NO. 19960311263, OF OFFICIAL RECORDS, LOT 'C' OF TRACT NO. 14634, PER MAP FILED IN BOOK 715, PAGES 48-50, OF MISCELLANEOUS MAPS, AND LOTS 'P' AND 'Q' OF TRACT NO. 14682, PER MAP FILED IN BOOK 723, PAGES 47-49, OF MISCELLANEOUS MAPS, ALL IN THE OFFICE OF THE COUNTY RECORDER OF ORANGE COUNTY.

RALPH W. GUIDA, IV P.L.S. 7076

ACCEPTED AND FILED AT THE REQUEST OF THE ORANGE COUNTY SURVEYOR'S OFFICE

DATE: 9-8-2016
TIME: 3:29 PM FEE $ 14.00
INSTRUMENT NO. 20160432663
BOOK 287 PAGE 40-44 & 15

HUGH NGUYEN
COUNTY CLERK - RECORDER
BY: Lana Lopez
DEPUTY

STATEMENT OF PURPOSE:

THE PURPOSE OF THIS SURVEY IS TO ESTABLISH THE LINES OF PARCELS 'A' AND 'C' OF LOT LINE ADJUSTMENT NO. 16622-LL, RECORDED MARCH 25, 1994 AS INSTRUMENT NO. 94-0213963, OF OFFICIAL RECORDS, PARCEL 'A' OF LOT LINE ADJUSTMENT NO. 24625-LL, RECORDED JUNE 19, 1996 AS INSTRUMENT NO. 19960311263, OF OFFICIAL RECORDS, LOT 'C' OF TRACT NO. 14634, PER MAP FILED IN BOOK 715, PAGES 48-50, OF MISCELLANEOUS MAPS, AND LOTS 'P' AND 'Q' OF TRACT NO. 14682, PER MAP FILED IN BOOK 723, PAGES 47-49, OF MISCELLANEOUS MAPS, ALL IN THE OFFICE OF THE COUNTY RECORDER OF ORANGE COUNTY.

COUNTY SURVEYOR'S STATEMENT:

THIS MAP HAS BEEN EXAMINED IN ACCORDANCE WITH SECTION 8766 OF THE PROFESSIONAL LAND SURVEYORS' ACT THIS 7th DAY OF September, 2016.

KEVIN R. HILLS, COUNTY SURVEYOR
L.S. 6617

LICENSED LAND SURVEYOR KEVIN R. HILLS 6617 STATE OF CALIFORNIA

SURVEYOR'S STATEMENT:

THIS MAP CORRECTLY REPRESENTS A SURVEY MADE BY ME OR UNDER MY DIRECTION IN CONFORMANCE WITH THE REQUIREMENTS OF THE PROFESSIONAL LAND SURVEYORS' ACT AT THE REQUEST OF CONCORDIA UNIVERSITY IN MARCH, 2015.

RALPH W. GUIDA, IV P.L.S. 7076 — DATE 8-25-16

PROFESSIONAL LAND SURVEYOR Ralph W. Guida, IV No. 7076 STATE OF CALIFORNIA

BASIS OF BEARINGS:

THE BEARINGS SHOWN HEREON ARE BASED UPON THE BEARING BETWEEN O.C.S. HORIZONTAL CONTROL STATION GPS NO. 6180 AND STATION GPS NO. 6184 BEING NORTH 46°24'48" EAST, PER RECORDS ON FILE IN THE OFFICE OF THE COUNTY SURVEYOR.

DATUM STATEMENT:

COORDINATES SHOWN ARE BASED ON THE CALIFORNIA COORDINATE SYSTEM (CCS83), ZONE VI, 1983 NAD, (2007.00 EPOCH OCS GPS ADJUSTMENT). ALL DISTANCES SHOWN ARE GROUND, UNLESS OTHERWISE NOTED. TO OBTAIN GRID DISTANCES MULTIPLY GROUND DISTANCE BY 0.99996975 (A MEAN VALUE).

MONUMENT NOTES:

(1) FD. PUNCHED 3-1/4" BRASS DISK IN CONCRETE STAMPED "LS 4215" IN CITY OF IRVINE WELL (OCS GPS 6180), PER R.S.B. 150/10-23, DN. 1.3', LOCATED AT THE CENTERLINE INTERSECTION OF UNIVERSITY DRIVE AND RIDGELINE DRIVE.

(2) FD. PUNCHED SPIKE AND SHINER (OCS GPS 6184), PER C.R. 2008-0379B, FLUSH, LOCATED AT THE CENTERLINE INTERSECTION OF CAMPUS DRIVE AND TURTLE ROCK DRIVE.

(3) FD. 2" I.P. TAGGED "RCE 21687", PER R2, DN. 0.55', ACCEPTED AS CORNER.

(4) FD. LEAD, TACK, AND TAG STAMPED "RCE 21687", PER R6, FLUSH, ACCEPTED AS CORNER.

(5) FD. SPIKE AND WASHER STAMPED "RCE 21687", PER R2, FLUSH, ACCEPTED AS INTERSECTION OF THE CENTERLINE OF DAYSTAR AND THE TRACT BOUNDARY OF R2.

(6) FD. SPIKE AND WASHER STAMPED "RCE 21687", PER R2, FLUSH, ACCEPTED AS THE CENTERLINE INTERSECTION OF DAYSTAR AND CONCORDIA WEST.

(7) FD. SHAFT OF SPIKE, FLUSH, ACCEPTED AS SPIKE AND WASHER STAMPED "RCE 21687" PER R2 AT THE CENTERLINE INTERSECTION OF FAITH AND CONCORDIA WEST.

(8) FD. SPIKE AND WASHER STAMPED "RCE 21687", PER R2, FLUSH, ACCEPTED AS THE CENTERLINE B.C. OF FAITH.

(9) FD. SPIKE AND WASHER STAMPED "RCE 21687", PER R2, FLUSH, ACCEPTED AS THE CENTERLINE E.C. OF FAITH.

(10) FD. SPIKE AND WASHER STAMPED "RCE 21687", PER R2, FLUSH, ACCEPTED AS THE CENTERLINE INTERSECTION OF FAITH AND CHARITY.

(11) FD. SPIKE AND WASHER STAMPED "RCE 21687", PER R2, FLUSH, ACCEPTED AS THE CENTERLINE B.C. OF FAITH.

(12) FD. SPIKE AND WASHER STAMPED "RCE 21687", PER R2, FLUSH, ACCEPTED AS THE CENTERLINE B.C. OF CHARITY.

(13) FD. SPIKE AND WASHER STAMPED "RCE 21687", PER R2, FLUSH, ACCEPTED AS THE CENTERLINE E.C. OF CHARITY.

(14) FD. SPIKE AND WASHER STAMPED "RCE 21687", PER R2, FLUSH, ACCEPTED AS THE CENTERLINE B.C. OF CHARITY.

(15) FD. SPIKE AND WASHER STAMPED "RCE 21687", PER R2, FLUSH, ACCEPTED AS INTERSECTION OF THE CENTERLINE OF CHARITY AND THE TRACT BOUNDARY OF R2.

(16) FD. SPIKE AND WASHER STAMPED "RCE 21687", PER R3, FLUSH, ACCEPTED AS THE CENTERLINE E.C. OF CHARITY.

(17) FD. SPIKE AND WASHER STAMPED "RCE 21687", PER R3, FLUSH, ACCEPTED AS THE CENTERLINE B.C. OF CHARITY.

(18) FD. SPIKE AND WASHER STAMPED "RCE 21687", PER R3, FLUSH, ACCEPTED AS THE CENTERLINE P.C.C. OF CHARITY.

(19) FD. SPIKE AND WASHER STAMPED "RCE 21687", PER R3, FLUSH, ACCEPTED AS THE CENTERLINE INTERSECTION OF CHARITY AND JOY.

(20) FD. SPIKE AND WASHER STAMPED "RCE 21687", PER R3, FLUSH, ACCEPTED AS THE CENTERLINE E.C. OF CHARITY.

REFERENCE NOTES:

(R1) RECORD DATA PER LOT LINE ADJUSTMENT NO. 16622-LL PER INSTRUMENT NO. 94-0213963, O.R., RECORDED MARCH 25, 1994

(R2) RECORD DATA PER TRACT NO. 14860, M.M. 706/30-31

(R3) RECORD DATA PER TRACT NO. 14634, M.M. 715/48-50

(R4) RECORD DATA PER LOT LINE ADJUSTMENT NO. 24625-LL PER INSTRUMENT NO. 19960311263, O.R., JUNE 19, 1996

(R5) RECORD DATA PER TRACT NO. 14682, M.M. 723/47-49

(R6) RECORD DATA PER CERTIFICATE OF CORRECTION PER INSTRUMENT NO. 20000651761, O.R., RECORDED NOVEMBER 30, 2000

(R7) RECORD DATA PER PARCEL MAP NO. 91-230, P.M.B. 271/7-8

LEGEND

- CENTERLINE
- LOT LINE
- RIGHT-OF-WAY LINE
- PROPERTY BOUNDARY LINE
- ● FOUND MONUMENT AS INDICATED.
- ▲ FOUND GPS CONTROL POINT

NOTES:

SEE SHEET 2 FOR ADDITIONAL MONUMENTATION NOTES AND ESTABLISHMENT NOTES

SEE SHEET 3 FOR BOUNDARY AND GPS TIES

SEE SHEET 4 FOR BOUNDARY, GPS TIES, AND DETAIL 'A'

SEE SHEET 5 FOR DETAIL 'B', LINE AND CURVE TABLES

287 40

DUPLICATE

DUPLICATE

287 41

SHEET 2 OF 5
DATE OF SURVEY: MARCH 18, 2015

RECORD OF SURVEY NO. 2015-1209

IN THE CITY OF IRVINE,
COUNTY OF ORANGE, STATE OF CALIFORNIA

RALPH W. GUIDA, IV P.L.S. 7076

MONUMENT NOTES CON'T.:

(21) FD. SPIKE AND WASHER STAMPED "RCE 21687", PER R3, FLUSH, ACCEPTED AS THE CENTERLINE OF CHARITY.

(22) FD. SPIKE AND WASHER STAMPED "RCE 21687", PER R3, FLUSH, ACCEPTED AS THE CENTERLINE B.C. OF JOY.

(23) FD. SPIKE AND WASHER STAMPED "RCE 21687", PER R3, FLUSH, ACCEPTED AS THE CENTERLINE P.R.C. OF JOY.

(24) FD. SPIKE AND WASHER STAMPED "RCE 21687", PER R3, FLUSH, ACCEPTED AS THE CENTERLINE E.C. OF JOY.

(25) FD. SPIKE AND WASHER STAMPED "RCE 21687", PER R3, FLUSH, ACCEPTED AS THE CENTERLINE INTERSECTION OF JOY AND CONCORDIA WEST.

(26) FD. 1" I.P. WITH PLASTIC PLUG STAMPED "LS 5780", PER R3, DN. 0.2', ACCEPTED AS CORNER.

(27) FD. 1" I.P. WITH PLASTIC PLUG STAMPED "LS 5780", PER R3, DN. 0.2', ACCEPTED AS CORNER.

(28) FD. 1" I.P. WITH PLASTIC PLUG STAMPED "LS 5780", PER R3, DN. 0.15', ACCEPTED AS CORNER.

(29) FD. 3/4" REBAR IN CONCRETE, ACCEPTED AS 2-1/2" ALUMINUM CAP MARKED "ORANGE COUNTY SURVEYOR - RCE 11467" IN CONCRETE PER R7, DN. 0.45', ACCEPTED AS CORNER.

(30) FD. 2" I.P. TAGGED "RCE 11467", PER R7, DN. 0.2', ACCEPTED AS CORNER.

(31) FD. 2" I.P. TAGGED "RCE 11467", PER R7, DN. 0.1', ACCEPTED AS CORNER.

(32) FD. 2" I.P. TAGGED "RCE 11467", PER R7, DN. 0.15', ACCEPTED AS CORNER.

(33) FD. 2" I.P. TAGGED "RCE 11467", PER R7, UP 0.1', ACCEPTED AS CORNER.

(34) FD. 2" I.P. TAGGED "LS 5780", PER R7, DN. 0.2', ACCEPTED AS CORNER.

(35) FD. SPIKE AND WASHER STAMPED "RCE 21687" IN LIEU OF 2" I.P. TAGGED "RCE 21687", PER R5, FLUSH, ACCEPTED AS CENTERLINE P.R.C. OF CONCORDIA EAST.

(36) FD. SPIKE AND WASHER STAMPED "RCE 21687", PER R5, FLUSH, ACCEPTED AS INTERSECTION OF THE CENTERLINE OF CONCORDIA EAST AND THE TRACT BOUNDARY OF R5.

(37) FD. SHAFT OF SPIKE, DN. 0.18', ACCEPTED AS SPIKE AND WASHER STAMPED "RCE 21687" PER R5, DN. 0.15', ACCEPTED AS CENTERLINE B.C. OF ASCENSION.

(38) FD. SHAFT OF SPIKE, FLUSH, ACCEPTED AS SPIKE AND WASHER STAMPED "RCE 21687" PER R5, FLUSH, ACCEPTED AS CENTERLINE INTERSECTION OF ASCENSION AND SILENT NIGHT.

(39) FD. SPIKE AND WASHER STAMPED "RCE 21687", PER R5, FLUSH, ACCEPTED AS CENTERLINE B.C. OF SILENT NIGHT.

(40) FD. SPIKE AND WASHER STAMPED "RCE 21687", PER R5, FLUSH, ACCEPTED AS CENTERLINE E.C. OF TRINITY.

(41) FD. SPIKE AND WASHER STAMPED "RCE 21687", PER R5, FLUSH, ACCEPTED AS CENTERLINE B.C. OF TRINITY.

(42) FD. SPIKE AND WASHER STAMPED "RCE 21687", PER R5, FLUSH, ACCEPTED AS CENTERLINE E.C. OF TRINITY.

(43) FD. SPIKE AND WASHER STAMPED "RCE 21687", PER R5, FLUSH, ACCEPTED AS CENTERLINE B.C. OF TRINITY.

(44) FD. SPIKE AND WASHER STAMPED "RCE 21687", PER R5, FLUSH, ACCEPTED AS CENTERLINE E.C. OF TRINITY.

(45) FD. SPIKE AND WASHER STAMPED "RCE 21687" PER R5, FLUSH, ACCEPTED AS CENTERLINE INTERSECTION OF TRINITY AND BLESSING.

(46) FD. SPIKE AND WASHER STAMPED "RCE 21687", PER R5, FLUSH, ACCEPTED AS THE CENTERLINE OF BLESSING.

(47) FD. LEAD, TACK, AND TAG STAMPED "RCE 21687" IN CONCRETE FOOTING IN LIEU OF 2" I.P. TAGGED "RCE 21687" PER R5, DN. 0.1', ACCEPTED AS CORNER.

(48) FD. 2" I.P. TAGGED "RCE 11467", PER R7, DN. 0.65', ACCEPTED AS CORNER.

(49) FD. 2" I.P. TAGGED "RCE 11467", PER R7, FLUSH, DISTURBED, PIPE IS LEANING, N 85°03'53" W 0.13' FROM ESTABLISHED CORNER.

(50) FD. LEAD, TACK, AND TAG STAMPED "RCE 21687" IN TOP OF CURB, FLUSH, NO REF., N 53°11'00" E 4.69' FROM ESTABLISHED CORNER, HELD FOR LINE.

(51) FD. LEAD, TACK, AND TAG STAMPED "RCE 21687" ON TOP OF RETAINING WALL, DISTURBED, IN LIEU OF 1" I.P. TAGGED "RCE 21687" PER R5, FLUSH, N 88°03'51" W 0.22' FROM ESTABLISHED CORNER.

(52) FD. LEAD, TACK, AND TAG STAMPED "RCE 21687" ON TOP OF RETAINING WALL, DISTURBED, IN LIEU OF 1" I.P. TAGGED "RCE 21687" PER R5, FLUSH, S 86°21'39" E 0.20' FROM ESTABLISHED CORNER.

(53) FD. LEAD, TACK, AND TAG STAMPED "RCE 21687" ON TOP OF RETAINING WALL, DISTURBED, IN LIEU OF 1" I.P. TAGGED "RCE 21687" PER R5, FLUSH, S 80°47'09" E 0.43' FROM ESTABLISHED CORNER.

(54) FD. LEAD, TACK, AND TAG STAMPED "RCE 21687" ON TOP OF RETAINING WALL, DISTURBED, IN LIEU OF 1" I.P. TAGGED "RCE 21687" PER R5, FLUSH, S 75°18'09" E 0.10' FROM ESTABLISHED CORNER.

(55) FD. LEAD, TACK, AND TAG STAMPED "RCE 21687" ON TOP OF RETAINING WALL, DISTURBED, IN LIEU OF 1" I.P. TAGGED "RCE 21687" PER R5, FLUSH, S 73°23'00" E 0.16' FROM ESTABLISHED CORNER.

(56) FD. LEAD, TACK, AND TAG STAMPED "RCE 21687" ON TOP OF RETAINING WALL, DISTURBED, IN LIEU OF 1" I.P. TAGGED "RCE 21687" PER R5, FLUSH, S 73°23'00" E 0.10' FROM ESTABLISHED CORNER.

(57) FD. LEAD, TACK, AND TAG STAMPED "RCE 21687" ON TOP OF RETAINING WALL, DISTURBED, IN LIEU OF 1" I.P. TAGGED "RCE 21687" PER R5, FLUSH, S 73°23'00" E 0.14' FROM ESTABLISHED CORNER.

(58) FD. LEAD, TACK, AND TAG STAMPED "RCE 21687" ON TOP OF RETAINING WALL, DISTURBED, IN LIEU OF 1" I.P. TAGGED "RCE 21687" PER R5, FLUSH, S 70°21'36" E 0.50' FROM ESTABLISHED CORNER.

(59) FD. 2" I.P. TAGGED "RCE 21687", PER R5, DN. 0.3', DISTURBED, S 77°19'44" W 0.56' FROM ESTABLISHED CORNER.

ESTABLISHMENT NOTES

[1] THE GENERALLY WESTERLY RIGHT-OF-WAY LINE OF CONCORDIA WEST AND THE CENTERLINES OF CONCORDIA WEST, FAITH, CHARITY, AND JOY WERE ESTABLISHED BY HOLDING FOUND MONUMENTS, RECORD ANGLES, RECORD CURVE DATA, AND RECORD DISTANCES PER R1, R2, AND R3 RESPECTIVELY.

[2] CORNER WAS ESTABLISHED BY RECORD DISTANCE-DISTANCE INTERSECTION PER R1 FROM FOUND MONS 26 AND 27 . RESULTING ANGLE AT ESTABLISHED CORNER EQUALS RECORD ANGLE PER R1.

[3] THE GENERALLY NORTHWESTERLY AND SOUTHEASTERLY RIGHT-OF-WAY LINES OF CONCORDIA EAST AND THE CENTERLINE OF CONCORDIA EAST WERE ESTABLISHED BY HOLDING FOUND MONS 35 AND 36 , RECORD ANGLES, RECORD CURVE DATA, AND RECORD DISTANCES PER R4 AND R5 RESPECTIVELY.

[4] CORNER WAS ESTABLISHED BY BEARING-BEARING INTERSECTION.

[5] THE SOUTHWESTERLY RIGHT-OF-WAY LINE OF ASCENSION AND THE CENTERLINE OF ASCENSION WERE ESTABLISHED BY HOLDING FOUND MONS 36 , 37 AND 38 , RECORD DISTANCE AND RECORD RADIUS PER R5.

[6] THE GENERALLY WESTERLY BOUNDARY OF R5 FROM FOUND MONS 48 AND 50 AND THE CENTERLINES OF TRINITY AND BLESSING BETWEEN FOUND MONS 38 AND 46 WERE ESTABLISHED BY HOLDING FOUND MONUMENTS, RECORD ANGLES, RECORD CURVE DATA, AND RECORD DISTANCES PER R5.

[7] THE GENERALLY SOUTHERLY LINE OF R1 WAS ESTABLISHED BY HOLDING RECORD ANGLES AND COMPASS ADJUSTING THE RECORD DISTANCES BETWEEN FOUND MONS 3 AND 48 .

NOTES:

SEE SHEET 1 FOR BASIS OF BEARINGS, DATUM STATEMENT, MONUMENTATION NOTES, REFERENCE NOTES, AND LEGEND

SEE SHEET 3 FOR BOUNDARY AND GPS TIES

SEE SHEET 4 FOR BOUNDARY, GPS TIES, AND DETAIL 'A'

SEE SHEET 5 FOR DETAIL 'B', LINE AND CURVE TABLES

287 41

DUPLICATE

DUPLICATE

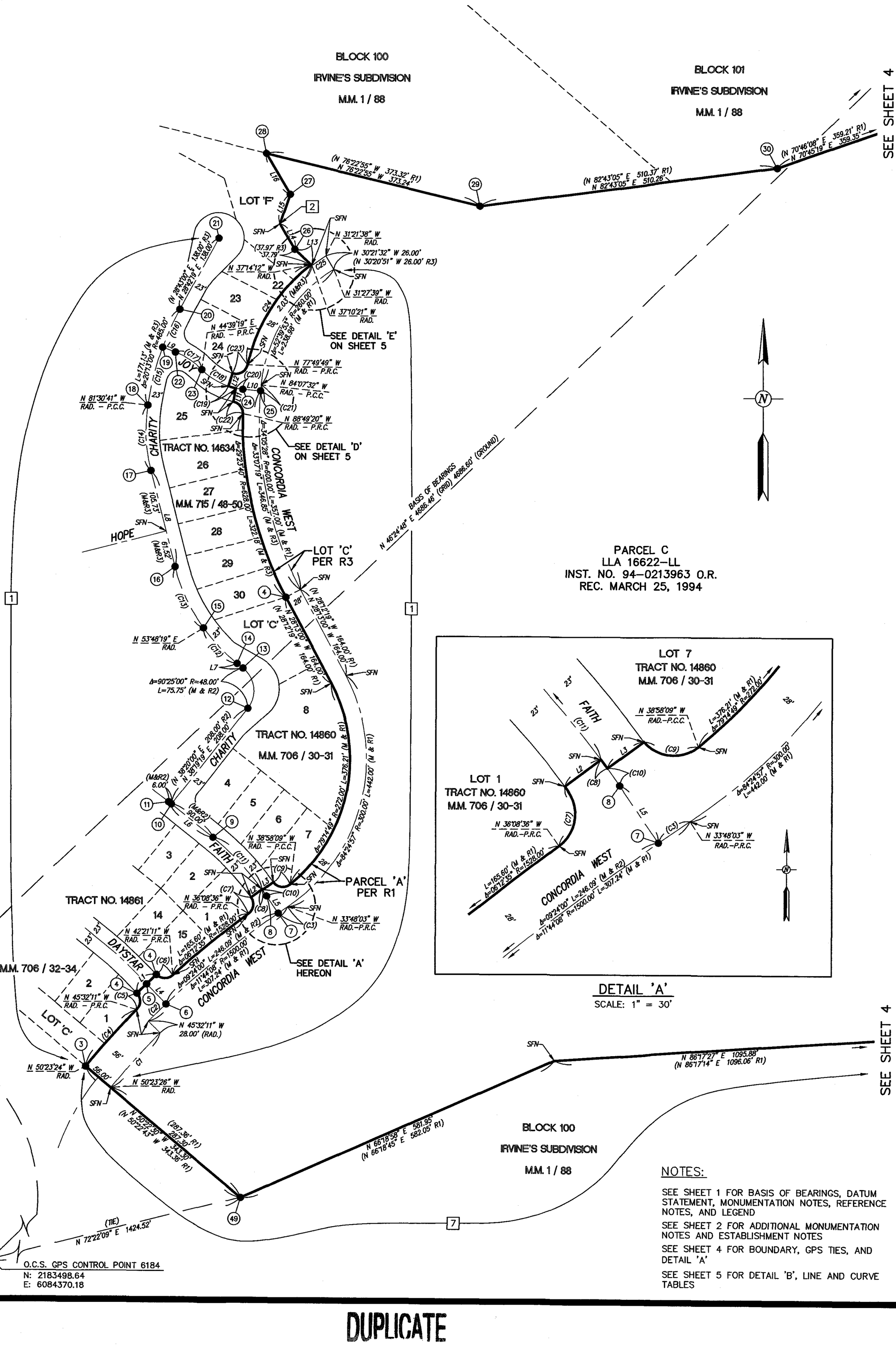
287 42

SHEET 3 OF 5
DATE OF SURVEY: MARCH 18, 2015
SCALE: 1" = 100'

RECORD OF SURVEY NO. 2015-1209

IN THE CITY OF IRVINE, COUNTY OF ORANGE, STATE OF CALIFORNIA

RALPH W. GUIDA, IV P.L.S. 7076



DETAIL 'A'
SCALE: 1" = 30'

NOTES:

SEE SHEET 1 FOR BASIS OF BEARINGS, DATUM STATEMENT, MONUMENTATION NOTES, REFERENCE NOTES, AND LEGEND

SEE SHEET 2 FOR ADDITIONAL MONUMENTATION NOTES AND ESTABLISHMENT NOTES

SEE SHEET 4 FOR BOUNDARY, GPS TIES, AND DETAIL 'A'

SEE SHEET 5 FOR DETAIL 'B', LINE AND CURVE TABLES

DUPLICATE

287 42

DUPLICATE

287 43

SHEET 4 OF 5
DATE OF SURVEY: MARCH 18, 2015
SCALE: 1" = 100'

RECORD OF SURVEY NO. 2015-1209

IN THE CITY OF IRVINE, COUNTY OF ORANGE, STATE OF CALIFORNIA

RALPH W. GUIDA, IV P.L.S. 7076

O.C.S. GPS CONTROL POINT 6180
N: 2186729.73
E: 6087764.73

(TIE) 524.34' N 03°45'42" E

(N 89°01'55" W 547.01' R1)
N 89°01'55" W 546.98'

N 50°48'13" W 263.92' 522.24'
201.42' (201.67' R1)

RIDGELINE DRIVE 82'

60'

62.50' (M&R4)

N 50°46'47" W RAD.

BLOCK 101
IRVINE'S SUBDIVISION
M.M. 1 / 88

(N 50°48'13" W 258.32' (258.03' R4) 522.20' R1)

EAST VARIES 28'

PCL 'A' PER R4

SEE DETAIL 'B' HEREON

PORTION LOT 'J'

TRACT NO. 14682
M.M. 723 / 47-49

SEE DETAIL 'F' HEREON

(N 35°23'00" W 242.58' (N 35°22'51" W 291.02' 291.00' R1) 291.00' R5)

N 35°23'00" W 389.00' (N 35°22'51" W 342.83' (M & R5) 389.00' R5)

ASCENSION

CONCORDIA

N 32°00'46" W RAD.
L=256.30' (M & R1)
Δ=36°42'42"
Δ=33°06'56" L=231.19' (M & R5) R=400.00'

N 28°25'00" W RAD.

N 79°29'45" E RAD.

(N 53°11'00" E 323.72' R1) (N 53°11'09" E 323.72' R5) 307.67' (307.71' R5) 323.68'

N 53°12'00" E 227.58' (N 53°12'09" E 227.62' R5) 23'

SILENT NIGHT

Δ=61°30'00" R=48.00' L=51.52' (M & R5)

N 08°18'00" W 166.33' (N 08°17'51" W 166.33' R5)

LOT 'Q' PER R5

PARCEL C
LLA 16622-LL
INST. NO. 94-0213963 O.R.
REC. MARCH 25, 1994

Δ=17°28'33" L=204.36' (M & R5)

Δ=35°51'00" R=670.00' L=419.22' (M & R1,R5)

LOT 'P' PER R5

SEE DETAIL 'C' ON SHEET 5

(N 17°29'09" E 243.00' R5) N 17°29'00" E 243.00' (M & R1)

Δ=24°55'00" R=650.00' L=282.67' (M & R5)

(N 16°37'00" E 155.00' (N 16°37'09" E 155.00' R5)

TRINITY

TRACT NO. 14682
M.M. 723 / 47-49

N 10°13'00" E 185.00' R1,R5)
N 10°13'00" E 184.94'

LOT 'M'

BLESSING

23'

L=78.25'

(M&R5) 23.75'

SEE SHEET 3

N 86°17'27" E 1095.88'
(N 86°17'14" E 1096.06' R1)

BLOCK 100 IRVINE'S SUBDIVISION M.M. 1 / 88

SEE SHEET 3

N 01°19'59" W RAD.
N 36°46'11" W RAD.
N 62°32'25" W RAD.
N 58°26'06" W RAD.
N 57°14'34" W RAD.

EAST

CONCORDIA

PORTION LOT 'J'
TRACT NO. 14682
M.M. 723 / 47-49

DETAIL 'B'
SCALE: 1" = 30'

DETAIL 'F'
SCALE: 1" = 30'

NOTES:

SEE SHEET 1 FOR BASIS OF BEARINGS, DATUM STATEMENT, MONUMENTATION NOTES, REFERENCE NOTES, AND LEGEND

SEE SHEET 2 FOR ADDITIONAL MONUMENTATION NOTES AND ESTABLISHMENT NOTES

SEE SHEET 3 FOR BOUNDARY AND GPS TIES

SEE SHEET 5 FOR DETAIL 'B', LINE AND CURVE TABLES

287 43

DUPLICATE

DUPLICATE

287 44

SHEET 5 OF 5
DATE OF SURVEY: MARCH 18, 2015

RECORD OF SURVEY NO. 2015-1209

IN THE CITY OF IRVINE, COUNTY OF ORANGE, STATE OF CALIFORNIA

RALPH W. GUIDA, IV P.L.S. 7076

LINE TABLE			
NO.	BEARING	LENGTH	
L1	N 46°03'19" E	46.00'	RAD.
	(N 46°04'00" E)	(46.00')	R2
L2	N 53°42'35" E	23.00'	RAD.
	(N 53°43'16" E)	(23.00')	R2
L3	N 53°52'28" E	23.00'	RAD.
	(N 53°53'09" E)	(23.00')	R2
L4	N 43°56'41" W	47.40'	RAD.
	(N 43°56'00" W)	(47.40')	R2
L5	N 34°32'41" W	35.00'	RAD.
	(N 34°32'00" W)	(35.00')	R2
L6	N 51°40'41" W	96.00'	
	(N 51°40'00" W)	(96.00')	R2
L7	N 52°05'41" W	12.60'	
	(N 52°05'00" W)	(12.60')	R2
L8	N 14°20'41" W	167.25'	
	(N 14°20'00" W)	(167.25')	R3
L9	N 69°39'46" W	23.18'	RAD.
	(N 69°39'05" W)	(23.18')	R3
L10	N 85°05'41" W	30.15'	RAD.
	(N 85°05'00" W)	(30.15')	R3
L11	N 10°58'08" E	23.00'	RAD.
	(N 10°58'49" E)	(23.00')	R3
L12	N 17°33'16" E	23.00'	RAD.
	(N 17°33'57" E)	(23.00')	R3
L13	N 46°21'24" W	39.82'	
	(N 46°25'44" W)	(40.00')	R1
L14	N 30°16'31" W	50.00'	
	(N 30°20'51" W)	(50.00')	R1
L15	N 18°54'33" E	52.85'	
	(N 18°50'13" E)	(52.85')	R1
L16	N 30°20'51" W	79.92'	
	(N 30°20'51" W)	(80.00')	R1
L17	N 39°11'44" E	50.08'	
	(N 39°11'44" E)	(50.04')	R1

LINE TABLE CON'T.			
NO.	BEARING	LENGTH	
(L18)	N 65°07'42" W	28.00'	RAD. M & R1
L19	N 13°01'34" E	49.68'	
	(N 13°01'43" E)	(49.68')	R4
L20	N 24°05'23" W	5.36'	
	(N 24°05'14" W)	(5.36')	R4
L21	N 65°54'37" E	9.00'	
	(N 65°54'46" E)	(9.00')	R4
L22	N 24°05'23" W	5.50'	
	(N 24°05'14" W)	(5.50')	R4
L23	N 57°50'20" W	6.02'	
	(N 57°50'11" W)	(6.02')	R4
L24	N 32°09'40" E	9.00'	
	(N 32°09'49" E)	(9.00')	R4
L25	N 57°50'20" W	6.02'	
	(N 57°50'11" W)	(6.02')	R4
L26	N 50°37'57" W	7.61'	RAD.
	(N 50°37'48" W)	(7.61')	R4
L27	N 40°43'36" E	20.88'	
	(N 40°43'45" E)	(20.88')	R4
L28	N 49°59'51" E	92.45'	
	(N 50°00'00" E)	(92.45')	R4
L29	N 54°37'00" E	25.00'	RAD.
	(N 54°37'09" E)	(25.00')	R5
L30	N 54°37'00" E	25.00'	RAD.
	(N 54°37'09" E)	(25.00')	R5
L31	N 35°23'00" W	48.44'	
	(N 35°22'51" W)	(48.44')	R5
L32	N 35°23'00" W	46.17'	
	(N 35°22'51" W)	(46.17')	R5
L33	N 23°47'00" E	133.00'	
	(N 23°47'09" E)	(133.00')	R5
L34	N 73°23'00" W	79.00'	
	(N 73°22'51" W)	(79.00')	R5

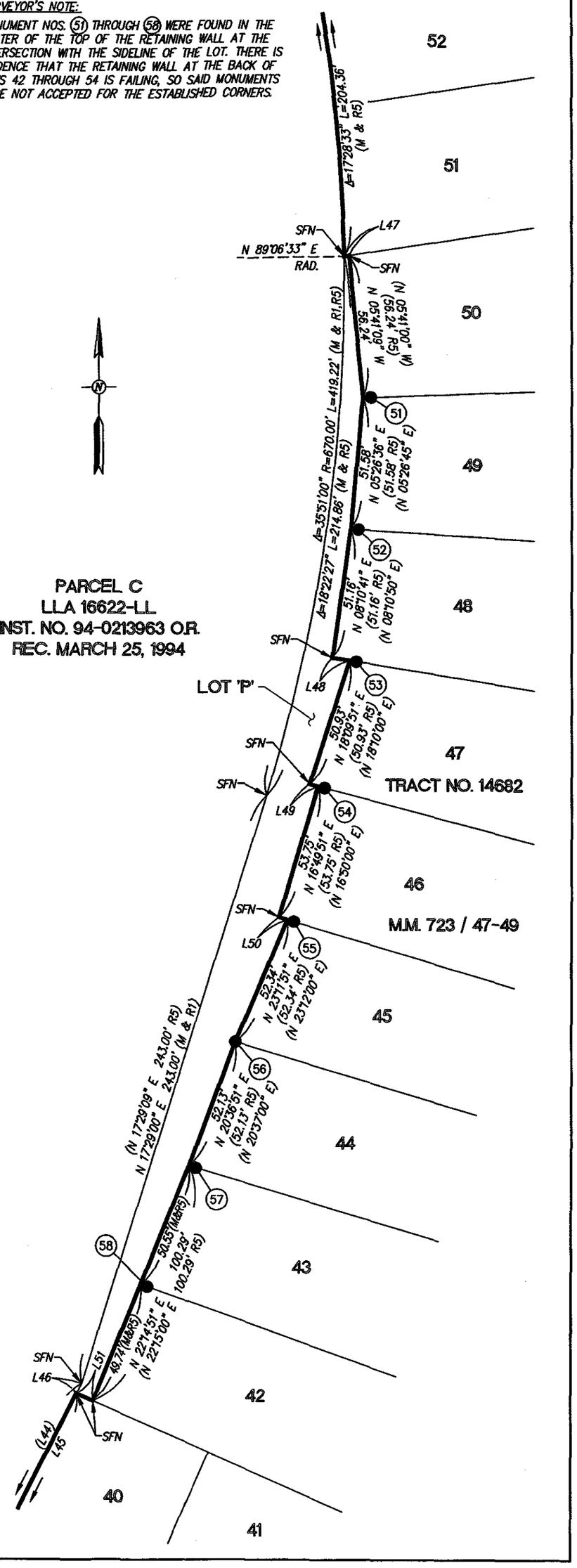
LINE TABLE CON'T.			
NO.	BEARING	LENGTH	
L35	N 69°29'59" W	43.00'	
	(N 69°29'50" W)	(43.00')	R5
L36	N 57°22'14" W	15.43'	
	(N 57°22'05" W)	(15.43')	R5
(L37)	N 20°00'00" E	102.00'	M & R1,R5
(L38)	N 51°39'00" E	73.76'	M & R1,R5
(L39)	N 18°22'00" W	63.56'	M & R1
	(N 18°21'51" W)	(63.56')	R5
L40	N 18°22'00" W	51.56'	
	(N 18°21'51" W)	(51.56')	R5
L41	N 18°22'00" W	12.00'	
	(N 18°21'51" W)	(12.00')	R5
L42	N 03°39'51" E	22.13'	
	(N 03°40'00" E)	(22.13')	R5
L43	N 07°34'19" W	36.76'	
	(N 07°34'10" W)	(36.76')	R5
(L44)	N 27°00'00" E	68.00'	M & R1
	(N 27°00'09" E)	(68.00')	R5
L45	N 27°00'00" E	63.60'	
	(N 27°00'09" E)	(63.60')	R5
L46	N 27°00'00" E	4.40'	
	(N 27°00'09" E)	(4.40')	R5
L47	N 81°42'00" E	1.94'	
	(N 81°42'09" E)	(1.94')	R5
L48	N 80°47'09" W	7.01'	
	(N 80°47'00" W)	(7.01')	R5
L49	N 75°18'09" W	3.50'	
	(N 75°18'00" W)	(3.50')	R5
L50	N 73°23'00" W	3.50'	
	(N 73°22'51" W)	(3.50')	R5
L51	N 66°13'00" W	7.07'	
	(N 66°12'51" W)	(7.07')	R5
L52	N 39°11'44" E	50.08'	
	(N 39°11'44" E)	(50.04')	R1

CURVE TABLE				
NO.	DELTA	RADIUS	LENGTH	
C1	04°51'15"	1472.00'	124.71'	
	(04°51'13")	(1472.00')	(124.70')	R1
(C2)	01°35'30"	1500.00'	41.67'	M & R1
(C3)	00°44'38"	1500.00'	19.47'	M & R2
(C4)	04°51'13"	1528.00'	129.44'	M & R2
(C5)	88°24'30"	20.00'	30.86'	M & R2
(C6)	88°24'30"	20.00'	30.86'	M & R2
(C7)	90°08'49"	20.00'	31.47'	M & R2
(C8)	00°09'53"	450.00'	1.30'	M & R2
(C9)	92°50'37"	20.00'	32.41'	M & R2
(C10)	01°34'51"	450.00'	12.41'	M & R2
(C11)	15°23'16"	450.00'	120.85'	M & R2
(C12)	15°54'00"	300.00'	83.25'	M & R2
(C13)	21°51'00"	300.00'	114.41'	M & R3
(C14)	22°50'00"	280.00'	111.58'	M & R3
(C15)	11°50'55"	485.00'	100.30'	M & R3
(C16)	08°22'05"	485.00'	70.83'	M & R3
(C17)	24°19'05"	127.00'	53.90'	M & R3
(C18)	27°06'03"	113.00'	53.45'	M & R3
(C19)	06°35'08"	113.00'	12.99'	M & R3

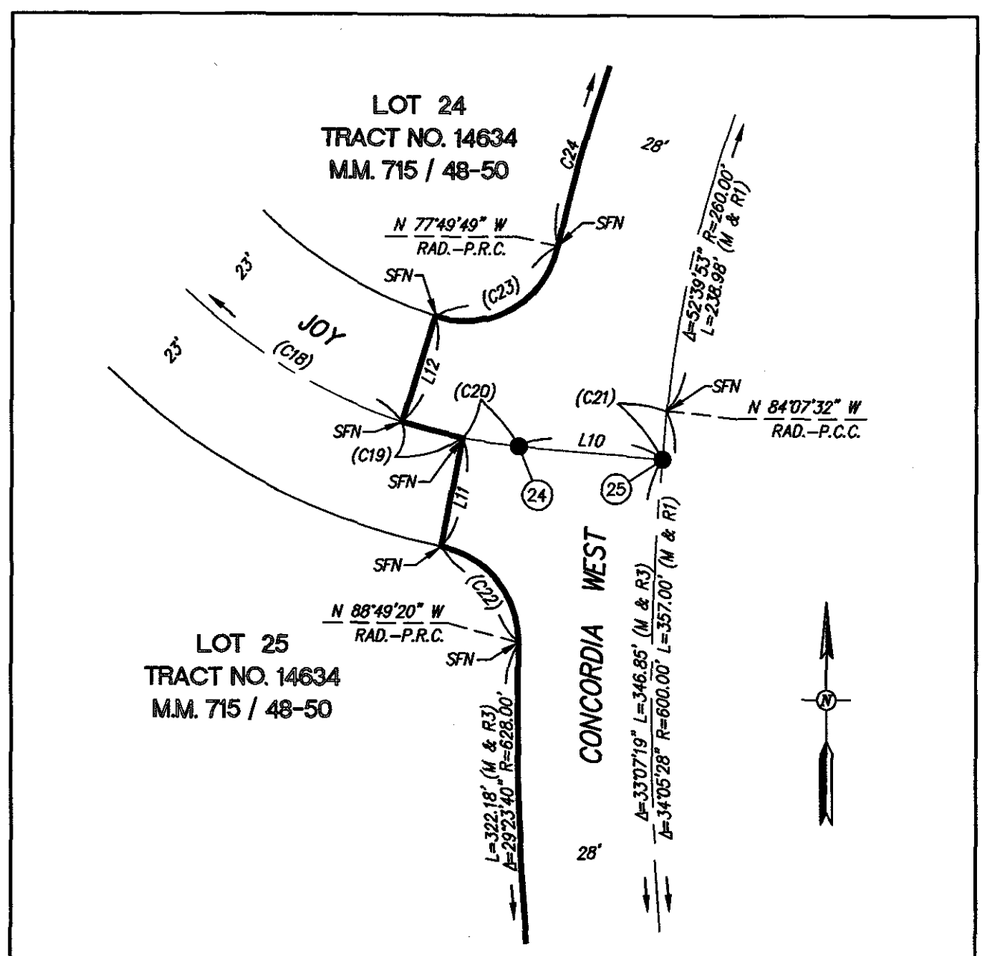
CURVE TABLE CON'T.				
NO.	DELTA	RADIUS	LENGTH	
(C20)	06°03'49"	113.00'	11.96'	M & R3
(C21)	00°58'09"	600.00'	10.15'	M & R3
(C22)	80°12'32"	20.00'	28.00'	M & R3
(C23)	95°23'05"	20.00'	33.30'	M & R3
C24	40°35'37"	288.00'	204.05'	
	(40°35'41")	(288.00')	(204.05')	R3
C25	05°48'43"	286.00'	29.01'	
	(05°48'35")	(286.00')	(29.00')	R3
(C26)	14°19'26"	428.00'	107.00'	M & R1
C27	26°11'39"	85.50'	39.09'	
	(26°10'09")	(85.50')	(39.05')	R4
(C28)	75°38'27"	50.44'	66.59'	M & R4
(C29)	25°46'14"	20.50'	9.22'	M & R4
(C30)	04°06'19"	432.50'	30.99'	M & R4
(C31)	06°36'37"	432.50'	49.90'	M & R4
(C32)	24°52'45"	20.00'	8.68'	M & R4
(C33)	03°35'46"	400.00'	25.11'	M & R5
C34	04°50'11"	300.00'	25.32'	
	(04°50'00")	(300.00')	(25.31')	R5
(C35)	07°10'00"	800.00'	100.07'	M & R5
(C36)	14°19'26"	400.00'	100.00'	M & R1

SURVEYOR'S NOTE:

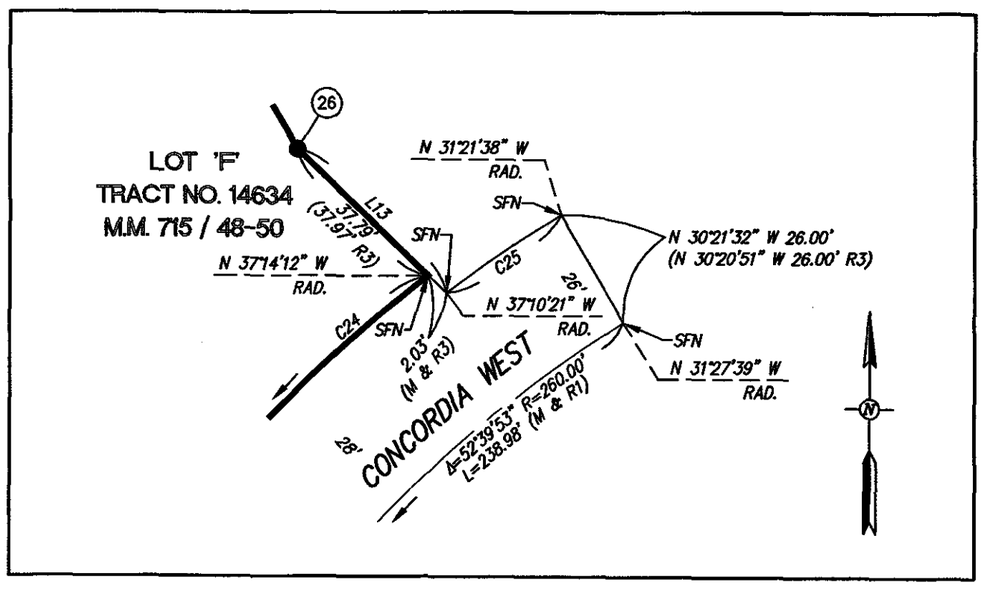
MONUMENT NOS. (51) THROUGH (58) WERE FOUND IN THE CENTER OF THE TOP OF THE RETAINING WALL AT THE INTERSECTION WITH THE SIDELINE OF THE LOT. THERE IS EVIDENCE THAT THE RETAINING WALL AT THE BACK OF LOTS 42 THROUGH 54 IS FAILING, SO SAID MONUMENTS WERE NOT ACCEPTED FOR THE ESTABLISHED CORNERS.



DETAIL 'C'
SCALE: 1" = 40'



DETAIL 'D'
SCALE: 1" = 30'



DETAIL 'E'
SCALE: 1" = 30'

NOTES:

SEE SHEET 1 FOR BASIS OF BEARINGS, DATUM STATEMENT, MONUMENTATION NOTES, REFERENCE NOTES, AND LEGEND

SEE SHEET 2 FOR ADDITIONAL MONUMENTATION NOTES AND ESTABLISHMENT NOTES

SEE SHEET 3 FOR BOUNDARY AND GPS TIES

SEE SHEET 4 FOR BOUNDARY, GPS TIES, AND DETAIL 'A'

287 44

DUPLICATE

EXHIBIT B

[Planning Commission Resolution 17-3598]

PLANNING COMMISSION RESOLUTION NO. 17-3598

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF IRVINE, CALIFORNIA, APPROVING CONDITIONAL USE PERMIT MODIFICATION 00612052-PCPU FOR CONCORDIA UNIVERSITY CAMPUS MASTER BUILD-OUT PLAN AT 1530 CONCORDIA WEST, PLANNING AREA 21, TURTLE ROCK, FILED BY CONCORDIA UNIVERSITY

WHEREAS, the Irvine City Council approved General Plan Amendment 4237-GA on April 14, 1992, and Zone Change 5232-ZC on April 28, 1992, to allow development of 310,980 square feet of institutional use and 330 institutional dwelling unit on the Concordia University campus; and

WHEREAS, the Irvine Planning Commission approved Conditional Use Permit 12273-CPU on August 5, 1993, which provided for the master build-out plan of the campus with development of 310,980 square feet of institutional use to serve 1,800 full-time students, 330 institutional dwelling units, a child care center, control access gates, and administrative relief for shared parking; and

WHEREAS, the Director of Community Development approved minor modification 23264-CPM to revise two residence halls from apartment to dormitory design on March 12, 1996; and

WHEREAS, the Director of Community Development approved minor modification 26040-CPM to add the new student center to replace the use and future expansion of the Eagle Café, replace the expansion of the student services/student center, and replace two new classroom buildings from previously approved Conditional Use Permit 12273-CPU on January 31, 1997; and

WHEREAS, the Irvine Zoning Administrator approved administrative relief 36598-CPM for shared parking to establish 1,105 parking spaces as the maximum required parking to serve the campus at build-out on December 8, 1999; and

WHEREAS, the Manager of Planning and Development Services approved minor modification 43809-CPM for the conversion of a dormitory into administrative use increasing the institutional cap to 321,220 square feet in Planning Area 21on June 28, 2000; and

WHEREAS, the Director of Community Development approved minor modification 0050287-CPM to add two golf cart paths for campus circulation improvements and reconfigure various parking lots on October 22, 2001; and

WHEREAS, the Irvine Planning Commission approved Conditional Use Permit modification 00366703-PCPM to reconfigure the Educational, Business and Technology Building and two parking lots on April 7, 2005; and

WHEREAS, Concordia University is requesting approval of Conditional Use Permit modification 00612052-PCPU to revise the campus build-out plan for the 72.8-acre main campus by demolishing seven existing buildings totaling approximately 71,231 square feet and constructing up to 148,880 square feet of new buildings or additions to existing buildings resulting in 77,649 square feet of new building square footage at 1530 Concordia West in Planning Area 21, Turtle Rock ("CUP Modification"); and

WHEREAS, should Concordia University fully implement the campus build-out plan, there would be 321,220 square feet of institutional buildings on campus and 330 dormitory units, consistent with the approved maximums; and

WHEREAS, the project has a General Plan land use designation of General Institutional, a Zoning Ordinance designation of 6.1 Institutional, and is located within the San Joaquin Hills Hillside Overlay District; and

WHEREAS, the CUP Modification conforms with the City of Irvine General Plan and will conform with the Zoning Ordinance if the Zoning Ordinance is amended pursuant to the associated Zone Change 00629029-PZC (the "Zone Change"); and

WHEREAS, the CUP Modification and associated Zone Change are considered a "project" under regulations of the State of California Environmental Quality Act (CEQA); and

WHEREAS, a Final Environmental Impact Report for Concordia University CUP Modification/Zone Change Campus Master Build-Out Plan Update (SCH No. 2015091023, 00618828-PCLE) (the "Final EIR") that includes responses to comments and corrections to the Draft EIR has been prepared pursuant to CEQA to address potential environmental impacts associated with the CUP Modification and Zone Change; and

WHEREAS. on March 16, 2017 the Planning Commission held a duly noticed public hearing on the Final EIR and the corresponding Zone Change and CUP Modification, at which time oral and documentary evidence was introduced along with the written recommendations of the Community Development Department of the City of Irvine, and the Planning Commission received public testimony; and

WHEREAS, the Final EIR is subject to review and, if appropriate, certification by the City Council of the City of Irvine; and

WHEREAS, through the adoption of Planning Commission Resolution No. 17-3596, the Planning Commission reviewed and recommended City Council certification of the Final EIR and adoption of the proposed CEQA Findings of Fact and Mitigation Monitoring and Reporting Program ("MMRP"); and

WHEREAS, the associated Zone Change is subject to review and, if appropriate, approval by the City Council of the City of Irvine; and

WHEREAS, through the adoption of Planning Commission Resolution No.17-3597, the Planning Commission reviewed and recommended City Council approval of the associated Zone Change; and

WHEREAS, Planning Commission of the City of Irvine's approval of the CUP Modification is contingent on the City Council's certification of the Final EIR, adoption of the proposed CEQA Findings of Fact and MMRP,and approval of the associated Zone Change; and

WHEREAS, the Planning Commission of the City of Irvine has considered information presented by the applicant, the Community Development Department, and other interested parties at the above-referenced public hearing held on March 16, 2017.

NOW, THEREFORE, the Planning Commission of the City of Irvine DOES HEREBY RESOLVE as follows:

SECTION 1. The Recitals above are true and correct and incorporated herein by this reference.

SECTION 2. Pursuant to Section 15161 and 15168 of the State of California CEQA Guidelines and Section 8 of the City of Irvine CEQA Procedures, an Environmental Impact Report (EIR), SCH No. 2015091023 has been prepared. The draft EIR was circulated for public comment from August 1, 2016 through September 14, 2016.

SECTION 3. Mitigation measures identified in the EIR have been incorporated into the conditions of approval for the project. These measures mitigate any potential significant environmental effects.

SECTION 4. Pursuant to Section 15202 of the State CEQA Guidelines, the Planning Commission reviewed and considered the Final EIR in reviewing the project. Through the adoption of Planning Commission Resolution No. 17-3596, the Planning Commission found that the EIR adequately addresses the general environmental setting of the proposed project, analyzes the potentially significant environmental impacts and alternatives, and proposes mitigation measures related to each significant impact. The Planning Commission, therefore, recommended the City Council certify the Final EIR and adopt the proposed CEQA Findings of Fact and MMRP.

SECTION 5. Pursuant to Fish and Game Code Section 711.4(c), all required Fish and Game filing fees shall be paid subsequent to certification of the Final EIR.

SECTION 6. The findings required by State law regarding justification of Citywide, village-wide, and project specific development fees for public facilities as a result of this project approval have been met as follows:

A. Citywide fees for public facilities are collected in conjunction with the issuance of building permits for development projects and consist of the following:

1. San Joaquin Transportation Corridor Area of Benefit Charges.

2. Development surcharge fees to recover wear and tear costs from construction site traffic.

3. A systems development charge.

B. Resolutions have been adopted by the Irvine City Council which establishes the connection between the development projects and the public improvements based on the following nexus:

1. The area of benefit charges for the San Joaquin Transportation Corridor are based on the assumption that future state and federal revenues are projected to be inadequate to construct said transportation corridors in a timely manner; and that future development should pay a share of the cost of implementing new transportation corridors to ensure that the transportation system will be adequate to serve said development and that this share of the corridor costs should be proportional to the traffic generated by the development.

2. The impact of construction vehicles using City streets causes wear and tear which significantly reduces the life of the surface of City streets beyond normally expected use and the cost of impacted wear and tear on City streets should be borne by the development projects which create the impact. The wearing surface on City streets is reduced by 50 percent by commercial/industrial construction traffic which causes significant increases on City maintenance costs.

3. The implementation of a systems development charge provides a predictable and equitable funding source for capital improvements by requiring development projects to "buy into" the pre-existing City infrastructure so that the impact of new growth on existing improvements will be borne equitably by new development.

C. All of the Citywide fees identified in this section are based on this project's proportional share of the cost of the improvement as identified in the appropriate City Council resolution.

D. The following nexus between the project specific public facilities and the development project have been identified:

1. The purposes of the fees have been identified.

2. There is a reasonable relationship between the need for public facilities and the type of development for which the fee is imposed.

3. There is a reasonable relationship between the amount of the fees and the costs of the public facilities attributable to the development on which the fee is based.

SECTION 7. The findings required to be made by the Planning Commission for the approval of a Conditional Use Permit Modification, as set forth in Section 2-9-7 of the Zoning Code, have been made as follows:

A. The proposed location of the conditional use is in accord with the objectives of Chapter 1-1 of the Zoning Ordinance and the purpose of the zoning district in which the site is located.

The project site is located in Planning Area 21, Turtle Rock, and designated for 6.1 Institutional use on the Zoning Ordinance land use map. The four-year private university/school uses are consistent with the Zoning Ordinance's description of the institutional land use category as a conditionally permitted use. If the Zoning Ordinance is amended pursuant to the associated Zone Change, the proposed uses will also be consistent with Zoning Ordinance Section 9-21-7.B's special development requirements for the parts of the Planning Area subject to General Plan Amendment 4237-GA and Zone Change 5232-ZC.

B. The proposed conditional use will not be detrimental to the public health, safety or welfare, or be materially injurious to properties or improvements in the vicinity.

Project review under CEQA and the development requirements of the Zoning Ordinance ensure that the proposed Conditional Use Permit modification will not be detrimental to the public health, safety or welfare, or be materially injurious to properties or improvements in the vicinity. It has been determined that, if City Council certifies the Final EIR and adopts of the proposed CEQA Findings of Fact and MMRP, and with the application of the conditions of approval below, which include mitigations measures, there will be no detrimental effects of development from implementing the proposed campus master build-out plan.

The project updates the previously approved campus master build-out plan for the 72.8-acre main campus at 1530 Concordia West by demolishing

seven existing buildings totaling approximately 71,231 square feet and constructing up to 148,880 square feet of new buildings or additions to existing buildings in four project phases. The proposed project maintains the previously approved 321,220 square foot cap of institutional buildings and 330 dormitory units or 1,320 beds. Planned new athletic facilities include a lap/recreational pool, relocation of four existing tennis courts and addition of two new tennis courts on a deck, and two new sand volleyball courts. Additionally, permanent athletic field lighting will be installed. The project also includes upgrades to on-site circulation and parking lot improvements and potential installation of a traffic signal, second outbound shared left/right turn lane and pedestrian crosswalk improvements off-site at the intersection of Ridgeline Drive and Concordia East.

C. The proposed conditional use is compatible with existing uses and future uses to the extent those uses are known, and will comply with each of the applicable provisions of the Zoning Ordinance, except for approved Variances and/or Administrative Relief per Chapters 2-2 and 2-37.

Concordia University is a four-year educational institution which has operated in this location since 1976 for over 40 years. The modification updates the previously approved 2005 campus master build out plan by renovating or replacing old buildings at or approaching the end of their useful lives with state-of-the-art educational facilities that enrich the academic, athletic, cultural and social environment for the university and larger community. The proposed buildings' orientation, massing and exterior materials are designed to complement the site topography and existing campus.

Land uses adjacent to the project site include Mason Regional Park to the north, Concordia East residential (82 low-density single-family detached homes) to the east, French Hill open space to the south, and Concordia West residential (69 low-density single-family detached homes) to the west. Access to the campus will continue to be provided via two existing gated entry points, one at Concordia East via Ridgeline Drive to the east and one at Concordia West via Turtle Rock Drive to the west. All required parking will continue to be provided on-site via surface parking lots.

The modification is compatible with the existing and future uses to the extent that those uses are known and will comply with Zoning Code Sections 3-37-37 (6.1 Institutional). As noted above, if the Zoning Ordinance is amended pursuant to the associated Zone Change, the proposed uses will also be consistent with Zoning Ordinance Section 9-21-7.B's special development requirements for the parts of the Planning Area subject to General Plan Amendment 4237-GA and Zone Change 5232-ZC. No requests for variances or administrative relief are being made with this CUP modification.

D. If the proposed Conditional Use Permit affects land located within the coastal zone, the proposed conditional use will comply with the provisions of the land use plan of the certified local coastal program.

The project site is not located within the coastal zone.

E. Based upon information available at the time of approval, adequate utilities, access roads, drainage, and other necessary facilities exist or will be provided to serve the proposed use.

Conditions of approval, including mitigation measures from the proposed EIR, are placed on the project for upgrades to existing infrastructure to serve the campus as the university implements the phased campus master build-out plan. Existing utility infrastructure and facilities are available on campus or in the vicinity. On-site utility infrastructure [i.e., water (both potable and recycled) wastewater, drainage, electricity, natural gas, and communications] would be provided, as necessary, to serve the proposed uses and would connect to the existing backbone infrastructure which would require on-site infrastructure improvements and off-site improvements along Ridgeline Drive and University Drive (for upgraded dry utility infrastructure) to serve the proposed uses and to connect to existing utilities. The utility infrastructure installed as part of the project would be sized and located expressly to serve the campus in terms of existing and proposed uses.

SECTION 8. That the Secretary to the Planning Commission shall enter the Resolution into the book of original Resolutions.

NOW, THEREFORE, based on the above findings and contingent on the City Council certifying the Final EIR, adopting the proposed CEQA Findings of Fact and MMRP, and approving the associated Zone Change, the Planning Commission of the City of Irvine DOES HEREBY APPROVE Conditional Use Permit Modification 00612052-PCPU, subject to all applicable Plans, Programs, and Policies (PPPs), Project Design Features (PDFs) and Mitigation Measures (MMs) as set forth by the Final EIR for the Concordia University CUP Modification/Zone Change Campus Master Build-Out Plan Update, and subject to the following conditions:

PRIOR TO THE ISSUANCE OF GRADING PERMITS

Standard Condition 2.4 **EXISTING SURVEY MONUMENTS**

Prior to issuance of the preliminary grading permit, the applicant shall file a Corner Record or Record of Survey with the County Surveyor to establish existing survey control points as defined in Section 8711(b) of the California Professional Land Surveyors Act, if the City Engineer determines an existing survey monument(s)

may be disturbed by construction activities. The City Engineer shall review and approve the Corner Record or Record of Survey prior to filing the record with the County Surveyor.

Standard Condition 2.5 **ARCHAEOLOGIST / PALEONTOLOGIST**
(PPP 4-1)

Prior to the issuance of the first preliminary or precise grading permit for a project that is located on land that includes potentially significant archaeological and/or paleontological sites, and for any subsequent permit involving excavation to increased depth, the applicant shall provide letters from an archaeologist and/or a paleontologist. The letters shall state that the applicant has retained these individuals, and that the consultant(s) will be on call during all grading and other significant ground disturbing activities. Determination of the need for these consultants shall be based on the environmental analysis for the project. These consultants shall be selected from the roll of qualified archaeologists and paleontologists maintained by the County of Orange (OC Public Works / OC Planning). The archaeologist and/or paleontologist shall meet with Community Development staff, and shall submit written recommendations specifying procedures for cultural/scientific resource surveillance. These recommendations shall be reviewed and approved by the Director of Community Development prior to issuance of the grading permit and prior to any surface disturbance on the project site. Should any cultural/scientific resources be discovered during grading, no further grading shall occur in the area of the discovery until the Director of Community Development is satisfied that adequate provisions are in place to protect these resources. This condition and the approved recommendations shall be incorporated on the cover sheet of the grading plan under the general heading: "Conditions of Approval."

Standard Condition 2.6 **SITE SPECIFIC GEOTECHNICAL STUDY**
(PPP 5-1)

Prior to the issuance of grading permits, the applicant shall provide to the Chief Building Official a site-specific geotechnical study for each proposed structure. The geotechnical report shall be prepared by a registered civil engineer or certified engineering geologist, having competence in the field of seismic hazard evaluation and mitigation. The geotechnical report shall contain site-specific evaluations of the seismic hazard affecting the project, and shall identify portions of the project site containing seismic hazards. The report shall also identify any known off-site seismic hazards that could adversely affect the site in the event of an earthquake. The contents of the geotechnical report shall include, but shall not be limited to, the following:

a. Project description.
b. A description of the geologic and geotechnical conditions at the site, including an appropriate site location map.

c. Evaluation of site-specific seismic hazards based on geological and geotechnical conditions, in accordance with current industry standards of practice.
d. Recommendations for earthwork and construction.
e. Name of report preparer(s), and signature(s) of a certified engineering geologist and/or registered civil engineer, having competence in the field of seismic hazard evaluation and mitigation.
f. Include the official professional registration or certification number and license expiration date of each report preparer in the signature block of the report.

Standard Condition 2.7 **GROUNDWATER SURVEY**

Prior to the issuance of precise grading permits, the applicant shall submit to the Chief Building Official a groundwater survey of the entire site. The analysis shall be prepared by a licensed geotechnical engineer versed in groundwater analysis and shall include the following information and analysis:

a. Potential for perched groundwater intrusion into the shallow groundwater zone upon build-out.
b. Analysis for relief of groundwater buildup and properties of soil materials on-site.
c. Impact of groundwater potential on building and structural foundations.
d. Proposed mitigation to avoid potential for groundwater intrusion within five feet of the bottom of the footings.

Standard Condition 2.12 **WATER QUALITY – NOTICE OF INTENT**
(PPP-8-1)

Prior to the issuance of preliminary or precise grading permits for a project that will result in soil disturbance of one (1) or more acres of land, the applicant shall provide the Chief Building Official with evidence that a Notice of Intent (NOI) has been filed with the State Water Resources Control Board. Such evidence shall consist of a copy of the NOI stamped by the State Water Resources Control Board or the Regional Water Quality Control Board, or a letter from either agency stating that the NOI has been filed.

Standard Condition 2.13 **WATER QUALITY MANAGEMENT PLAN**
(PPP 8-2)

Prior to the issuance of preliminary or precise grading permits, the applicant shall submit to the Chief Building Official for review and approval, a Water Quality Management Plan (WQMP). The WQMP shall identify the Best Management Practices (BMPs) that will be used on the site to control predictable pollutant runoff.

Standard Condition 2.20 **WILDLIFE HABITAT CLEARANCE**

Prior to the issuance of permits for any grading activity including, but not limited to, clearing, grubbing, mowing, discing, trenching, grading, fuel modification, agriculture planting activity, and/or other related construction activity for a project that will involve removal of native plant communities and wildlife habitat, the applicant shall obtain written authorization from the appropriate Federal, State and local agencies having jurisdiction over the habitat area. The authorization shall state that said activity complies with the regulations enforced by those agencies. Additionally, any mitigation requirements set forth by such agencies shall be incorporated into the project's final design plans. This written authorization, along with plans and mitigation measures, shall be submitted to the Director of Community Development for review and shall have been approved by the Director prior to issuance of a permit for any grading activity.

Standard Condition 2.24 **SOLID WASTE RECYCLING**

Prior to the issuance of grading permits for a project that involves the demolition of an asphalt or concrete parking lot on site, the applicant shall submit a waste management plan demonstrating compliance with the requirements of Title 6, Division 7 of the City of Irvine Municipal Code relating to recycling and diversion of demolition waste as applicable to said project. Over the course of demolition or construction, the applicant shall ensure compliance with all code requirements related to the use of City-authorized waste haulers.

Condition 2.26 **HYDROLOGY REPORT**

Prior to issuance of grading permits, the applicant shall submit a hydrology report for the proposed development, addressing the existing and proposed drainage conditions.

Condition 2.27 **11' TRAIL EASEMENT DEED**

Prior to issuance of a grading permit for Phase 1, the applicant shall submit a quitclaim and easement deed for the alteration of the existing pedestrian access easement through the college demonstrating a continuous connection from Turtle Rock Vistas residential development though the Concordia University campus to Ridgeline Drive. The quitclaim and easement deed shall be in the form approved by the City Attorney and prepared to the satisfaction of the City Engineer.

Condition 2.28 **COUNTY ROW ACQUISITION**

Prior to issuance of grading permits for the portion of the 11' wide trail (along Concordia East) and, if applicable, any traffic signal related improvements for the intersection at Concordia East and Ridgeline Drive, within County of Orange right-

of-way, an Encroachment Permit and/or other acquisition method (e.g., park abandonment process) shall be required.

Condition 2.29 **OCFA EMERGENCY ACCESS EASEMENTS**

Prior to issuance of a grading permit, the applicant shall submit an easement deed for emergency access to the City. The easement deed shall be in the form approved by the City Attorney and prepared to the satisfaction of the City Engineer.

Condition 2.30 **OCFA SUBMITTALS**

Prior to the issuance of a grading permit, the applicant shall submit and receive approval from the Orange County Fire Authority for the following:

- Conceptual Fuel Modification Plan with rough grading permit (service code PR120)
- Precise Fuel Modification Plan with precise grading permit (service code PR124)
- Fire Master Plan for entire campus (service code PR145)
- Fire Protection Plan (service code PR146). For areas not within a very high fire hazard severity zone, architectural plans submitted to the City and/or County Building Departments shall list the applicable special construction requirements of CBC Chapter 7A or CRC R327.
- Executed Secured Fire Protection Agreement with the Orange County Fire Authority *(PPP 12-2)*

Condition 2.31 **OCFA FUEL MODIFICATION COVENANT**

A covenant for access and inspection purposes to the benefit of the city and for maintenance by the land owner is required for Fuel Modification Zones, Special Maintenance Areas, and/or Roadside Protection Zones that were identified on approved fuel modification plans. The covenant shall be provided to the OCFA for review and approval and recorded prior to issuance of grading permits

Condition 2.32 **CHILDCARE CENTER OPTIONS**

Prior to the issuance of the first grading permit for Phase 3 of the Concordia University Campus Master Build-Out Plan, the University shall submit a Conditional Use Permit (CUP) application(s) for a childcare center(s) on-campus and/or off-campus implementing one or both options below to accommodate 100 additional (new) licensed child care slots within Irvine.

a. If the childcare center is accommodated on campus, it shall be located in 5,000 to 8,000 gross square feet of space in an existing building or in a proposed Phase 3 or 4 building in the Campus Master Build-Out Plan.

Additionally, an outdoor play area shall be provided consistent with all applicable City Child Care Center Standards and State Child Care licensing requirements; and/or

b. If the childcare center is accommodated off-campus, it shall be located at an off-campus location convenient to University students and employees within the City of Irvine and shall consist of a new facility/facilities and/or the expansion of an existing facility/facilities.

The applicant and/or childcare provider shall make a good faith effort to process and obtain the CUP application(s) in a timely manner.

Condition 2.33 **CONSTRUCTION STAGING & MANAGEMENT PLANS**

Prior to the issuance of grading permits for each building, a construction management plan, detailing items including but not limited to access routes; haul routes; staging areas; temporary parking for students, faculty/staff, construction/temporary workers; and clean-up requirements including any public and private roadways, shall be submitted to the Director of Community Development. The plans shall be reviewed and approved by Community Development, Public Safety, Public Works and Orange County Fire Authority. A copy of the approved phased construction staging and management plans shall be retained by the Community Development Department and made available for public viewing.

Condition 2.34 **MINOR/MAJOR MODIFICATIONS**
(PPP 1-3)

Prior to approval of any modification application and/or issuance of grading and/or building permits for future buildings on campus, the Community Development Department shall review any proposed revisions, if applicable, to Conditional Use Permit modification 00612052-PCPU pursuant to Zoning Ordinance Chapter 2-19, Minor/Major Modification Procedure. Future buildings shall also comply with the University's *Narrative of Proposed Architectural Styles*, included in Appendix C of the Draft Environmental Impact Report (EIR).

PRIOR TO THE ISSUANCE OF BUILDING PERMITS

Standard Condition 3.5 **FINAL ACOUSTICAL REPORT**
(PPP-10-3)

Prior to the issuance of building permits for each structure or tenant improvement, other than a parking structure, the applicant shall submit a final acoustical report prepared to the satisfaction of the Director of Community Development. The report shall demonstrate that the development will be sound attenuated against present and projected noise levels including stationary, roadway, aircraft,

helicopter, and railroad noise to meet City interior and exterior noise standards. The final acoustical report shall include all information required by the City's Acoustical Report Information Sheet (Form 42-48). The report shall be accompanied by a list identifying the sheet(s) of the building plans that include required sound attenuation measures.

Standard Condition 3.6 **SITE LIGHTING REQUIREMENTS**
(PPP 12-4)

Prior to the issuance of building permits, the applicant shall demonstrate they have met the Irvine Uniform Security Code requirements for lighting by providing the below listed items for a complete review by the Police department. Failure to provide a complete lighting package will result in the delay of satisfaction of this condition.

a. Electrical plan showing light fixture locations, type of light fixture, height of light fixture, and point-by-point photometric lighting analysis overlaid on the landscape plan with a tree legend. The photometric plan should only show those fixtures used to meet the Irvine Uniform Security Code requirements.

b. Corresponding fixture cut-sheets (specifications) of those lights used to meet the Irvine Uniform Security Code.

c. Site plan demonstrating that landscaping shall not be planted so as to obscure required light levels.

d. Site plans that are full-scale and legible.

Standard Condition 3.7 **SOLID WASTE RECYCLING**

Prior to the issuance of building permits for a project that involves new construction or that involves the demolition or renovation of existing buildings on site, the applicant shall comply with requirements of Title 6, Division 7 of the City of Irvine Municipal Code relating to recycling and diversion of construction and demolition waste as applicable to said project. Over the course of demolition or construction, the applicant shall ensure compliance with all code requirements related to the use of City-authorized waste haulers.

Standard Condition 3.10 (Modified) **CHILD CARE PLAYGROUND**

Prior to the issuance of a building permit for a building in phases three or four that includes a childcare center, the applicant shall obtain approval of a Playground Plan by the Director of Community Development. The Playground Plan shall include all information specified in City of Irvine Park/Public Facility Standards, Section VII-B.3.4.

Standard Condition 3.17 **EMERGENCY ACCESS PLAN**
(PPP 13-1)

Prior to the issuance of the first building permit, the applicant shall submit and have approved by the Chief of Police an Emergency Access Plan, which identifies and locates all Knox Boxes, Knox key switches, and Click2Enter radio access control receivers. Said plan shall be incorporated into the plan set approved for building permits

Standard Condition 3.20 **CONSTRUCTION SITE SECURITY PLAN**
(PPP 12-3)

Prior to the issuance of the first building permit, a Construction Site Security Plan, per the Irvine Uniform Security Code, Section 5-9-521, shall be approved by the Chief of Police. Said plan shall be incorporated into the plan set approved for building permits.

Condition 3.27 **OCFA SUBMITTALS**

Prior to issuance of each building permit, the applicant shall submit to the Orange County Fire Authority and obtain approval of the following:

- Architectural (service codes PR200 - PR285), when required by the OCFA "Plan Submittal Criteria Form."
- Underground Piping (service codes PR470 - PR475), for private hydrants and sprinkler systems

Condition 3.28 **OCFA SUBMITTALS**

Prior to concealing interior construction, the applicant shall submit to the Orange County Fire Authority and obtain approval of the following:

- Fire Sprinkler System (service codes PR400 - PR465)
- Sprinkler Monitoring System (service code PR500)
- Fire alarm system (service code PR500 – PR 520), if modified, provided voluntarily, or required by Code

Condition 3.29 **OCFA PRECONSTRUCTION MEETING**

Before commencement of construction, the applicant or responsible party shall attend a pre-construction meeting with an OCFA inspector.

Condition 3.30 **OCFA VEGETATION CLEARANCE/RELEASE**

Prior to issuance of either building permits or bringing lumber or other combustible materials into the area, whichever comes first, the developer/builder

shall implement those portions of the approved fuel modification plan determined to be necessary by the OCFA and a confirmation of proper vegetation clearance shall be issued by the OCFA to the City of Irvine building department. Removal of undesirable species may meet this requirement or a separation of combustible vegetation for a minimum distance of 100 feet from the location of the structure and lumber stock-pile may be acceptable.

Condition 3.31 **CHILDCARE SECURITY GUIDELINES**

Prior to issuance of building permits for a childcare center, the applicant shall demonstrate compliance with the City of Irvine Public Safety Child Care Security Guidelines.

Condition 3.33 **ATHLETIC FIELD LIGHTING SYSTEM INSTALLATION & OPERATIONS**
(PDF 1-2)

Prior to approval of building permits for installation of athletic facility lighting, the Project Applicant shall submit for review and approval by the Director of Community Development lighting plans for existing and proposed athletic facilities, demonstrating compliance with requirements outlined in the City of Irvine Parks and Public Facilities Standards Manual. A third-party lighting consultant may be retained at the discretion of the Director of Community Development to review the athletic field lighting plans. The Project Applicant shall be responsible for all costs associated with the review by the City-hired third-party lighting consultant. A copy of this submittal shall be provided to the Concordia East Community Association's Board of Directors concurrently with the submission of the same to the City.

As shown on Exhibit 3-24, Conceptual Athletic Field Lighting Plan, in Section 3.0, Project Description, of the Draft EIR, the proposed project would involve installation of athletic field lighting at each of the existing athletic fields (soccer/track, softball, baseball, and practice), at the two proposed sand volleyball courts and on the proposed tennis court deck (four courts out of six). With the exception of tennis courts and practice field, the lighting shall comply with lighting requirements established by the National Collegiate Athletic Association (NCAA) for intercollegiate play (no broadcast) as shown in Appendix C, NCAA Best Lighting Practices, of the Draft EIR, or as modified by the NCAA in the future.

The lighting system and associated operation of the lighting system include the following features which serve to reduce potential impacts:

- Installation of light emitting diode (LED) light fixtures or other industry approved best available technology and not metal halide.
- Lighting shall only be installed on the four tennis courts in the eastern portions of the tennis court deck (closest to the baseball field), and

shall be designed to accommodate nighttime play for recreation and practice.

- Tennis court lighting shall not exceed an average light level of 50 footcandles and shall not be designed to comply with NCAA requirements.
- Practice field lighting shall not exceed an average light level of 30 footcandles and shall not be designed to comply with NCAA requirements.
- Reflectors for the light fixtures that direct the light onto the field, reducing sky glow and spill light onto neighboring properties, and a visor assembly that works in conjunction with the reflector to provide more light control and reduce glare on and off the field.
- A remote scheduling, monitoring and data management system that allows the University to schedule, report, and track usage of athletic field lighting, including by special user groups.
- A multi-watt dimming control system that operates by adjusting the total electrical consumption of the driver allowing for different light levels for intercollegiate play (i.e., high mode - 100 percent power), practices (i.e., medium mode– 50 percent power), and clean-up activities (i.e., low mode- 15 percent power) that can be operated through on-site and remote control links.
- A lighting curfew of 9:00 PM to limit nighttime operational hours for all field use. All events shall be scheduled to conclude before the curfew and the automated lighting system shall be designed to and shall turn off athletic field lights no later than 9:00 PM each day. If scheduled events are concluded before 9:00 PM, the lights shall be turned off at the earliest time possible.

Condition 3.34 **ATHLETIC FIELD LIGHTING COMPLIANCE**
(MM 1-2)

During installation of the lighting system, and prior to operation of the athletic facility lighting, the University shall retain a registered Lighting Engineer or lighting professional with certification that indicates proficiency in outdoor lighting design to provide on-site verification that lighting installation conforms to submitted plans (i.e., number of poles and fixtures, mounting heights, spill light footcandles, and glare candela or candlepower) and is in compliance with applicable criteria established in the City's *Parks and Park Facilities Standards*. Written verification of compliance shall be provided to the Community Development Department prior to approval of use of the athletic field lighting. A copy of this submittal shall be provided to the Concordia East Community Association's Board of Directors concurrently with the submission of the same to the City. The City may request written verification by a registered Lighting Engineer of the lighting operations on the campus at any time to ensure continued compliance and/or address any community concerns.

Condition 3.35 **IRWD**

Prior to the issuance of a building permit for the first building, the applicant shall coordinate with the Irvine Ranch Water District (IRWD) to develop a technical memorandum or Sub-Area Master Plan addendum for applicable portions of this project. The memorandum or addendum shall be completed to the satisfaction of IRWD's Development Services Group.

Condition 3.36 **EXTEND LEFT TURN LANES ON UNIVERSITY AT RIDGELINE**
(MM 13-1)

Prior to issuance of the first building permit for institutional uses in Phase 1, and if the University Drive and Ridgeline Drive/Rosa Drew Lane Improvement Project has been approved by the City of Irvine, the Project Applicant shall pay its fair share toward this improvement project (0.76 percent as presented in the TIA included in Appendix J). If this improvement project has not been approved at the time of issuance of the first building permit, prior to issuance of an occupancy permit, the Project Applicant shall extend the westbound turn lane at the Ridgeline Drive/University intersection by 25 feet per lane. Compliance with the applicable mitigation requirement shall be confirmed by the Community Development Department.

Condition 3.37 **INSTALL RIGHT-TURN LANE ON RIDGELINE AT UNIVERSITY**
(MM 13-3)

Prior to issuance of a building permit for additional institutional square footage in Phases 3 and 4, if a second northbound right-turn lane at Ridgeline Drive/University Drive intersection is not being implemented by others, the Project Applicant shall install this improvement or demonstrate in a subsequent traffic analysis to the satisfaction of the Director of Community Development that the improvement is no longer needed. If it is demonstrated that the improvement has been or is being implemented by others prior to issuance of a building permit for additional institutional square footage in Phases 3 and 4, the Project Applicant shall pay its fair-share toward implementation of this improvement (2.7 percent as presented in the TIA included in Appendix J).

Condition 3.38 **INSTALL EASTBOUND THROUGH LANE ON UNIVERSITY**
(MM 13-4)

Prior to issuance of a building permit for additional institutional square footage in Phases 3 and 4, the Project Applicant shall implement a third eastbound through lane on University between Ridgeline and Michelson, or demonstrate in a subsequent traffic analysis to the satisfaction of the Director of Community Development that the improvement is no longer needed. However, if the

improvement has been identified or implemented as part of a short-term interim-year condition by others, the Project Applicant shall pay its fair-share contribution toward implementation of this improvement (1.01 percent as presented in the TIA included in Appendix J).

PRIOR TO FINAL APPROVAL OF COMPLETED WORK AUTHORIZED BY GRADING, LANDSCAPING OR IMPROVEMENT PERMIT

Standard Condition 3.39 **RECORD DRAWINGS – PDF & AUTOCAD**

Prior to final approval of a grading, landscaping, or improvement permit, and following final inspection, the applicant shall submit to the City individual PDF files of the drawing and AutoCAD files. The permit number and the words "RECORD DRAWING" shall appear on all of the sheets.

PRIOR TO AUTHORIZATION TO USE, OCCUPY, AND/OR OPERATE

Standard Condition 4.2 (Modified) **CHILD CARE PLAYGROUND INSPECTION**

Prior to authorization to use, occupy, and/or operate the playground in the event that one is required, the applicant shall submit to the Chief Building Official a letter stating that the play equipment installation has been inspected by a person authorized by the manufacturer, that the equipment has been installed per manufacturer's specifications, and that it complies with minimum playground safety regulations, adopted by the State of California (CA Code of Regulations, Title 22, Division 4, Chapter 22, Article 1-4).

Standard Condition 4.9 **EMERGENCY ACCESS INSPECTION**
(PPP 13-2)

Prior to authorization to use, occupy, and/or operate, the applicant shall arrange for and have passed an inspection, to be performed by the Police Department and the Orange County Fire Authority, to ensure compliance with the Emergency Access Plan requirements. The inspector shall verify test acceptance and locations of all Knox boxes and key switches as depicted on the approved plan.

Condition 4.13 **OCFA TEMPORARY/FINAL OCCUPANCY INSPECTIONS**

Prior to issuance of temporary or final certificate of occupancy, all OCFA inspections shall be completed to the satisfaction of the OCFA inspector and be in substantial compliance with codes and standards applicable to the project and commensurate with the type of occupancy (temporary or final) requested.

Condition 4.14 OCFA FUEL MODIFICATION INSPECTION FOR OCCUPANCY

Prior to issuance of temporary or final certificate of occupancy, the fuel modification zones adjacent to structures must be installed, irrigated, and inspected. This includes physical installation of features identified in the approved precise fuel modification plan (including, but not limited to, plant establishment, thinning, irrigation, zone markers, access easements, etc). A written disclosure may be requested by the OCFA Inspector indicating that the property owner is aware of the fuel modification zone on their land and that they are aware of the associated restrictions of the zone.

Condition 4.15 **OCFA OWNER TURN-OVER**

Prior to issuance of temporary or final certificate of occupancy for the Keck Astronomy Center, a turn-over meeting/inspection shall be arranged for the Fire Inspector and the following representatives: landscape design professional, installing landscape contractor, management representative, landscape maintenance contractor. The fuel modification areas shall be maintained as originally installed and approved. Proof of a recorded covenant shall be provided to OCFA.

Condition 4.16 **EXTEND LEFT TURN LANE ON TURTLE ROCK AT CONCORDIA WEST**

(MM 13-2)

Prior to authorization to use, occupy, and/or operate for any institutional uses in Phase 1, the Project Applicant shall lengthen the southbound left-turn lane at the Turtle Rock Drive/Concordia West roadway intersection from 110 feet to 140 feet (an addition of 30 feet) to meet Transportation Design Procedure (TDP)-1 design criteria. The design and implementation of this mitigation improvement shall be to the satisfaction of the Director of Community Development Department.

Condition 4.17 **TRAFFIC SIGNAL INSTALLATION**

(PDF 13-2)

Prior to the issuance of Certificates of Use and Occupancy for the Music, Worship and Theology building, the applicant shall enter into an agreement with the City and post security in a form and in an amount acceptable to the City Engineer guaranteeing construction of a traffic signal at Concordia East and Ridgeline Drive. Timing of construction of the signal and actual construction will be determined based upon a review of necessity by the Transportation Commission. If a signal is determined not to be needed, the agreement will terminate and the security will be released.

PRIOR TO THE EXONERATION OF SECURITY

Standard Condition 5.1 **EXISTING SURVEY MONUMENTS**

Prior to the exoneration of any security for a project that may include existing survey monuments disturbed through construction activities and deemed necessary for preservation by the City Engineer, as set forth in Standard Condition 1.7 or 2.4, the applicant shall have a licensed land surveyor or qualified registered civil engineer reestablish any such monumentation damaged or destroyed during construction of the project and file the corner records with the County Surveyor. Evidence of such filing shall be furnished to the City Engineer.

Standard Condition 5.2 **DIGITAL RECORDS -PDF**

Prior to the exoneration of any security for improvements required by either Standard Condition 1.1 or 2.1, the applicant shall submit one (1) copy in PDF format of the recorded final map. The PDF can be on PC compatible CD or DVD.

Standard Condition 5.3 **DIGITAL RECORDS - AUTOCAD**

Prior to the exoneration of any security for any improvements required by either Standard Condition 1.1 or 2.1, the applicant shall provide proof that the permit for the subject improvement has been approved and finaled by the City. Submit one (1) set of computerized data, which is compatible with the City DXF (AutoCAD) system, of the record drawings of grading, landscape, and improvement plans to, and in a manner approved by the City. Refer to Specifications for Digital Submission as maintained by the Surveyor's Office of the County of Orange for specific requirements of individual submittal.

MISCELLANEOUS

Standard Condition 6.1 **DISCRETIONARY CASE CHARGES**

The applicant is responsible for paying all charges related to the processing of this discretionary case application within 30 days of the issuance of the final invoice or prior to the issuance of building permits for this project, whichever occurs first. Failure to pay all charges shall result in delays in the issuance of required permits or may result in the revocation of the approval of this application.

Standard Condition 6.2 **LEGAL ACTION – HOLD HARMLESS**

In accordance with the provisions of Section 5-5-114 of the Irvine Municipal Code and Government Code Section 66474.9, the applicant shall defend, indemnify, and hold harmless the City of Irvine and its agents, officers, and employees from and against any claim, action, or proceeding against the City agency or its agents, officers, or employees to attack, set aside, void, or annul an approval by the City,

including, without limitation, an action by an advisory agency, appeal board, or legislative body concerning this discretionary approval. This defense and indemnification shall include the payment of all legal costs incurred on behalf of the City in connection with the application, and the defense of any claim, action or proceeding challenging the approval. The City will promptly notify the applicant of any claim, action, or proceeding and will cooperate fully in the defense.

In the event a legal challenge to the discretionary approval is successful, and an award of attorney fees is made to the challenger, the applicant shall be responsible to pay the full amount of such an award.

Standard Condition 6.15 (Modified) **UNIVERSITY PARKING ISSUES**

If subsequent to the approval of the parking ratios in accordance with Zoning Ordinance Section 4-3-2, the Director of Community Development determines that parking issues are negatively affecting the project site or adjacent properties (e.g., parking in adjacent neighborhoods), the property owner may be required to submit a plan to the Director of Community Development that identifies specific measures to resolve these problems. The plan shall be submitted within 30 days of notification by the City and shall be reviewed and approved by the Director of Community Development. The property owner shall be required, at its sole expense, to implement any modifications required by the plan within 30 days of written notice from the Director of Community Development to implement such measures, or in such time frame as directed by the Director of Community Development.

Similarly, any development applications for uses within the campus shall demonstrate to the satisfaction of the Director of Community Development that the actual parking demand from the site does not exceed the approved minimum parking ratios of 0.48 space per dorm bed plus one space per 421 institutional square feet.

Condition 6.19 **OCFA LUMBER-DROP INSPECTION**

After installation of required fire access roadways and hydrants, the applicant shall receive clearance via a lumber-drop inspection from the Orange County Fire Authority prior to bringing combustible building materials on-site.

Condition 6.20 **OCFA FUEL MODIFICATION MAINTENANCE**

The property owner is responsible for all maintenance of the fuel modification indefinitely in accordance with the approved fuel modification plans and recorded covenant. The property owner shall retain all approved fuel modification plans. As property is transferred, property owners shall disclose the location and regulations of fuel modification zone to the new property owners.

Condition 6.21 **VEHICLE TRIP CAP AND MONITORING**
(MM 9-1)

Incremental Daily Trip Cap
The maximum daily trip cap shall be determined by the actual existing square footage (i.e., buildings with temporary or final certificate of occupancy) on the campus on the starting date of the vehicle trip count provided, however, that 4,732 maximum daily trips shall be the initial maximum daily trip cap until Concordia adds any additional institutional building square footage beyond the existing 243,571 square feet, at which time the below maximum Daily Trip Cap ("Daily Trip Cap") will exclusively apply and govern provided the Daily Trip Cap calculation yields no less than 4,732 maximum daily trips. As building square footage is allowed to be occupied and compliance with the trip cap is verified, the trip cap will increase incrementally for the campus. Vehicle trips generated by the Concordia University campus shall be calculated as follows:

Daily Trip Cap = 17.12 trips x existing institutional square footage/1,000 SF

(note: institutional square footage excludes dormitory unit square footage)

Maximum Daily Trip Cap
If Daily Trip Cap compliance is successfully and continuously demonstrated with the occupancy of each new or expanded building, the daily trip generation shall not exceed 5,500 daily trips at full-campus build-out (i.e., 321,220 square feet of institutional uses and 330 dormitory units).

Vehicle Trip Counts
Concordia and all its successors shall conduct a count of vehicles entering and exiting the campus two times annually. The first count of vehicles shall be taken during the month of October on three successive days (Tuesday, Wednesday and Thursday). The second count of vehicles shall be taken on a weekend day (Friday or Saturday) in the Spring when a special event or special events with the largest attendance and largest vehicle trip generation is/are anticipated. The proposed dates of each count shall be reviewed and approved by City staff a minimum of 30 days in advance of commencing any actual counts.

This "cordon count" shall be conducted via a mixture of electronic and mechanical means (e.g., magnetic road loops, video and/or rubber hose counting systems). All trips entering and exiting the campus, including those associated with pass-through traffic (e.g., community HOA vehicles traversing the campus to travel from one location to another), shall be recorded. Furthermore, counts from all residential neighborhood streets (i.e., Ascension for Concordia East and Daystar, Faith and Joy for Concordia West) shall be deducted from the overall gate volumes.

Vehicle Trip Monitoring Reports
Concordia University shall submit to the Community Development Director (and provide copies directly to the Board of Directors of the Concordia East and West Community Associations) two comprehensive trip monitoring reports summarizing the completed counts of vehicles entering and exiting the campus ("Vehicle Trip Monitoring Report"). The Vehicle Trip Monitoring Reports for the October and Spring counts shall be submitted no later than 30 calendar days after completion of each count and, in the case of the City, submitted as a Pre-Application case type.

Actual count data for each day shall be included in the Vehicle Trip Monitoring Report. The highest 24-hour count for each collection period (October and Spring) shall be used in determining compliance with the Daily Trip Cap, and daily counts shall not be averaged between the count days for that year. Each Vehicle Trip Monitoring Report shall include a summary description of all events and activities occurring on campus each day that traffic counts were taken. At the discretion of the Director of Community Development, additional traffic counts and reports beyond the October and Spring Vehicle Trip Monitoring Reports may be required, if deemed necessary.

Non-Compliance
Should any October or Spring Vehicle Trip Monitoring Report or specially requested report submitted to the City evidence noncompliance with the applicable maximum trip count limitation, within 30 calendar days of the Director of Community Development's receipt of the Vehicle Trip Monitoring Report, University representatives shall meet with the Director of Community Development and Concordia East and West Community Associations' Board of Directors, if interested, to review actions including but not limited to reducing on-campus activities and implementing transportation demand management measures (e.g., carpooling, use of alternative modes of transportation, parking management) that shall be immediately taken to comply with the trip count limitations.

Additionally, prior to issuance of all grading/building permit and approval of all development applications for uses within the campus, the applicant shall demonstrate to the satisfaction of the Director of Community Development that the projected total daily traffic from the site will not exceed 4,732 daily trips or 17.12 daily trips per thousand square feet of existing and/or proposed institutional square footage (whichever is greater). In the event of non-compliance with the applicable trip cap, the applicant shall be prohibited from further implementing the campus build-out plan regardless of the (approved) status of such permit(s) and/or development plan(s) until compliance with the trip cap is demonstrated.

Additional Requirements
Additionally, where the applicant is required to submit a traffic analysis by any federal, state, or local law or policy, including but not limited to the City Traffic Impact Analysis Guidelines and/or California Environmental Quality Act, the applicant shall submit such traffic analysis in addition to the above requirements.

Finally, see Condition of Approval 6.25 regarding Special Events and Condition of Approval 6.24 regarding Non-University Events for details on additional reporting requirements for those activities.

Condition 6.22 **DORMITORY USE**

Existing (256 dormitory units/1,024 beds) and future (74 dormitory units/296 beds) on-campus housing shall be used exclusively as dormitory units for Concordia University students, faculty, and employees, in perpetuity, except as to use which is co-extensive with uses subject to Condition 6.24, below.

Condition 6.23 **MAINTAIN TRAIL ALIGNMENT**

Open pedestrian/bicycle access (minimum 11-foot wide) shall be maintained between the Turtle Rock Vistas residential development through Concordia University with a continuous connection to Ridgeline Drive in perpetuity. The precise location of the trail connection shall be determined and/or confirmed during review of any discretionary development and/or building permit application for Concordia University and appropriate signage provided.

Condition 6.24 **NON-UNIVERSITY EVENTS LIMIT AND REPORTING**

The University is zoned 6.1, Institutional, and, except as provided in this condition, use of the campus shall be connected to the University's educational and religious purposes, to insure that the primary use of the campus is in keeping with the institutional zoning requirement, and to require a limitation of, and reporting process for, any and all auxiliary/community use of campus facilities defined below as "non-university events."

For purposes of this condition, non-university events are defined as events where non-Concordia University/Lutheran Church-Missouri Synod groups, businesses, organizations or individuals, whether for-profit or non-profit, use and/or rent any portion of Concordia University's campus or facilities, including, without limitation, its institutional buildings, athletic fields and related facilities, and/or any other improvements.

Concordia University shall limit non-university events, as defined herein, on any portion of Concordia University's main campus or facilities (including, without limitation, its institutional buildings, athletic fields and related facilities, and/or any other improvements) to a maximum of 25 events per academic year (i.e., August

1 through May 15) and summer term (i.e., May 16 through July 31) combined. For non-university events that will last more than one day, each day of such event shall be considered a separate event for purposes of this limitation. Likewise, if multiple non-university events are held on the same day, each day of each such event shall be counted separately for purposes of this limitation.

Athletic facility usage as allowed under the "Lutheran Church-Missouri Synod/City of Irvine Joint Use of College Facilities Agreement" (as amended on August 21, 1996) between the City of Irvine and Concordia University ("Joint Use Agreement") shall not be considered non-university events, and shall not be included in the annual non-university event report. The availability and usage of the athletic facilities contained in the recorded "Joint Use Agreement" (as amended on August 21, 1996) shall remain consistent with Exhibit B, Concordia University Facilities Description and Percentage of Use Availability, and shall not be subject to the 25 events limit.

Similar to the Joint Use described above, non-athletic events that provide for the participation of youth who are of such an age as to reasonably consider future attendance at the University shall not be considered non-university events, and shall not be included in the annual non-university event report. For such events to be considered non-university events, there shall be evidence that the University took reasonable steps in furtherance of promoting the University to such participants.

After the end of each academic year and summer term (August 1 - July 31), and not later than September 15 after such term, Concordia University shall submit to the Community Development Director (and provide copies directly to the Concordia East and West Community Associations' Board of Directors) a non-university event summary for the completed academic year and summer term detailing the number of non-university event days, the dates, start and end times, event descriptions, attendance numbers, and whether special arrangements such as extra City Public Safety assistance or off-site parking were required, which shall be incorporated in an Events Report. The Events Report shall be a combined report of the non-university event summary described in the prior sentence and the special event summary described below in Condition of Approval 6.25. Descriptions of any complaints received shall be provided in the Events Report. The Events Report shall be submitted as a Pre-Application case type to the City for review.

Should any Events Report submitted to the City evidence noncompliance with the event day limit for non-university events, or should any Event Report fail to accurately report non-university events, within 15 calendar days of the Director of Community Development's receipt of the Events Report, University representatives shall meet with the Director of Community Development and Concordia East and West Community Associations' Board of Directors, if interested, to review actions that shall be immediately taken to comply with the

event day limit. In the event that such actions do not result in compliance, the Director of Community Development may, in his or her discretion, further limit the number and type of non-university events to the point where operations on-campus function appropriately.

Condition 6.25 **SPECIAL EVENTS REPORTING**

Special events are held at the main campus throughout the year and generally include large and/or multiple events typically attracting larger numbers of outside guests and visitors. Special events are classified as academic life events, student life events, university life events, or auxiliary/community life (non-university events). Special events generally occur outside typical campus weekday peak traffic hours of 8 - 9 a.m. and 4:30 – 5:30 p.m. or during the weekends. Auxiliary/community life ("non-university events") special events are limited by Condition 6.24 and shall be counted as part of the allowed 25 events per academic year and summer term. Academic life, student life and university life special events shall be limited to events hosted by Concordia University which directly relate to its educational and religious purposes.

After the end of each academic year and summer term (August 1 - July 31), and not later than September 15 after such term, Concordia University shall submit to the Community Development Director (and provide copies directly to the Concordia East and West Community Associations' Board of Directors) a special event summary for the completed academic year detailing the dates, start and end times, event descriptions, attendance numbers, and whether special arrangements such as extra City Public Safety assistance or off-site parking were required, which shall be incorporated in an Events Report. The Events Report shall be a combined report of the non-university event summary described in Condition of Approval 6.24 and the special event summary described in the previous sentence. Descriptions of any complaints received shall be provided in the annual Events Report. A copy of the most current Traffic and Parking Management Plan shall also be provided consistent with Condition of Approval 6.28, Traffic and Parking Management Plan. The Events Report shall be submitted as a Pre-Application case type to the City for review.

Should any annual Events Report submitted to the City evidence noncompliance with these Conditions of Approval (i.e., Conditions 6.21, 6.24 and 6.25), or fail to accurately report and/or classify special versus non-university events, within 15 calendar days of the Director of Community Development's receipt of the Events Report, University representatives shall meet with the Director of Community Development and Concordia East and West Community Associations' Board of Directors, if interested, to review actions that shall be immediately taken to comply with these Conditions of Approval. In the event that such actions do not result in compliance, the Director of Community Development may, in his or her discretion, require other necessary measures be taken by the University to ensure operations on-campus function appropriately.

Concordia University shall utilize its electronic notification system, known as Dwelling Live, to notify the public, including residents of Concordia East and West of any main campus special event at least 48 hours in advance of that event occurring.

Refer to Condition of Approval 6.21 above regarding vehicle trip monitoring for an explanation of traffic counts that will be taken in the Spring and reported in the Spring vehicle trip monitoring report.

Condition 6.26 **ATHLETIC FIELD LIGHTING**

Concordia University shall not light athletic fields listed below when they are not in use. All lighting shall be turned off by 9 p.m. each day (consistent with PDF 1-2).

a. Soccer field and Track (existing)
b. Softball field (existing)
c. Baseball field (existing)
d. Practice field (existing)
e. Two sand volleyball courts (proposed)
f. Tennis court deck – four out of six courts are lighted (proposed)

Condition 6.27 **ATHLETIC ACTIVITY RELATED NOISE**
(PDF 10-1)

During operation of existing and proposed outdoor on-campus athletic facilities by the University, City of Irvine or private rental users, the University shall prohibit amplified music after 7:00 PM. Announcing shall be allowed until the completion of each outdoor game/competition or until 9:00 PM, whichever occurs first. This requirement shall be stipulated in all University, City of Irvine, or private rental agreements for use of the outdoor campus athletic fields.

Condition 6.28 **TRAFFIC AND PARKING MANAGEMENT PLAN**

Concordia University shall implement the Traffic and Parking Management Plan (TPMP) dated April 2016 (refer to Appendix L of the Traffic Study which is Appendix J of the Environmental Impact Report).

The TPMP shall address and include, at a minimum, the following components:

a. Traffic management needs and measures to be implemented by Concordia University (CU) for Special Events shall be evaluated at levels based on anticipated attendance, the mode of transportation for visitors, the type of event, the event location on campus, the number of events calendared for the same date and time and other relevant factors. The TPMP shall differentiate

among low capacity, medium capacity, and high capacity events and the requirements for each attendance level during both the peak and nonpeak traffic periods.

b. Identification of practical designated off-campus and off-street/nonpublic parking areas to be implemented to address anticipated and expected overflow parking needs caused by Special Events operations, including identification of the preventative and/or corrective measures that will be undertaken by CU to address neighborhood or "intrusion" parking.
c. Identification of safe pedestrian paths of on-campus travel and/or shuttle bus operations from the identified off-site parking areas to campus, including safe pick-up and drop-off areas. This includes the provision for use of traffic control personnel and crossing guards as deemed necessary.
d. At the end of any Special Event, traffic control personnel shall direct exiting event traffic to the nearest exit gate, such that approximately 50 percent of such traffic will be directed to exit through the West Gate and 50 percent of such traffic will be directed to exit through the East Gate.
e. Prior to any high capacity non-University event at CU, in addition to any CU requirements pertaining to such use, CU shall require the party using the on-campus facility to comply with all specific guidelines for Special Events as defined in the City of Irvine Municipal Code, Title 2 - Administrative Services, Division 10 - Special Permits and Licenses, Chapter 8 - Special Events.
f. Identification of when an Event Management Plan is recommended and/or required.

The TPMP shall be implemented at no cost and expense to the City of Irvine. At the discretion of the Director of Community Development, additional updates to the TPMP may be required, if deemed necessary.

Condition 6.29 **UNLOCK GATE AT BLESSING**

The manual vehicular gate at the cul-de-sac on Blessing shall remain unlocked at all times and "Fire Lane - No Parking" and "For Emergency Evacuation Only" signs shall be posted on each side of the gate at all times in accordance with OCFA approved Conceptual Fire Master Plan (Service Request Number 213456).

Condition 6.30 **MAXIMUM DEVELOPMENT ALLOWED**

The maximum development intensity at full campus build-out allowed for Concordia University main campus is 321,220 institutional square feet and 330 dormitory units/1,320 beds subject to the conditions of approval contained in this resolution.

Condition 6.31 **APPLICABILITY OF EIR**

This approval is subject to all applicable Plans, Programs, and Policies (PPPs), Project Design Features (PDFs), and Mitigation Measures (MMs) as identified in the Mitigation Monitoring and Reporting Program (MMRP) for the Final EIR (SCH No. 2015091023) prepared for the Concordia University CUP Modification/Zone Change Campus Master Build-Out Plan Update.

Condition 6.32 **ZONE CHANGE CONTINGENCY**

This Conditional Use Permit shall not take effect unless and until the City Council certifies the Final EIR, adopts the proposed CEQA Findings of Fact and MMRP, and approves the associated Zone Change 00629029-PZC.

Condition 6.33 **EARLY WARNING FIRE DETECTION SYSTEM**

Within 120 days from the City's approval of this project Concordia University shall install an early warning fire detection system which covers and surveys the entirety of the northerly border of the Concordia University's main campus (portions of which border Mason Regional Park). The early warning fire detection system shall be linked to a communication system which provides notice to the students, faculty, employees, visitors on the campus and the residents and visitors within the Concordia East and West communities when a fire is detected.

Condition 6.34 **CAMPUS AND COMMUNITY EMERGENCY EVACUATION PLAN**

Within 120 days from the City's approval of this project, Concordia University, in conjunction and consultation with the OCFA, the City of Irvine's Police Department, and Board of Directors of Concordia East and West Community Associations, shall prepare a mutually acceptable comprehensive emergency evacuation plan for all students, faculty, employees, and visitors on the main campus and all residents and visitors within the Concordia East and West Community Associations.

Condition 6.35 **CONSTRUCTION-RELATED CAMPUS ACCESS**

Access to Concordia University's property for all construction-related activities, except for vehicles bringing workers to and from the main campus, concerning the proposed project, in addition to the operation of construction-related equipment, shall be limited to the City's standard hours of permitted construction activities specified in subsection A of section 6-8-205 of the City of Irvine's Municipal Code. No construction-related vehicles, except for vehicles bringing workers to and from the main campus, shall enter Concordia University's property or existing gates prior to those standard hours of permitted construction activities, nor shall any construction-related vehicles, except for vehicles bringing

workers to and from the main campus, become operational prior to such standard hours of permitted construction activities.

PASSED AND ADOPTED by the Planning Commission of the City of Irvine at a regular meeting held on the 16th day of March 2017, by the following roll call vote:

AYES:	5 COMMISSIONERS:	Duong, Kuo, Nirschl, Smith, Bartlett
NOES:	0 COMMISSIONERS:	
ABSENT:	0 COMMISSIONERS:	
ABSTAIN	:0 COMMISSIONERS:	

Unless an appeal is filed prior to the expiration of the fifteen-day appeal period at 5:00 p.m. on Friday, March 31, 2017, this approval shall become effective thirty days after the second reading of Zone Change 00629029-PZC, provided however, this approval shall not become effective unless the City Council certifies the Final EIR and adopts of the proposed CEQA Findings of Fact and MMRP.

CHAIR OF THE PLANNING
COMMISSION FOR THE CITY OF IRVINE

SECRETARY OF THE PLANNING
COMMISSION FOR THE CITY OF IRVINE

EXHIBIT C

[The Mitigation Monitoring and Reporting Program, approved as Exhibit B to City Council Resolution No. 17-29]

MITIGATION MONITORING AND REPORTING PROGRAM

CONCORDIA UNIVERSITY CUP MODIFICATION AND ZONE CHANGE CAMPUS MASTER BUILD-OUT PLAN UPDATE

1.0 INTRODUCTION

Section 21081.6 to the State of California Public Resources Code requires a lead or responsible agency that approves or carries out a project where an environmental impact report (EIR) has identified significant environmental effects to adopt a "reporting or monitoring program for adopted or required changes to mitigate or avoid significant environmental effects." The City of Irvine is the Lead Agency for the Concordia University Conditional Use Permit (CUP) Modification and Zone Change for the Campus Master Build-Out Plan Update EIR, and therefore is responsible for implementation of the Mitigation Monitoring and Reporting Program (MMRP). An EIR has been prepared for this project which addresses potential environmental impacts and, where appropriate, recommends measures to mitigate these impacts. As such, a mitigation reporting or monitoring program is required to ensure that adopted mitigation measures are implemented.

2.0 PROJECT LOCATION

The project site is the existing Concordia University campus at 1530 Concordia West in Planning Area 21, Turtle Rock, in the City of Irvine, Orange County, California. The project site is generally located north of Turtle Rock Drive, south of University Drive and Mason Regional Park, east of Culver Drive/Concordia West, and west of Ridgeline Drive. Access to the project site will continue to be provided via two gated access points off of Ridgeline Drive to the east and Turtle Rock Drive to the west.

3.0 PROJECT SUMMARY

The project site is approximately 72.8 acres and zoned 6.1, Institutional. The existing campus is comprised of 16 institutional buildings totaling approximately 243,571 square feet and 256 dormitory units (1,024 beds). Original Conditional Use Permit 12273-CPU and subsequently approved modifications approved a maximum 321,220 square feet of institutional buildings and 330 institutional dormitory units (1,320 beds) for the campus. The proposed project does not involve any change in the maximum square footage or number of dormitory units allowed pursuant to existing entitlements.

The proposed Conditional Use Permit modification updates the current Campus Master Plan. Seven (7) existing buildings totaling approximately 71,231 square feet total are proposed to be demolished. Additionally, seven (7) new buildings or additions to existing buildings totaling approximately 148,880 square feet total are proposed to be constructed. Furthermore, one future residence hall for 74 dormitory units (296 beds) is proposed. Therefore, consistent with existing entitlements, the proposed project would allow for up to 321,220 sf of institutional buildings on campus, and 330 institutional dormitory units (1,320 beds).

Various athletic facilities will be added, relocated or improved, including but not limited to a new lap and recreational pool with kidney-shaped "play" area for students and staff only as well as two new sand volleyball courts and two new tennis courts with four relocated tennis courts on a deck over the southwest parking area. On-campus surface parking lots will provide all parking. New parking areas are proposed to be added and existing parking areas will remain, be reconfigured,

or removed. As proposed, the number of on-site parking spaces will increase from 1,218 existing spaces to approximately 1,436 spaces, or a net increase of approximately 218 spaces. Lastly, internal campus roadway improvements and improvements at the Ridgeline Drive/Concordia East roadway intersection, including installation of a traffic signal and addition of a second eastbound shared left/right-turn lane, are also proposed.

The requested Zone Change application proposes to revise or remove Special Development Requirements from City Zoning Ordinance Section 9-21-7.B, Special Development Requirements for Concordia University (Christ College Irvine) General Plan Amendment 4237-GA and Zoning Change 5232-ZC. No change in the zoning designation of 6.1, Institutional, is proposed.

The proposed project would generally be implemented in four phases with Phases 1 and 2 estimated to be implemented between 2017 and 2020, and Phases 3 and 4 estimated to be implemented between 2020 and 2035. Additional project description information is provided in the Draft Environmental Impact Report.

4.0 PROGRAM MANAGEMENT

The MMRP for the Concordia University CUP Modification and Zone Change for the Campus Master Build-Out Plan Update will be in place through all phases of project approval. Enforcement of the MMRP will be the responsibility of a Project Manager (PM) at the City of Irvine.

GENERAL PROCEDURES

MMRP Program Definitions

The MMRP consists of key program elements. The elements are summarized below.

- **MMRP Files.** Files are established to document and retain records of the MMRP. The file organization is established by the PM according to PPPs, PDFs, MMs, and project phases.

- **Reporting and Implementation Forms.** Reporting and Implementation (R&I) Forms are designed to record the monitoring activity in a manner consistent with the sequence of approvals in the MMRP. An R&I form is prepared for each potential significant impact and its corresponding PPP, PDF and/or MM. The R&I Forms are placed in the MMRP files.

- **Mitigation Monitoring and Reporting Program Procedures.** The policies and procedures for the MMRP described herein are intended to provide focused, yet flexible guidelines for monitoring the implementation of the PPPs, PDFs and MMs discussed in the Final EIR. The attached MMRP Matrix (Table 1) lists each PPP, PDF and MM, the party responsible for monitoring efforts, and the timing of implementation. The MMRP Matrix also provides a column for the PM to verify that a PPP, PDF or MM has been completed. After each measure is verified for compliance/completion, no further action is required, pursuant to the MMRP, for the specific phase.

- **Disposition of Monitoring Forms.** Documentation of all actions and completed R&I Forms are kept in the MMRP file with the City of Irvine during the pre-design, design, construction, and operational phases of the project. Reports will be available from the city upon request at the following address:

City of Irvine (Lead Agency)
Community Development Department
One Civic Center Plaza
Irvine, California 92623

ROLES AND RESPONSIBILITIES: PROJECT MANAGER

The role is assigned by the Community Development Director. The PM assigned to the Project will supervise the MMRP during design, construction, and operation of the project and is responsible for the overall management of the MMRP. The PM is thoroughly familiar with the project and qualified to determine if an adopted measure is being properly implemented. The PM oversees the MMRP and reviews the Reporting and Implementation (R&I) Forms to ensure they are filled out correctly and proper action is being taken on each measure. The PM and/or an assignee will also be responsible for preparing and updating the R&I Forms during all phases of the project. The responsibilities of the PM and/or assignee(s) include the following:

1. An R&I Form will be prepared for each potential significant impact and its corresponding Plans, Programs, and Policies (PPPs), Project Design Features (PDFs), and Mitigation Measures (MMs), as identified in the attached MMRP Matrix (Table 1).

2. Appropriate specialists will be retained, as needed, to monitor specific mitigation activities and provide appropriate written approvals to the PM.

3. The PM and/or an assignee will approve, by signature and date, the completion of each action item that was identified on the R&I Form.

4. Should unanticipated circumstances arise, or it otherwise be determined that a PPP, PDF, or MM is impracticable or unworkable, the PM, in coordination with a mitigation specialist (if technical expertise beyond the PM's expertise is required), will determine the need for the PPP, PDF or MM to be deleted, substituted or modified, or for a new MM to be added. The PM shall confirm:

    (1) the deletion, substitution, modification or addition would achieve the same or greater reduction in potential project impacts of the project as the original PPP, PDF or MM

    (2) the deletion, substitution, modification or addition would not cause any impacts that were not otherwise analyzed in this EIR, and

    (3) the City publicly provides a legitimate reason for making the deletion, substitution, modification or addition and supports the reason with substantial evidence.

    The PM will make a recommendation to the decision-making body (City Council) to approve the deletion, substitution, modification or addition of the PPP, PDF or MM.

5. If it is determined that the deletion, substitution, or modification of a PPP, PDF, or MM or addition of a new MM would cause an impact that was not otherwise analyzed in this EIR, the PM shall ensure that appropriate environmental documentation pursuant to CEQA (e.g., addendum) is completed, prior to the City Council taking action on the deletion, substitution or modification.

6. If it is found that an adopted PPP, PDF or MM is not being properly implemented, the PM will require corrective actions to ensure adequate implementation.

7. The PM has the authority to stop the work of construction contractors if compliance with any aspects of the MMRP is not occurring after written notification has been issued. The PM also has authority to hold certificates of occupancies if compliance with a PPP, PDF or MM attached herein is not occurring. The PM also has authority to hold the issuance of a building permit until all PPPs, PDFs and MMs are implemented. Should the applicant/contractor disagree with the findings and actions of the PM, an appeal to the Community Development Director can be submitted within 15 days of the PM's determination. Appeals of the Community Development Director decision can be made to the Planning Commission and City Council in accordance with the procedures outlined in Section 2-5 of the City of Irvine Zoning Code.

8. An R&I Form will be completed by the PM and/or an assignee. The completed form will be provided to the appropriate design, construction, or operational personnel.

9. Each PPP, PDF, and MM requiring no further monitoring will be signed off as completed by the PM and/or an assignee in the last column of the attached MMRP Matrix (Table 1).

TABLE 1
MITIGATION MONITORING AND REPORTING PROGRAM
CONCORDIA UNIVERSITY CUP MODIFICATION AND ZONE CHANGE
CAMPUS MASTER BUILD-OUT PLAN UPDATE

TIMING FOR PPP, PDF, OR MITIGATION MEASURE	PLANS, PROGRAMS, AND POLICIES (PPPs), PROJECT DESIGN FEATURES (PDFs), AND MITIGATION MEASURES		RESPONSIBLE FOR MONITORING	METHOD OF IMPLEMENTATION	COMPLETION DATE
5.1 AESTHETICS					
Existing Plans, Programs, and Policies					
Phases 1 through 4 Prior to the issuance of each building permit	**PPP 1-1**	Prior to issuance of each building permit, the Community Development Department shall confirm compliance with requirements outlined in Chapter 3-37, Zoning District Land Use Regulations and Development Standards, of the City's Zoning Ordinance, related to maximum site coverage for buildings (50 percent), maximum allowed building height (50 feet), minimum required building setbacks, and minimum site landscaping (15 percent).	Community Development Department	The Community Development Department shall confirm compliance with requirements outlined in Chapter 3-37, Zoning District Land Use Regulations and Development Standards, during plan review.	
Phases 1 through 4 Prior to approval of each building permit	**PPP 1-2**	Prior to approval of each building permit, the Community Development Department shall confirm compliance with requirements outlined in Section 3-16-1 of the Irvine Zoning Ordinance. As required, outdoor lighting shall be designed and installed so that all direct rays are confined to the site and adjacent properties are protected from glare. Lighting trespass levels as measured at adjacent residential and open space land use boundaries shall be 0.0 footcandles. The level of lighting on the site shall comply with the requirements of the City's Uniform Security Code, which establishes standards for the minimum lighting levels for safety purposes.	Community Development Department	The Community Development Department shall confirm compliance with requirements outlined in Section 3-16-1, Lighting, of the Irvine Zoning Ordinance during plan review.	

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

TIMING FOR PPP, PDF, OR MITIGATION MEASURE	PLANS, PROGRAMS, AND POLICIES (PPPs), PROJECT DESIGN FEATURES (PDFs), AND MITIGATION MEASURES		RESPONSIBLE FOR MONITORING	METHOD OF IMPLEMENTATION	COMPLETION DATE
Phases 1 through 4 Prior to approval of any modification application and/or issuance of grading and/or building permits	**PPP 1-3**	Prior to approval of any modification application and/or issuance of grading and/or building permits for future buildings on campus, the Community Development Department shall review any proposed revisions, if applicable, to Conditional Use Permit modification 00612052-PCPU pursuant to Zoning Ordinance Chapter 2-19, Minor/Major Modification Procedure. Future buildings shall also comply with the University's *Narrative of Proposed Architectural Styles*, included in Appendix C of this Draft Environmental Impact Report (EIR).	Community Development Department	The Community Development Department shall review any proposed revisions to Conditional Use Permit modification 00612052-PCPU pursuant to Zoning Ordinance Chapter 2-19, Minor/Major Modification Procedure. Future buildings shall comply with the University's *Narrative of Proposed Architectural Styles*, included in Appendix C of the Draft EIR.	
Project Design Features					
Phases 1 through 4 Prior to issuance of grading permits and/or building permits	**PDF 1-1**	Prior to issuance of grading permits and/or building permits, the Community Development Department shall confirm that the contractor specifications include installation of screened perimeter fencing around construction staging areas and construction sites to obstruct views from adjacent ground-level vantage points during construction. Implementation of the required fencing shall be verified by the City's Building and Safety Department during construction.	Community Development Department	The Community Development Department shall confirm that the contractor specifications include installation of screened perimeter fencing around construction staging areas and construction sites to obstruct views from adjacent ground-level vantage points during construction. Implementation shall be verified by the City's Building and Safety Department during construction.	

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

TIMING FOR PPP, PDF, OR MITIGATION MEASURE	PLANS, PROGRAMS, AND POLICIES (PPPs), PROJECT DESIGN FEATURES (PDFs), AND MITIGATION MEASURES	RESPONSIBLE FOR MONITORING	METHOD OF IMPLEMENTATION	COMPLETION DATE
Phases 1 through 4 Prior to approval of building permits for installation of athletic facility lighting the lighting plans shall be review. Confirmation following installation. Monitoring of curfew ongoing during operation.	**PDF 1-2** Prior to approval of building permits for installation of athletic facility lighting, the Project Applicant shall submit for review and approval by the Director of Community Development lighting plans for existing and proposed athletic facilities, demonstrating compliance with requirements outlined in the City of Irvine Parks and Public Facilities Standards Manual (also refer to MM 1-2). A third-party lighting consultant may be retained at the discretion of the Director of Community Development to review the athletic field lighting plans. The Project Applicant shall be responsible for all costs associated with the review by the City-hired third-party lighting consultant. A copy of this submittal shall be provided to the Concordia East Community Association's Board of Directors concurrently with the submission of the same to the City. As shown on Exhibit 3-24, Conceptual Athletic Field Lighting Plan, in Section 3.0, Project Description, the proposed project would involve installation of athletic field lighting at each of the existing athletic fields (soccer/track, softball, baseball, and practice), at the two proposed sand volleyball courts and on the proposed tennis court deck (four courts out of six). With the exception of tennis courts and practice field, the lighting shall comply with lighting requirements established by the National Collegiate Athletic Association (NCAA) for intercollegiate play (no broadcast), as shown in Appendix C, NCAA Best Lighting Practices, of the Draft EIR, or as modified by the NCAA in the future.	Community Development Department	The Community Development Department shall review lighting plans prior to approval of building permits to install lighting for existing and proposed athletic facilities, demonstrating compliance with requirements outlined in the City of Irvine Parks and Public Facilities Standards Manual. A third-party lighting consultant may be retained to review the athletic field lighting plans. Confirmation of implementation of lighting plan requirements shall be conducted by the Community Development Department on-site following installation. The Community Development Department shall periodically review compliance with the lighting curfew on-site, and through public input for any violation.	

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

TIMING FOR PPP, PDF, OR MITIGATION MEASURE	PLANS, PROGRAMS, AND POLICIES (PPPs), PROJECT DESIGN FEATURES (PDFs), AND MITIGATION MEASURES	RESPONSIBLE FOR MONITORING	METHOD OF IMPLEMENTATION	COMPLETION DATE
	The lighting system and associated operation of the lighting system include the following features which serve to reduce potential impacts: • Installation of light emitting diode (LED) light fixtures or other industry approved best available technology, and not metal halide. • Lighting shall only be installed on the four tennis courts in the eastern portions of the tennis court deck (closest to the baseball field), and shall be designed to accommodate nighttime play for recreation and practice. • Tennis court lighting shall not exceed an average light level of 50 footcandles and shall not be designed to comply with NCAA requirements. • Practice field lighting shall not exceed an average light level of 30 footcandles and shall not be designed to comply with NCAA requirements. • Reflectors for the light fixtures that direct the light onto the field, reducing sky glow and spill light onto neighboring properties, and a visor assembly that works in conjunction with the reflector to provide more light control and reduce glare on and off the field. • A remote scheduling, monitoring and data management system that allows the University to schedule, report, and			

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

TIMING FOR PPP, PDF, OR MITIGATION MEASURE	PLANS, PROGRAMS, AND POLICIES (PPPs), PROJECT DESIGN FEATURES (PDFs), AND MITIGATION MEASURES	RESPONSIBLE FOR MONITORING	METHOD OF IMPLEMENTATION	COMPLETION DATE
	track usage of athletic field lighting, including by special user groups. • A multi-watt dimming control system that operates by adjusting the total electrical consumption of the driver allowing for different light levels for intercollegiate play (i.e., high mode – 100 percent power), practices (i.e., medium mode – 50 percent power), and clean-up activities (i.e., low mode – 15 percent power), that can be operated through on-site and remote control links. • A lighting curfew of 9:00 PM to limit nighttime operational hours for all field use. All events shall be scheduled to conclude before the curfew and the automated lighting system shall be designed to and shall turn off athletic field lights no later than 9:00 PM each day. If scheduled events are concluded before 9:00 PM, the lights shall be turned off at the earliest time possible.			
Mitigation Measures				
<u>Phases 1 through 4</u> Prior to the issuance of grading and/or building permits	**MM 1-1** Prior to the issuance of grading and/or building permits, the Project Applicant shall provide evidence to the City that the contractor specifications require any temporary nighttime lighting installed during construction for security or any other purpose be downward-facing and hooded or shielded to prevent light from spilling outside the staging area and from directly broadcasting security light into the sky or onto adjacent residential properties. Compliance with this measure shall be	Community Development Department	The Project Applicant shall provide evidence to the City that the contractor specifications require any temporary nighttime lighting installed during construction for security or any other purpose be downward-facing and hooded or shielded to prevent light from spilling outside the staging area and from directly broadcasting security light into the	

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

TIMING FOR PPP, PDF, OR MITIGATION MEASURE	PLANS, PROGRAMS, AND POLICIES (PPPs), PROJECT DESIGN FEATURES (PDFs), AND MITIGATION MEASURES		RESPONSIBLE FOR MONITORING	METHOD OF IMPLEMENTATION	COMPLETION DATE
		verified by the City's Building and Safety Department during inspections of the construction site.		sky or onto adjacent residential properties. Compliance with this measure shall be verified by the City's Building and Safety Division during inspections of the construction site.	
Phases 1 through 4 During installation of the lighting system and prior to operation of the athletic facility lighting and on an as needed basis in perpetuity	**MM 1-2**	During installation of the lighting system, and prior to operation of the athletic facility lighting, the University shall retain a registered Lighting Engineer or lighting professional with certification that indicates proficiency in outdoor lighting design to provide on-site verification that lighting installation conforms to submitted plans (i.e., number of poles and fixtures, mounting heights, spill light footcandles, and glare candela or candlepower) and is in compliance with applicable criteria established in the City's *Parks and Park Facilities Standards*. Written verification of compliance shall be provided to the Community Development Department prior to approval of use of the athletic field lighting. A copy of this submittal shall be provided to the Concordia East Community Association's Board of Directors concurrently with the submission of the same to the City. The City may request written verification by a registered Lighting Engineer of the lighting operations on the campus at any time to ensure continued compliance and/or address any community concerns.	Community Development Department	The University shall retain a registered Lighting Engineer or lighting professional with certification that indicates proficiency in outdoor lighting design. Written verification of compliance shall be provided to the Community Development Department prior to approval of use of the athletic field lighting.	

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

TIMING FOR PPP, PDF, OR MITIGATION MEASURE	PLANS, PROGRAMS, AND POLICIES (PPPs), PROJECT DESIGN FEATURES (PDFs), AND MITIGATION MEASURES		RESPONSIBLE FOR MONITORING	METHOD OF IMPLEMENTATION	COMPLETION DATE
5.2 AIR QUALITY					
Existing Plans, Programs, and Policies					
Phases 1 through 4 Prior to issuance of each demolition or grading permit, whichever occurs first, and during construction	**PPP 2-1**	During construction of future development on campus (i.e., proposed project), the Project Applicant and its contractors shall comply with South Coast Air Quality Management District (SCAQMD) Rules 402 and 403, in order to minimize short-term emissions of dust and particulates. SCAQMD Rule 402 requires that air pollutant emissions not be a nuisance off site. SCAQMD Rule 403 requires that fugitive dust be controlled with the best available control measures so that the presence of such dust does not remain visible in the atmosphere beyond the property line of the emission source. This requirement shall be included as notes on the contractor specifications. Table 1 of Rule 403 prescribes the Best Available Control Measures that are applicable to all construction projects and is included in Appendix D. Prior to issuance of each demolition permit or grading permit, whichever occurs first, the Project Applicant shall provide the City of Irvine with a SCAQMD-approved Dust Control Plan and/or other sufficient proof of compliance with Rule 403 as deemed sufficient by the Director of Community Development.	Community Development Department	The Project Applicant shall comply with SCAQMD Rules 402 and 403 and provide the City of Irvine with a SCAQMD-approved Dust Control Plan and/or other sufficient proof of compliance with Rule 403 as deemed sufficient by the Community Development Department. Compliance with this measure shall be verified by the City's Building and Safety Division during inspections of the construction site.	
Phases 1 through 4 Prior to the issuance of each building permit	**PPP 2-2**	Prior to the issuance of each building permit for each project on campus, the Project Applicant shall demonstrate compliance with Rule 1113 (i.e., Super Compliant Paints) to the satisfaction of the Director of the Community Development. Architectural coatings and solvents shall	Community Development Department	The Project Applicant shall demonstrate compliance with SCAQMD Rule 1113. This requirement shall be included as notes on the contractor specifications and architectural building plans and verified by the	

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

TIMING FOR PPP, PDF, OR MITIGATION MEASURE	PLANS, PROGRAMS, AND POLICIES (PPPs), PROJECT DESIGN FEATURES (PDFs), AND MITIGATION MEASURES		RESPONSIBLE FOR MONITORING	METHOD OF IMPLEMENTATION	COMPLETION DATE
		be selected so that the volatile organic compound (VOC) content of the coatings is compliant with SCAQMD Rule 1113. This requirement shall be included as notes on the contractor specifications and architectural building plans.		Community Development Department.	
Phase 3 Prior to the issuance of a building permit for the Science, Nursing and Healthcare Building	**PPP 2-3**	Prior to the issuance of a building permit for the Science, Nursing and Healthcare Building, the Project Applicant shall provide the City of Irvine with the SCAQMD-approved Permit to Construct and Permit to Operate or other sufficient proof of compliance with Regulation XIV and Rules 1401, 201, and 203. New sources of toxic chemicals that may be emitted into the outside air at the campus shall comply with SCAQMD Rule 1401 and Regulation XIV (Toxics and Other Non-Criteria Pollutants) along with Rule 201 and Regulation II (requiring a Permit to Construct prior to the installation of any equipment that may cause air contaminants) as well as Rule 203 (requiring a Permit to Operate prior to the use of any equipment that may cause air contaminants). These rules and regulations are required unless the equipment or aspects of the project are exempt under Rule 219, which identifies those equipment, processes, or operations that do not require permits.	Community Development Department	The Project Applicant shall provide the Community Development Department with the SCAQMD-approved Permit to Construct and Permit to Operate or other sufficient proof of compliance with Regulation XIV and Rules 1401, 201, and 203.	

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

TIMING FOR PPP, PDF, OR MITIGATION MEASURE	PLANS, PROGRAMS, AND POLICIES (PPPs), PROJECT DESIGN FEATURES (PDFs), AND MITIGATION MEASURES		RESPONSIBLE FOR MONITORING	METHOD OF IMPLEMENTATION	COMPLETION DATE
5.3 BIOLOGICAL RESOURCES					
Existing Plans, Programs, and Policies					
Phase 1 Prior to the issuance of any grading permit that involves removal of coastal sage scrub habitat associated with the Dorm Road realignment	**PPP 3-1**	Prior to the issuance of any grading permit that involves removal of coastal sage scrub habitat associated with the Dorm Road realignment, the Project Applicant shall provide proof of the mitigation fee payment to the Director of Community Development. The Project Applicant shall comply with the requirements set forth in the Central-Coastal Natural Community Conservation Plan/Habitat Conservation Plan (NCCP/HCP) and its associated Implementation Agreement (IA). As a nonparticipating landowner whose lands are located within the jurisdiction of a signatory local government (i.e., the City of Irvine), the Project Applicant shall pay the mitigation fee pursuant to Section 7 of the NCCP/HCP IA. This fee shall be paid to the NCCP non-profit corporation. Take is then authorized by the Section 10(a) Permit(s) issued by the U.S. Fish and Wildlife Service (USFWS) and the California Department of Fish and Wildlife (CDFW) Management Authorization is granted to the signatory local government.	Community Development Department	The Project Applicant shall provide proof of the mitigation fee payment pursuant to Section 7 of the NCCP/HCP IA to the Community Development Department.	

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

TIMING FOR PPP, PDF, OR MITIGATION MEASURE	PLANS, PROGRAMS, AND POLICIES (PPPs), PROJECT DESIGN FEATURES (PDFs), AND MITIGATION MEASURES	RESPONSIBLE FOR MONITORING	METHOD OF IMPLEMENTATION	COMPLETION DATE
Phases 1 through 4 Prior to the issuance of any grading permit for activities within 500 feet of coastal sage scrub habitat Monitoring to occur during all grading and other significant ground disturbing activities Protective measures to be installed or completed prior to all grading and during all construction activities as well as following completion of initial grading/earth-movement activities	**PPP 3-2** Prior to the issuance of any grading permits for activities within 500 feet of coastal sage scrub habitat, the Project Applicant shall provide letters from a United States Fish and Wildlife Service (USFWS)/CDFW-approved Biologist to the Director of Community Development. The letters shall state that the Biologist has been retained by the Project Applicant and shall monitor all grading and other significant ground-disturbing activities in or adjacent to coastal sage scrub habitats. The Biologist shall monitor these activities to ensure that the Project Applicant complies with the NCCP/HCP IA that specifies measures that must be taken to minimize construction impacts to coastal sage scrub and its subassociation during construction, including but not limited to the following: • To the maximum extent practicable, no grading of coastal sage scrub or southern cactus scrub habitat that is occupied by nesting gnatcatchers will occur during the breeding season (January 15 through July 15). It is expressly understood that this provision and the remaining provisions of these "construction-related minimization measures" are subject to public health and safety considerations. These considerations include unexpected slope stabilization, erosion control measures, and emergency facility repairs. In the event of such public health and safety circumstances, landowners or public agencies/utilities will provide USFWS/CDFW with the	Community Development Department	The Project Applicant shall provide letters from an approved Biologist to the Community Development Department identifying that the Biologist has been retained by the Project Applicant to monitor all grading and other significant ground-disturbing activities in or adjacent to coastal sage scrub habitats. The Project Applicant and Biologist will comply with specific measures in the NCCP/HCP IA related to coastal sage scrub and its subassociation during construction as outlined but not limited to as outlined in PPP 3-2. The City and Biologist, if needed, shall conduct periodic inspections during construction to ensure compliance with these requirements.	

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

TIMING FOR PPP, PDF, OR MITIGATION MEASURE	PLANS, PROGRAMS, AND POLICIES (PPPs), PROJECT DESIGN FEATURES (PDFs), AND MITIGATION MEASURES	RESPONSIBLE FOR MONITORING	METHOD OF IMPLEMENTATION	COMPLETION DATE
	maximum practicable notice (or such notice as is specified in the Central-Coastal NCCP/HCP) to allow for capture of gnatcatchers, cactus wrens, and any other coastal sage scrub or southern cactus scrub Covered Species that are not otherwise flushed and will carry out the following measures only to the extent as practicable in the context of the public health and safety considerations. • Prior to the commencement of grading operations or other activities involving significant soil disturbance, all areas of coastal sage scrub or southern cactus scrub habitat to be avoided under the provisions of the Central-Coastal NCCP/HCP shall be identified with temporary fencing and other markers clearly visible to construction personnel. • Prior to the commencement of grading operations or other activities involving disturbance of coastal sage scrub or southern cactus scrub, a survey will be conducted to locate gnatcatchers and cactus wrens within 100 feet of the outer extent of projected soil disturbance activities and the locations of any such species shall be clearly marked and identified on the construction/grading plans. • A Monitoring Biologist, acceptable to USFWS/CDFW, will be on site during any clearing of coastal sage scrub or southern cactus scrub. The landowner			

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

TIMING FOR PPP, PDF, OR MITIGATION MEASURE	PLANS, PROGRAMS, AND POLICIES (PPPs), PROJECT DESIGN FEATURES (PDFs), AND MITIGATION MEASURES	RESPONSIBLE FOR MONITORING	METHOD OF IMPLEMENTATION	COMPLETION DATE
	or relevant public agency/utility will advise USFWS/CDFW at least 7 calendar days (and preferably 14 calendar days) prior to the clearing of any habitat occupied by Covered Species to allow USFWS/CDFW to work with the Monitoring Biologist in connection with bird flushing/capture activities. The Monitoring Biologist will flush Covered Species (avian or other mobile Covered Species) from occupied habitat areas immediately prior to brush-clearing and earth-moving activities. If birds cannot be flushed, they will be captured in mist nets, if feasible, and relocated to areas of the site to be protected or to the NCCP/HCP Reserve System. It will be the responsibility of the Monitoring Biologist to ensure that Covered (bird) Species will not be directly impacted by brush-clearing and earth-moving equipment in a manner that also allows for construction activities on a timely basis. • Following the completion of initial grading/earth-movement activities, all areas of coastal sage scrub or southern cactus scrub habitat to be avoided by construction equipment and personnel will be marked with temporary fencing and other appropriate markers clearly visible to construction personnel. No construction access, parking, or storage of equipment or materials will be permitted within such marked areas.			

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

TIMING FOR PPP, PDF, OR MITIGATION MEASURE	PLANS, PROGRAMS, AND POLICIES (PPPs), PROJECT DESIGN FEATURES (PDFs), AND MITIGATION MEASURES	RESPONSIBLE FOR MONITORING	METHOD OF IMPLEMENTATION	COMPLETION DATE
	• In areas bordering the NCCP/HCP Reserve System or Special Linkage/Special Management areas containing significant coastal sage scrub or southern cactus scrub identified in the Central-Coastal NCCP/HCP for protection, vehicle transportation routes between cut-and-fill locations will be restricted to a minimum number during construction consistent with project construction requirements. Waste dirt or rubble will not be deposited on adjacent coastal sage scrub or southern cactus scrub identified in the Central-Coastal NCCP/HCP for protection. Preconstruction meetings involving the Monitoring Biologist, construction supervisors, and equipment operators will be conducted and documented to ensure maximum practicable adherence to these measures. • Coastal sage scrub or southern cactus scrub identified in the Central-Coastal NCCP/HCP for protection and located within the likely dust-drift radius of construction areas shall be periodically sprayed with water to reduce accumulated dust on the leaves as recommended by the Monitoring Biologist.			

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

TIMING FOR PPP, PDF, OR MITIGATION MEASURE	PLANS, PROGRAMS, AND POLICIES (PPPs), PROJECT DESIGN FEATURES (PDFs), AND MITIGATION MEASURES	RESPONSIBLE FOR MONITORING	METHOD OF IMPLEMENTATION	COMPLETION DATE
Phases 1 through 4 During construction activities	**PPP 3-3** All construction activities shall comply with the federal Migratory Bird Treaty Act of 1918 (MBTA); the Golden Eagle Protection Act; and California Fish and Game Code Sections 3503, 3511 and 3513. Compliance with these regulations shall be accomplished by completing the following: • Construction activities involving vegetation removal shall be conducted between September 1 and February 15, to the extent feasible. If construction occurs inside the peak nesting season (between February 15 and August 31), a preconstruction survey (or possibly multiple surveys) by a qualified Biologist shall be conducted within 72 hours prior to construction activities to identify any active nesting locations. If the Biologist does not find any active nests, the construction work shall be allowed to proceed. The Biologist conducting the clearance survey shall document a negative survey with a report indicating that no impacts to active avian nests shall occur. If the Biologist finds an active nest and determines that the nest may be impacted, the Biologist shall delineate an appropriate buffer zone around the nest. The size of the buffer shall be determined by the Biologist, in consultation with CDFW, and shall be based on the nesting species, its sensitivity to disturbance, and expected types of disturbance. These buffers are typically 300 feet from the nests of non-listed species and 500	Community Development Department	All construction activities shall comply with applicable requirements. If construction occurs inside the peak nesting season, a preconstruction survey (or surveys) by a qualified Biologist shall be conducted within 72 hours prior to construction activities. If the Biologist finds an active nest and determines that the nest may be impacted, the Biologist shall delineate an appropriate buffer zone around the nest. Results of the preconstruction survey and any subsequent monitoring shall be provided to the Project Applicant, CDFW, and the City.	

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

TIMING FOR PPP, PDF, OR MITIGATION MEASURE	PLANS, PROGRAMS, AND POLICIES (PPPs), PROJECT DESIGN FEATURES (PDFs), AND MITIGATION MEASURES	RESPONSIBLE FOR MONITORING	METHOD OF IMPLEMENTATION	COMPLETION DATE
	feet from the nests of listed species. Any active nests observed during the survey shall be mapped on an aerial photograph. Only construction activities (if any) that have been approved by the Biologist shall take place within the buffer zone until the nest is vacated. The Biologist shall serve as a Construction Monitor when construction activities take place near active nest areas to ensure that no inadvertent impacts on these nests occur. Results of the preconstruction survey and any subsequent monitoring shall be provided to the Project Applicant, CDFW, and the City. The monitoring report shall summarize the results of the nest monitoring, describe construction restrictions currently in place, and confirm that construction activities can proceed within the buffer area without jeopardizing the survival of the young birds. Construction within the designated buffer area shall not proceed until written authorization is received by the Project Applicant from CDFW.			

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

TIMING FOR PPP, PDF, OR MITIGATION MEASURE	PLANS, PROGRAMS, AND POLICIES (PPPs), PROJECT DESIGN FEATURES (PDFs), AND MITIGATION MEASURES	RESPONSIBLE FOR MONITORING	METHOD OF IMPLEMENTATION	COMPLETION DATE
Phases 1 through 4 During construction activities	**PPP 3-4** All construction activities shall comply with Sections 3503, 3503.5, 3511, and 3513 of the *California Fish and Game Code,* which protect active nests of any raptor species (i.e., white-tailed kite), including common raptor species. Compliance with these codes shall be accomplished by completing the following: • If vegetation is to be cleared during the potential raptor nesting season (February 1 to August 31), all suitable habitat within 500 feet of the project site shall be thoroughly surveyed for the presence of nesting raptors by a qualified Biologist within 72 hours prior to clearing. If the Biologist does not find any active nests, the construction work shall be allowed to proceed. The Biologist conducting the clearance survey shall document a negative survey with a report indicating that no impacts to active avian nests shall occur. If any active nests are detected, the area shall be flagged or fenced and mapped on the construction plans with a buffer. The size of the buffer shall be determined by the Biologist, in consultation with CDFW, and shall be based on the nesting species, its sensitivity to disturbance, and expected types of disturbance. These buffers are typically 500 feet from the nests of raptors. The buffer area shall be avoided until the nesting cycle is complete or until it is determined that the nest has failed. Results of the preconstruction survey and any	Community Development Department	All construction activities shall be conducted in a manner to protect active nests of any raptor species (i.e., white-tailed kite), including common raptor species. If vegetation is cleared during the potential raptor nesting season, all suitable habitat within 500 feet of the project site shall be surveyed by a qualified Biologist within 72 hours prior to clearing. If any active nests are detected, the area shall be flagged or fenced and mapped on the construction plans with a buffer. Results of the preconstruction survey and any subsequent monitoring shall be provided to the Project Applicant, CDFW, and the City. If active nests are present, the Community Development Department and Biologist, if needed, shall confirm on-site that protective flags/fences have been installed as required by the Biologist.	

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

TIMING FOR PPP, PDF, OR MITIGATION MEASURE	PLANS, PROGRAMS, AND POLICIES (PPPs), PROJECT DESIGN FEATURES (PDFs), AND MITIGATION MEASURES		RESPONSIBLE FOR MONITORING	METHOD OF IMPLEMENTATION	COMPLETION DATE
		subsequent monitoring shall be provided to the Project Applicant, CDFW, and the City. The monitoring report shall summarize the results of the nest monitoring, describe construction restrictions currently in place, and confirm that construction activities can proceed within the buffer area without jeopardizing the survival of the young birds. Construction within the designated buffer area shall not proceed until authorization is received by the Project Applicant from CDFW.			
Phases 1 through 4 Prior to removal of any significant trees	**PPP 3-5**	Prior to removal of any significant trees on public or private land as part of the proposed project, the Project Applicant shall obtain a Tree Removal Permit, pursuant to Sections 5-7-407 and 5-7-410 (Urban Forestry) of the City's Municipal Code and associated Urban Forestry Guideline Manual. This permit may require the replacement of removed trees to ensure compliance with Chapter 4, Urban Forestry, of Municipal Code.	Community Development Department	The Project Applicant shall obtain a Tree Removal Permit, pursuant to Sections 5-7-407 and 5-7-410 (Urban Forestry) of the City's Municipal Code and associated Urban Forestry Guideline Manual.	
Project Design Features					
Phases 1 through 4 Prior to issuance of landscape permits	**PDF 3-1**	Prior to issuance of landscape permits, the Director of Community Development shall confirm that final landscape plans are in compliance with the Conceptual Planting Plan. Exhibit 3-23 in Section 3.0, Project Description, of this Draft Environmental Impact Report (EIR), depicts the Conceptual Planting Plan included in the proposed Campus Master Build-Out Plan Update. This planting plan does not include exotic, invasive species (i.e., those on the California Invasive Plant Council's invasive plant inventory) that would potentially	Community Development Department	The Community Development Department shall review and confirm that final landscape plans are in compliance with the Conceptual Planting Plan.	

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

TIMING FOR PPP, PDF, OR MITIGATION MEASURE	PLANS, PROGRAMS, AND POLICIES (PPPs), PROJECT DESIGN FEATURES (PDFs), AND MITIGATION MEASURES		RESPONSIBLE FOR MONITORING	METHOD OF IMPLEMENTATION	COMPLETION DATE
		degrade the quality of the surrounding natural open space. Landscaping installed for the proposed project shall only include species on the approved planting plan.			
Phases 1 through 4 Prior to issuance of grading permits	**PDF 3-2**	Prior to issuance of grading permits, the Director of Community Development shall confirm that the limits of work/impact limits avoid sensitive biological areas, consistent with the project design. As shown on Exhibit 5.3-5, the proposed project limits of work/impact limits are outside of, and avoid direct impacts to, Sand Canyon Wash, which is designated "Non-Reserve Open Space" by the Central-Coastal Natural Community Conservation Plan/Habitat Conservation Plan (NCCP/HCP), and areas within the jurisdiction of the U.S. Army Corps of Engineers (USACE), the Regional Water Quality Control Board (RWQCB), and the California Department of Fish and Wildlife (CDFW).	Community Development Department	The Community Development Department shall confirm that the limits of work/impact limits avoid sensitive biological areas, consistent with the project design.	
Mitigation Measures					
Phases 1 through 4 Prior to the issuance of a grading permit for areas within 500 feet of special status vegetation Prior to issuance of any building or demolition permit monitor and confirm the installation of protective fencing/flagging	**MM 3-1**	**Southern Willow Scrub/Jurisdictional Resources.** Prior to the issuance of a grading permit for areas within 500 feet of special status vegetation, the Project Applicant shall provide written evidence to the City of Irvine that a qualified Biologist has been retained to observe grading activities and to ensure that adjacent special status vegetation (i.e., southern willow scrub) and jurisdictional resources are not impacted. Prior to issuance of any building or demolition permit, the qualified Biologist shall monitor the installation of protective fencing/flagging by the Contractor. Fencing/flagging shall be installed around all special status	Community Development Department and biologist	The Project Applicant shall provide written evidence to the City of Irvine that a qualified Biologist has been retained to observe grading activities and to ensure that adjacent special status vegetation and jurisdictional resources are not impacted. The qualified Biologist shall monitor the installation of protective fencing/flagging by the Contractor. The Community Development Department and Biologist, if	

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

TIMING FOR PPP, PDF, OR MITIGATION MEASURE	PLANS, PROGRAMS, AND POLICIES (PPPs), PROJECT DESIGN FEATURES (PDFs), AND MITIGATION MEASURES		RESPONSIBLE FOR MONITORING	METHOD OF IMPLEMENTATION	COMPLETION DATE
		vegetation and jurisdictional resources to be avoided.		needed, shall confirm on-site that protective fencing/flagging has been installed.	
Phases 1 through 4 One month prior to any building demolition conduct pre-construction survey Protective measures to be installed prior to construction or demolition, if needed	**MM 3-2**	**Special Status Bat Species.** To the extent practicable, trimming or removal of mature trees shall not occur during the bat maternity season (i.e., between March 1 and August 31). One month prior to any building demolition, a preconstruction survey for roosting bats shall be conducted. The survey shall consist of one diurnal (i.e., daytime) survey, followed by an evening emergence survey. The survey will determine if any bats are day roosting in the buildings proposed for removal. If direct impacts to day roosting bats are anticipated, bat-exclusionary devices shall be installed prior to construction or demolition activities. The bat exclusionary devices shall be designed to allow for bats to exit the roost areas but not re-enter. All designs shall be approved by a qualified Bat Specialist and installation shall be monitored by a qualified Bat Specialist.	Community Development Department and biologist	The Project Applicant shall provide written evidence to the City of Irvine that a qualified Bat Specialist has been retained to conduct a preconstruction survey for roosting bats which shall occur one month prior to any building demolition. If direct impacts to day roosting bats are anticipated, bat-exclusionary devices shall be installed prior to construction or demolition activities.	
Phases 1 through 4 Prior to the issuance of grading permits, if grading and/or construction activities are scheduled to occur during the breeding season for the least Bell's vireo (March 15 to September 15) Prior to construction, completion of required noise surveys/analysis and installation of noise	**MM 3-3**	**Least Bell's Vireo.** Prior to the issuance of a grading permit, if grading and/or construction activities are scheduled to occur during the breeding season for the least Bell's vireo (March 15 to September 15), the Director of Community Development shall verify that the following requirements regarding least Bell's vireo are shown on the grading and/or building permit plans: A. No clearing, grubbing, grading, or other construction shall occur between March 15 and September 15, until the following requirements have	Community Development Department	If grading and/or construction activities are scheduled to occur during the breeding season for the least Bell's vireo, the Community Development Department shall verify that the requirements as outlined in MM 3-3 regarding least Bell's vireo are shown on the grading and/or building permit plans. Should construction occur between March 15 and September 15, the City shall confirm that required pre-	

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

TIMING FOR PPP, PDF, OR MITIGATION MEASURE	PLANS, PROGRAMS, AND POLICIES (PPPs), PROJECT DESIGN FEATURES (PDFs), AND MITIGATION MEASURES	RESPONSIBLE FOR MONITORING	METHOD OF IMPLEMENTATION	COMPLETION DATE
attenuation measures, if needed	been met to the satisfaction of the Director of Community Development: i. The project certified-Biologist shall survey all riparian areas that would be subject to construction noise levels exceeding 60 A-weighted decibels (dBA) hourly average for least Bell's vireo. Preconstruction surveys shall be conducted by a qualified Biologist once per week within suitable habitat beginning four weeks prior to construction (or the week of March 15 if construction is in progress) and continuing through September 15 or until 10 consecutive visits have had negative survey results. Surveys shall be conducted between dawn and 11:00 AM during suitable weather conditions as outlined in the U.S. Fish and Wildlife Service (USFWS) survey protocol for the species. If a preconstruction focused survey is not conducted, all riparian habitat shall be considered occupied. ii. Between March 15 and September 15, no construction activities shall occur within any portion of the site where construction activities would result in noise levels exceeding 60 db(A) hourly average (or at the current existing noise level) at the edge of occupied least Bell's vireo habitat. An analysis showing noise generated by		construction surveys and noise analysis be conducted or noise attenuation measures installed.	

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

TIMING FOR PPP, PDF, OR MITIGATION MEASURE	PLANS, PROGRAMS, AND POLICIES (PPPs), PROJECT DESIGN FEATURES (PDFs), AND MITIGATION MEASURES	RESPONSIBLE FOR MONITORING	METHOD OF IMPLEMENTATION	COMPLETION DATE
	construction activities shall not exceed 60 db(A) (or current existing noise level) at the edge of riparian habitat shall be completed by an acoustician deemed qualified by the Director of Community Development (e.g., possessing a noise engineer license with experience monitoring noise levels with listed animal species). OR iii. No less than two weeks prior to the commencement of construction activities (or by March 15 if construction is in progress), under the direction of a qualified Acoustician, noise attenuation measures shall be implemented to ensure noise levels from construction activities will not exceed 60 db(A) (or at the current existing noise level) at the edge of habitat occupied or potentially occupied by the least Bell's vireo. Concurrent with construction and the noise attenuation measures, noise monitoring shall be conducted at the edge of riparian habitat to ensure that noise levels do not exceed 60 db(A) hourly average (or current existing noise level). If noise attenuation measures implemented are determined to be inadequate by a qualified Acoustician or project Biologist, then the associated construction activities shall cease until such time that adequate noise			

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

TIMING FOR PPP, PDF, OR MITIGATION MEASURE	PLANS, PROGRAMS, AND POLICIES (PPPs), PROJECT DESIGN FEATURES (PDFs), AND MITIGATION MEASURES	RESPONSIBLE FOR MONITORING	METHOD OF IMPLEMENTATION	COMPLETION DATE
	attenuation is achieved or until the end of the breeding season (September 16). B. If preconstruction surveys demonstrate that the least Bell's vireo is not present, the project Biologist shall submit a report with substantial evidence to the Community Development Department that demonstrates noise attenuation measures are not necessary between March 15 and September 15. The report shall describe the methodology and results of the 10 consecutive negative preconstruction survey visits. If evidence indicates the potential is high for least Bell's vireo to be present based on prior focused survey(s) or site conditions, the City shall require implementation of measures in item A above.			
Phases 1 through 4 Prior to the initiation of fuel modification and other fire protection activities and other fire protection activities adjacent to coastal sage scrub and southern willow scrub habitat	**MM 3-4** Prior to the initiation of fuel modification and other fire protection activities adjacent to coastal sage scrub and southern willow scrub habitat, a Non-native Vegetation Removal and Planting Plan addressing the removal of non-native vegetation and planting of native vegetation, shall be prepared by a qualified Restoration Ecologist. The Plan shall be submitted to the Community Development Director, and shall, at a minimum, include the following items: A. The responsibilities of the landowner, specialists, and personnel that would supervise and implement the plan shall be specified.	Community Development Department	A Non-native Vegetation Removal and Planting Plan addressing the removal of non-native vegetation and planting of native vegetation, shall be prepared by a qualified Restoration Ecologist. The Plan shall be submitted to the Community Development Department and shall, at a minimum, include the items A through F as listed in MM 3-4.	

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

TIMING FOR PPP, PDF, OR MITIGATION MEASURE	PLANS, PROGRAMS, AND POLICIES (PPPs), PROJECT DESIGN FEATURES (PDFs), AND MITIGATION MEASURES	RESPONSIBLE FOR MONITORING	METHOD OF IMPLEMENTATION	COMPLETION DATE
	B. A schedule that requires removal of non-native and ornamental vegetation in late fall and early winter to avoid the nesting season for nesting birds, including the California gnatcatcher and least Bell's vireo. These activities shall not occur during the nesting season (January 15 through September 15). C. A requirement for installation temporary fencing or other appropriate markers around any sage scrub or southern willow scrub vegetation to ensure it is not impacted during non-native vegetation removal activities. D. A requirement for vegetation removal to be conducted once per year utilizing hand tools. E. A requirement for a qualified Biologist to observe/monitor non-native vegetation removal activities to ensure (1) appropriate placement of fencing or other markers, and (2) adjacent special status vegetation (i.e., southern willow scrub and coastal sage scrub) are not impacted. F. A requirement for maintenance training for any individuals involved in the removal of non-native vegetation.			

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

TIMING FOR PPP, PDF, OR MITIGATION MEASURE	PLANS, PROGRAMS, AND POLICIES (PPPs), PROJECT DESIGN FEATURES (PDFs), AND MITIGATION MEASURES		RESPONSIBLE FOR MONITORING	METHOD OF IMPLEMENTATION	COMPLETION DATE
5.4 CULTURAL RESOURCES					
Existing Plans, Programs, and Policies					
Phases 1 through 4 Prior to the issuance of the first preliminary or precise grading permit for a project that is located on land that includes potentially significant archaeological and/or paleontological sites, and for any subsequent permit involving excavation to increased depth	**PPP 4-1**	Prior to the issuance of the first preliminary or precise grading permit for a project that is located on land that includes potentially significant archaeological and/or paleontological sites, and for any subsequent permit involving excavation to increased depth, the Project Applicant shall provide letters from an Archaeologist and/or a Paleontologist. The letters shall state that the Project Applicant has retained these individuals, and that the consultant(s) will be on call during all grading and other significant ground-disturbing activities. Determination of the need for these consultants shall be based on the environmental analysis for the project. These consultants shall be selected from the roll of qualified Archaeologists and Paleontologists maintained by the County of Orange (OC Public Works/OC Planning). The Archaeologist and/or Paleontologist shall meet with Community Development staff and shall submit written recommendations specifying procedures for cultural/scientific resource surveillance. These recommendations shall be reviewed and approved by the Director of Community Development prior to issuance of the grading permit and prior to any surface disturbance on the campus. Should any cultural/scientific resources be discovered during grading, no further grading shall occur in the area of the discovery until the Director of Community Development is satisfied that adequate provisions are in place to protect the resources. This condition and the approved	Community Development Department	The Project Applicant shall provide letters from an Archaeologist and/or a Paleontologist. The Archaeologist and/or Paleontologist shall meet with Community Development staff and shall submit written recommendations specifying procedures for cultural/scientific resource surveillance. These recommendations shall be reviewed and approved by the Director of Community Development, or his/her designee, prior to issuance of the grading permit and prior to any surface disturbance on the campus. The Community Development Department shall verify that this condition and the approved recommendations shall be incorporated on the cover sheet of the grading plan under the general heading: “Conditions of Approval”.	

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

TIMING FOR PPP, PDF, OR MITIGATION MEASURE	PLANS, PROGRAMS, AND POLICIES (PPPs), PROJECT DESIGN FEATURES (PDFs), AND MITIGATION MEASURES		RESPONSIBLE FOR MONITORING	METHOD OF IMPLEMENTATION	COMPLETION DATE
		recommendations shall be incorporated on the cover sheet of the grading plan under the general heading: "Conditions of Approval". (*City of Irvine Standard Condition 2.5)*			
Phases 1 through 4 During ground disturbance activities	**PPP 4-2**	During ground disturbance activities, if potentially significant features or sites, as opposed to isolates, are discovered, testing to determine significance is required by Sections 21083.2 and 21084.4 of the *California Public Resource Code* (PRC) and Section 15064.5(c) of Title 14 of the *California Code of Regulations* (i.e., the State CEQA Guidelines). If the features or sites are determined to meet significance criteria, then data recovery excavations would also be required unless the project is redesigned to avoid impacts. Testing and the results of data recovery excavations shall be reviewed and approved by the Director of Community Development.	Community Development Department	If potentially significant features or sites are discovered, testing to determine significance is required by Sections 21083.2 and 21084.4 of the *California Public Resource Code* and Section 15064.5(c) of Title 14 of the *California Code of Regulations*. Testing and the results of data recovery excavations shall be reviewed and approved by the Director of Community Development.	
Phases 1 through 4 During ground disturbance activities	**PPP 4-3**	During ground disturbance activities, in the event of the accidental discovery or recognition of human remains in any location other than a dedicated cemetery, the steps listed below shall be taken: a. There shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until the Orange County Coroner is contacted to determine if the remains are prehistoric and that no investigation of the cause of death is required. If the Coroner determines the remains to be	Community Development Department	In the event of the accidental discovery or recognition of human remains, the steps listed in items a and b of PPP 4-3 shall be taken.	

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

TIMING FOR PPP, PDF, OR MITIGATION MEASURE	PLANS, PROGRAMS, AND POLICIES (PPPs), PROJECT DESIGN FEATURES (PDFs), AND MITIGATION MEASURES	RESPONSIBLE FOR MONITORING	METHOD OF IMPLEMENTATION	COMPLETION DATE
	Native American, then s/he shall contact the Native American Heritage Commission (NAHC) within 24 hours, and the NAHC shall identify the person or persons it believes to be the most likely descendant from the deceased Native American. The most likely descendant may make recommendations to the landowner or the person responsible for the excavation work, for means of treating or disposing of the human remains and any associated grave goods with appropriate dignity, as provided in Section 5097.98 of the PRC, or b. Where the following conditions occur, the landowner or his/her authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity either in accordance with the recommendations of the most likely descendant or on the property in a location not subject to further subsurface disturbance: 1. The Native American Heritage Commission (NAHC) is unable to identify a most likely descendant or the most likely descendant failed to make a recommendation within 48 hours after being granted access to the site;			

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

TIMING FOR PPP, PDF, OR MITIGATION MEASURE	PLANS, PROGRAMS, AND POLICIES (PPPs), PROJECT DESIGN FEATURES (PDFs), AND MITIGATION MEASURES		RESPONSIBLE FOR MONITORING	METHOD OF IMPLEMENTATION	COMPLETION DATE
		2. The identified descendent fails to make a recommendation; or 3. The landowner or his/her authorized representative rejects the recommendation of the descendant, and mediation by the NAHC fails to provide measures acceptable to the landowner (State CEQA Guidelines, Section 15064.5[e]).			
Mitigation Measures					
<u>Phases 1 through 4</u> Prior to the issuance of a grading permit, during ground disturbing activities, and reporting following construction	**MM 4-1**	Prior to issuance of a grading permit, the following requirement shall be incorporated on the cover sheet of the Grading Plan under the general heading "Conditions of Approval": a. Prior to the issuance of any grading permit, the Project Applicant shall provide written evidence to the City of Irvine that a qualified Archaeologist and a Native American Monitor have been retained to observe grading activities in native sediments, at a depth of five feet or deeper, and salvage and catalog artifacts as necessary. The Archaeologist and Native American Monitor shall be present at the pre-grade conference; shall establish procedures for archaeological resources surveillance; and shall establish, in cooperation with the Project Applicant, procedures for temporarily halting or redirecting work to permit sampling,	Community Development Department	The Community Development Department shall confirm that requirements listed in MM 4-1 are incorporated on the cover sheet of the Grading Plan under the general heading "Conditions of Approval". The Archaeologist and Native American shall participate in pre-grading activities; conduct monitoring and reporting during construction; record, salvage, curation of any discovered resources (with assistance from the Native American Monitor for Native American artifacts); and prepare the required monitoring report.	

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

TIMING FOR PPP, PDF, OR MITIGATION MEASURE	PLANS, PROGRAMS, AND POLICIES (PPPs), PROJECT DESIGN FEATURES (PDFs), AND MITIGATION MEASURES	RESPONSIBLE FOR MONITORING	METHOD OF IMPLEMENTATION	COMPLETION DATE
	identification, and evaluation of artifacts. The qualified Archaeologist shall be responsible for maintaining daily field notes and a photographic record and for reporting all finds in a timely manner. The Archaeologist shall also be equipped to record and salvage cultural resources that may be unearthed during initial ground-disturbing activities. Non-Native American artifacts shall be inventoried, assessed, and analyzed for cultural affiliation, personal affiliation (prior ownership), function, and temporal placement. Subsequent to analysis and reporting, these artifacts shall be subjected to curation at an accredited curation facility approved by the City of Irvine or returned to the Project Applicant, as deemed appropriate. All artifacts discovered shall be inventoried and analyzed by the professional Archaeologist. The Native American Monitor shall assist in the analysis of any Native American artifacts for identification as everyday life and/or religious or sacred items, cultural affiliation, temporal placement and function, as much as possible. The significance of Native American resources shall be evaluated in accordance with the provisions of CEQA and shall		The Community Development Department shall confirm the monitoring report is submitted.	

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

TIMING FOR PPP, PDF, OR MITIGATION MEASURE	PLANS, PROGRAMS, AND POLICIES (PPPs), PROJECT DESIGN FEATURES (PDFs), AND MITIGATION MEASURES	RESPONSIBLE FOR MONITORING	METHOD OF IMPLEMENTATION	COMPLETION DATE
	consider the religious beliefs, customs, and practices of the affected tribes. All items found in association with Native American human remains shall be considered grave goods or sacred in origin and subject to special handling. Native American artifacts that cannot be avoided or relocated at the campus will be prepared in a manner for curation and shall be delivered to an accredited curation facility approved by the City of Irvine within a reasonable amount of time. Once ground-disturbing activities exceeding five feet in depth in native sediments have ceased or the qualified Archaeologist, in consultation with the Native American Monitor, determines that monitoring activities are no longer necessary, monitoring activities may be discontinued following notification to the City of Irvine. A report of findings, including the period of inspection; a catalog and analysis of the artifacts found; and the repository of the artifacts shall be prepared upon completion of the steps outlined above. The report shall include a discussion of the significance of all recovered artifacts. The report and inventory, when submitted to the City of Irvine, will signify completion of the program to			

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

TIMING FOR PPP, PDF, OR MITIGATION MEASURE	PLANS, PROGRAMS, AND POLICIES (PPPs), PROJECT DESIGN FEATURES (PDFs), AND MITIGATION MEASURES	RESPONSIBLE FOR MONITORING	METHOD OF IMPLEMENTATION	COMPLETION DATE
	mitigate impacts to archaeological and/or cultural resources.			
Phases 1 through 4 Prior to issuance of a grading permit and during ground disturbing activities	**MM 4-2** Prior to issuance of a grading permit, the following requirements shall be incorporated on the cover sheet of the Grading Plan under the general heading "Conditions of Approval": a. A qualified Paleontologist and Paleontological Monitor shall be present at the pre-grade meeting to consult with the grading contractor and other consultants prior to the start of earth-moving activities. At the meeting, the Paleontologist shall establish procedures for paleontological resources surveillance based on the location and depths of paleontologically sensitive sediments, and shall establish, in cooperation with the City, procedures for temporarily halting or redirecting work to permit the sampling, identification, and evaluation of the fossils as appropriate. b. A qualified Paleontological Monitor shall be present at the site when grading and excavation in the Vaqueros Formation exceeds five feet in depth. Paleontological monitoring is not required in areas where excavation does not exceed five feet. c. The Monitor shall have the authority to temporarily direct,	Community Development Department	The requirements listed in MM 4-2 shall be incorporated on the cover sheet of the Grading Plan under the general heading "Conditions of Approval". The qualified Paleontologist shall participate in pre-grading activities; conduct monitoring and reporting during construction; clean, stabilize, identify and document fossils; and prepare the required monitoring report. The Community Development shall confirm the monitoring report is submitted.	

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

TIMING FOR PPP, PDF, OR MITIGATION MEASURE	PLANS, PROGRAMS, AND POLICIES (PPPs), PROJECT DESIGN FEATURES (PDFs), AND MITIGATION MEASURES	RESPONSIBLE FOR MONITORING	METHOD OF IMPLEMENTATION	COMPLETION DATE
	divert, or halt grading to allow recovery of paleontological resources. In areas rich in micro-vertebrates, collection of large bulk samples of matrix for later water screening to recover small bones and teeth shall be part of the paleontological salvage program. d. Fossils recovered from this project shall be cleaned, stabilized, identified, and documented. A report on the paleontological resources recovered from the parcels shall be prepared by the Paleontologist and submitted to the Community Development Department. e. Fossils with their contextual data must be deposited at a recognized museum or institution.			
5.5 GEOLOGY AND SOILS				
Existing Plans, Programs and Policies				
Phases 1 through 4 Prior to the issuance of grading permits	**PPP 5-1** Prior to the issuance of grading permits, the Project Applicant shall provide to the Chief Building Official a site-specific geotechnical study for each proposed structure. The Geotechnical Report shall be prepared by a registered Civil Engineer or certified Engineering Geologist, having competence in the field of seismic hazard evaluation and mitigation. The Geotechnical Report shall contain site-specific evaluations of the seismic hazard affecting the project and shall identify portions of the project site containing seismic hazards. The report shall also	Chief Building Official	The Project Applicant shall provide to the Chief Building Official a site-specific geotechnical study for each proposed structure. The contents of the Geotechnical Report shall include, but shall not be limited to, items a through f listed in PPP 5-1.	

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

TIMING FOR PPP, PDF, OR MITIGATION MEASURE	PLANS, PROGRAMS, AND POLICIES (PPPs), PROJECT DESIGN FEATURES (PDFs), AND MITIGATION MEASURES	RESPONSIBLE FOR MONITORING	METHOD OF IMPLEMENTATION	COMPLETION DATE
	identify any known off-site seismic hazards that could adversely affect the site in the event of an earthquake. The contents of the Geotechnical Report shall include, but shall not be limited to, the following: a. A project description. b. A description of the geologic and geotechnical conditions at the site, including an appropriate site location map. c. An evaluation of site-specific seismic hazards based on geological and geotechnical conditions, in accordance with current industry standards of practice. d. Recommendations for earthwork and construction. e. The name(s) of report preparer(s) and signature(s) of a certified Engineering Geologist and/or registered Civil Engineer, having competence in the field of seismic hazard evaluation and mitigation. f. The official professional registration or certification number and license expiration date of each report preparer in the signature block of the report *(City of Irvine Standard Condition 2.6).*			

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

TIMING FOR PPP, PDF, OR MITIGATION MEASURE	PLANS, PROGRAMS, AND POLICIES (PPPs), PROJECT DESIGN FEATURES (PDFs), AND MITIGATION MEASURES		RESPONSIBLE FOR MONITORING	METHOD OF IMPLEMENTATION	COMPLETION DATE
Phases 1 through 4 Prior to issuance of a grading permit for inclusion of note During grading and construction activities for compliance with City requirements	**PPP 5-2**	Prior to issuance of a grading permit, the Project Applicant shall demonstrate compliance with the following requirement to the satisfaction of the Chief Building Official, and this requirement shall be included on the cover sheet of the grading permit. During grading and construction activities, all grading operations and construction will be conducted in conformance with the applicable *City of Irvine Grading Code* (Municipal Code Title 5, Division 10) and Grading Manual and the most recent version of the *California Building Code* (CBC). Grading operations shall also be consistent with the recommendations included in the most current Geotechnical Report for the project area prepared by the Engineer of Record.	Chief Building Official	The Project Applicant shall include the required note on the cover sheet of the grading plan. The Building Official shall confirm compliance with the City's grading requirements consistent with standard review procedures.	
Phases 1 through 4 Prior to issuance of a grading permit for inclusion of note During grading and earthwork activities for compliance with City requirements	**PPP 5-3**	Prior to issuance of a grading permit, the Project Applicant shall demonstrate compliance with the following requirement to the satisfaction of the Chief Building Official, and this requirement shall be included on the cover sheet of the grading permit. During grading and earthwork activities, in accordance with the *City of Irvine Grading Code* (Municipal Code Title 5, Division 10) and Grading Manual, grading and earthwork shall be performed under the observation of a Registered Civil Engineer specializing in Geotechnical Engineering in order to achieve proper subgrade preparation; selection of satisfactory fill materials; placement and compaction of structural fill; stability of finished slopes; design of buttress fills; subdrain installation; and incorporation of data supplied by the Engineering Geologist.	Chief Building Official	The Project Applicant shall include the required note on the cover sheet of the grading plan. The Building Official shall confirm compliance with the City's grading and earthwork requirements consistent with standard review procedures.	

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

TIMING FOR PPP, PDF, OR MITIGATION MEASURE	PLANS, PROGRAMS, AND POLICIES (PPPs), PROJECT DESIGN FEATURES (PDFs), AND MITIGATION MEASURES		RESPONSIBLE FOR MONITORING	METHOD OF IMPLEMENTATION	COMPLETION DATE
Phases 1 through 4 Prior to issuance of a grading permit for inclusion of note During grading and earthwork activities for compliance with City requirements	**PPP 5-4**	Prior to issuance of a grading permit, the Project Applicant shall demonstrate compliance with the following requirement to the satisfaction of the Chief Building Official, and this requirement shall be included on the cover sheet of the grading permit. During grading and earthwork activities, in accordance with the *City of Irvine Grading Code* (Municipal Code Title 5, Division 10) and Grading Manual, grading and earthwork shall also be performed under the observation of a certified Engineering Geologist to provide professional review and written approval of the adequacy of natural ground for receiving fills; the stability of cut slopes with respect to geological matters; and the need for subdrains or other groundwater drainage devices. The Geologist shall geologically map the exposed earth units during grading to verify the anticipated conditions and, if different, provide findings to the Geotechnical Engineer for possible design modifications. If recommendations are modified they shall be submitted to the City Engineer for review and approval.	Chief Building Official	The Project Applicant shall include the required note on the grading plan. The certified Engineering Geologist shall conduct on-site observations and required reporting to the City Engineer during construction.	
Phases 1 through 4 Prior to issuance of a building permit	**PPP 5-5**	Prior to issuance of a building permit, the Project Applicant shall submit to the Chief Building Official for review and approval documentation prepared by a licensed Geotechnical Engineer certifying the suitability of the graded site, as required in the *City of Irvine Building Code* (Municipal Code Title 14, Buildings and Construction).	Chief Building Official	The Project Applicant shall submit to the Chief Building Official for review and approval documentation prepared by a licensed Geotechnical Engineer certifying the suitability of the graded site, as required in the *City of Irvine Building Code*.	

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

TIMING FOR PPP, PDF, OR MITIGATION MEASURE	PLANS, PROGRAMS, AND POLICIES (PPPs), PROJECT DESIGN FEATURES (PDFs), AND MITIGATION MEASURES	RESPONSIBLE FOR MONITORING	METHOD OF IMPLEMENTATION	COMPLETION DATE
Phases 1 through 4 Prior to the issuance of grading permits Revegetation of cut and fill slopes after grading	**PPP 5-6** Prior to the issuance of grading permits, the Project Applicant shall demonstrate compliance with the following requirement to the satisfaction of the Chief Building Official. Grading level details of the proposed cut and fill slopes shall be evaluated by a licensed Geotechnical Engineer for stability. If adverse conditions are anticipated, remedial measures will be provided to stabilize the slopes. Revegetation of cut and fill slopes shall be required in accordance with the *City of Irvine Grading Code* (Municipal Code Title 5, Division 10) and Grading Manual.	Chief Building Official	The Project Applicant shall include the required note on the cover sheet of the grading plan. The Geotechnical Engineer shall be responsible for slope evaluation and identification of remedial measures. The Chief Building Official shall confirm compliance with the City's requirements consistent with standard review procedures.	
Phases 1 through 4 Prior to the issuance of a building permit	**PPP 5-7** Prior to the issuance of a building permit, the Project Applicant shall demonstrate compliance with the following requirement to the satisfaction of the Chief Building Official. Future buildings and structure, including retaining walls, shall be designed in accordance with the all applicable State Codes with *City of Irvine Amendments*. The design of the structures shall include lateral load analysis using the most restrictive seismic and wind loads as determined by the California Building Code (CBC).	Chief Building Official	The Project Applicant shall demonstrate compliance with the requirement that future buildings and structures, including retaining walls, are designed in accordance with the all applicable State Codes with City of Irvine Amendments. The Chief Building Official shall confirm compliance with the City's requirements consistent with standard review procedures.	
Phase 3 Prior to issuance of a grading permit for the proposed recreation/lap pool	**PPP 5-8** Prior to issuance of a grading permit for the proposed recreation/lap pool, and as required by the Special Development Requirement included in Chapter 9-21, Planning Area 21 (Turtle Rock), of the Zoning Ordinance: a. In conjunction with submittal of swimming pool or spa plans, the Project Applicant shall submit a soil report prepared and signed by a licensed civil and/or geotechnical	Chief Building Official	The Project Applicant shall submit a soil report for the swimming pool/spa to the City Building Official or demonstrate that the provisions for exceptions to this requirement have been met.	

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

TIMING FOR PPP, PDF, OR MITIGATION MEASURE	PLANS, PROGRAMS, AND POLICIES (PPPs), PROJECT DESIGN FEATURES (PDFs), AND MITIGATION MEASURES	RESPONSIBLE FOR MONITORING	METHOD OF IMPLEMENTATION	COMPLETION DATE
	engineer. The report shall include, but not be limited to, the following information: (1) A plot showing the location of all test borings and/or excavations. (2) Descriptions and classifications of the materials/soils encountered. (3) Elevation of the water table, if encountered. (4) Recommendations for foundation type and design criteria, including bearing capacity, provisions to minimize the effects of expansive soils, and the effects of adjacent loads. (5) Expected total differential settlement. b. Exception: The City Building Official may waive the requirement for submission of a soil report if the following conditions are met: (1) A hydrostatic valve is installed in the pool to relieve hydrostatic pressure. (2) The pool is designed to accommodate the effects of expansive soils.			

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

TIMING FOR PPP, PDF, OR MITIGATION MEASURE	PLANS, PROGRAMS, AND POLICIES (PPPs), PROJECT DESIGN FEATURES (PDFs), AND MITIGATION MEASURES	RESPONSIBLE FOR MONITORING	METHOD OF IMPLEMENTATION	COMPLETION DATE
Mitigation Measures				

Phases 1 and 2
 	
Prior to the issuance of a grading permit for the Music, Worship and Theology and Concordia University (CU) Center Addition
	MM 5-1 Prior to the issuance of a grading permit, recommendations from the *Preliminary Geotechnical Engineering Report for the Music, Worship and Theology and CU Center Projects, Concordia University Irvine* (November 2015) prepared by Geotechnical Solutions, Inc. and any forthcoming geotechnical studies (required pursuant to PPP 5-1) shall be included in the site preparation and building design specifications. Compliance with this requirement shall be verified by the City's Chief Building Official. Preliminary recommendations to be included in the project specifications include, but are not limited to:
	
	• Evaluation of Foundation Types and Foundation Recommendations
	  o Spread Footing Foundations
	  o Caisson Recommendations
	  o Conventional Foundations on Engineering Compacted Fill
	• Floor Slab
	• Retaining Wall Recommendations
	  o Lateral Passive Resistance
	  o Active Pressure
	  o At-Rest Earth Pressure
	  o Seismic Force
	• Pavement Recommendations
	• Pavement Grading Recommendations
	  o Subgrade Preparation
	  o Aggregate Base
	  o Asphalt Concrete Pavement
	  o Site Drainage
	  o Exterior Concrete Flatwork
		Chief Building Official	Recommendations from the *Preliminary Geotechnical Engineering Report for the Music, Worship and Theology and CU Center Projects, Concordia University Irvine* (November 2015) prepared by Geotechnical Solutions, Inc. and any forthcoming geotechnical studies (required pursuant to PPP 5-1) shall be included in the site preparation and building design specifications. Compliance with this requirement shall be verified by the City's Chief Building Official.	

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

TIMING FOR PPP, PDF, OR MITIGATION MEASURE	PLANS, PROGRAMS, AND POLICIES (PPPs), PROJECT DESIGN FEATURES (PDFs), AND MITIGATION MEASURES		RESPONSIBLE FOR MONITORING	METHOD OF IMPLEMENTATION	COMPLETION DATE
		○ Corrosion and Sulfate Attack Protection ○ Concrete • Grading Recommendations • Construction Verification Procedures ○ Pre-Grading Meeting ○ Footing Observations ○ Earthwork Observations ○ Temporary Support of Excavations			
4.6 GREENHOUSE GAS EMISSIONS					
Existing Plans, Programs and Policies					
Phases 1 through 4 Prior to the issuance of demolition and/or building permits, whichever occurs first	**PPP 6-1**	Prior to the issuance of demolition and/or building permits, whichever occurs first, the Project Applicant shall submit a Waste Management Plan for review and approval by the Director of Public Works demonstrating compliance with the requirements of Title 6, Division 7 (Refuse) of the *City of Irvine Municipal Code* relating to recycling and diversion of construction and demolition (C&D) debris as applicable. Over the course of demolition and construction, the Project Applicant shall ensure compliance with all code requirements related to the use of City-authorized waste haulers.	Public Works Department	The Project Applicant shall submit a Waste Management Plan for review and approval by the Director of Public Works demonstrating compliance with the requirements of Title 6, Division 7 (Refuse) of the *City of Irvine Municipal Code* relating to recycling and diversion of construction and demolition (C&D) debris.	
Phases 1 through 4 Prior to the issuance of each building permit	**PPP 6-2**	Prior to the issuance of each building permit, the Project Applicant shall be required to demonstrate that buildings have been designed in accordance with the applicable Title 24 Energy Efficiency Standards for Residential and Nonresidential Buildings (24 CCR 6).	Community Development Department	The Project Applicant shall be required to demonstrate that buildings have been designed in accordance with the applicable Title 24 Energy Efficiency Standards for Residential and Nonresidential Buildings (24 CCR 6).	

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

TIMING FOR PPP, PDF, OR MITIGATION MEASURE	PLANS, PROGRAMS, AND POLICIES (PPPs), PROJECT DESIGN FEATURES (PDFs), AND MITIGATION MEASURES		RESPONSIBLE FOR MONITORING	METHOD OF IMPLEMENTATION	COMPLETION DATE
Phases 1 through 4 Prior to the issuance of each building permit	**PPP 6-3**	Prior to the issuance of each building permit, the Project Applicant shall be required to demonstrate that the project meets the applicable California Green Building Standards (24 CCR 11).	Community Development Department	The Project Applicant shall be required to demonstrate that the project meets the applicable California Green Building Standards (24 CCR 11).	
5.7 HAZARDOUS AND HAZARDOUS MATERIALS					
Existing Plans, Programs and Policies					
Phases 1 through 4 Prior to issuance of a demolition permit or grading permit, whichever occurs first, surveys, inspections, and analyses for ACMs and LBP shall be conducted During construction for handling of ACM and lead, if present Prior to issuance of any demolition permit or grading permit for activities that involve the removal of structures or facilities with ACM or LBP provide results of surveys	**PPP 7-1**	Prior to issuance of a demolition permit or grading permit, whichever occurs first, pre-demolition surveys, inspections, and analyses for asbestos-containing materials (ACMs) and lead-based paint (LBP) shall be performed by fully licensed and qualified individuals for any structures or facilities to be demolished. This shall be accomplished in accordance with all applicable federal, State, and local regulations, including, but not limited to California Occupational Safety and Health Administration (CalOSHA) requirements and South Coast Air Quality Management District (SCAQMD) Rule 1403. Dependent on the results of the surveys, ACM and LBP abatement or management measures shall be implemented in accordance with all applicable regulations, summarized below. Should ACM be identified in any of the surveyed buildings or facilities intended for demolition, workers shall comply with the requirements of Title 8 of the California Code of Regulations (Section 1529), which regulates asbestos exposure. Any damaged ACM shall be removed, repaired, encapsulated, or enclosed. Removal of materials reported to contain detectable amounts of asbestos shall be performed by a licensed asbestos abatement contractor	Community Development Department	Fully licensed and qualified individuals, commissioned by the Project Applicant shall conduct pre-demolition surveys, inspections, and analyses for asbestos-containing materials (ACMs) and lead-based paint (LBP), in accordance with applicable regulation, for any structures or facilities to be demolished. The results of these efforts shall be provided to the Community Development Department. If present, ACM and LBP abatement or management measures shall be implemented in accordance with all applicable regulations summarized in PPP 7-1. The Project Applicant shall demonstrate that requirements for ACM and LBP abatement are included in the contractor specifications.	

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

TIMING FOR PPP, PDF, OR MITIGATION MEASURE	PLANS, PROGRAMS, AND POLICIES (PPPs), PROJECT DESIGN FEATURES (PDFs), AND MITIGATION MEASURES	RESPONSIBLE FOR MONITORING	METHOD OF IMPLEMENTATION	COMPLETION DATE
	prior to demolition activities. In addition, asbestos-containing waste shall be disposed of by a licensed asbestos abatement contractor and manifested as hazardous waste. Dry sawing, sanding, and drilling of ACM shall be avoided to minimize airborne asbestos exposure. Building materials containing asbestos may be exposed during demolition activities, and shall be sampled and analyzed prior to further disturbance. Should LBP be identified in any of the surveyed buildings or facilities intended for demolition, workers shall comply with the requirements of Title 8 of the California Code of Regulations (Section 1532.1), which provides exposure limits, exposure monitoring, respiratory protection, and good working practice by workers exposed to lead. LBP debris and other waste shall be managed and disposed of in accordance with the applicable provision of the California Health and Safety Code. Prior to issuance of a demolition or grading permit, whichever comes first, the Project Applicant shall submit to the Director of Community Development evidence that the requirement to adhere to all applicable regulations is included in the contractor specifications. Prior to issuance of any demolition permit or grading permit for activities that involve the removal of structures or facilities with ACM or LBP, the results of ACM and lead surveys shall be provided to the Director of the Community Development Department.			

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

TIMING FOR PPP, PDF, OR MITIGATION MEASURE	PLANS, PROGRAMS, AND POLICIES (PPPs), PROJECT DESIGN FEATURES (PDFs), AND MITIGATION MEASURES		RESPONSIBLE FOR MONITORING	METHOD OF IMPLEMENTATION	COMPLETION DATE
Project Design Features					
Phases 1 through 4 Prior to the issuance of temporary or final certificate of occupancy permits The Conceptual Fuel Modification Plan (SR #207374) was approved by OCFA on December 28, 2016.	**PDF 7-1**	Prior to the issuance of temporary or final certificate of occupancy permits for each building on campus, fuel modification requirements identified in the approved Fuel Modification Plan shall be installed and inspected to ensure they are in conformance with the approved Fuel Modification Plan, to the satisfaction of OCFA. A Conceptual Fuel Modification Plan has been prepared for the proposed project (refer to Exhibits 3-26 and 3-27 and Appendix G of this Draft EIR) and shall be approved by OCFA prior to issuance of a grading permit	Community Development Department	Fuel modification requirements identified in the approved Conceptual Fuel Modification Plan shall be installed by the Project Applicant. Post-installation inspection shall be completed by the Community Development Department to ensure the fuel modification requirements have been completed.	
Mitigation Measures					
Phases 3 and 4 Prior to issuance of a demolition permit or grading permit, whichever occurs first, for documentation that qualified individuals have been retained During demolition/grading for completion of testing of soils, and abatement and disposal of soils, if needed.	**MM 7-1**	Prior to issuance of a demolition permit or grading permit, whichever occurs first, the Project Applicant shall provide documentation to the Director of Community Development that appropriately qualified individuals have been retained to manage the identified materials in accordance with all applicable regulations. Soils encountered during demolition and earth-moving activities having the potential to contain polychlorinated biphenyls (PCBs) (this includes property within 25 feet of a possible historic source of PCBs or where visual and/or other evidence of contamination is noted) shall be tested for PCBs using U.S. Environmental Protection Agency (USEPA) Method 8082. If detectable concentrations of PCBs are identified, these shall be compared to appropriate regulatory screening levels (i.e., EPA Regional Screening Levels	Community Development Department	The Project Applicant shall provide documentation to the Director of Community Development that appropriately qualified individuals have been retained to manage the identified materials in accordance with all applicable regulations. Testing of soils shall be conducted by qualified individuals during demolition and earth-moving activities. Coordination with the applicable regulatory oversight agency(ies) shall be initiated and the agency(ies) direction/ recommendation regarding the proper abatement and disposal of PCB-impacted soil shall be implemented. This requirement shall be included in the	

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

TIMING FOR PPP, PDF, OR MITIGATION MEASURE	PLANS, PROGRAMS, AND POLICIES (PPPs), PROJECT DESIGN FEATURES (PDFs), AND MITIGATION MEASURES		RESPONSIBLE FOR MONITORING	METHOD OF IMPLEMENTATION	COMPLETION DATE
		[RSLs] or California Human Health Screening Levels [CHHSLs]). In addition, coordination with the applicable regulatory oversight agency(ies) shall be initiated and the agency(ies) direction/recommendation regarding the proper abatement and disposal of PCB-impacted soil shall be implemented. This requirement shall be included in the construction contractor's specifications, and its performance shall be the responsibility of the Project Applicant.		construction contractor's specifications, and its performance shall be the responsibility of the Project Applicant. Inclusion of requirements on the contractor specifications shall be confirmed by the Community Development Department.	
<u>Phases 3 and 4</u> Prior to issuance of a demolition permit	**MM 7-2**	Prior to issuance of a demolition permit, the Project Applicant shall provide evidence that the onsite soils do not contain concentrations of organochlorine pesticides (OCPs) or lead above the applicable levels shall be provided to the Director of the Community Development Department for review and approval. Pre-demolition soil sampling for OCPs and lead shall be performed by a licensed contractor. The sampling shall be conducted under the guidance of the sampling requirements identified in the California Department of Toxic Substances Control's (DTSC's) *Interim Guidance Evaluation of School Sites with Potential Soil Contamination as a Result of Lead from Lead-Based Paint, Organochlorine Pesticides from Termiticides, and Polychlorinated Biphenyls from Electrical Transformers.* If OCP and/or lead levels within the sampled areas are identified in excess of screening values identified in the guidance document, a Health Risk Assessment (HRA) shall be prepared to the satisfaction of the Director of the	Community Development Department	The Project Applicant shall provide evidence to the Community Development Department that the onsite soils do not contain concentrations of OCPs or lead above the applicable levels, based on pre-demolition soil sampling by a licensed contractor. If OCP and/or lead levels within the sampled areas are identified in excess of screening values identified in the guidance document, a Health Risk Assessment (HRA) shall be prepared to the satisfaction of the Director of the Community Development Department and, if required, remediation shall be conducted to ensure that applicable levels are achieved.	

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

TIMING FOR PPP, PDF, OR MITIGATION MEASURE	PLANS, PROGRAMS, AND POLICIES (PPPs), PROJECT DESIGN FEATURES (PDFs), AND MITIGATION MEASURES		RESPONSIBLE FOR MONITORING	METHOD OF IMPLEMENTATION	COMPLETION DATE
		Community Development Department and, if required, remediation shall be conducted to ensure that applicable levels are achieved.			
5.8 HYDROLOGY AND WATER QUALITY					
Existing Plans, Programs and Policies					
Phases 1 through 4 Prior to the issuance of preliminary or precise grading permits for a project that will result in soil disturbance of one or more acres of land	**PPP 8-1**	Prior to the issuance of preliminary or precise grading permits for a project that will result in soil disturbance of one or more acres of land, the Project Applicant shall provide the Chief Building Official with evidence that a Notice of Intent (NOI) has been filed with the State Water Resources Control Board. Such evidence shall consist of a copy of the NOI stamped by the State Water Resources Control Board or the Regional Water Quality Control Board or a letter from either agency stating that the NOI has been filed. (*City of Irvine Standard Condition 2.12*)	Chief Building Official	The Project Applicant shall provide the Chief Building Official with evidence that a Notice of Intent (NOI) has been filed with the State Water Resources Control Board.	
Phases 1 through 4 Prior to the issuance of preliminary or precise grading permits	**PPP 8-2**	Prior to the issuance of preliminary or precise grading permits, the applicant shall submit to the Chief Building Official for review and approval, a Water Quality Management Plan (WQMP). The WQMP shall identify the Best Management Practices (BMPs) that will be used on the site to control predictable pollutant runoff. (*City of Irvine Standard Condition 2.13)*	Chief Building Official	The applicant shall submit to the Chief Building Official for review and approval, a WQMP.	

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

TIMING FOR PPP, PDF, OR MITIGATION MEASURE	PLANS, PROGRAMS, AND POLICIES (PPPs), PROJECT DESIGN FEATURES (PDFs), AND MITIGATION MEASURES		RESPONSIBLE FOR MONITORING	METHOD OF IMPLEMENTATION	COMPLETION DATE
Project Design Features					
Phases 1 through 4 Prior to issuance of each grading permit	**PDF 8-1**	Prior to issuance of each grading permit, the Community Development Department shall verify that required Low Impact Development (LID) structural and non-structural Best Management Practices (BMPs) required by project-specific Final Water Quality Management Plans (WQMPs) are incorporated into the grading plans and contractor specifications. The Municipal Separate Storm Sewer System (MS4) permit and Drainage Area Management Plan/Local Implementation Plan (DAMP/LIP) require the consideration and incorporation of site design practices to reduce runoff and to promote a hydrologically functional project that mimics the natural hydrologic regime to the extent feasible. The proposed project incorporates installation of LID structural BMPs (refer to Exhibit 3-32, Conceptual WQMP BMP Plan) and implementation of non-structural BMPs as identified in the preliminary WQMP included in Appendix H of this Draft EIR. The following BMPs are included as part of the proposed project. **LID BMPs** • Bio-retention system with underdrains • Stormwater planter boxes with underdrains • Vegetated swales • Vegetated filter strips • Proprietary bio-treatment (modular wetlands devices) **Non-Structural Source-Control BMPs**	Community Development Department	The Community Development Department shall verify that required LID structural and non-structural Best Management Practices (BMPs) required by project-specific Final WQMPs are incorporated into the grading plans and contractor specifications.	

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

TIMING FOR PPP, PDF, OR MITIGATION MEASURE	PLANS, PROGRAMS, AND POLICIES (PPPs), PROJECT DESIGN FEATURES (PDFs), AND MITIGATION MEASURES	RESPONSIBLE FOR MONITORING	METHOD OF IMPLEMENTATION	COMPLETION DATE
	• Property owner, tenant, and occupant education • Activity restrictions • Common area landscape management • BMP maintenance • Common area litter control • Employee training • Housekeeping of loading docks • Common area catch basin inspection • Street sweeping **Structural Source-Control BMPs** • Storm drain system stenciling and signage • Trash and waste storage areas to reduce pollution introduction • Efficient irrigation systems and landscape design, water conservation, smart controllers, and source control • Slope and channel protection and energy dissipation • Incorporation of requirements applicable to individual priority project categories (from Santa Ana Regional Water Quality Control Board NPDES Permit) • Loading dock areas • Hillside landscaping • Wash water control for food preparation areas			

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

TIMING FOR PPP, PDF, OR MITIGATION MEASURE	PLANS, PROGRAMS, AND POLICIES (PPPs), PROJECT DESIGN FEATURES (PDFs), AND MITIGATION MEASURES	RESPONSIBLE FOR MONITORING	METHOD OF IMPLEMENTATION	COMPLETION DATE
5.9 LAND USE AND PLANNING				
Mitigation Measures				
Phases 1 through 4 Ongoing monitoring and reporting of vehicular trips during operations. Vehicle trip counts to be conducted two times annually (October and Spring). Monitoring Reports also to be prepared two times annually following completion of trip counts.	**MM 9-1** ***Incremental Daily Trip Cap*** The maximum daily trip cap shall be determined by the actual existing square footage (i.e., buildings with temporary or final certificate of occupancy) on the campus on the starting date of the vehicle trip count provided, however, that 4,732 maximum daily trips shall be the initial maximum daily trip cap until Concordia adds any additional institutional building square footage beyond the existing 243,571 square feet, at which time the below maximum Daily Trip Cap ("Daily Trip Cap") will exclusively apply and govern provided the Daily Trip Cap calculation yields no less than 4,732 maximum daily trips. As building square footage is allowed to be occupied and compliance with the trip cap is verified, the trip cap will increase incrementally for the campus. Vehicle trips generated by the Concordia University campus shall be calculated as follows: Daily Trip Cap = 17.12 trips x existing institutional square footage/1,000 square feet *(note: institutional square footage excludes dormitory unit square footage)* ***Maximum Daily Trip Cap*** If Daily Trip Cap compliance is successfully and continuously demonstrated with the occupancy of each new or expanded building, the daily trip generation shall not exceed 5,500 daily trips at full-campus	Community Development Department	Applicable maximum daily trip cap based on identified formula shall be calculated by the City based on occupied square footage when the trip count is conducted. Vehicle trip counts to be conducted by the University two times annually, as reviewed/approved by City staff: (1) three successive days in October (Tuesday, Wednesday and Thursday); (2) a weekend day (Friday or Saturday) in the Spring Spring when a special event or special events with the largest attendance and largest vehicle trip generation is/are anticipated. The Vehicle Trip Monitoring Reports for the October and Spring counts shall be submitted no later than 30 calendar days after completion of each count and, in the case of the City, submitted as a Pre-Application case type. In the event of non-compliance with trip caps based on the annual counts, actions to be immediately taken by the University to comply with the trip count limitations shall be established based on coordination with the City and Concordia East and West	

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

TIMING FOR PPP, PDF, OR MITIGATION MEASURE	PLANS, PROGRAMS, AND POLICIES (PPPs), PROJECT DESIGN FEATURES (PDFs), AND MITIGATION MEASURES	RESPONSIBLE FOR MONITORING	METHOD OF IMPLEMENTATION	COMPLETION DATE
	build-out (i.e., 321,220 square feet of institutional uses and 330 dormitory units). ***Vehicle Trip Counts*** Concordia and all its successors shall conduct a count of vehicles entering and exiting the campus two times annually. The first count of vehicles shall be taken during the month of October on three successive days (Tuesday, Wednesday and Thursday). The second count of vehicles shall be taken on a weekend day (Friday or Saturday) in the Spring when a special event or special events with the largest attendance and largest vehicle trip generation is/are anticipated. The proposed dates of each count shall be reviewed and approved by City staff a minimum of 30 days in advance of commencing any actual counts. This "cordon count" shall be conducted via a mixture of electronic and mechanical means (e.g., magnetic road loops, video and/or rubber hose counting systems). All trips entering and exiting the campus, including those associated with pass-through traffic (e.g., community HOA vehicles traversing the campus to travel from one location to another), shall be recorded. Furthermore, counts from all residential neighborhood streets (i.e., Ascension for Concordia East and Daystar, Faith and Joy for Concordia West) shall be deducted from the overall gate volumes. ***Vehicle Trip Monitoring Reports*** Concordia University shall submit to the Community Development Director (and provide copies directly to the Board of		Homeowners Association presidents, if interested. In the event of non-compliance with the applicable trip cap, the applicant shall be prohibited from further implementing the campus build-out plan regardless of the (approved) status of permit(s) and/or development plan(s) until compliance with the trip cap is demonstrated. Traffic analysis shall be conducted in compliance with federal, state, or local law or policy, as applicable.	

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

TIMING FOR PPP, PDF, OR MITIGATION MEASURE	PLANS, PROGRAMS, AND POLICIES (PPPs), PROJECT DESIGN FEATURES (PDFs), AND MITIGATION MEASURES	RESPONSIBLE FOR MONITORING	METHOD OF IMPLEMENTATION	COMPLETION DATE
	Directors of the Concordia East and West Community Associations) two comprehensive trip monitoring reports summarizing the completed counts of vehicles entering and exiting the campus ("Vehicle Trip Monitoring Report"). The Vehicle Trip Monitoring Reports for the October and Spring counts shall be submitted no later than 30 calendar days after completion of each count and, in the case of the City, submitted as a Pre-Application case type. Actual count data for each day shall be included in the Vehicle Trip Monitoring Report. The highest 24-hour count for each collection period (October and Spring) shall be used in determining compliance with the Daily Trip Cap, and daily counts shall not be averaged between the count days for that year. Each Vehicle Trip Monitoring Report shall include a summary description of all events and activities occurring on campus each day that traffic counts were taken. At the discretion of the Director of Community Development, additional traffic counts and reports beyond the October and Spring Vehicle Trip Monitoring Reports may be required, if deemed necessary. ***Non-Compliance*** Should any October or Spring Vehicle Trip Monitoring Report or specially requested report submitted to the City evidence noncompliance with the applicable maximum trip count limitation, within 30 calendar days of the Director of Community Development's receipt of the Vehicle Trip Monitoring Report, University			

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

TIMING FOR PPP, PDF, OR MITIGATION MEASURE	PLANS, PROGRAMS, AND POLICIES (PPPs), PROJECT DESIGN FEATURES (PDFs), AND MITIGATION MEASURES	RESPONSIBLE FOR MONITORING	METHOD OF IMPLEMENTATION	COMPLETION DATE
	representatives shall meet with the Director of Community Development and Concordia East and West Community Associations' Board of Directors, if interested, to review actions including but not limited to reducing on-campus activities and implementing transportation demand management measures (e.g., carpooling, use of alternative modes of transportation, parking management) that shall be immediately taken to comply with the trip count limitations. Additionally, prior to issuance of all grading/building permit and approval of all development applications for uses within the campus, the applicant shall demonstrate to the satisfaction of the Director of Community Development that the projected total daily traffic from the site will not exceed 4,732 daily trips or 17.12 daily trips per thousand square feet of existing and/or proposed institutional square footage (whichever is greater). In the event of non-compliance with the applicable trip cap, the applicant shall be prohibited from further implementing the campus build-out plan regardless of the (approved) status of such permit(s) and/or development plan(s) until compliance with the trip cap is demonstrated. ***Additional Requirements*** Additionally, where the applicant is required to submit a traffic analysis by any federal, state, or local law or policy, including but not limited to the City Traffic Impact Analysis Guidelines and/or California Environmental Quality Act, the			

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

TIMING FOR PPP, PDF, OR MITIGATION MEASURE	PLANS, PROGRAMS, AND POLICIES (PPPs), PROJECT DESIGN FEATURES (PDFs), AND MITIGATION MEASURES		RESPONSIBLE FOR MONITORING	METHOD OF IMPLEMENTATION	COMPLETION DATE
		applicant shall submit such traffic analysis in addition to the above requirements. Finally, see Condition of Approval 6.25 regarding Special Events and Condition of Approval 6.24 regarding Non-University Events for details on additional reporting requirements for those activities.			
5.10 NOISE					
Existing Plans, Programs and Policies					
Phases 1 through 4 Prior to issuance of a grading permit for confirmation of note on contract plans and specifications Ongoing monitoring of compliance during construction	**PPP 10-1**	Prior to issuance of a grading permit, the Community Development Department shall confirm that the following requirement is included on the contract plans and specifications. "Construction activities occurring as part of the project shall be subject to the limitations and requirements of Section 6-8-205(a) of the Irvine Municipal Code, which states that construction activities may only occur between 7:00 AM and 7:00 PM Mondays through Fridays and 9:00 AM and 6:00 PM on Saturdays. No construction activities shall be permitted outside these hours or on Sundays and federal holidays unless a temporary waiver is granted by the Chief Building Official or an authorized representative. Trucks, vehicles, and equipment that are making or are involved with material deliveries, loading, or transfer of materials; equipment service; maintenance of any devices; or appurtenances for or within any construction project in the City shall not be operated or driven on City streets outside of these hours or on Sundays and federal holidays unless the City grants a temporary waiver. Any waiver granted shall consider	Community Development Department	The Community Development Department shall confirm that the requirement listed in PPP 10-1 is included on the contract plans and specifications. The Community Development Department shall periodically monitor compliance with these requirements on-site during construction.	

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

TIMING FOR PPP, PDF, OR MITIGATION MEASURE	PLANS, PROGRAMS, AND POLICIES (PPPs), PROJECT DESIGN FEATURES (PDFs), AND MITIGATION MEASURES		RESPONSIBLE FOR MONITORING	METHOD OF IMPLEMENTATION	COMPLETION DATE
		impacts upon the community. No construction activity, including maintenance work on the City rights-of-way that might be required, shall be permitted outside these hours except in emergencies." Compliance by the contractor shall be confirmed by the Community Development Department during construction.			
Phases 1 through 4 Prior to issuance of any grading permits for submittal of Traffic Routing Plan and inclusion on the grading and building plans Ongoing monitoring of compliance during construction	**PPP 10-2**	In compliance with Special Development Requirement No. 9 included in Chapter 9-21 of the City's Zoning Ordinance, prior to issuance of any grading permits, the Project Applicant shall submit for review and approval by the Chief Building Official a Construction Traffic Routing Plan that routes construction traffic away from residential areas. The routing plan shall be shown as a map on the grading and building plans and shall specify that construction traffic is to be routed to Ridgeline Drive, to University Avenue, and directly to the Interstate (I) 405 freeway.	Chief Building Official	The Project Applicant shall submit for review and approval by the Chief Building Official a Construction Traffic Routing Plan and shall include this on grading and building plans. The Community Development Department shall periodically monitor compliance with this Plan during construction.	
Phases 1 through 4 Prior to the issuance of building permits	**PPP 10-3**	Prior to the issuance of building permits for each structure or tenant improvement other than a parking structure, the Project Applicant shall submit a Final Acoustical Report prepared to the satisfaction of the Director of Community Development. The report shall demonstrate that the development will be sound-attenuated against present and projected noise levels, including stationary, roadway, aircraft, helicopter, and railroad noise to meet City interior and exterior noise standards. The Final Acoustical Report shall include all information required by the City's Acoustical Report Information Sheet (Form 42-48). The report shall be accompanied by a list	Community Development Department	The Project Applicant shall submit a Final Acoustical Report prepared to the satisfaction to the Community Development Department.	

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

TIMING FOR PPP, PDF, OR MITIGATION MEASURE	PLANS, PROGRAMS, AND POLICIES (PPPs), PROJECT DESIGN FEATURES (PDFs), AND MITIGATION MEASURES		RESPONSIBLE FOR MONITORING	METHOD OF IMPLEMENTATION	COMPLETION DATE
		identifying the sheet(s) of the building plans that include required sound attenuation measures *(City of Irvine Standard Condition 3.5)*.			
Phases 1 through 4 Prior to the issuance of building permits	**PPP 10-4**	Prior to the issuance of building permits for each structure, the Project Applicant shall submit for review and approval by the Chief Building Official, acoustical specifications or equivalent analysis that demonstrates that noise levels from heating, ventilation, and air conditioning (HVAC) equipment and similar equipment would not exceed the noise level limits of Section 6-8-204 B.2 of the Noise Ordinance as shown in Table 5.10-6 of this EIR.	Chief Building Official	The Project Applicant shall submit for review and approval by the Chief Building Official, acoustical specifications or equivalent analysis that demonstrates that noise levels from HVAC equipment and similar equipment would not exceed the noise level limits of Section 6-8-204 B.2 of the Noise Ordinance.	
Project Design Features					
Phases 1 through 4 During operation of existing and proposed on campus athletic facilities	**PDF 10-1**	During operation of existing and proposed outdoor on campus athletic facilities by the University, City of Irvine or private rental users, the University shall prohibit amplified music after 7:00 PM. Announcing shall be allowed until the completion of each outdoor game/competition or until 9:00 PM, whichever occurs first. This requirement shall be stipulated in all University, City of Irvine, or private rental agreements for use of the outdoor campus athletic fields.	Community Development Department	The University shall prohibit amplified music after 7:00 PM. Announcing shall be allowed until the completion of each outdoor game/competition or until 9:00 PM, whichever occurs first. The Community Development Department shall periodically monitor compliance with these requirements during operation.	
Mitigation Measures					
Phases 1 through 4 Prior to the issuance of each grading and building permit for submittal of construction-related noise mitigation plan	**MM 10-1**	Prior to the issuance of each grading permit and building permit, the Project Applicant or its contractor shall submit a construction-related noise mitigation plan to the Director of Community Development for review and approval. The plan must depict the location of construction equipment and how the noise from this equipment shall be mitigated during	Community Development Department	The Project Applicant or its contractor shall submit a construction-related noise mitigation plan to the Community Development Department, and implement plan requirements during construction.	

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

TIMING FOR PPP, PDF, OR MITIGATION MEASURE	PLANS, PROGRAMS, AND POLICIES (PPPs), PROJECT DESIGN FEATURES (PDFs), AND MITIGATION MEASURES		RESPONSIBLE FOR MONITORING	METHOD OF IMPLEMENTATION	COMPLETION DATE
During construction for implementation of noise attenuation measures		construction of the project, through the use of such methods as the following: • Temporary noise attenuation fences. • Preferential location of equipment. • Use of current technology and noise suppression equipment.		The Community Development Department shall periodically monitor compliance with the noise mitigation plan during construction.	
<u>Phases 1 through 4 with the Exception of the Music, Worship, and Theology Building and CU Center Addition</u> Prior to the commencement of any blasting activities for submittal of blasting plan After blasting for vibration-caused damage survey and completion of repairs	**MM 10-2**	Prior to the commencement of any blasting activities, the Project Applicant shall submit a blasting plan prepared by a qualified blasting specialist to the Orange County Fire Authority and City of Irvine Department of Building and Safety for review and approval. A blasting permit shall be obtained from OCFA. A copy of the approved blasting plan shall be submitted to the Community Development Department. The Project Applicant shall be responsible for all costs associated with the preparation and implementation of the blasting plan to the satisfaction of OCFA. The blasting plan shall be prepared in accordance with the U. S. Department of Interior, Office of Surface Mining Reclamation and Enforcement standards and shall include, but not be limited to the following: a. Pre-blast survey of on- and off-site conditions and determination of structures that would be in the area subject to potential damage from blasting activities. b. The condition of any structures subject to potential damage shall be documented to provide a baseline for evaluating post-blast conditions. c. Site and location of planned blasting and hours of operation (blasting to be	Community Development Department/OCFA	The Project Applicant shall submit a blasting plan prepared by a qualified blasting specialist to OCFA and the City as identified. The Project Applicant shall conduct post-blast survey to identify vibration-caused damage and repair recommendations, and shall complete necessary repairs. The Community Development Department shall confirm necessary repairs are made.	

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

TIMING FOR PPP, PDF, OR MITIGATION MEASURE	PLANS, PROGRAMS, AND POLICIES (PPPs), PROJECT DESIGN FEATURES (PDFs), AND MITIGATION MEASURES	RESPONSIBLE FOR MONITORING	METHOD OF IMPLEMENTATION	COMPLETION DATE
	conducted during the daylight hours only) d. Notification of blasting activities to all property owners within one-half mile of the blasting area, which may include (depending on location of blasting) private residents, and Orange County Parks, any other persons/agencies determined appropriate by OCFA. This notification shall describe expected period and frequency that the blasting shall occur and give a contact phone number for any questions or complaints. All complaints shall be responded to in a method deemed satisfactory to the City of Irvine Community Development Director. e. Types and amounts of explosives f. Warning system information. For example, pre-blast alarms shall be sounded. Immediately before blasting, the construction contractor shall sound a signal announcing the blast. Construction contractors shall follow the construction safety plan that will provide for these measures. g. Methods of transportation and handling of explosives h. Minimum acceptable weather conditions i. Procedures for handling, setting, wiring and firing explosives k. Procedures for clearing and controlling access to blast danger			

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

TIMING FOR PPP, PDF, OR MITIGATION MEASURE	PLANS, PROGRAMS, AND POLICIES (PPPs), PROJECT DESIGN FEATURES (PDFs), AND MITIGATION MEASURES	RESPONSIBLE FOR MONITORING	METHOD OF IMPLEMENTATION	COMPLETION DATE
	j. Procedures for handling misfires and other unusual occurrences l. Emergency action plan m. Material safety data sheet for all explosives or other hazardous materials expected to be used. n. Compliance with local, state and federal laws o. Measures to assess, control, and monitor noise and ground vibration from blasting, including: • The project contractor shall use current state-of-the-art technology to keep blast-related vibration and air blast at off-site residential and other occupied structures as low as possible, consistent with blasting safety. In no instance shall blast vibration or air blast, measured on the ground adjacent to a residential or other occupied structure, be allowed to exceed the frequency dependent limits contained in the USOSM regulations. • The project contractor shall use a blasting seismograph to monitor and record air blast and vibration for blasts within 1,000 feet of residences and other occupied structures to verify that measured levels are within the recommended limits at those locations. If blasting is found to exceed specified levels, blasting shall cease, and alternative			

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

TIMING FOR PPP, PDF, OR MITIGATION MEASURE	PLANS, PROGRAMS, AND POLICIES (PPPs), PROJECT DESIGN FEATURES (PDFs), AND MITIGATION MEASURES	RESPONSIBLE FOR MONITORING	METHOD OF IMPLEMENTATION	COMPLETION DATE
	blasting or excavation methods that result in the specified levels not being exceeded shall be employed. • Air blast and vibration monitoring shall take place at the nearest off-site residential or other occupied structure. If vibration levels are expected to be lower than those required to trigger the seismograph at that location, or if permission cannot be obtained to record at that location, recording shall be accomplished at some closer site in line with the structure. Specific locations and distances where air blast and vibration are measured shall be documented in detail along with measured air blast and vibration amplitudes. p. At the conclusions of blasting activities, a post-blast survey shall be conducted to identify vibration-caused damage. In the unanticipated event of discovery of vibration-caused damage, necessary repairs shall be recommended. The Project Applicant shall be responsible for all repairs associated with vibration-caused damage.			

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

TIMING FOR PPP, PDF, OR MITIGATION MEASURE	PLANS, PROGRAMS, AND POLICIES (PPPs), PROJECT DESIGN FEATURES (PDFs), AND MITIGATION MEASURES		RESPONSIBLE FOR MONITORING	METHOD OF IMPLEMENTATION	COMPLETION DATE
Phases 1 through 4 Prior to issuance of each grading permit for review of contractor specifications During construction for compliance verification	**MM 10-3**	Prior to issuance of each grading permit, the Community Development Department shall confirm that the following requirement is included on the contract specifications and indicated as a note on the cover sheet of the grading plan. Compliance by the contractor shall be confirmed by the Building and Safety Department during construction. "Equipment to be used for demolition and grading that would occur within 200 feet of a residence or 100 feet of a non-residential building shall not include vibratory rollers, large bulldozers, or similar large or heavy equipment. Vibratory rollers operated in the static mode shall be allowed."	Community Development Department	The Community Development Department shall confirm that the requirement in MM 10-3 is included on the contract specifications and indicated as a note on the cover sheet of the grading plan. Compliance by the contractor shall be confirmed by the Building and Safety Department on-site during construction.	
5.11 POPULATION AND HOUSING					
	There are no PPPs, PDFs or Mitigation Measures applicable to population and housing.				
5.12 PUBLIC SERVICES					
Existing Plans, Programs and Policies					
Phases 1 through 4 Prior to the issuance of the first building permit for each building	**PPP 12-1**	Prior to the issuance of the first building permit, the Project Applicant shall comply with all applicable Orange County Fire Authority (OCFA) codes, ordinances, and standard conditions including but not limited to fire prevention and suppression measures, water improvement plans, fire hydrants, automatic fire extinguishing systems, fire access, access gates, combustible construction, water availability, and fire sprinkler systems. Compliance with this PPP shall be verified by the Chief Building Official.	Chief Building Official	The Project Applicant shall ensure that applicable OCFA requirements are included on the building plans. The Chief Building Official shall complete required inspections to ensure compliance with OCFA requirements.	

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

TIMING FOR PPP, PDF, OR MITIGATION MEASURE	PLANS, PROGRAMS, AND POLICIES (PPPs), PROJECT DESIGN FEATURES (PDFs), AND MITIGATION MEASURES	RESPONSIBLE FOR MONITORING	METHOD OF IMPLEMENTATION	COMPLETION DATE
Phases 1 through 4 Prior to issuance of any grading permit	**PPP 12-2** Prior to issuance of any grading permit, the Project Applicant shall enter into a Secured Fire Protection Agreement (SFPA) with the OCFA. The SFPA shall cover all future development under the Campus Master Build-Out Plan Update (Phases 1 through 4). A copy of the executed SFPA shall be provided to the Community Development Director.	Community Development Department	The Project Applicant shall provide a copy of the executed SFPA to the Community Development Department.	
Phases 1 through 4 Prior to the issuance of the first building permit	**PPP 12-3** Prior to the issuance of the first building permit, a Construction Site Security Plan, per the Irvine Uniform Security Code, Section 5-9-521, shall be approved by the Chief of Police. Said plan shall be incorporated into the plan set approved for building permits. *(City of Irvine Standard Condition 3.20)*	Community Development Department	The Project Applicant shall provide a Construction Site Security Plan to the Police Department, and ensure that requirements are incorporated into the plan set for building permits. The Community Development Department shall confirm requirements are included in the plan set.	
Phases 1 through 4 Prior to the issuance of building permits	**PPP 12-4** Prior to the issuance of building permits, the applicant shall demonstrate they have met the Irvine Uniform Security Code requirements for lighting by providing the below listed items for a complete review by the Police Department. Failure to provide a complete lighting package will result in the delay of satisfaction of this condition. *(City of Irvine Standard Condition 3.6)* a. Electrical plan showing light fixture locations, type of light fixture, height of light fixture, and point-by-point photometric lighting analysis overlaid on the landscape plan with a tree legend. The photometric plan should only show those fixtures used to meet	Community Development Department	The Project Applicant shall demonstrate it has met the Irvine Uniform Security Code requirements for lighting by providing the items listed in PPP 12-4 for a complete review by the Police Department. The Community Development Department shall confirm these requirements have been completed.	

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

TIMING FOR PPP, PDF, OR MITIGATION MEASURE	PLANS, PROGRAMS, AND POLICIES (PPPs), PROJECT DESIGN FEATURES (PDFs), AND MITIGATION MEASURES		RESPONSIBLE FOR MONITORING	METHOD OF IMPLEMENTATION	COMPLETION DATE
		the Irvine Uniform Security Code requirements. b. Corresponding fixture cut-sheets (specifications) of those lights used to meet the Irvine Uniform Security Code. c. Site plan demonstrating that landscaping shall not be planted so as to obscure required light levels. d. Site plans that are full-scale and legible.			
5.13 TRANSPORTATION AND TRAFFIC					
Existing Plans, Programs, and Policies					
Phases 1 through 4 Prior to the issuance of the first building permit	**PPP 13-1**	Prior to the issuance of the first building permit, the Project Applicant shall submit and have approved by the Chief of Police an Emergency Access Plan, which identifies and locates all Knox Boxes, Knox key switches, and Click2Enter radio access control receivers. This plan shall be incorporated into the plan set approved for building permits (City of Irvine Standard Condition 3.17).	Community Development Department	The Project Applicant shall submit an Emergency Access Plan, and incorporate the requirements into the plan set approved for building permits. The Community Development Department shall confirm requirements are included in the plan set.	
Phases 1 through 4 Prior to authorization to use, occupy, and/or operate	**PPP 13-2**	Prior to authorization to use, occupy, and/or operate, the Project Applicant shall arrange for and have passed an inspection, to be performed by the Police Department and the Orange County Fire Authority, to ensure compliance with the Emergency Access Plan requirements. The inspector shall verify test acceptance and locations of all Knox boxes and key switches as depicted on the approved plan (City of Irvine Standard Condition 4.9).	Community Development Department	The Project Applicant shall arrange for and have passed an inspection, to be performed by the Police Department and the OCFA, to ensure compliance with the Emergency Access Plan requirements. The Community Development Department shall confirm the inspection results.	

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

TIMING FOR PPP, PDF, OR MITIGATION MEASURE	PLANS, PROGRAMS, AND POLICIES (PPPs), PROJECT DESIGN FEATURES (PDFs), AND MITIGATION MEASURES		RESPONSIBLE FOR MONITORING	METHOD OF IMPLEMENTATION	COMPLETION DATE
Phases 1 through 4 Prior to issuance of any grading permits for submittal of Traffic Routing Plan and inclusion on the grading and building plans Ongoing monitoring of compliance during construction	**PPP 13-3**	As required by Special Development Requirement (SDR) 3 included in Section 9-21-7.B of the Zoning Ordinance (originally SDR 9), Special Development Requirements for Concordia University (Christ College Irvine) General Plan Amendment 4237-GA and Zone Change 5232-ZC, prior to issuance of any grading permits, the Project Applicant shall submit for review and approval by the Chief Building Official a construction traffic routing plan that routes construction traffic away from residential areas. The routing plan shall be shown as a map on the grading and building plans and shall specify that construction traffic is to be routed to Ridgeline Drive, to University Avenue, and directly to the Interstate 405 freeway.	Chief Building Official	The Project Applicant shall submit a Construction Traffic Routing Plan and shall include this on grading and building plans. The Community Development Department shall periodically monitor compliance with this Plan during construction.	
Project Design Features					
Phase 1 Prior to authorization to use, occupy, and/or operate	**PDF 13-1**	Prior to authorization to use, occupy, and/or operate any new institutional development or square footage on campus, the Project Applicant shall demonstrate to the satisfaction of the Director of Community Development that the following internal circulation improvements have been implemented: • **Concordia East Roadway.** To improve traffic and parking management along Concordia East, the following improvements would be implemented, as conceptually shown on Exhibit 3-8a. o Add a stop-controlled intersection at Ascension/Concordia East with uncontrolled flow for inbound	Community Development Department	The Project Applicant shall install internal circulation improvements listed in PDF 13-1. The Community Development Department shall conduct a site review to ensure the improvements have been implemented.	

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

TIMING FOR PPP, PDF, OR MITIGATION MEASURE	PLANS, PROGRAMS, AND POLICIES (PPPs), PROJECT DESIGN FEATURES (PDFs), AND MITIGATION MEASURES	RESPONSIBLE FOR MONITORING	METHOD OF IMPLEMENTATION	COMPLETION DATE
	traffic, and a dedicated westbound left turn lane. o Relocate the Parking Lot E entrance to align with Dorm Road (4-way stop controlled intersection). o Add a dedicated westbound left turn lane at Dorm Road/Concordia East and eastbound left turn lane into the Parking Lot E. o Relocate the driveway for the District Office from Concordia East to Dorm Road. o Maintain and/or realign the public bicycle/pedestrian pathway (minimum 11-foot width) along the south side of Concordia East and west side of Dorm Road. • **Concordia West Roadway** o Modify the Parking Lot A entry/exit to accommodate the expanded parking lot.			
Phase 1 Prior to Certificates of Use and Occupancy for the Music, Worship and Theology building	**PDF 13-2** Prior to the issuance of Certificates of Use and Occupancy for the Music, Worship and Theology building, the applicant shall enter into an agreement with the City and post security in a form and in an amount acceptable to the City Engineer guaranteeing construction of a traffic signal at Concordia East and Ridgeline Drive. Timing of construction of the signal and actual construction will be determined based upon a review of necessity by the Transportation Commission. If a signal is determined not to be needed, the agreement will terminate and the security will be released.	Community Development Department	The Project Applicant shall enter into an agreement with the City and post security in a form and in an amount acceptable to the City Engineer guaranteeing construction of a traffic signal.	

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

TIMING FOR PPP, PDF, OR MITIGATION MEASURE	PLANS, PROGRAMS, AND POLICIES (PPPs), PROJECT DESIGN FEATURES (PDFs), AND MITIGATION MEASURES		RESPONSIBLE FOR MONITORING	METHOD OF IMPLEMENTATION	COMPLETION DATE
Phases 1 through 4 During operations	**PDF 13-3**	During operation of the Concordia University Main Campus, the Project Applicant shall continue to implement and refine the Concordia University Irvine Traffic and Parking Management Plan that outlines the traffic and parking regulations on campus and requires preparation of an Event Action Plan to regulate and facilitate traffic flow and parking during each scheduled special events. The Department of Campus Safety enforces the regulations and provisions in the Traffic and Parking Management Plan and Event Action Plans.	Community Development Department	The Project Applicant shall continue to implement and refine the Concordia University Irvine Traffic and Parking Management Plan. The Department of Campus Safety shall continue to enforce the Traffic and Parking Management Plan. The Community Development Department shall ensure compliance with the Traffic and Parking Management Plan requirements through periodic site inspections.	
Phases 1 through 4 Prior to the issuance of grading and building permits for inclusion of trail on plans Ongoing provision of trail in perpetuity	**PDF 13-4**	Prior to the issuance of grading permits and building permits, the Project Applicant shall demonstrate to the satisfaction of the Director of Community Development that the minimum 11-foot wide bicycle/pedestrian trail is maintained during construction and operation of the Concordia University Main Campus. The Project Applicant shall maintain the public bicycle/pedestrian trail that extends through the campus (connecting Turtle Rock Vistas development to Ridgeline) in its current location, or realigned as necessary to accommodate all construction activities and/or final trail alignment with campus build-out implementation.	Community Development Department	The Project Applicant shall include the bicycle/pedestrian trail on all plan sets. The Community Development Department shall conduct periodic site visits to ensure the trail is maintained during construction and ongoing campus operations.	

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

TIMING FOR PPP, PDF, OR MITIGATION MEASURE	PLANS, PROGRAMS, AND POLICIES (PPPs), PROJECT DESIGN FEATURES (PDFs), AND MITIGATION MEASURES		RESPONSIBLE FOR MONITORING	METHOD OF IMPLEMENTATION	COMPLETION DATE
Mitigation Measures					
Phase 1 Because the intersection improvement project has been approved, prior to issuance of the first building permit the fee shall be paid	**MM 13-1**	Prior to issuance of the first building permit for institutional uses in Phase 1, and if the University Drive and Ridgeline Drive/Rosa Drew Lane Improvement Project has been approved by the City of Irvine, the Project Applicant shall pay its fair share toward this improvement project (0.76 percent as presented in the TIA included in Appendix J). If this improvement project has not been approved at the time of issuance of the first building permit, prior to issuance of an occupancy permit, the Project Applicant shall extend the westbound turn lane at the Ridgeline Drive/University intersection by 25 feet per lane. Compliance with the applicable mitigation requirement shall be confirmed by the Community Development Department.	Community Development Department	The Project Applicant shall pay its fair share toward this improvement project (0.76 percent as presented in the TIA included in Appendix J), which has been approved by the City. The Community Development Department shall confirm payment of the required fee.	
Phase 1 Prior to authorization to use, occupy, and/or operate	**MM 13-2**	Prior to authorization to use, occupy, and/or operate for any institutional uses in Phase 1, the Project Applicant shall lengthen the southbound left-turn lane at the Turtle Rock Drive/Concordia West roadway intersection from 110 feet to 140 feet (an addition of 30 feet) to meet Transportation Design Procedure (TDP)-1 design criteria. The design and implementation of this mitigation improvement shall be to the satisfaction of the Director of Community Development Department.	Community Development Department	The Project Applicant shall implement the required improvement at the Turtle Rock Drive/Concordia West roadway intersection. The Community Development Department shall conduct a site visit to confirm the improvement has been implemented, as required.	
Phases 3 and 4 Prior to issuance of a building permit for additional institutional square footage in Phases 3 and 4	**MM 13-3**	Prior to issuance of a building permit for additional institutional square footage in Phases 3 and 4, if a second northbound right-turn lane at Ridgeline Drive/University Drive intersection is not being implemented by others, the Project Applicant shall install	Community Development Department	If the required improvement is not being implemented by others, the Project Applicant shall implement this improvement or demonstrate in a subsequent traffic analysis to the satisfaction of the Director of	

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

TIMING FOR PPP, PDF, OR MITIGATION MEASURE	PLANS, PROGRAMS, AND POLICIES (PPPs), PROJECT DESIGN FEATURES (PDFs), AND MITIGATION MEASURES		RESPONSIBLE FOR MONITORING	METHOD OF IMPLEMENTATION	COMPLETION DATE
		this improvement or demonstrate in a subsequent traffic analysis to the satisfaction of the Director of Community Development that the improvement is no longer needed. If it is demonstrated that the improvement has been or is being implemented by others prior to issuance of a building permit for additional institutional square footage in Phases 3 and 4, the Project Applicant shall pay its fair-share toward implementation of this improvement (2.7 percent as presented in the TIA included in Appendix J).		Community Development that the improvement is no longer needed. If it is demonstrated that the improvement has been or is being implemented by others prior to issuance of a building permit for additional institutional square footage in Phases 3 and 4, the Project Applicant shall pay its fair-share toward implementation of this improvement. The Community Development Department shall confirm compliance with the applicable requirement.	
Phases 3 and 4 Prior to issuance of a building permit for additional institutional square footage in Phases 3 and 4	**MM 13-4**	Prior to issuance of a building permit for additional institutional square footage in Phases 3 and 4, the Project Applicant shall implement a third eastbound through lane on University between Ridgeline and Michelson, or demonstrate in a subsequent traffic analysis to the satisfaction of the Director of Community Development that the improvement is no longer needed. However, if the improvement has been identified or implemented as part of a short-term interim-year condition by others, the Project Applicant shall pay its fair-share contribution toward implementation of this improvement (1.01 percent as presented in the TIA included in Appendix J).	Community Development Department	If the required improvement is not being implemented by others, the Project Applicant shall implement this improvement or demonstrate in a subsequent traffic analysis to the satisfaction of the Director of Community Development that the improvement is no longer needed. If it is demonstrated that the improvement has been or is being implemented by others prior to issuance of a building permit for additional institutional square footage in Phases 3 and 4, the Project Applicant shall pay its fair-share toward implementation of this improvement. The Community Development Department shall confirm compliance with the applicable requirement.	

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

TIMING FOR PPP, PDF, OR MITIGATION MEASURE	PLANS, PROGRAMS, AND POLICIES (PPPs), PROJECT DESIGN FEATURES (PDFs), AND MITIGATION MEASURES	RESPONSIBLE FOR MONITORING	METHOD OF IMPLEMENTATION	COMPLETION DATE
Phases 1 through 4 Prior to the issuance of each grading permit or demolition permit, whichever occurs first for submittal of a Traffic Control Plan Ongoing monitoring of compliance during construction	**MM 13-5** Prior to the issuance of each grading permit or demolition permit, whichever occurs first, for each individual development project, the Project Applicant shall submit a Traffic Control Plan to the Building and Safety Department for review and approval. The Traffic Control Plan shall provide for temporary traffic control during construction activities for the project. To reduce traffic congestion, the Traffic Control Plan shall include, as necessary, appropriate, and practicable, the following: (1) temporary traffic controls (e.g., a flag person) during all phases of construction to maintain smooth traffic flow; (2) a requirement for at least one unobstructed lane to be maintained in both directions on roadways internal to campus and off-campus roadways subject to construction activity; (3) a requirement to maintain emergency access at all times; (4) scheduling of construction activities that affect traffic flow on the arterial system to off-peak hours; (5) consolidation of truck deliveries; and (6) incorporation of the truck routing plan required by Plan, Policy, and Program (PPP) 13-3. Compliance with the Traffic Control Plan shall be verified by the Building and Safety Department during construction.	Building and Safety Department	The Project Applicant shall submit a Traffic Control Plan to the Building and Safety Department for review and approval. The Building and Safety Department shall periodically monitor compliance with this Plan during construction.	

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

TIMING FOR PPP, PDF, OR MITIGATION MEASURE	PLANS, PROGRAMS, AND POLICIES (PPPs), PROJECT DESIGN FEATURES (PDFs), AND MITIGATION MEASURES		RESPONSIBLE FOR MONITORING	METHOD OF IMPLEMENTATION	COMPLETION DATE
5.14 UTILITIES AND SERVICE SYSTEMS					
Phases 3 and 4 Prior to issuance of the first grading permit	**MM 14-1**	Prior to issuance of the first grading permit for development of proposed buildings in Phases 3 and 4, the Project Applicant shall provide written evidence to the satisfaction of the Director of Community Development Department indicating that the Irvine Ranch Water District has determined there is sufficient transmission capacity to accept sewage flows from future campus development, particularly the new 74-unit dormitory building.	Community Development Department	The Project Applicant shall provide written evidence to the satisfaction of the Director of Community Development Department indicating that the Irvine Ranch Water District has determined there is sufficient transmission capacity to accept sewage flows from future campus development, particularly the new 74-unit dormitory building.	

EXHIBIT D

[Tables Summarizing Relationships Between MOU, Conditions of Approval to CUP Modification, and MMRP]

Summary of MOU Provisions Clarifying, Amplifying and Supplementing Conditions of Approval and MMRP For Concordia University's Campus Master Build-Out Plan Update

The Memorandum of Understanding between the City of Irvine and Concordia University (which was approved by the City of Irvine's City Council on May 9, 2017) (the "**MOU**") clarified, amplified, and supplemented certain:

1. Conditions approved by the City of Irvine's Planning Commission on March 16, 2017 through the adoption of Planning Commission Resolution 17-3598 relating to Conditional Use Permit Modification 00612052-PCPU ("**Conditions**") (Exhibit B to the MOU); and

2. Provisions of the Mitigation Monitoring and Reporting Program for Concordia University's Campus Master Build-Out Plan Update adopted by the City of Irvine's City Council on April 25, 2017 through the approval of Exhibit B to City Council Resolution No. 17-29 ("**MMRP Provisions**") (Exhibit C to the MOU).

For reference purposes only, the tables below summarize the relationships between the Conditions, MMRP Provisions and MOU provisions. To the extent the summary in these tables differs from the approval documents (*i.e.*, Planning Commission Resolution 17-3598, Exhibit B to City Council Resolution No. 17-29, and the MOU), the approval documents shall prevail.

Overview	**Conditions**	**MMRP Provisions**	**MOU Provisions**
Construction Staging & Management Plans	2.33	not applicable	§ 2.F
Minor/Major Modifications	2.34	PPP 1-3	§ 2.A
Athletic Field Lighting System Installation & Operations	3.33	PDF 1-2	§ 2.E
Athletic Field Lighting Compliance	3.34	MM 1-2	§ 2.E
Traffic Signal Installation	4.17	PDF 13-2	§ 2.D
Vehicle Trip Cap and Monitoring	6.21	MM 9-1	§ 2.B, § 2.C
Non-University Events Limit and Reporting	6.24	not applicable	§ 2.B
Special Events Reporting	6.25	not applicable	§ 2.B
Athletic Field Lighting	6.26	not applicable	§ 2.E

Conditions, MMRP Provisions and MOU Provisions:	
Construction Staging & Management Plans	**Condition 2.33** Prior to the issuance of grading permits for each building, a construction management plan, detailing items including but not limited to access routes; haul routes; staging areas; temporary parking for students, faculty/staff, construction/temporary workers; and clean-up requirements including any public and private roadways, shall be submitted to the Director of Community Development. The plans shall be reviewed and approved by Community Development, Public Safety, Public Works and Orange County Fire Authority. A copy of the approved phased construction staging and management plans shall be retained by the Community Development Department and made available for public viewing. **MOU § 2.F** Concordia understands, agrees, and covenants that, prior to issuance of each grading permits for Phases 1 and 2 of the Campus Master Build-Out Plan, it will meet with and seek input from the Board of Directors of the Concordia East Community Association and the Concordia West Community Association on the construction management plans required by Condition 2.33 to Planning Commission Resolution 17-3598. The covenants set forth in this Section 2.F are intended to clarify, amplify, and supplement Condition 2.33 to Planning Commission Resolution 17-3598.
Minor/Major Modifications	**Condition 2.34 & PPP 1-3** Prior to approval of any modification application and/or issuance of grading and/or building permits for future buildings on campus, the Community Development Department shall review any proposed revisions, if applicable, to Conditional Use Permit modification 00612052-PCPU pursuant to Zoning Ordinance Chapter 2-19, Minor/Major Modification Procedure. Future buildings shall also comply with the University's Narrative of Proposed Architectural Styles, included in Appendix C of the Draft Environmental Impact Report (EIR). **MOU § 2.A** The City's approval of its Campus Master Build-Out Plan (as updated by the City's approval of the Project and any subsequent discretionary approvals) is a phased approval consisting of four phases, each of which is described in Section 3.4 of the Draft EIR for the Project. Concordia understands, agrees, and covenants that no permits shall be issued and no construction of any improvements shall be permitted for any portion of Project Phases 3 and 4 unless and until Concordia obtains further discretionary approval(s) from the

Conditions, MMRP Provisions and MOU Provisions:	
	City (such as a subsequent modification to CUP Modification 00612052-PCPU pursuant to Chapter 2-19 of the Irvine Zoning Ordinance). Concordia further understands, agrees, and covenants that additional public review (including, without limitation, any review required by the California Environmental Quality Act) shall be required for any discretionary approval related to any portion of Phases 3 or 4, and that any discretionary approval for any portion of Phases 3 or 4 shall, at a minimum, require a duly noticed public hearing before the City's Planning Commission. The covenants set forth in this Section 2.A are intended to clarify, amplify, and supplement Condition 2.34 to Planning Commission Resolution 17-3598 (Ex. B) and Plan, Program, and Policy (PPP) Number 1-3 to the MMRP (Ex. C).
Athletic Field Lighting System Installation & Operations	**Condition 3.33 & PDF 1-2** Prior to approval of building permits for installation of athletic facility lighting, the Project Applicant shall submit for review and approval by the Director of Community Development lighting plans for existing and proposed athletic facilities, demonstrating compliance with requirements outlined in the City of Irvine Parks and Public Facilities Standards Manual. A third-party lighting consultant may be retained at the discretion of the Director of Community Development to review the athletic field lighting plans. The Project Applicant shall be responsible for all costs associated with the review by the City-hired third-party lighting consultant. A copy of this submittal shall be provided to the Concordia East Community Association's Board of Directors concurrently with the submission of the same to the City. As shown on Exhibit 3 24, Conceptual Athletic Field Lighting Plan, in Section 3.0, Project Description, of the Draft EIR, the proposed project would involve installation of athletic field lighting at each of the existing athletic fields (soccer/track, softball, baseball, and practice), at the two proposed sand volleyball courts and on the proposed tennis court deck (four courts out of six). With the exception of tennis courts and practice field, the lighting shall comply with lighting requirements established by the National Collegiate Athletic Association (NCAA) for intercollegiate play (no broadcast) as shown in Appendix C, NCAA Best Lighting Practices, of the Draft EIR, or as modified by the NCAA in the future. The lighting system and associated operation of the lighting system include the following features which serve to reduce potential impacts: • Installation of light emitting diode (LED) light fixtures or other industry approved best available technology and not metal halide.

Conditions, MMRP Provisions and MOU Provisions:	
	• Lighting shall only be installed on the four tennis courts in the eastern portions of the tennis court deck (closest to the baseball field), and shall be designed to accommodate nighttime play for recreation and practice. • Tennis court lighting shall not exceed an average light level of 50 footcandles and shall not be designed to comply with NCAA requirements. • Practice field lighting shall not exceed an average light level of 30 footcandles and shall not be designed to comply with NCAA requirements. • Reflectors for the light fixtures that direct the light onto the field, reducing sky glow and spill light onto neighboring properties, and a visor assembly that works in conjunction with the reflector to provide more light control and reduce glare on and off the field. • A remote scheduling, monitoring and data management system that allows the University to schedule, report, and track usage of athletic field lighting, including by special user groups. • A multi-watt dimming control system that operates by adjusting the total electrical consumption of the driver allowing for different light levels for intercollegiate play (i.e., high mode - 100 percent power), practices (i.e., medium mode– 50 percent power), and clean-up activities (i.e., low mode- 15 percent power) that can be operated through on-site and remote control links. • A lighting curfew of 9:00 PM to limit nighttime operational hours for all field use. All events shall be scheduled to conclude before the curfew and the automated lighting system shall be designed to and shall turn off athletic field lights no later than 9:00 PM each day. If scheduled events are concluded before 9:00 PM, the lights shall be turned off at the earliest time possible. **MOU § 2.E** Notwithstanding Condition 3.33 to Planning Commission Resolution 17-3598, Table 3-5 of the Draft EIR for the Project ("Athletic Field Lighting"), Exhibit 3-24 to the Draft EIR for the Project ("Conceptual Athletic Field Lighting Plan"), or any other approved planning document that addresses athletic field lighting on the Property, Concordia understands, agrees, and covenants that, until, at the earliest, such time as it obtains approvals to proceed with Phase 3 of the Campus Master Build-Out Plan (as updated by the City's approval of the Project and any subsequent discretionary approval), the number of athletic field lighting poles shall not exceed fifteen (15) permanent athletic field light poles on the entire Property, and no temporary lighting apparatus may be used to illuminate any athletic facility for athletic purposes once the permanent athletic field light poles are in place and

Conditions, MMRP Provisions and MOU Provisions:	
	operational. The Parties further understand, agree, and covenant that, except as set forth above in this Section 2.E, this MOU does not change any requirement for athletic field lighting set forth in Conditions 3.33, 3.34 and 6.26 to Planning Commission Resolution 17-3598, Table 3-5 of the Draft EIR for the Project ("Athletic Field Lighting"), Exhibit 3-24 to the Draft EIR for the Project ("Conceptual Athletic Field Lighting Plan"), Attachment B of the Final EIR ("Expanded Lighting Analysis"), or any other approved planning document, including without limitation, maximum pole heights, luminaire type, mounting height, and LED fixture quantity. Concordia understands, agrees and covenants that the locations and construction of the fifteen (15) permanent athletic field light poles must be consistent with the locations, maximum pole heights, luminaire type, mounting height, LED fixture quantity, light spillage, and total kW loads for each field, as analyzed in the lighting studies for the EIR for the Project and as reflected in the Expanded Lighting Analysis (Attachment B to the Final EIR). Concordia further understands, agrees and covenants that the amount and locations of any additional light poles beyond the fifteen (15) permanent athletic field light poles discussed in this Section 2.E shall require discretionary approval of the City's Planning Commission and will conform to or not exceed the amount (thirty three (33) total light poles inclusive of the fifteen (15) light poles discussed in this Section 2.E), physical characteristics (i.e., maximum pole heights, luminaire type, mounting height, LED fixture quantity), and locations set forth in Table 3-5 of the Draft EIR for the Project ("Athletic Field Lighting"), Exhibit 3-24 to the Draft EIR for the Project ("Conceptual Athletic Field Lighting Plan"), and Attachment B of the Final EIR ("Expanded Lighting Analysis"). The covenants set forth in this Section 2.E are intended to clarify, amplify, and supplement Conditions 3.33, 3.34 and 6.26 to Planning Commission Resolution 17-3598 (Ex. B) and Project Design Feature (PDF) 1-2 and Mitigation Measure (MM) 1-2 to the MMRP (Ex. C).
Athletic Field Lighting Compliance	**Condition 3.34 & MM 1-2** During installation of the lighting system, and prior to operation of the athletic facility lighting, the University shall retain a registered Lighting Engineer or lighting professional with certification that indicates proficiency in outdoor lighting design to provide on-site verification that lighting installation conforms to submitted plans (i.e., number of poles and fixtures, mounting heights, spill light footcandles, and glare candela or candlepower) and is in compliance with applicable criteria established in the City's Parks and Park Facilities Standards. Written verification of compliance shall be provided to the Community Development Department prior to approval of

Conditions, MMRP Provisions and MOU Provisions:	
	use of the athletic field lighting. A copy of this submittal shall be provided to the Concordia East Community Association's Board of Directors concurrently with the submission of the same to the City. The City may request written verification by a registered Lighting Engineer of the lighting operations on the campus at any time to ensure continued compliance and/or address any community concerns. **MOU § 2.E** – See above
Athletic Field Lighting	**Condition 6.26** Concordia University shall not light athletic fields listed below when they are not in use. All lighting shall be turned off by 9 p.m. each day (consistent with PDF 1-2). a. Soccer field and Track (existing) b. Softball field (existing) c. Baseball field (existing) d. Practice field (existing) e. Two sand volleyball courts (proposed) f. Tennis court deck – four out of six courts are lighted (proposed) **MOU § 2.E** – See above
Traffic Signal Installation	**Condition 4.17 & PDF 13-2** Prior to the issuance of Certificates of Use and Occupancy for the Music, Worship and Theology building, the applicant shall enter into an agreement with the City and post security in a form and in an amount acceptable to the City Engineer guaranteeing construction of a traffic signal at Concordia East and Ridgeline Drive. Timing of construction of the signal and actual construction will be determined based upon a review of necessity by the Transportation Commission. If a signal is determined not to be needed, the agreement will terminate and the security will be released. **MOU § 2.D** Notwithstanding Condition 4.17 to Planning Commission Resolution 17-3598, Concordia understands, agrees, and covenants that, if the City determines a traffic signal is not needed at the intersection of Concordia East and Ridgeline Drive, the City may use the financial security Concordia

Conditions, MMRP Provisions and MOU Provisions:	
	provided for that proposed signal to pay for different unfunded traffic improvements in the immediate area of the Property. The Parties understand, agree, and covenant that the specific location and traffic improvement(s) to be constructed with the use of such funds shall be based upon the determination and/or recommendation of the Transportation Commission for the City of Irvine. The covenants set forth in this Section 2.D are intended to clarify, amplify, and supplement Condition 4.17 to Planning Commission Resolution 17-3598 (Ex. B) and Project Design Feature (PDF) Number 13-2 to the MMRP (Ex. C).
Vehicle Trip Cap and Monitoring	**Condition 6.21 & MM 9-1** *Incremental Daily Trip Cap* The maximum daily trip cap shall be determined by the actual existing square footage (i.e., buildings with temporary or final certificate of occupancy) on the campus on the starting date of the vehicle trip count provided, however, that 4,732 maximum daily trips shall be the initial maximum daily trip cap until Concordia adds any additional institutional building square footage beyond the existing 243,571 square feet, at which time the below maximum Daily Trip Cap ("Daily Trip Cap") will exclusively apply and govern provided the Daily Trip Cap calculation yields no less than 4,732 maximum daily trips. As building square footage is allowed to be occupied and compliance with the trip cap is verified, the trip cap will increase incrementally for the campus. Vehicle trips generated by the Concordia University campus shall be calculated as follows: Daily Trip Cap = 17.12 trips x existing institutional square footage/1,000 SF (note: institutional square footage excludes dormitory unit square footage) *Maximum Daily Trip Cap* If Daily Trip Cap compliance is successfully and continuously demonstrated with the occupancy of each new or expanded building, the daily trip generation shall not exceed 5,500 daily trips at full-campus build-out (i.e., 321,220 square feet of institutional uses and 330 dormitory units). *Vehicle Trip Counts* Concordia and all its successors shall conduct a count of vehicles entering and exiting the campus two times annually. The first count of vehicles shall be taken during the month of October on three successive days (Tuesday, Wednesday and Thursday). The second count of vehicles shall be taken on a

Conditions, MMRP Provisions and MOU Provisions:	
	weekend day (Friday or Saturday) in the Spring when a special event or special events with the largest attendance and largest vehicle trip generation is/are anticipated. The proposed dates of each count shall be reviewed and approved by City staff a minimum of 30 days in advance of commencing any actual counts. This "cordon count" shall be conducted via a mixture of electronic and mechanical means (e.g., magnetic road loops, video and/or rubber hose counting systems). All trips entering and exiting the campus, including those associated with pass-through traffic (e.g., community HOA vehicles traversing the campus to travel from one location to another), shall be recorded. Furthermore, counts from all residential neighborhood streets (i.e., Ascension for Concordia East and Daystar, Faith and Joy for Concordia West) shall be deducted from the overall gate volumes. *Vehicle Trip Monitoring Reports* Concordia University shall submit to the Community Development Director (and provide copies directly to the Board of Directors of the Concordia East and West Community Associations) two comprehensive trip monitoring reports summarizing the completed counts of vehicles entering and exiting the campus ("Vehicle Trip Monitoring Report"). The Vehicle Trip Monitoring Reports for the October and Spring counts shall be submitted no later than 30 calendar days after completion of each count and, in the case of the City, submitted as a Pre-Application case type. Actual count data for each day shall be included in the Vehicle Trip Monitoring Report. The highest 24-hour count for each collection period (October and Spring) shall be used in determining compliance with the Daily Trip Cap, and daily counts shall not be averaged between the count days for that year. Each Vehicle Trip Monitoring Report shall include a summary description of all events and activities occurring on campus each day that traffic counts were taken. At the discretion of the Director of Community Development, additional traffic counts and reports beyond the October and Spring Vehicle Trip Monitoring Reports may be required, if deemed necessary. *Non-Compliance* Should any October or Spring Vehicle Trip Monitoring Report or specially requested report submitted to the City evidence noncompliance with the applicable maximum trip count limitation, within 30 calendar days of the Director of Community Development's receipt of the Vehicle Trip Monitoring Report, University representatives shall meet with the Director of Community Development and Concordia East and West Community

Conditions, MMRP Provisions and MOU Provisions:	
	Associations' Board of Directors, if interested, to review actions including but not limited to reducing on-campus activities and implementing transportation demand management measures (e.g., carpooling, use of alternative modes of transportation, parking management) that shall be immediately taken to comply with the trip count limitations. Additionally, prior to issuance of all grading/building permit and approval of all development applications for uses within the campus, the applicant shall demonstrate to the satisfaction of the Director of Community Development that the projected total daily traffic from the site will not exceed 4,732 daily trips or 17.12 daily trips per thousand square feet of existing and/or proposed institutional square footage (whichever is greater). In the event of non-compliance with the applicable trip cap, the applicant shall be prohibited from further implementing the campus build-out plan regardless of the (approved) status of such permit(s) and/or development plan(s) until compliance with the trip cap is demonstrated. *Additional Requirements* Additionally, where the applicant is required to submit a traffic analysis by any federal, state, or local law or policy, including but not limited to the City Traffic Impact Analysis Guidelines and/or California Environmental Quality Act, the applicant shall submit such traffic analysis in addition to the above requirements. Finally, see Condition of Approval 6.25 regarding Special Events and Condition of Approval 6.24 regarding Non-University Events for details on additional reporting requirements for those activities. **MOU § 2.B** On-road traffic counts that the City conducted in October of 2014 indicate that, prior to the City's approval of the Project, Concordia's use of the Property generated a two-way volume of up to 4,732 vehicle trips per day. Concordia understands, agrees, and covenants that, until such time as it obtains approvals to proceed with Phase 3 of the Campus Master Build-Out Plan (as updated by the City's approval of the Project, and any subsequent discretionary approval), the maximum Daily Trip Cap (as that term is defined in Condition 6.21 to Planning Commission Resolution 17-3598) shall not exceed 4,732 trips per day, regardless of the amount of actual existing institutional square footage on the campus. Concordia understands, agrees, and covenants that, notwithstanding Condition 6.21 to Planning Commission Resolution 17-3598, increasing the actual existing square footage on the campus during Phases 1 and 2 beyond pre-Project conditions (of approximately 243,571 square feet) shall not increase the maximum Daily

Conditions, MMRP Provisions and MOU Provisions:	
	Trip Cap. The intent of this covenant is to ensure "net zero" additional vehicle trips until, at the earliest, Concordia obtains approvals to proceed with Phase 3 of the Campus Master Build-Out Plan (as updated by the City's approval of the Project and any subsequent discretionary approval), which may coincide with completion of certain City-approved intersection improvements at University Drive and Ridgeline Drive/Rosa Drew Lane. Concordia further understands, agrees, and covenants that failure to comply with the maximum Daily Trip Cap of 4,732 trips per day until, at the earliest, Concordia obtains approvals to proceed with Phase 3 of the Campus Master Build-Out Plan (as updated by the City's approval of the Project and any subsequent discretionary approval), entitles the City to utilize any or all of the enforcement mechanisms set forth in State, Federal or local law (including, without limitation, the City's Municipal Code and Zoning Ordinance), and in Condition 6.21 to Planning Commission Resolution 17-3598, including without limitation, requiring Concordia to reduce on-campus activities and/or implement transportation demand management measures (such as carpooling, use of alternative modes of transportation, and parking management) to ensure immediate compliance with trip cap limitations, and requiring Concordia to demonstrate compliance with trip cap limitations prior to obtaining development approvals (including without limitation grading and building permits) for uses within the campus. The covenants set forth in this Section 2.B are intended to clarify, amplify, and supplement Conditions 6.21, 6.24 and 6.25 to Planning Commission Resolution 17-3598 (Ex. B) and Mitigation Measure (MM) Number 9-1 to the MMRP (Ex. C). The Parties further understand, agree, and covenant that, except as set forth above in this Section 2.B, this MOU does not change any requirement for "vehicle trip cap and monitoring" set forth in Condition 6.21 or Mitigation Measure Number 9-1, including, without limitation, the requirement that daily trip generation shall not exceed 5,500 daily trips at full campus build-out (i.e., 321,220 square feet of institutional uses and 330 dormitory units) for any approval Concordia may obtain for Phases 3 and/or 4 of the Campus Master Build-Out Plan (as updated by the City's approval of the Project and any subsequent discretionary approval). **MOU § 2.C** Notwithstanding Condition 6.21 to Planning Commission Resolution 17-3598, the City and Concordia understand, agree, and covenant that the City shall conduct the biannual vehicle trip counts required by Condition 6.21, subject to the timing requirements set forth in Condition 6.21, using City personnel or an independent qualified entity selected and approved by the

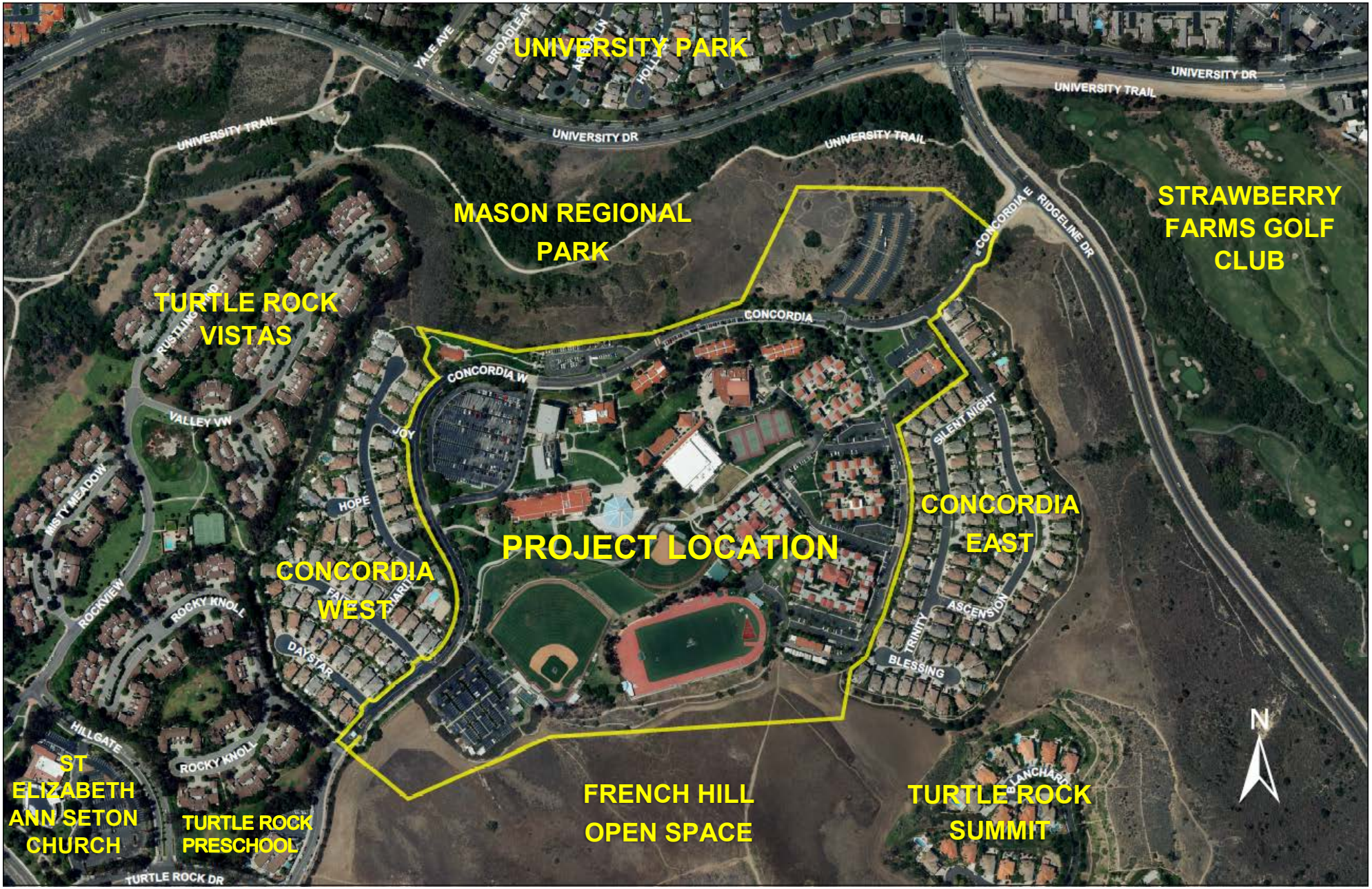
Conditions, MMRP Provisions and MOU Provisions:	
	City. Concordia understands, agrees, and covenants that Concordia shall be responsible for reimbursing the City for the actual and necessary costs of the traffic counts within thirty (30) days of receiving a request for reimbursement. The Parties further understand, agree, and covenant that the City may conduct these traffic counts on dates the City unilaterally selects without prior notice to Concordia, provided those dates are during the month of October on three successive days (Tuesday, Wednesday and Thursday), and on a weekend day (Friday or Saturday) in the Spring when a special event or special events with the largest attendance and largest vehicle trip generation is/are anticipated. Upon request, Concordia shall provide the City with a list of upcoming University and Non-University special events to occur on campus, which includes the date(s), a description, anticipated attendance, and anticipated vehicle trip generation for each identified special event. The Parties further understand, agree, and covenant that, if the City either notifies Concordia that the City will not conduct an upcoming biannual traffic count or neglects to conduct a biannual traffic count, Concordia shall become responsible for employing an independent qualified entity to conduct the biannual traffic counts in accordance with the requirements set forth in Condition 6.21 until such time as the City notifies Concordia that the City will resume City-conducted traffic counts pursuant to and in accordance with this Section 2.C. To the extent that the City notifies Concordia that the City will not conduct an upcoming biannual traffic count or neglects to conduct a biannual traffic count, the City shall provide written notice of the same to the Board of Directors of the Concordia East Community Association and Concordia West Community Association either concurrent with notice to Concordia or as soon as possible after discovering that the City has neglected to conduct a biannual traffic count. The Parties further understand, agree, and covenant that this MOU does not limit or restrict the City's rights, as set forth in Condition 6.21, to require or conduct additional traffic counts if the City determines such traffic counts are necessary. The covenants set forth in this Section 2.C are intended to clarify, amplify, and supplement Condition 6.21 to Planning Commission Resolution 17-3598 (Ex. B) and Mitigation Measure (MM) Number 9-1 to the MMRP (Ex. C).
Non-University Events Limit and Reporting	**Condition 6.24** The University is zoned 6.1, Institutional, and, except as provided in this condition, use of the campus shall be connected to the University's educational and religious purposes, to insure that the primary use of the campus is in keeping with the institutional zoning requirement, and to require

Conditions, MMRP Provisions and MOU Provisions:	
	a limitation of, and reporting process for, any and all auxiliary/community use of campus facilities defined below as "non-university events." For purposes of this condition, non-university events are defined as events where non-Concordia University/Lutheran Church-Missouri Synod groups, businesses, organizations or individuals, whether for-profit or non-profit, use and/or rent any portion of Concordia University's campus or facilities, including, without limitation, its institutional buildings, athletic fields and related facilities, and/or any other improvements. Concordia University shall limit non-university events, as defined herein, on any portion of Concordia University's main campus or facilities (including, without limitation, its institutional buildings, athletic fields and related facilities, and/or any other improvements) to a maximum of 25 events per academic year (i.e., August 1 through May 15) and summer term (i.e., May 16 through July 31) combined. For non-university events that will last more than one day, each day of such event shall be considered a separate event for purposes of this limitation. Likewise, if multiple non-university events are held on the same day, each day of each such event shall be counted separately for purposes of this limitation. Athletic facility usage as allowed under the "Lutheran Church-Missouri Synod/City of Irvine Joint Use of College Facilities Agreement" (as amended on August 21, 1996) between the City of Irvine and Concordia University ("Joint Use Agreement") shall not be considered non-university events, and shall not be included in the annual non-university event report. The availability and usage of the athletic facilities contained in the recorded "Joint Use Agreement" (as amended on August 21, 1996) shall remain consistent with Exhibit B, Concordia University Facilities Description and Percentage of Use Availability, and shall not be subject to the 25 events limit. Similar to the Joint Use described above, non-athletic events that provide for the participation of youth who are of such an age as to reasonably consider future attendance at the University shall not be considered non-university events, and shall not be included in the annual non-university event report. For such events to be considered non-university events, there shall be evidence that the University took reasonable steps in furtherance of promoting the University to such participants. After the end of each academic year and summer term (August 1 - July 31), and not later than September 15 after such term, Concordia University shall submit to the Community Development Director (and provide copies directly to the Concordia East and West Community Associations' Board of Directors) a non-university event summary for the completed academic year and summer term detailing the number of non-university event days, the

Conditions, MMRP Provisions and MOU Provisions:	
	dates, start and end times, event descriptions, attendance numbers, and whether special arrangements such as extra City Public Safety assistance or off-site parking were required, which shall be incorporated in an Events Report. The Events Report shall be a combined report of the non-university event summary described in the prior sentence and the special event summary described below in Condition of Approval 6.25. Descriptions of any complaints received shall be provided in the Events Report. The Events Report shall be submitted as a Pre-Application case type to the City for review. Should any Events Report submitted to the City evidence noncompliance with the event day limit for non-university events, or should any Event Report fail to accurately report non-university events, within 15 calendar days of the Director of Community Development's receipt of the Events Report, University representatives shall meet with the Director of Community Development and Concordia East and West Community Associations' Board of Directors, if interested, to review actions that shall be immediately taken to comply with the event day limit. In the event that such actions do not result in compliance, the Director of Community Development may, in his or her discretion, further limit the number and type of non-university events to the point where operations on-campus function appropriately. **MOU § 2.B** – See above
Special Events Reporting	**Condition 6.25** Special events are held at the main campus throughout the year and generally include large and/or multiple events typically attracting larger numbers of outside guests and visitors. Special events are classified as academic life events, student life events, university life events, or auxiliary/community life (non-university events). Special events generally occur outside typical campus weekday peak traffic hours of 8 - 9 a.m. and 4:30 – 5:30 p.m. or during the weekends. Auxiliary/community life ("non-university events") special events are limited by Condition 6.24 and shall be counted as part of the allowed 25 events per academic year and summer term. Academic life, student life and university life special events shall be limited to events hosted by Concordia University which directly relate to its educational and religious purposes. After the end of each academic year and summer term (August 1 - July 31), and not later than September 15 after such term, Concordia University shall submit to the Community Development Director (and provide copies directly to the Concordia East and West Community Associations' Board of Directors) a special event summary for the completed academic year detailing the dates, start and end times, event descriptions, attendance numbers, and

Conditions, MMRP Provisions and MOU Provisions:	
	whether special arrangements such as extra City Public Safety assistance or off-site parking were required, which shall be incorporated in an Events Report. The Events Report shall be a combined report of the non-university event summary described in Condition of Approval 6.24 and the special event summary described in the previous sentence. Descriptions of any complaints received shall be provided in the annual Events Report. A copy of the most current Traffic and Parking Management Plan shall also be provided consistent with Condition of Approval 6.28, Traffic and Parking Management Plan. The Events Report shall be submitted as a Pre-Application case type to the City for review. Should any annual Events Report submitted to the City evidence noncompliance with these Conditions of Approval (i.e., Conditions 6.21, 6.24 and 6.25), or fail to accurately report and/or classify special versus non-university events, within 15 calendar days of the Director of Community Development's receipt of the Events Report, University representatives shall meet with the Director of Community Development and Concordia East and West Community Associations' Board of Directors, if interested, to review actions that shall be immediately taken to comply with these Conditions of Approval. In the event that such actions do not result in compliance, the Director of Community Development may, in his or her discretion, require other necessary measures be taken by the University to ensure operations on-campus function appropriately. Concordia University shall utilize its electronic notification system, known as Dwelling Live, to notify the public, including residents of Concordia East and West of any main campus special event at least 48 hours in advance of that event occurring. Refer to Condition of Approval 6.21 above regarding vehicle trip monitoring for an explanation of traffic counts that will be taken in the Spring and reported in the Spring vehicle trip monitoring report. **MOU § 2.B** – See above

VICINITY MAP – CONCORDIA UNIVERSITY
PLANNING AREA 21



ATTACHMENT 5

3.8

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CITY OF IRVINE
CITY CLERK'S OFFICE
2017 MAY -2 AM 10: 51

RECEIVED
MAY 02 2017
CITY OF IRVINE
CITY MANAGER'S OFFICE

Memo

To: Sean Joyce, City Manager

From: Jeffrey Lalloway, Councilmember JL

Date: May 2, 2017

Re: **Community Partnership Fund Grant Nomination**

In accordance with City Council Resolution No. 08-42, I am requesting the City Council approve a $500 community partnership grant award to Myford Elementary School Parent Teacher Organization (Myford PTO) in support of program costs.

Myford PTO is a qualified 501(c)(3) tax-exempt organization that provides programs, activities, materials, items, and financial support to further enrich and enhance the educational experience of the students.

Should the City Council approve this request, Myford PTO will enter into a Funding Agreement with the City that specifies the use of grant funds, reporting requirements and regulatory compliance.

I would like to place this item on the May 9 City Council agenda to approve this community partnership grant award and authorize the City Manager to prepare and execute a Funding Agreement.

cc: Irvine City Council
Molly McLaughlin, City Clerk

RECEIVED
CITY OF IRVINE
CITY CLERK'S OFFICE

2017 MAY -2 AM 10: 51

Memo

RECEIVED
MAY 02 2017
CITY OF IRVINE
CITY MANAGER'S OFFICE

To: Sean Joyce, City Manager

From: Donald P. Wagner, Mayor

Date: May 2, 2017

Re: City Support of the American Red Cross

In accordance with City Council Resolution No. 08-42, I am requesting the City Council approve a $500 community partnership grant to the American Red Cross in support of the American Red Cross Orange County Heroes Luncheon.

Additionally, I am requesting my colleagues consider making similar nominations from their respective Community Partnership Funds. With each councilmember's support we can sponsor this great event with a $2,500 collective donation. The City of Irvine has a long-standing history of supporting services provided by the American Red Cross.

For more than 100 years, the American Red Cross has helped make Orange County safer and more prepared. These services could not be provided without the assistance of its volunteers and supporters. The American Red Cross Orange County is hosting a Heroes Luncheon to raise public awareness of local heroes who carry out the Red Cross mission. This event honors local individuals who make personal commitments to creating safer and stronger communities and providing assistance when disaster strikes.

I believe it is important for the City of Irvine to continue supporting the efforts of the American Red Cross and its services including disaster relief, preparedness and safety training, service to military members, and blood donations in Orange County.

Should the City Council approve this request, the American Red Cross Orange County will enter into a Funding Agreement with the City that specifies the grants use of funds, reporting requirements and regulatory compliance.

I would like to place this item on the May 9, 2017 City Council agenda to approve this community partnership grant award and authorize the City Manager to prepare and execute a Funding Agreement.

cc: Irvine City Council
Molly McLaughlin, City Clerk

4.1

RECEIVED
CITY OF IRVINE
CITY CLERK'S OFFICE

2017 APR 28 PM 4:54

Memo

RECEIVED

APR 28 2017

CITY OF IRVINE
CITY MANAGER'S OFFICE

To: Sean Joyce, City Manager

From: Lynn Schott, Mayor Pro Tem,
Jeffrey Lalloway, Councilmember

Date: April 28, 2017

Re: **Request for Public Discussion of Siting of Safari Substation in the Spectrum Business Center and for Reconsideration of Decision to Initiate a Proceeding with the California Public Utilities Commission Concerning Same**

On March 14, 2017, the City Attorney announced a closed session vote of the City Council to initiate a proceeding with the California Public Utilities Commission (CPUC) under CPUC General Order 131-D. The proceeding would seek CPUC review and action relating to Southern California Edison's attempt to construct the Safari Substation on Wald Street in the Spectrum Business Center.

Since that decision we have been moved by the public testimony of the neighboring and nearby business and property owners, referring to themselves as Spectrum 5, asking that their shared concerns be the subject of a public hearing before the City Council. We believe it is appropriate to extend to those individuals the opportunity to comprehensively present their concerns, in a context that allows for more than the normally allotted three minutes provided for general public comments. Such a hearing would allow for a thorough vetting of this issue and would ensure that the City Council provides clear and public direction on this matter.

Please place a public discussion of this matter on the May 9, 2017 City Council agenda, so that the City Council can take all appropriate action up to and including reconsideration and reversal of the City Council's March 14, 2017 decision to initiate a proceeding with the CPUC over the Safari Substation.

cc: City Council
Molly McLaughlin, City Clerk

4.2

REQUEST FOR CITY COUNCIL ACTION

MEETING DATE: MAY 9, 2017

TITLE: PARKS MASTER PLAN

Director of Community Development

City Manager

RECOMMENDED ACTION

Adopt – A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, APPROVING A CITY-INITIATED PARKS MASTER PLAN

EXECUTIVE SUMMARY

The City of Irvine has been master-planned with a vast network of public parks and park facilities. The 1988 *Community Parks Master Plan*, developed to "guide the development of the community parks and recreation facilities through the City's anticipated build-out," is no longer applicable as the City approaches build-out and must focus on existing assets that are aging. In September 2014, the City of Irvine contracted with the planning firm MIG to develop a *Parks Master Plan* (*Master Plan*) for the City. After conducting a comprehensive inventory of the existing park system, a complete needs assessment, an extensive public outreach program, and several technical analyses, the *Master Plan* was prepared (Exhibit A of Attachment 4). The *Master Plan* addresses improvements to existing parks, park facilities and open space, as well as the creation of new parks in the City. The *Master Plan* will provide a framework for considering future Capital Improvement Program (CIP) park projects and Americans with Disabilities Act (ADA) playground accessibility projects for at least the next 10 years. The *Master Plan* may also act as a planning tool for designing and programming future developer-built parks.

While the proposed *Master Plan* was developed to address the creation of new parks and improvements to existing parks, it is important to understand the document in context to the City's long-term CIP. The *Master Plan* is not intended to determine specific scopes, schedules and budgets for construction projects. Rather, it is meant to identify a list of conceptual park and park facility projects and to assist in prioritizing these projects, which, over time, may be included in the CIP after further analysis and guidance from the appropriate recommendation and approval bodies. The *Master Plan* will also help inform, confirm or modify existing project scopes of work budgeted in the CIP for such community parks as Heritage, Hicks Canyon, Oak Creek and Colonel Bill Barber Marine Corps Memorial.

Staff recommends that the City Council adopt the *Master Plan.* This document has been reviewed by several advisory bodies (see discussion below). Comments and concerns that were discussed during these meetings were compiled into a comment matrix which is provided as Attachment 2 of this staff report.

COMMISSION/BOARD/COMMITTEE RECOMMENDATION

The *Master Plan* was considered by the Community Services Commission on March 15, 2017. At the meeting, Commissioners recommended the *Master Plan* identify potential locations for new pickleball, field event (such as long jump), lighted volleyball facilities and gymnasium in the City. Additionally, members of the Commission requested that the document encourage the integration of outdoor art programming and studio/workshop space into the park system. Following its discussion, the Community Services Commission, with all members present, unanimously approved a Resolution recommending that the City Council approve the *Master Plan*. Commission comments, and staff's responses to those comments, are provided in the comment matrix (Attachment 2).

The *Master Plan* was considered by the Planning Commission on April 6, 2017. At the meeting, Commissioners discussed the importance of using limited resources (*i.e.*, parks, funds) efficiently. Commissioners highlighted the need for additional study of parks in the Irvine Business Complex. Other discussion ensued regarding enhanced access to mountain biking trails within protected open space areas, project cost estimates and potential funding sources, community interest in child care and project prioritization. One Commissioner, however, expressed concern that the *Master Plan* was too focused on passive and urban park uses. After discussion, the Planning Commission voted 4-1 (Commissioners Bartlett, Duong, Kuo and Nirschl in favor; Commissioner Smith opposed) to recommend that the City Council approve the *Master Plan*. Commission comments, and staff's responses to those comments, are provided in the comment matrix (Attachment 2).

Several advisory committees also reviewed the *Master Plan* document prior to the City Council's consideration of this item. At its regular meeting on April 20, 2017, the Senior Citizens Council received a staff presentation regarding the *Master Plan*. At the end of the discussion, the Senior Citizens Council unanimously voted, with all members present, to forward the following statement to the City Council: "The Irvine Senior Citizens Council is pleased that the Irvine Parks *Master Plan* includes Pickleball sites throughout the City and requests that consideration be given during planning to placing some pickleball sites in the parks near or adjacent to existing and future senior centers."

The Aquatics Advisory Board received an update at its meeting on April 26, 2017 and had no questions or comments. The Irvine Residents with Disabilities Advisory Board reviewed the *Master Plan* at a regular meeting held on May 2, 2017. The Board voiced

concerns about the "outdated" use of the term "senior citizen," the lack of activities for senior day groups, how the provision of amenities should be needs based, and requests the City consider establishing a task force that focuses specifically on addressing the needs of seniors in respect to such issues as parks, traffic, security and affordable housing. The Board stated support for outdoor fitness equipment. One member of the public commended the *Master Plan's* inclusion of new park and recreation opportunities as universal playgrounds and outdoor fitness equipment.

As stated above, the comments received during these meetings and any written commission or committee member correspondence, along with staff's responses to such comments, are included in the attached comment matrix. Any comments or recommendations received after this report was completed will be provided verbally at the City Council meeting.

ANALYSIS

Background

The initial City *Plan for Community Level Parks, Recreation and Cultural Facilities* was completed in 1974. On October 11, 1988, the City Council unanimously approved, with all members present, the current version of the *Master Plan*. The stated purpose of the 1988 *Community Parks Master Plan* was to "guide the development of the community parks and recreation facilities through the City's anticipated build-out, in the year 2020." With 2020 approaching, many of the assumptions in the 1988 document are no longer applicable.

In September 2014, the City hired the planning firm MIG to prepare an updated master plan. Since 1982, MIG has established itself as a nationally recognized leader in developing comprehensive park and recreation master plans. In California, MIG has prepared park plans for such cities as Palo Alto, Davis, Claremont and Sunnyvale. MIG's extensive experience in parks and recreation planning was utilized to develop the *Master Plan*.

Master Plan Development Process

Technical Review

Preparation of the *Master Plan* was initiated in September 2014 with due diligence tasks such as site tours and data collection. From January 2015 to January 2016, the project team managed an extensive public engagement effort. At various points in this process the Community Services Commission, Planning Commission and City Council were informed to provide ample opportunity for feedback.

Prior to formulating recommendations for the parks system, the following plan phases took place: public engagement, existing systems review, play area assessment and needs assessment. Descriptions of key analytical elements in the development of the *Master Plan* are provided below:

Public Engagement – Through this effort, the City received over 2,000 responses from members in the community. A comprehensive discussion of the City's public outreach efforts is provided in the *Public Engagement Findings Summary* document, dated October 2016, and provided as a technical supplement to the *Master Plan*. A summary of outreach efforts and the feedback that was received is provided in Table 1 below.

Existing Systems Review – This element of the process focused on cataloguing existing resources, programs and operations that support the City's parks and recreation system. An *Existing Systems Summary* document was created as the final work product. In addition to the inventory, this document describes the City's land use setting and demographics; summarizes the types of recreation programs available; and, provides an overview of the operations and services related to parks, open space and recreation facilities. It also incorporates the Orange County Great Park as a recreational resource that contributes to community inventory. While information that was gathered through the existing systems review has been incorporated into the proposed *Master Plan*, the *Existing Systems Summary* is also a stand-alone document provided as a technical supplement.

Americans with Disabilities Act (ADA) Play Area Assessment – This element of the process consisted of an evaluation of 43 City playgrounds by an International Code Council Accessibility Inspector/Plans Examiner that identified potential physical barriers to accessibility and verified compliance with the 2010 ADA Standards and the 2013 California Building Code, Chapter 11-B. The *ADA Play Area Assessment* provides planning level construction cost estimates for each proposed improvement. Projects outlined in the *ADA Play Area Assessment* are already in progress as part of the City's ongoing playground rehabilitation and maintenance projects.

Needs Assessment – This element of the process was conducted to evaluate how well the existing park system meets the needs and goals articulated by the community and City standards, with a particular focus on how to maximize the community value of Irvine's public park system. The resulting *Final Needs Assessment* report is predominantly focused on park capacity, park facilities and recreation programs.

All work elements described in the preceding paragraphs constitute the background analysis used to formulate recommendations and develop the *Master Plan*. These documents are available as technical supplements to the *Master Plan* on the City's website at www.cityofirvine.org/community-development/parks-master-plan.

Analysis Findings

The studies concluded that Irvine parks are of superior quality, providing an outstanding variety of amenities, excellent programs and impeccably maintained grounds. Irvine residents overwhelmingly value and support City efforts to keep public facilities clean and attractive and to provide parks, recreation programs and athletic/aquatic facilities (2013 Citywide Resident Satisfaction Survey). As a result, the City received the distinction as having the eighth-highest quality park system in the nation, outranked only by large metropolitan cities like Minneapolis, Washington, D.C, San Francisco and New York (Trust for Public Land, 2016).

Technical analyses of the *Master Plan* support this conclusion. Findings and resulting recommendations focused largely on growth and enhancement opportunities for the park system as the community's needs mature and change. Several key themes and community values emerged through the public engagement process.

Table 1: Community Themes – Public Values

Outreach Activities	**Community Feedback/Themes**
• Commission and Council updates • Community events • Community workshops • Dedicated project webpage • Focus group discussions • On-line interactive questionnaire • Stakeholder interviews • Telephone survey (random sample)	• Connectivity and Access • Diversity of Activities, Amenities and Facilities • Education • Evolving Needs • Flexibility • Health, Wellness and the Outdoors • Partnerships • Standards and Maintenance

Themes were based on a strong public consensus that spanned all outreach methods and activities. While a desire for specific recreation elements varied among subgroups of the population, these themes were universally expressed. As a result, they guided the development of the recommendations outlined in the *Master Plan*.

The analysis also indicated support for the City's private park system, noting that these parks "enhance opportunities at a neighborhood scale." It found that Irvine's private parks deliver additional amenities to meet recreation demands such as: swimming pools, tennis courts, basketball courts, playgrounds and clubhouses. These features supplement and enhance the offerings of public facilities throughout the City.

In addition to appraising the City's ability to meet community demands and maintain established standards, the *Final Needs Assessment* evaluated the overall condition of City parks. Individual parks were evaluated and assigned scores in 12 different categories. Scores utilized a scale system of 1 to 5 with 1 being "very poor" and 5 being "exceptional." The *Final Needs Assessment* verified that the City's public park system is

well-planned with parks evenly distributed and amenities sufficient and in "above average condition" overall.

Based on this assessment, no public park is in need of dramatic improvement or repair. As a result, the outcomes of the assessment of park conditions are unusual in that they do not identify any unmet standards or parks that are in subpar condition. Instead, the *Master Plan* recommendations are meant to identify ways to enhance City parks when facilities are approaching the end of their lifespan or when parks are being renovated/refreshed to accommodate change in community demand or park uses.

Master Plan

The *Master Plan* outlines recommendations for the entire park system as well as enhancement options for each public park within the City. It also outlines potential funding sources associated with park development and park improvement efforts. Finally, it includes a tool for City staff to review park requests and ideas submitted by the public.

The *Master Plan* is divided into three chapters: *Introduction*, *Systemwide Recommendations* and *Site Opportunities*. Chapter 1, *Introduction*, provides a brief description of the background analyses utilized to develop and support the *Master Plan*, much of which is also discussed above. The remainder of this report highlights the ideas and recommendations that are presented in the *Master Plan*.

Systemwide Recommendations

Chapter 2, *Systemwide Recommendations*, outlines general policy recommendations that the City could implement as it considers future public park and park facility improvements, enhancements, renovations and refurbishments. Based on the background analyses, the *Master Plan* suggests eight objectives, along with accompanying recommendations, to apply on a systemwide basis. Each objective is listed below along with sample recommendations that would accompany each objective:

***Objective A*: Provide a variety of public and private parks to meet resident needs**. Recommendations under this objective focus on administrative measures such as creating a function-based park classification system for all City parks and recreation services, providing flexible design guidelines and evaluating City expectations for private parks. For example, the City mainly tracks public resources through park improvement credits. A function-based park classification system would identify all park resources by the type of park or facilities served (*e.g.*, community park, neighborhood park, private parks and trailheads). As part of this new system, the City would prepare and maintain an inventory of all resources (including regional and private parks). In turn, that inventory would identify what community needs are being met.

Objective B: ***Provide a broad spectrum of active and passive, indoor and outdoor park amenities throughout Irvine that support diverse recreation experiences, community gathering spots and opportunities for play***. Recommendations include: revisiting recreation standards where demand has changed, providing more specialized (unique) play areas within community parks, broadening field standards to allow for multi-use recreation opportunities, and monitoring needs for new nature centers and/or nature center enhancements.

Objective C: ***Activate parks and address evolving community recreation needs through the provision of programs and events***. This objective includes suggestions to enhance nature, health and fitness programs; periodically revisit facility reservation and fee policies; create programs that provide indoor and outdoor elements; create a recreation operations plan; and expand environmental education programs.

Objective D: ***Ensure that the City's park, recreation and open space system is accessible to Irvine residents, including users of different abilities and demographic characteristics***. Recommendations within this objective emphasize the need to locate parks and provide recreational amenities to all residents by considering the geographic distribution of major facilities, evaluating the park needs of high density residential developments and improving building circulation with ADA access.

Objective E: ***Create dynamic parks as special and unique places, adding or incorporating art and historic resources, innovative features, diverse landscaping, nature, varied color palettes and welcoming amenities***. Recommendations associated with this objective will further enhance the City's reputation as a leader in community livability. They include: developing activity hubs within parks, incorporating additional walking trails in and around parks, and adding park features that highlight nature.

Objective F: ***Balance access to open space for outdoor recreation with conservation needs***. This objective focuses on the increasing public demand for access to open space preserve areas that were dedicated to the City for ecological purposes. While preserve areas inherently limit human interface, the recommendations associated with this objective attempt to enhance the City's access to pristine natural areas, as deemed appropriate by resource agencies and agreements. Suggestions include the development of support features along existing trails, and construction of facilities and trails that support nature programming and environmental education.

Objective G: ***Ensure that Irvine's parks and recreation system is operated, maintained and renovated in a manner that is cost effective, while balancing user safety, satisfaction and funding availability***. Objective recommendations include enhanced landscape sustainability efforts and the adoption of stormwater management elements within the existing and future park system.

Objective H: ***Develop and maintain relationships with targeted public and private organizations and entities to support City objectives***. This objective focuses on partnership opportunities for the enhancement of construction, programming, maintenance and funding of parks. Recommendations associated with this objective include the identification of public and private partnerships that support indoor recreation facility needs and coordination with the development community to create private neighborhood parks with unique character.

Site Opportunities

Since most of the City's public park system is complete and well-maintained, the *Master Plan* focuses largely on enhancement opportunities related to existing park sites. The quality of Irvine's park system provides the City with a unique ability to concentrate on how to further improve parks to meet future expectations and desires for new recreation opportunities.

Chapter 3, *Site Opportunities*, identifies ways to build, enhance and rehabilitate parks as the City develops and renovates parkland in the future. The *Master Plan* showcases improvement options for 66 public parks and 25 major facilities. A total of 34 recommendation opportunities are categorized into one of three areas: build, enhance and rehabilitate. An enhancement would improve, update or refresh parks and facilities to respond to evolving community needs. A rehabilitation project would replace, repair or rehabilitate aging, worn or broken amenities and facilities to sustain existing recreation opportunities.

This chapter also provides conceptual illustrations that demonstrate how the recommended enhancements could be implemented at eight sites selected because of their familiarity and popularity with residents (identified during the community engagement process) and due to several linkages with pending CIP projects: Bommer Canyon, Bill Barber, Deerfield, Harvard, Heritage, Mike Ward, Rancho San Joaquin and Turtle Rock Community Parks. Additionally, a conceptual illustration for a hypothetical neighborhood park in the Irvine Business Complex is provided.

Chapter 3 also provides detailed descriptions of various amenity innovations for the City to consider as it assesses alternatives to develop new and/or improve existing parks in

the future. Finally, the Chapter outlines potential funding opportunities to consider as the City moves forward with implementation of the *Master Plan*.

Public Outreach

The *Master Plan* has been available for public review on the City's *Master Plan* webpage since March 9, 2017. All individuals on the *Master Plan* interest list, along with focus group and interview participants (over 150 individuals), received email notifications of the document's release and upcoming public meeting schedule. Notification of the *Master Plan* discussion for the Planning Commission was also provided in the *Orange County Register* on April 5, 2017. Copies of written *Master Plan* comments received from members of the public have been included as Attachment 3 of this report.

Implementation

The *Master Plan* in intended to inform and help guide park and park facility improvements and operations plans in the future. The Community Services Department is developing a project plan for major facilities renovations over the next 10 years. In addition, a Parks Standards Update will be completed. Regular maintenance and amenity replacement projects will also continue with *Master Plan* guidance.

While the *Master Plan* provides a summary of various funding sources that may be considered when implementing park improvement projects, it does not provide implementation cost estimates for any proposed park policy or project. It is envisioned that project cost assessment and prioritzation would occur as this project plan and specific projects are developed. It is important to note that enhancing and rehabilitating the City's extensive system of parks and park facilities will require significant resources. Therefore, a complete project analysis must concentrate on specific funding requirements. Projects will likely be phased in over time with an emphasis on cost effective use of resources, sustainability, and identifying funding sources and partnerships. Capital projects will be prioritized with other citywide capital needs through the CIP review process.

ENVIRONMENTAL REVIEW

Pursuant to Section 4 of the City of Irvine California Environmental Quality Act (CEQA) procedures and Article 18 of the State CEQA Guidelines, it has been determined that the proposed project has been found to be statutorily exempt from the requirements of CEQA under Section 15262, Feasibility and Planning Studies. A Notice of Exemption has been prepared (Attachment 1).

ALTERNATIVES CONSIDERED

The City Council could determine:

1. Not to approve the *Master Plan*. In this event, the existing 1988 Community Parks Master Plan would continue to serve as the City's guiding park policy document.

2. Remand the *Master Plan* back to staff for revisions. Staff would return at a future meeting with revisions as directed.

FINANCIAL IMPACT

A total of $555,001 from the City's General Fund was allocated to prepare the *Master Plan* project in the Fiscal Year (FY) 2014-15 Budget. At the beginning of FY 2015-16, an additional $12,000 was allocated to the project to incorporate the Orange County Great Park into the document as a regional park resource.

Future park projects developed under the guidance of the *Master Plan* will be processed through the City's annual CIP process as discussed in the Implementation section above.

REPORT PREPARED BY: Darlene Nicandro, Principal Planner
Kathleen Haton, Senior Planner

ATTACHMENTS

Attachment 1: Draft Notice of Exemption
Attachment 2: Commission and Committee Review Comment Matrix
Attachment 3: Public Comments Received on the *Master Plan*
Attachment 4: Resolution No. 17-XX Approving a City-initiated Parks Master Plan

cc: Lisa Rudloff, Deputy Director of Community Services
Ed Crofts, Community Services Manager (via email)
Darin Loughrey, Community Services Manager (via email)
Catherine Lundberg, Assistant Planner (via email)
Cindy Mendoza, MIG (via email)
Jose Rodriguez, MIG (via email)
File

DRAFT NOTICE OF EXEMPTION

TO: ☒ State of California
Office of Planning & Research
PO Box 3044
Sacramento, CA 95812-3044

☒ County Clerk
County of Orange
PO Box 238
Santa Ana, CA 92702

FROM: City of Irvine
Community Development Department
PO Box 19575
Irvine, CA 92623-9575
Attn: Darlene Nicandro
Principal Planner
949-724-7462
dnicandro@cityofirvine.org

SUBJECT: Filing of **Notice of Exemption** in compliance with Section 15062 of the Public Resources Code.

Project Title and File No.: City of Irvine Parks Master Plan

Project Location:
(include County) Citywide

Project Description: A comprehensive update to the City of Irvine Parks Master Plan to address the creation of new parks and improvements to existing park, park facilities and open space.

Approving Public Agency: City of Irvine
City Council
PO Box 19575
Irvine, CA 92623-9575

Approval Date: May 9, 2017
Resolution No: CC Reso No. 17-XXXX

Project Applicant: City of Irvine
PO Box 19575
Irvine, CA 92625-9575

Attn: Darlene Nicandro, Principal Planner
dnicandro@cityofirvine.org

Exempt Status:
(check one)

- ☐ Ministerial (Section 21080(b)(1); 15268)
- ☐ Declared Emergency (Section 21080(b)(3); 15269(a)
- ☐ Emergency Project (Section 21080(b)(4); 15269(b)(c)
- ☒ Statutory Exemption: Section 15262 Feasibility and Planning Studies
- ☐ Categorical Exemption:
- ☐ General Rule Exemption: 15061(B)(3)

Reasons Why Project Is Exempt: The project is exempt because the proposed project is a citywide planning study that neither approves nor authorizes any enhancement or construction activity that would have a substantial adverse effect on the rest of the City.

Darlene Nicandro, Principal Planner		**May 9, 2017**
Name and Title	Signature	Date

ATTACHMENT 1

PARKS MASTER PLAN
Commission and Committee Review Comment Matrix

Body	Meeting Date	General Comments	Response to Comments
Community Services Commission	March 15, 2017	The Master Plan should: • identify potential locations for new pickleball, field event (such as long jump), lighted volleyball facilities and gymnasium in the City. • encourage the integration of outdoor art programming and studio/workshop space into the park system.	The Master Plan: • identifies Woodbridge and Oak Creek Community Parks as potential sites for pickleball, and recommends a pilot program to dual-stripe tennis courts for both uses. In addition, six pickleball courts are already planned for Portola Springs Community Park • recommends Harvard Community Park as a potential site for long jump. Other potential sites could include Northwood, Gateway and Deerfield • indicates that gymnasia are planned at Bill Barber and Gateway Community Parks. Other potential sites could include Oak Creek Community Park and the Irvine Business Complex Although the Master Plan does not include recommendations for lighted volleyball courts and the integration of outdoor art programming, lighted volleyball courts could be added to Table D-1 of the Master Plan, and "arteliers" may be added as a potential Facility Innovation. Lighted volleyball courts near/adjacent to residential areas should require a lighting/noise study prior to implementation.
Planning Commission	April 6, 2017	Commissioners highlighted such issues as: • importance of efficiently using limited resources (i.e., parks, funds); • need for additional study of parks in the Irvine Business Complex (IBC); • enhanced access to mountain biking trails within protected open space areas; • development of another disc golf course; • importance of creativity and unique park designs; • project cost estimates and potential funding sources; • community interest in child care; and • project prioritization. One Commissioner expressed concern that the Master Plan was too focused on passive and urban park uses.	• Staff recognizes the importance of efficiently using limited resources. • The Master Plan could recommend additional analysis of parks in the IBC (i.e., added to Table D-1 and/or included in the Master Plan's IBC illustrative discussion). • Staff has ongoing discussions with the Irvine Ranch Conservancy regarding enhanced access to mountain bike trails within protected open space areas. Objective F of the Master Plan is devoted specifically to the City's balance of access and conservation needs within its open space areas. • The Master Plan identifies the future Gateway Park as an ideal setting for a full scale, dedicated disc golf course. • The Facility Innovations section in Chapter 3 outlines creative and unique park features to consider when parks are developed, renovated or enhanced. • Chapter 3 of the Master Plan provides a variety of potential park improvement funding sources (pages 127 - 138). Among others, these include: interagency partnerships, sponsorships, concessions, user fees, mello roos, government grant programs and revenue bonds. A proposed budgetary process could be added to this section; however, City Council direction would be needed to determine the parameters of this process. • The scope of the Master Plan did not include a comprehensive child care evaluation. The City conducted a Child Care Needs Assessment in May 2016, and it serves as a planning document through 2035. • The Master Plan is a long-range planning document and assumes that implementation (including project prioritization) will occur as part of future capital improvement projects. • Consistent throughout all forms of outreach, respondents stressed the need for passive and flexible park uses (i.e., walking trails, shade). The Master Plan does not propose the removal of any athletic fields from existing parks. Rather, proposed objectives and recommendations focus on diversity and flexibility of park uses. Additionally, the Orange County Great Park Sports Park is under construction and will add numerous fields and courts to the park system. Recommendations A2 and B7 also address this concern.
Senior Citizens Council	April 20, 2017	Senior Citizens Council unanimously voted to forward the following statement to the City Council: "The Irvine Senior Citizens Council is pleased that the Irvine Parks Master Plan includes pickleball sites throughout the City and requests that consideration be given during planning to placing some pickleball sites in the parks near or adjacent to existing and future senior centers."	The Master Plan already recommends that pickleball court(s) be considered at Mike Ward Community Park, near the Lakeview Senior Center. In addition, the Master Plan could recommend that pickleball courts be considered at Rancho San Joaquin Park and Trabuco Center.
Aquatics Advisory Board	April 26, 2017	No questions or comments	N/A
Irvine Residents with Disabilities Advisory Board	May 2, 2017	The Board voiced concerns regarding: • "outdated" use of the term "senior citizen;" • lack of activities for senior day groups; and, • how the provision of amenities should be needs based (and requested the City consider establishing a task force that focuses specifically on addressing the needs of seniors in respect to such issues as parks, traffic, security and affordable housing). The Board stated its support for outdoor fitness equipment.	• It is not the City's intention to use the term "senior citizen" in a negative way by any means. The Master Plan addresses and promotes equity in access for all ages and ability levels. Facility innovations address specific amenities that would benefit the community on a universal level. In addition, specific attention was given to two of the City's established senior centers in an effort to enhance parity in the park system. • The comment regarding the lack of activities for senior day groups is noted and has been communicated to Community Services recreation programming staff. Facility innovations could be implemented near senior centers to provide a greater range of daily activities. • The establishment of a taskforce is outside the scope of this document.

Written Correspondence Provided by Senior Citizens Councilmember Kim

Reviewing the Draft plan, city of IRVINE parks master plan.

by Jaweu Kim, Member,
Senior citizens council
- appointed by council member Fox.

I found this draft is well presented and documented based on well researched materials.

I found the following recommendation, ~~were made~~, as follow:

> Ensure that the city's park, recreation and open space system is accessible to IRVINE residents, including users of different abilities and DEMOGRAPHIC characteristics.

I have studied the plan based on the Notion that IRVINE is faced with overwelming increased Number of MULTICULTURAL population.

How can we create and maintain the reputation of Best planed city with Best planed park system, while addressing the ISSUE that I am pointing out.

This plan did not supply me the credible indication that the forementioned ISSUE shall be given a Serious Consideration for FUTURE development, Build, enhance, and ~~rehabilitation of~~ rehabilitate the IRVINE park system.

I do understand that master plan is not intended to show specific scope.

Also, I understand this master plan was:

1. unanimously approved by community service commission.

2. approved by a 4-1 vote by planning commission.

But, I do not endorse to give full approval and support, as it is written now.

Sincerely

Jessie

4/20/2019

Provided by Senior Citizens Councilmember Jones at
the April 20, 2017 Senior Citizens Council Meeting

Pickleball Fact Sheet 2016**

Pickleball is a court sport played on a badminton-sized court with the net lowered to 34 inches at the center. It is played with a perforated plastic ball similar to a wiffle ball and composite or wooden paddles about twice the size of ping-pong paddles. It can be played indoors or outdoors and is easy for beginners to learn, but can develop into a fast-paced, competitive game for experienced players. In addition, the game has developed a passionate following due to its friendly, social nature, and its multi-generational appeal.

Pickleball can be played as singles or doubles. New players can learn the basic rules quickly in a single session. No special apparel is needed – just something comfortable and appropriate for a court sport. Equipment is inexpensive and easily portable. The game can be played by all ages and is particularly popular in school P.E. programs and in adult living communities.

The sport is governed by the USA Pickleball Association (USAPA.org), which maintains the rules, promotes the sport, sanctions tournaments, and provides player rankings. www.usapa.org History 2016 marks the 51st Anniversary of pickleball, as it was invented in 1965 on Bainbridge Island, a short ferry ride from Seattle, by three enterprising dads – Joel Pritchard, Bill Bell, and Barney McCallum. Their children were bored with their usual summertime activities. It evolved from the original handmade equipment and simple rules into a popular sport throughout North America and is now taking off in other parts of the world. The origin of the game's name is thought to be derived from the co-inventors' family cocker spaniel, "Pickles", who loved to chase stray balls and hide them in the bushes.

The Court: A pickleball court is 20' x 44' for both singles and doubles. The net is hung at 36" at the ends and hangs 34" in the middle. A non-volley zone extends 7' back from the net on each side,commonly called "the kitchen".

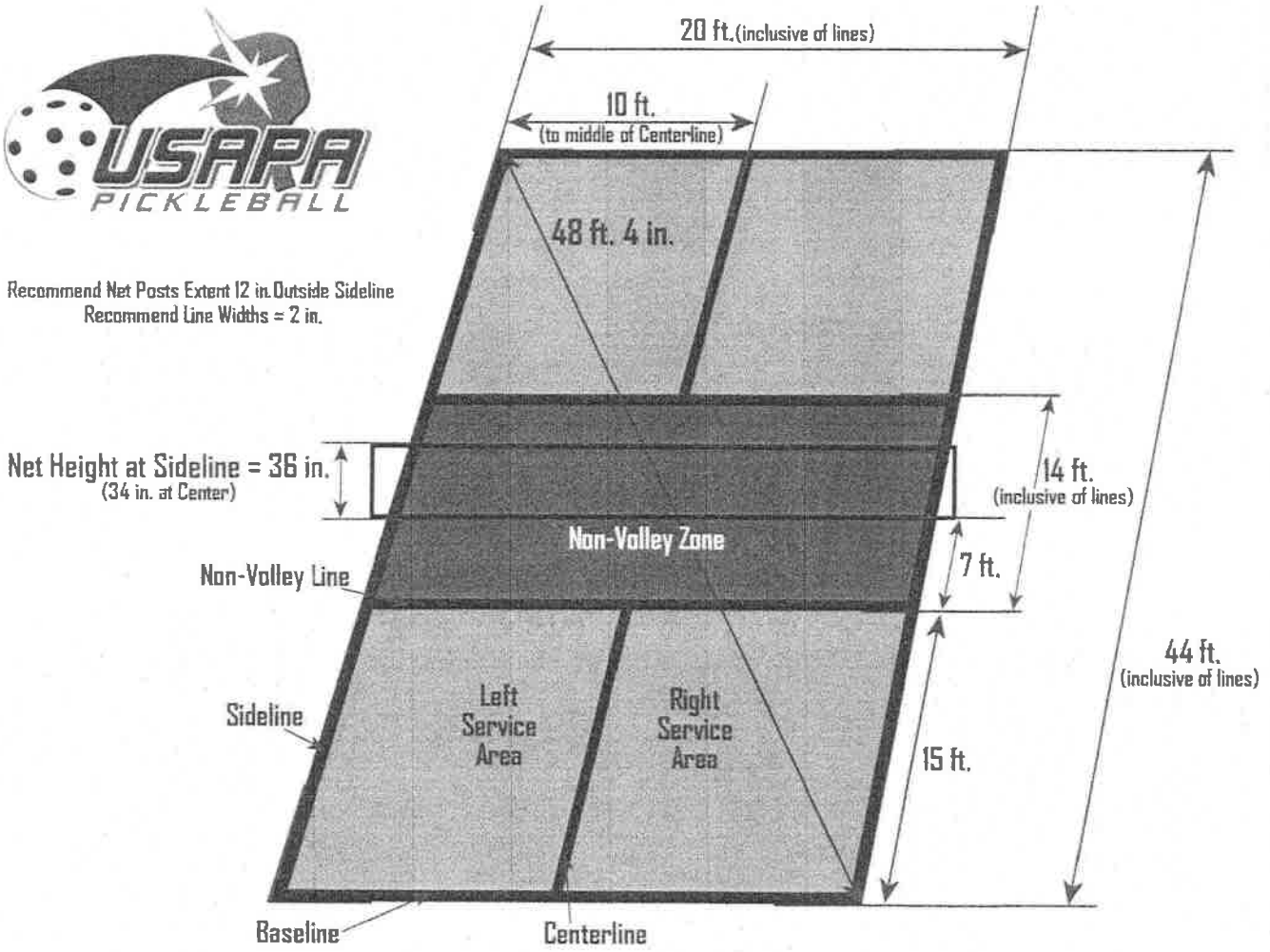
Competitive paddles used in pickleball are constructed from a high-tech composite, ranging in cost from $50-$150 each. Pickleball paddle specifications may be found at http://ipickleball.org/wp- content/uploads /2014/12/Paddle _Material_Specifications.pdf. An official pickleball is made of plastic and is between 2 7/8 inches to 3 inches in diameter and weighs between .08 and 1.02 ounces. There are no color restrictions. The USAPA has tested and approved a number of outdoor and indoor balls for official tournament play. A complete list can be viewed here: http://www.usapa.org/ifp-ball-specifications/

Virtually every state and Canadian province has pickleball venues. Senior residence communities, YMCAs, local community recreation centers, schools and parks are just some of the places likely to have pickleball courts. The USAPA compiles the most up-to-date and comprehensive listing of places to play at http://usapa.org/ptp/index.php. The known places to play increases approximately 76 per month for a total of 3,748 as of Jan 2016. Currently, the USAPA is tracking over 200,000 pickleball players and 12,668 pickleball courts in North America, with an average of 76 new places to play pickleball debuting across the U.S. and Canada each month!

The USAPA supports and sanctions tournaments throughout the United States. See http://usapa.org/schedule/index.php for a current list of upcoming pickleball tournaments. In 2009, the USAPA held the first Nationals Pickleball Tournament in Buckeye, Arizona. Over 400 players participated in divisions for all ages. In 2015, the Nationals VII Tournament is anticipated to be the largest tournament in the world, with more than 700 participants competing in Casa Grande, Arizona. See http://usapa.org/nationals/ for detailed information. The USAPA National tournament will be held this year at Palm Creek Club in Casa Grande, AZ in November of 2016.

ESTIMATED PICKLEBALL PLAYERS WITHIN THE UNITED STATES
Sports & Fitness Industry Association (SFIA) 2015 Participant Report, they reported pickleball currently has 2.46 million players. SFIA is the premier trade association for top brands, manufacturers, retailers and marketers in the American sporting goods and fitness industry and have been in existence since 1906.

**As reported by the United States of America Pickleball Association USAPA



Line Tolerances:

- Net line to outside of NVZ line: 7' +/- 1/8"
- Net line to outside of baseline: 22' +/- 1/4"
- Outside sideline to outside sideline: 20' +/- 1/4"
- Outside sideline to centerline: 10' +/- 1/8"
- Diagonal dimension to outside of lines: 48' 4" +/- 3/4"

Received: Wednesday, March 22, 2017

To: Irvine Park Planning Team

I have comments from my review of the draft Parks Master Plan announced per your March 9 email. In summary, I believe the plan does not adequately address the unique and unmet needs for non-league, group recreation activities in community parks. The Parks Plan should do more to coordinate community park priorities and plans with the new athletic facilities at OCGP. Specific comments follow:

1. Pickleball: The plan highlights the increasing popularity of pickleball; but, it does not reflect how it is played, where courts are best located, and court design. Pickleball is commonly played weekday mornings by drop-in groups of seniors, often in rotating versus match play. These properties suggest a successful facility will be centrally located and include sufficient space between or around courts for waiting players to socialize.

The draft Parks Plan notes that pickleball courts are planned for Portola Springs Park. I believe this park is too remote to be a good location for pickleball as it is usually played. Woodbridge Community Park is also noted as a potential location. It has the needed central location and is ideally located next to the Lake St senior center and Woodbridge Village Center. But I am concerned is that just removing the handball courts may not provide enough space for a properly sized and designed pickleball facility.

One option might be to focus Woodbridge Park on senior activities and recreation, perhaps adding bocce courts in place of existing basketball and volleyball courts. Per below, I believe there are equally good or better locations for those activities in other community parks.

2. Drop-in/Senior Tennis: On weekends, Woodbridge High School tennis courts are used for multiple drop-in and local club tennis activities, including senior tennis on Saturday mornings. The courts have an ideal central location and are well-designed for social play with shaded waiting space between courts.

But there have been problems with the weekend management of WHS courts that are incompatible with social drop-in play. These problems have included late openings and reservations for the city's tennis business during usual recreation play hours. With the opening of new OCGP tennis facilities, I suggest that the city tennis business discontinue any use of WHS courts. The WHS courts are a superior location and design for recreational tennis by informal groups. The city should maintain a joint-use agreement for those courts.

Doubles tennis is a popular weekday morning activity for retired seniors. Based on groups I have played with and know about, I believe there are unmet Irvine and regional needs for organized drop-in tennis during the week. As a regional need, perhaps this activity might be well located at OCGP.

3. Recreation Priority at Community Parks: The new athletic facilities at OCGP provide an opportunity to re-focus community parks on recreation. Major recreation improvements appear possible with only minor re-planning at select community parks.

Above I suggested the possibility of focusing Woodbridge Park on senior recreation, possibly resulting in the additional removal of basketball and volleyball courts. Oak Creek and Windrow parks appear to be good replacement locations because they have similar central locations.

Oak Creek may be a particularly good location for expanded volleyball and basketball recreation. Both sports attract younger participants that may be interested in after-work and evening group drop-in play. Oak Creek is reasonably central to Spectrum and Jamboree/business district apartment developments. Oak Creek also does not have residential neighbors making it more compatible with later evening activities.

The Parks Plan accurately notes that the city is lacking group drop-in activities. It is logical that central locations for these activities are best. Central community parks like Woodbridge, Oak Creek and Windrow are a limited resource. Activities and facilities that are best provided at central locations should be priority for these parks. The Parks Plan should include a process for re-planning community parks for increased recreation in coordination with OCGP.

Thank you for the opportunity to comment. Please consider these comments and contact me with any questions.

- Bob Blaisdell
1 Woodlake
Irvine, CA 92604
949-552-6705

CITY COUNCIL RESOLUTION NO. 17-XX

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, APPROVING A CITY-INITIATED PARKS MASTER PLAN

WHEREAS, the City of Irvine initiated a project to update and replace the 1988 Community Parks Master Plan in 2014; and

WHEREAS, in September 2014, the City of Irvine retained MIG, a professional planning consultant, to assist in the preparation of a citywide Parks Master Plan; and

WHEREAS, the Parks Master Plan was developed to address the creation of new parks and improvements as a framework for potential Capital Improvement Program projects and Americans with Disabilities Act accessibility projects, priorities, funding strategies and costs for at least the next 10 years; and

WHEREAS, the Parks Master Plan reflects public input regarding future park development and enhancement of existing parks, which was gathered and provided through an extensive public outreach effort; and

WHEREAS, the proposed Parks Master Plan is considered a project pursuant to the State of California Environmental Quality Act (CEQA); and

WHEREAS, Pursuant to Section 4 of the City of Irvine CEQA procedures and Article 19 of the State CEQA Guidelines, it has been determined that the proposed project is found to be exempt from the requirements of CEQA under Section 15262, Feasibility and Planning Studies; and

WHEREAS, the project is consistent with the City's General Plan and Zoning Ordinance; and

WHEREAS, a draft Notice of Exemption has been prepared pursuant to CEQA Section 15262 as a statutory exemption since the Parks Master Plan is a planning study to be reviewed by the City Council of the City of Irvine; and

WHEREAS, the Community Services Commission of the City of Irvine considered information presented by Community Development Department staff and other interested parties at a duly noticed public meeting held on March 15, 2017 and adopted (unanimously with all members present) Community Services Commission Resolution No. 17-02 recommending City Council approval of the proposed Parks Master Plan; and

WHEREAS, the Planning Commission of the City of Irvine considered information presented by Community Development staff and other interested parties at a duly noticed public meeting held on April 6, 2017 and adopted (on a 4-1 vote with all

ATTACHMENT 4

members present) Planning Commission Resolution No. 17-3599 recommending City Council approval of the proposed Parks Master Plan; and

WHEREAS, the Senior Citizen Council of the City of Irvine considered information presented by Community Development staff and other interested parties at a duly noticed public meeting held on April 20, 2017; and

WHEREAS, the Irvine Residents with Disabilities Advisory Board of the City of Irvine considered information presented by Community Development staff and other interested parties at a duly noticed public meeting held on May 2, 2017; and

WHEREAS, the City Council of the City of Irvine considered information presented by Community Development staff and other interested parties at a duly noticed public meeting held on May 9, 2017.

NOW, THEREFORE, the City Council of the City of Irvine DOES HEREBY RESOLVE as follows:

SECTION 1. Pursuant to Section 4 of the City of Irvine CEQA procedures and Article 19 of the CEQA Guidelines, it has been determined that the proposed project has been found to be statutorily exempt from the requirements of CEQA, under Section 15262 Feasibility and Planning Studies.

SECTION 2. The City Council of the City of Irvine approves the Parks Master Plan attached hereto as "Exhibit A" and incorporated herein by this reference.

SECTION 3. That the City Clerk of the City of Irvine shall certify to the passage and adoption of this Resolution and enter it into the book of original Resolutions.

PASSED AND ADOPTED by the City Council of the City of Irvine at a regular meeting held on the 9th day of May 2017.

_____
MAYOR OF THE CITY OF IRVINE

ATTEST:

_____
CITY CLERK OF THE CITY OF IRVINE

STATE OF CALIFORNIA)
COUNTY OF ORANGE) SS
CITY OF IRVINE)

I, MOLLY MCLAUGHLIN, City Clerk of the City of Irvine, HEREBY DO CERTIFY that the foregoing resolution was duly adopted at a regular meeting of the City Council of the City of Irvine held on the 9th day of May 2017.

AYES	COUNCILMEMBERS:
NOES	COUNCILMEMBERS:
ABSENT	COUNCILMEMBERS:
ABSTAIN	COUNCILMEMBERS:

_____
CITY CLERK OF THE CITY OF IRVINE

DRAFT PLAN | FEB 2017

CITY OF IRVINE

parks master plan

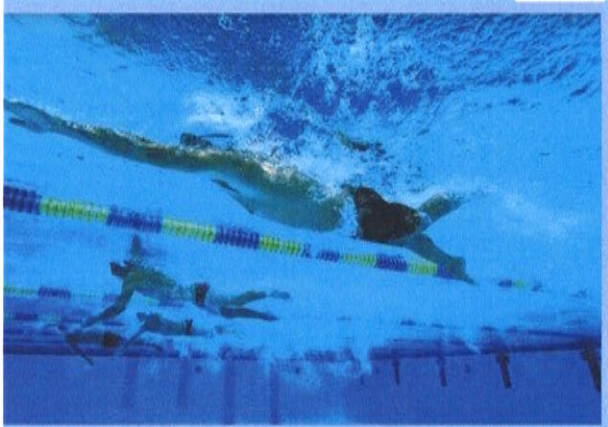


EXHIBIT A

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City of Irvine

PARKS MASTER PLAN

Draft Plan

February 2017

Prepared by:

109 W. Union Avenue I Fullerton, CA 92832
714.871.3638 I www.migcom.com

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ACKNOWLEDGEMENTS

The City of Irvine greatly appreciates the efforts of community members, committee and advisory board members, City staff, and other City leaders who contributed to this planning effort. Your interest and support will continue to foster the success of our park and recreation system.

CITY COUNCIL

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Lynn Schott, Mayor Pro Tem
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Jeffery Lalloway, Councilmember
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CHAPTER 1
Introduction

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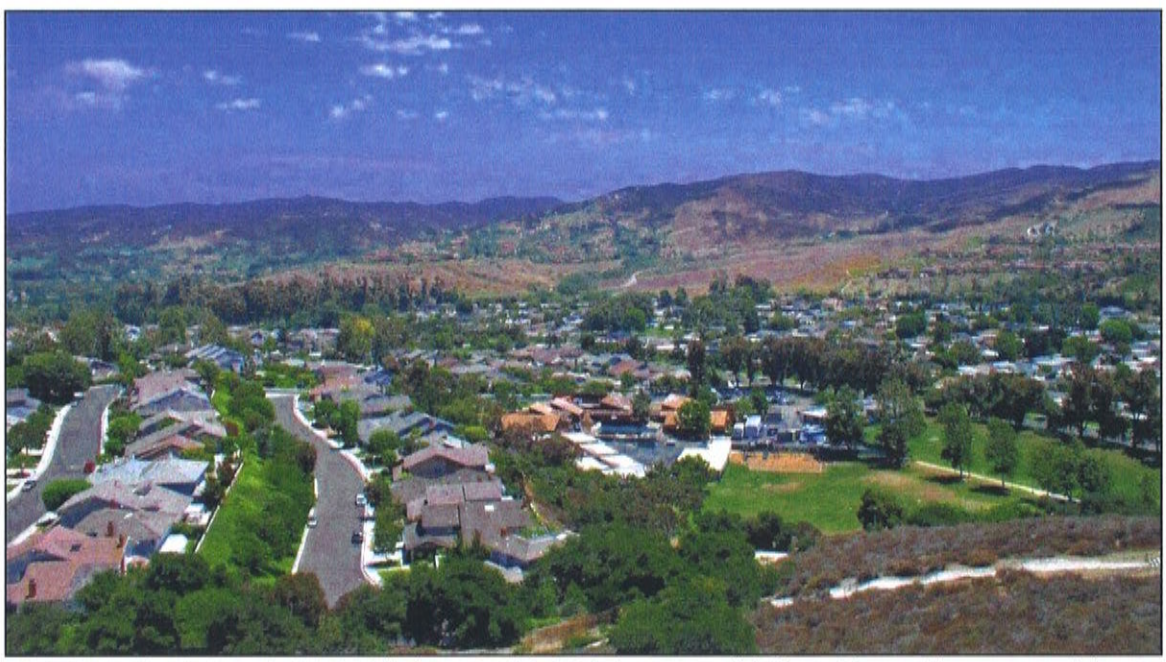
1. INTRODUCTION

Irvine is consistently recognized as one of America's most successful master-planned communities. One of many legacies of the Irvine master plan is the City's robust network of parks and open spaces, provided through ongoing collaboration between public and private entities. In 2016, the Trust for Public Land, a national nonprofit organization, recognized Irvine as having the eighth-highest quality park system in the nation, outranked only by large metropolitan cities like Minneapolis, Washington, D.C., San Francisco, and New York. Echoing the analysis by the Trust for Public Land, Irvine residents largely approve of the park system, with ninety-five percent of respondents in a recent Resident Satisfaction Survey indicating that they are very satisfied or satisfied with City of Irvine (City) efforts to provide parks, athletic and aquatic facilities (True North Research, Inc., 2013).

Much of Irvine's success in parks and recreation can be traced to the 1988 *Community Parks Master Plan*, which guided development of the City's park system over the past several decades. According to *Community Parks Master Plan* principles, parks and trails have been integrated into the design of each new residential village, ensuring that residents have recreation opportunities nearby, as well as access to park and open space amenities provided on a citywide scale.

While the 1988 *Community Parks Master Plan* has helped Irvine attain the quality park system we know and enjoy today, much of that Plan focused on the creation of new



Turtle Rock village is located within the hills, just east of the UC Irvine campus. This Master Plan provides recommendations to parks, recreation facilities, open space and programs to support the village lifestyle and a high quality of life.

parks. As the City approaches buildout, there are relatively few residential villages left to develop. Accordingly, the focus of park planning must begin to shift away from new development toward the ongoing maintenance and enhancement of park resources. This *Parks Master Plan* (or *Master Plan*) will help the City make that transition so that it can continue to provide residents with high-quality parks, recreation facilities, open spaces, programs and services over the coming decade and beyond.

CITY PARKS AND RECREATION RESOURCES

The *Master Plan* provides guidance for Irvine's public parks. These include community parks, neighborhood parks and special use sites—accounting for more than 530 acres of park land. Map 1 illustrates where these amenities are located in the City. Although the Orange County Great Park (OCGP) planning process is independent of this effort, this *Master Plan* considers how park amenities planned for the OCGP will interact with the City's broader park network; essentially considering the vast amenities proposed for the OCGP to be amenities within the City's overall park resources. Appendix A presents the inventory of all park resources according to classification. For a description of these different park classifications, see the information below.

Quick Park Facts

The City of Irvine provides 60 public parks covering more than 530 acres, as well as approximately 823 acres of active use areas within the OCGP:

Park Type	Acres	#
Community Parks	352.6	20
Neighborhood Parks	170.6	36
Special Use Sites	9.6	4
OCGP	823.0	1

Irvine's public park system supports different types of recreation facilities for indoor and outdoor use:

- athletic facilities, such as soccer fields, baseball/ softball fields and sports courts;
- outdoor facilities, such as playgrounds, swimming pools, picnic areas, and outdoor amphitheaters; and
- indoor facilities, such as community centers, senior centers, fine arts and nature centers.

Quick Facility Facts

Irvine parks provide more than 400 public recreation facilities:

Park Type	Athletic Facilities	Outdoor Facilities	Indoor Facilities
Community Parks	167	69	18
Neighborhood Parks	68	100	1
Special Use Sites	0	0	5

For legibility, some parks are noted by numbers on the map. These reference numbers are listed below:

1 *Neighborhood Parks*

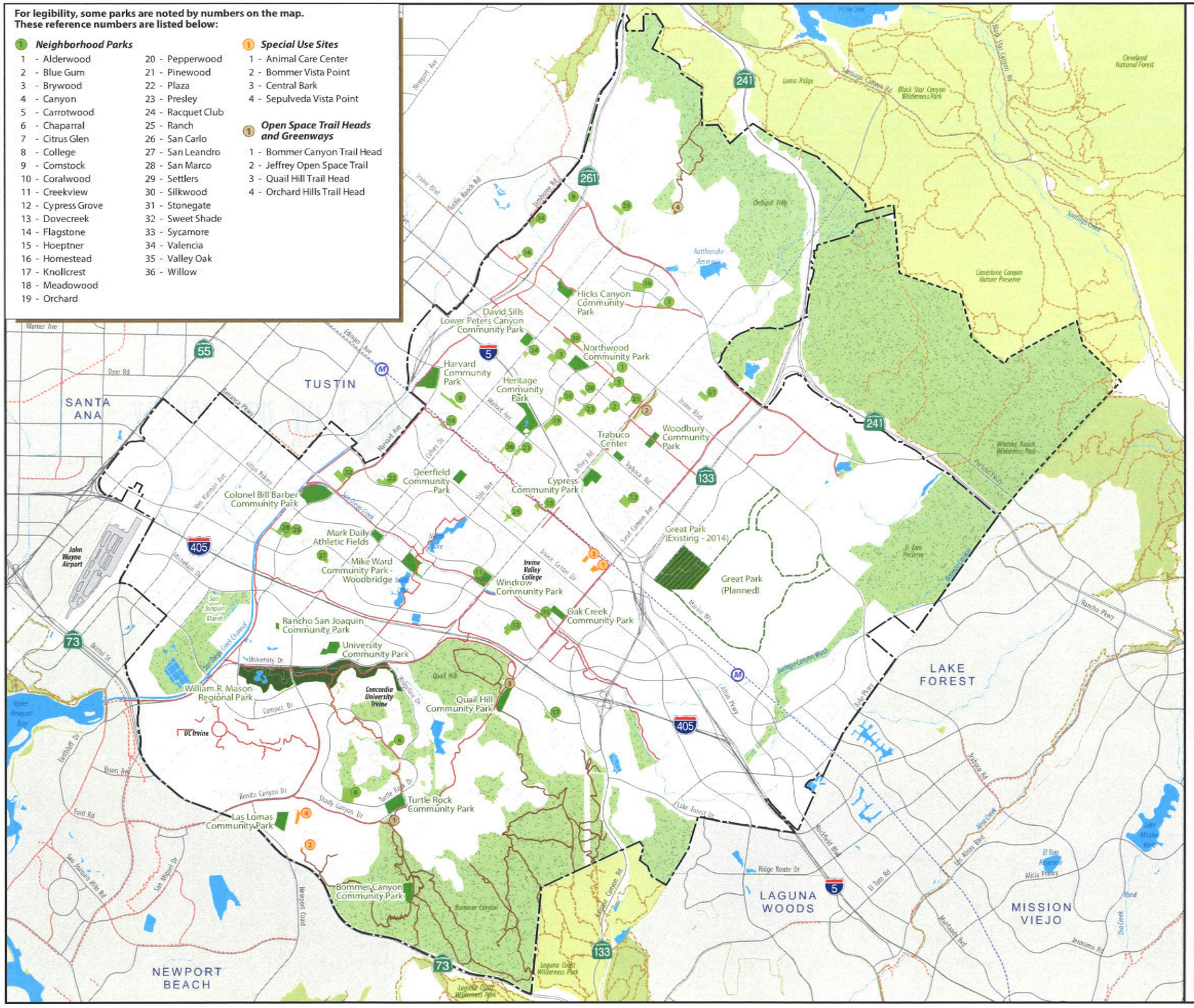
1 - Alderwood
2 - Blue Gum
3 - Brywood
4 - Canyon
5 - Carrotwood
6 - Chaparral
7 - Citrus Glen
8 - College
9 - Comstock
10 - Coralwood
11 - Creekview
12 - Cypress Grove
13 - Dovecreek
14 - Flagstone
15 - Hoeptner
16 - Homestead
17 - Knollcrest
18 - Meadowood
19 - Orchard
20 - Pepperwood
21 - Pinewood
22 - Plaza
23 - Presley
24 - Racquet Club
25 - Ranch
26 - San Carlo
27 - San Leandro
28 - San Marco
29 - Settlers
30 - Silkwood
31 - Stonegate
32 - Sweet Shade
33 - Sycamore
34 - Valencia
35 - Valley Oak
36 - Willow

1 *Special Use Sites*

1 - Animal Care Center
2 - Bommer Vista Point
3 - Central Bark
4 - Sepulveda Vista Point

1 *Open Space Trail Heads and Greenways*

1 - Bommer Canyon Trail Head
2 - Jeffrey Open Space Trail
3 - Quail Hill Trail Head
4 - Orchard Hills Trail Head


Irvine Lake
Santiago Canyon Rd
Black Star Canyon Rd
Cleveland National Forest
Loma Ridge
Black Star Canyon Wilderness Park
Orchard Hills
Rattlesnake Reservoir
Limestone Canyon Nature Preserve
Santiago Creek
Whiting Ranch Wilderness Park
Portola Pkwy
Irvine Blvd
Jamboree Rd
Irvine Ranch Rd
Newport Ave
Warner Ave
Edinger Ave
Dyer Rd
Bristol St
Harvard Community Park
David Sills Lower Peters Canyon Community Park
Hicks Canyon Community Park
Northwood Community Park
Heritage Community Park
Walnut Ave
Trabuco Center
Trabuco Rd
Woodbury Community Park
Deerfield Community Park
Cypress Community Park
Jeffrey Rd
Hyland Ave
Culver Dr
Alton Pkwy
Ion Kannon Ave
Colonel Bill Barber Community Park
Sand Canyon Ave
Great Park (Existing - 2014)
Great Park (Planned)
Marine Way
El Toro Preserve
Rancho Pkwy
Mark Daily Athletic Fields
Mike Ward Community Park - Woodbridge
Irvine Valley College
Windrow Community Park
Oak Creek Community Park
Irvine Center Dr
Rancho San Joaquin Community Park
University Community Park
San Joaquin Marsh
San Diego Creek Channel
University Dr
William R. Mason Regional Park
Concordia University Irvine
Quail Hill Community Park
Campus Dr
Jeffrey Open Space Trail
Quail Hill
Turtle Rock Community Park
Las Lomas Community Park
Bommer Canyon Community Park
Bommer Canyon
Barranca Pkwy
Irvine Lake
Santiago Canyon Rd
Black Star Canyon Rd
Cleveland National Forest
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Quail Hill Community Park
Campus Dr
Jeffrey Open Space Trail
Quail Hill
Turtle Rock Community Park
Las Lomas Community Park
Bommer Canyon Community Park
Bommer Canyon
Barranca Pkwy
TUSTIN
SANTA ANA
NEWPORT BEACH
LAKE FOREST
LAGUNA WOODS
MISSION VIEJO
John Wayne Airport
OC Irvine
Upper Newport Bay
Laguna Coast Wilderness Park
Aliso Creek
Arroyo Trabuco Golf Course
Aliso Viejo Community Park
Aliso Viejo Regional Park
Aliso Creek Trail
Aliso Creek Inn & Golf Club
Aliso Creek

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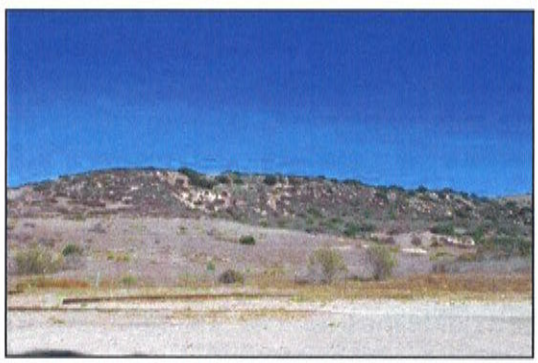
Community Parks are larger multi-purpose parks that serve as village hubs for the entire community. Examples include Colonel Bill Barber Marine Corps Memorial Park and Heritage Community Park.

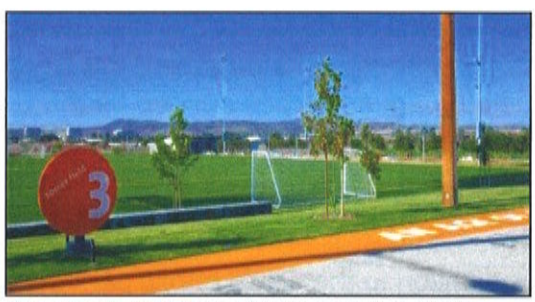
Neighborhood Parks are smaller parks that provide close-to-home access to essential recreation opportunities. Examples include Hoeptner Neighborhood Park and Meadowood Park.

Special Use Sites offer unique amenities or stand-alone facilities that serve a community-wide audience. Examples are Irvine's Animal Care Center, Central Bark Dog Park and Sepulveda Vista.



Open Space includes protected natural areas. Some preserves support hiking, bird watching, horseback riding and similar trail-related activities. Examples include the Southern Open Space Preserve, Northern Open Space Preserve, and Jeffrey Open Space Trail.

On and Off-Street Trails and Bikeways support recreation and non-motorized transportation.



The Orange County Great Park (OCGP) is a large, partially developed regional park with recreation facilities to support the arts, gardening and agriculture, sports and fitness, events and festivals. This park will continue to be developed according to its approved master plan.

City parks and recreation facilities are activated by drop-in activities, structured recreation programs and events that are intended to enrich quality of life and support health, education and social connections.

Other City Recreation Resources

While the *Master Plan* focuses on community parks, public neighborhood parks and special use sites, the City provides other recreation resources that affect park planning and use. The City preserves more than 6,500 acres of open space wetlands, oak woodlands, grasslands and coastal sage scrub. It maintains miles of on-street and off-street bikeways, including Class I Regional Trails. It is building the approximately 1,300-acre OCGP that will serve as a region-wide amenity.

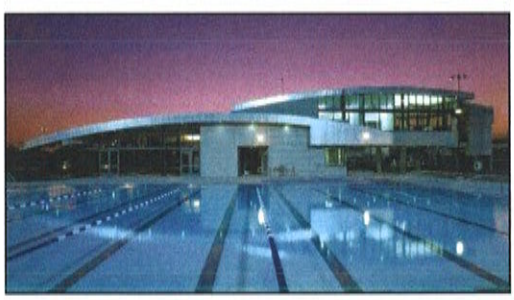
The City plays a role in the development of private neighborhood parks, setting standards and guidelines for their development. There are hundreds of private parks in Irvine owned and maintained by homeowners associations and apartment management companies. These private parks provide residents with neighborhood recreation opportunities, especially those related to swimming. Although the *Master Plan* focuses on public sites, it serves as a resource for developers of private neighborhood parks regarding the types of private park amenities desired by the community.

Recreation Programs & Events

The City coordinates educational and recreation programming in the following service areas:

Aquatics programs
Arts programs
Children, senior and disability programs
Educational classes
Festivals and events
Nature activities
Physical education and recess programs
Sports leagues
Summer camps

Many leisure pools are provided at private parks and apartments. (Source: Camden Property Trust)



William Woollett Jr. Aquatics Center was developed in partnership with the IUSD.

Other Public Recreation Resources

In addition to the City's public park system, residents of Irvine have access to a variety of other parks and recreation resources. Other major providers of recreational space include:

- County of Orange
- School districts
- Colleges and universities

The City has, on occasion, partnered with several of these providers to further enhance and maximize recreation opportunities in the community. For example, the City has joint -use agreements with the Irvine United School District (IUSD), Tustin United School District (TUSD) and Concordia University.

BUILD, ENHANCE, REHABILITATE, MAINTAIN AND ACTIVATE

In the coming years, Irvine will build several planned parks and facilities, but it will also continue to enhance, rehabilitate, maintain and activate its existing park resources. Recognizing that a shift away from park system expansion and toward maintenance and refurbishment will necessitate several policy, design and programming changes, the City has developed this *Master Plan*. In particular, the *Master Plan* will help the City:

- identify ways to continue to provide an array of outdoor activities and recreational services for current and future generations;
- involve residents in reimagining recreation opportunities so that parks better meet evolving community needs and expectations;
- identify opportunities to refine plans for upcoming parks and facilities so that their designs better reflect community needs; and
- enhance and refresh public community parks, neighborhood parks and special use sites and rehabilitate aging and worn amenities and facilities.

Opportunities for Irvine's Park and Recreation System

The *Master Plan* identifies sites with opportunities to implement the following types of projects:

***Build**: Acquire park land and develop remaining planned parks and facilities to meet the needs of residents, or demolish and fully reconstruct buildings to modernize or expand them to support new uses.*

***Enhance**: Improve, update and refresh parks and facilities to address new trends and better respond to evolving community needs.*

***Rehabilitate**: Replace, repair or rehabilitate aging, worn, broken or sub-standard amenities and facilities to restore and sustain existing recreation opportunities.*

In addition, system-wide recommendations address needs for the following:

***Maintain**: Provide preventative and routine maintenance and custodial care to parks and facilities to sustain assets for the long term.*

***Activate**: Provide programs, events and drop-in recreation opportunities and manage City parks and facilities to support diverse recreation activities and experiences.*

The *Master Plan* also takes into consideration long-term needs to maintain parks and facilities and activate and program sites for the benefit of residents, as well as employees and visitors who contribute to the economic vitality of the community.

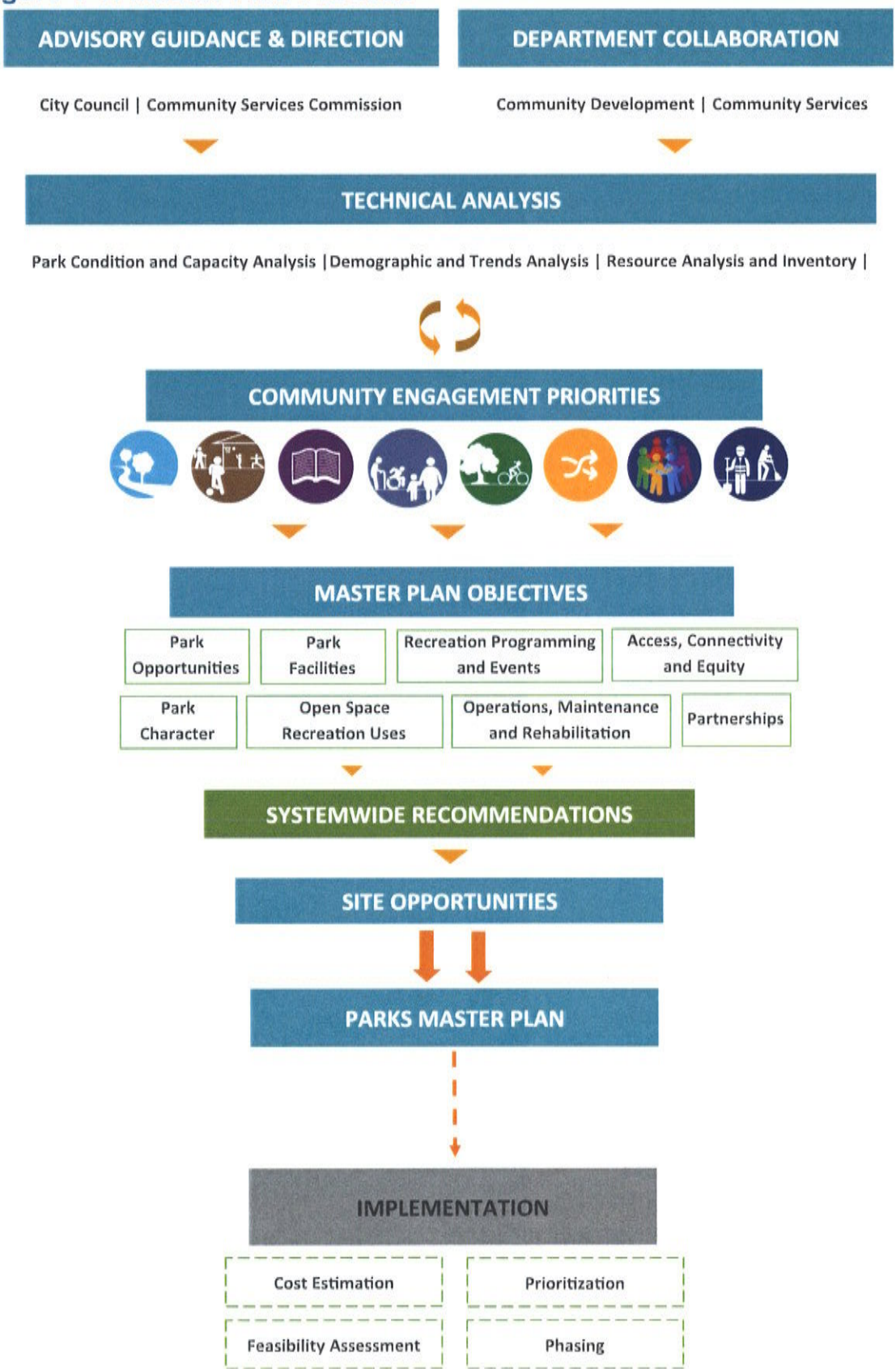
The *Master Plan* will serve as the guiding document for future park development and operations while providing enough flexibility to adapt to changing needs over time. To that end, it incorporates recommendations that can carry the system into the future. While the *Master Plan* identifies opportunities that could be carried out over the long term, it is intended to help the City prioritize and focus on a list of projects that can be completed within ten years, consistent with *Master Plan* objectives and community priorities. Project implementation and timelines will depend on funding requirements and availability, ongoing prioritization and decisions made through the City's annual budgeting and capital improvement process.

THE MASTER PLAN PROCESS

Given the community's interest in parks and recreation and the number of stakeholders involved in providing parks and recreation services, development of the *Master Plan* involved participation, guidance and direction from City Council, City Commissions, City Committees, civic leaders, community interest groups and staff.

Figure I-I provides an overview of the *Master Plan* development process.

Figure 1-1: Master Plan Process



Technical Analysis

A technical analysis of parks, recreation facilities, programs and other recreation resources helped cross-check the public engagement priorities with on-the-ground realities of the park system. With the technical guidance of the City's Project Management Team and involvement of additional staff at key points in the planning process, this research included:

- *Existing Systems Summary:* A baseline evaluation of the City's park and recreation system, which provided a foundation for the planning effort. This included conducting an inventory and mapping City parks, identifying demographic and recreation trends, describing the planning context, and identifying resources for recreation programming, operations and management.

- *Parks and Recreation Needs Assessment:* A Geographic Information Systems (GIS) network and service area mapping analysis, evaluation of existing park and facility standards and park condition and capacity analysis was combined with outreach findings to identify community needs for parks and recreation along with opportunities to improve existing parks and facilities.

Master Plan Outreach Activities

Stakeholder Interviews: Small-group interviews with representatives from community organizations, City departments and other agencies.

Focus Groups: Special meetings held with members of local advisory committees, boards, special interest groups, agencies and non-profits.

Community Intercept Events: Interactive outreach activities at five community events in parks throughout the City.

Mapita Online Questionnaire: Online survey available to anyone interested in providing input to the planning process.

Parks and Recreation Survey: A random-sample phone survey of residents conducted by an independent research firm.

Sports Committee Meeting: Facilitated discussion with the Irvine Sports Committee.

Sports/Aquatics Online Questionnaires: Questionnaires for members of the Irvine Sports Committee and the Irvine Aquatic Advisory Board.

Community Workshops: Two interactive public workshops.

Plan Development Workshop: Facilitated staff meeting to determine Master Plan direction and contents.

Webpage Emailed Feedback: Email communication via the project webpage.

High School Youth Action Team Survey: Questionnaire completed by high school youth leaders.

Council and Commission Meetings: Project updates provided at public meetings for Irvine's City Council Community Services Commission, and Planning Commission.

• *Americans with Disabilities Act (ADA) Assessment of Play Areas in Irvine Parks*:
All play areas in City parks were evaluated against accessibility standards to identify potential barriers for use and planning level cost estimates for removing these barriers.

Findings were summarized in City and stakeholder-reviewed reports that provide the foundation for recommendations and conclusions presented in this Master Plan. These documents are available as technical supplements under separate cover.

Community Priorities

Residents used stickers to answer questions at a Community Intercept Event held at the Bill Barber Park Youth Softball Opening Ceremonies in February 2015

To identify evolving community needs and reimagine the park and recreation system, the City initiated a multi-faceted public outreach effort involving residents, stakeholders, community leaders, interest groups, advisory board members and park users. Between January 2015 and March 2016, approximately 2,100 people participated in outreach activities to identify park and recreation priorities and establish the future direction for parks, recreation facilities, open space, trails and programming. Eight key themes emerged from the outreach activities collectively. These community priorities, summarized alphabetically below and described in detail in Appendix B, inform the *Master Plan* objectives and recommendations.

Connectivity and Access: Provide safe and convenient access to parks, outdoor recreation and open space areas.

Diversity of Activities, Amenities and Facilities: Provide a greater variety of recreation opportunities, support amenities and spaces.

Education: Integrate creative, scientific, academic, historical, educational and interpretive opportunities into the park system.

Evolving Needs: Plan for changing demographics and populations with diverse ages, cultures, abilities and needs.

Flexibility: Develop facilities to accommodate multiple types of park users and activities.

Health, Wellness and the Outdoors: Provide opportunities to connect to nature, enjoy the outdoors, and engage in fitness and healthy activities that contribute to the wellbeing of individuals and the community.

Partnerships: Pursue collaborations between government agencies, businesses, developers, schools and non-profit organizations to enhance the park system.

Standards and Maintenance: Continue to achieve excellence in parks, facilities, programming, maintenance and customer service.

Master Plan Objectives and Recommendations

The community's priorities and future vision for City parks have guided the development of the *Parks Master Plan*. The *Master Plan* includes the following:

- *Chapter 2: Systemwide Recommendations* incorporates the community's priorities into eight *Master Plan* objectives for strengthening Irvine's park and recreation system. For each objective, recommendations illustrate how new standards, design concepts and community ideas may be applied to City parks and used to expand programs, access to open space and other recreation opportunities.

- *Chapter 3: Site Recommendations* identifies opportunities to build, enhance and rehabilitate City parks. It provides examples of potential design changes for nine City park sites when they are renovated or developed, and it identifies "facility innovations" that illustrate options for diversifying Irvine's recreation amenities according to evolving community interests.

The Re-Imagined Park System

The *Parks Master Plan* provides ongoing direction, strategies and a list of capital projects to support an engaging, thriving park and recreation system that embraces community priorities.

The *Master Plan* includes far more potential projects than the City could complete in the next ten years (i.e., the average lifespan of a local park master plan), even when working with developers, schools, businesses and other partners who share the community's vision for parks and recreation. Recognizing that Irvine aims for the finest recreation experiences possible, this *Master Plan* identifies potential improvements that could further enhance these facilities in a reasonable period of time. A ten-year horizon will keep the document relevant and manageable from a planning and funding perspective. This timeframe is also consistent with update guidelines established for a city's general plan (GC§65040.5), which evaluates the long-term growth of a jurisdiction.

Irvine's park system is firmly established as a leader in the provision of municipal recreation services. In keeping with the City's tradition of high standards, this *Parks Master Plan* provides recommendations that would further enrich Irvine's public park system through a dynamic network of spaces that celebrate community-wide values for nature, culture, recreation, arts, ecology, history and education.

Prioritizing projects, incorporating resources that support the *Master Plan* objectives and identifying citywide recreation goals will require continued City commitment and further review. The recommendations presented in this *Master Plan* will focus resources where they would most efficiently build, enhance, rehabilitate, maintain and activate Irvine's high-quality park system in the future.

Gazebo overlooking the pond at Heritage Community Park

The *Master Plan* emphasizes the importance of maintaining flexibility when responding to community needs and new ideas. A tool has been developed to help weigh how new ideas and suggestions align with plan objectives and assist with prioritizing them. Using the assessment form (found in Appendix E), proponents of new programs and projects will be able to describe how their proposals achieve or enhance *Master Plan* goals.

Following submission to the City, staff responsible for developing and operating parks and recreation programs will assess the relative merits of each proposal. Results will then be compared against the results of other projects under consideration in the Capital Improvement Program.

While community-driven projects help address evolving recreation needs, relatively limited funds may be available each year to support the many worthy investments that could be made within the park system.

CHAPTER 2
Systemwide Recommendations

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2. SYSTEMWIDE RECOMMENDATIONS

Owing in large part to consistent community support for high-quality facility and programming investments, Irvine's park network receives accolades on a national scale (most recently placing in the top ten US park systems according to a nationwide study conducted by the Trust for Public Land). As a leader in recreation services and facilities, the City strives to further refine and improve its parks on a systemwide level. This *Parks Master Plan* exemplifies such an effort. During community outreach, Irvine residents expressed a desire for parks and recreation facilities to embrace new recreation trends, accommodate changing community demographics and reflect priorities for the City. This *Master Plan* categorizes community-supported direction into eight objectives and recommendations for further enhancing Irvine's park system:

- *Objective A:* Provide a variety of public and private parks to meet resident needs.
- *Objective B:* Provide a broad spectrum of active and passive, indoor and outdoor park amenities throughout Irvine that support diverse recreation experiences, community gathering spots and opportunities for play.
- *Objective C:* Activate parks and address community recreation needs through the provision of programs and events.
- *Objective D:* Ensure that the City's park, recreation and open space system is accessible to Irvine residents, including users of different abilities and demographic characteristics.
- *Objective E:* Create dynamic parks as special and unique places, adding or incorporating art and historic resources, innovative features, diverse landscaping, nature, varied color palettes and welcoming amenities.

Outreach Themes

Icons for community outreach themes note the community priorities each recommendation supports:

Connectivity and Access

Diversity

Education

Evolving Needs

Flexibility

Health, Wellness, Outdoors

Partnerships

Standards and Maintenance

- *Objective F:* Balance access to open space for outdoor recreation with conservation needs.

- *Objective G:* Ensure that Irvine's parks and recreation system is operated, maintained and renovated in a manner that is cost-effective, while balancing user safety, security, satisfaction and funding availability.

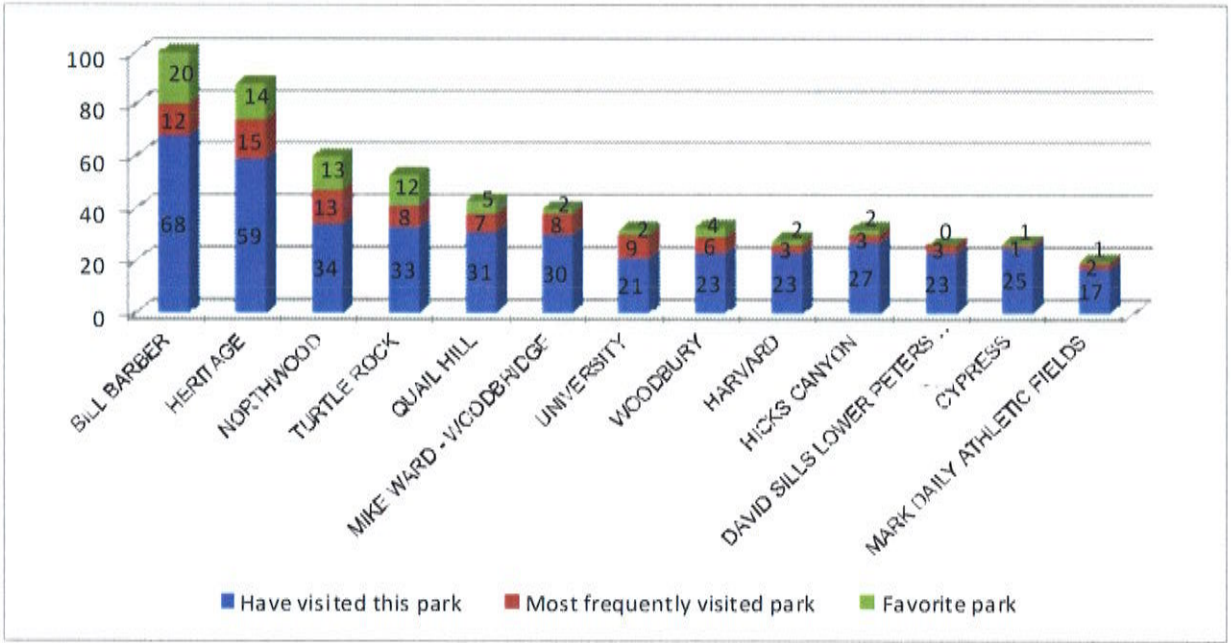
- *Objective H:* Develop and maintain relationships with targeted public and private organizations and entities to support City objectives.

PARK OPPORTUNITIES

Objective A: Provide a variety of public and private parks to meet resident needs.

Parks are community hubs that provide a variety of benefits. In addition to providing recreation space, parks also protect natural resources, unite nearby neighborhoods, support health and fitness and beautify the community.

Figure 2-1: Park Preference in the City of Irvine



The community parks shown above were mentioned most frequently by 450 Mapita participants responding to questions about park visitation and preference. The data provides a glimpse of parks within the community.

Irvine's park system provides an appealing combination of small neighborhood parks larger community parks, regional parks, trails, scenic vistas and open space. Together these sites enhance the City's identity and quality of life.

By 2030, Irvine's population is projected to increase to 327,900 residents (City of Irvine Fiscal Year 2016-17 Budget). New parks will be needed to meet the increasing demand for park land, particularly in new residential areas and villages in the northern part of Irvine and in the Irvine Business Complex (IBC). In addition, residents desire enhanced connections to parks, trails and open space.

New park development should also factor in the Orange County Great Park (OCGP) as a resource that will play a significant role in meeting park and recreation needs for many segments of the community. The *Master Plan* recommends reviewing and updating park classification and standards to address these new dynamics around a specific set of service level metrics.

Recommendations

A1 Adopt a function-based classification system for all City parks and recreation spaces and maintain a park inventory of both public and private park facilities.

The City is supported by a large network of parks and recreational facilities under various forms of ownership; however, it only tracks public resources through park improvement credits. Implementation of a function-based classification system would identify all parks and recreation spaces and facilities, including: neighborhood parks, community parks, special use sites, regional parks, private parks, open space, trailheads and trail corridors. This planning tool would allow the City to better assess gaps and identify core level of service expectations. For planning purposes, the resources the OCGP brings as a City regional park with unique and specialized uses, facilities, events and programs would be included. Table 2-1 summarizes the existing and planned facilities for the OCGP.

Categorizing all sites by function would require that the City prepare and maintain an inventory of public and private park resources to identify what needs are being met by these parks. The Parks and Open Space Inventory in Appendix A serves as a starting point for public facilities; however, a comprehensive inventory of private park resources is in progress but has yet to be finalized.

Table 2-1: Orange County Great Park Features

Existing Features	Future Park Features
South Lawn Athletics Building South Lawn (4 soccer fields) North Lawn (2 multi-use fields) Great Park Gallery Farm + Food Lab Incredible Edible Farm Great Park Certified Farmers Market and Picnic Meadows Visitors Center Reflecting Ponds and Viewing Pier Kids Rock Playground Hangar 244 Festival Site Giving Grove Great Park Balloon	12 baseball/softball fields 18 new soccer/multi-use fields 5 sand volleyball courts 25 tennis courts 4 sports courts 188-acre golf course 178-acre wildlife corridor 71-acre agricultural area 40-acre Bosque Improvements 36-acre Upper Bee Canyon area Cultural Terrace Ice Facility 84.3 acre restored Agua Chinon Wash

Source: Orange County Great Park Corporation, <http://www.ocgp.org/>, 2014; with City updates, 2016.

A2 Maintain minimum standards for traditional uses; provide flexible design guidelines to encourage variation.

City standards and guidelines are not typically based on park design and character. The City should continue to focus its efforts on providing traditional recreation facilities. Numerical standards should apply to facilities that support the most popular types of traditional recreation activities.

Compared to national levels, Irvine has consistently surpassed the average amount of park amenities provided to its residents. The City's standards exceed national benchmarks for major recreational facilities in jurisdictions with populations over 250,000, as reported by the National Parks and Recreation Association in the 2016 National Field Survey. Furthermore, the number of facilities such as soccer fields, ball fields, playgrounds, community centers and senior centers, provided through the City's public park network, exceeds the national average for cities within this population range. When considering this network along with the addition of a system of private parks that were designed to meet City standards and serve adjacent neighborhoods, Irvine boasts a cohesive park network that is superior to most.

However, community outreach suggests that residents would like to enjoy a wide variety of recreation experiences. Therefore, in addition to maintaining numerical facility standards, adopting more comprehensive park design and development guidelines will support the development of diverse options that reflect new and emerging trends in recreation. New design guidelines should address the provision of more unique support facilities and amenities to create a variation in social spaces. For example, rather than providing separate numerical standards for picnic tables and barbecues, the City should consider a guideline for shaded picnic shelters that include tables, barbecues and water to support small group gatherings. The City should also evaluate current standards for community centers, as larger, multi-use facilities could better support the diverse array of programming desired by Irvine residents.

A3 Support trail-related recreation in community parks.

Recreation trends suggest that trail use is very popular. This trend was reiterated by the public at community outreach events. Focus on trails in all community parks is recommended. These trails should be separate from access paths to facilities, wherever possible. A variation of trail length and challenge should be considered for all age groups and abilities including accessible loop trails, soft surfaced jogging trails and nature trails. The City should consider variation of experience along a trail, utilizing activity nodes to activate spaces periodically.

A4 Evaluate expectations for private parks.

Private park standards allow parks that are a minimum of 100 feet wide and 1/3 acre in size. Parks of this size or configuration are limited in the recreation amenities they can offer. Recreation trends show that many cities are moving away from the provision of smaller tot lots, pocket parks and mini parks in favor of larger neighborhood parks.

However, there are areas of the City where unique and non-traditional private recreation amenities would be appropriate. In particular, the IBC is home to large scale office developments and high-density residential uses. Vacant land in this area of the City is scarce and land value is high. It would be difficult to acquire, assemble, design and construct large outdoor park facilities within IBC neighborhoods. In keeping with Objective A listed above, the IBC area is uniquely suited to host park/recreation facilities that are more urban in nature such as indoor recreation facilities (i.e., consistent with the reuse of an existing building) or small public plazas or other types of gathering spaces.

The City should consider updating and expanding its guidelines to ensure that private parks are meeting local recreation needs including the consideration of larger private Neighborhood Parks to provide more amenities.

Adopting design guidelines by park type could help ensure that essential recreation opportunities are provided in all neighborhood parks, whether public or private.

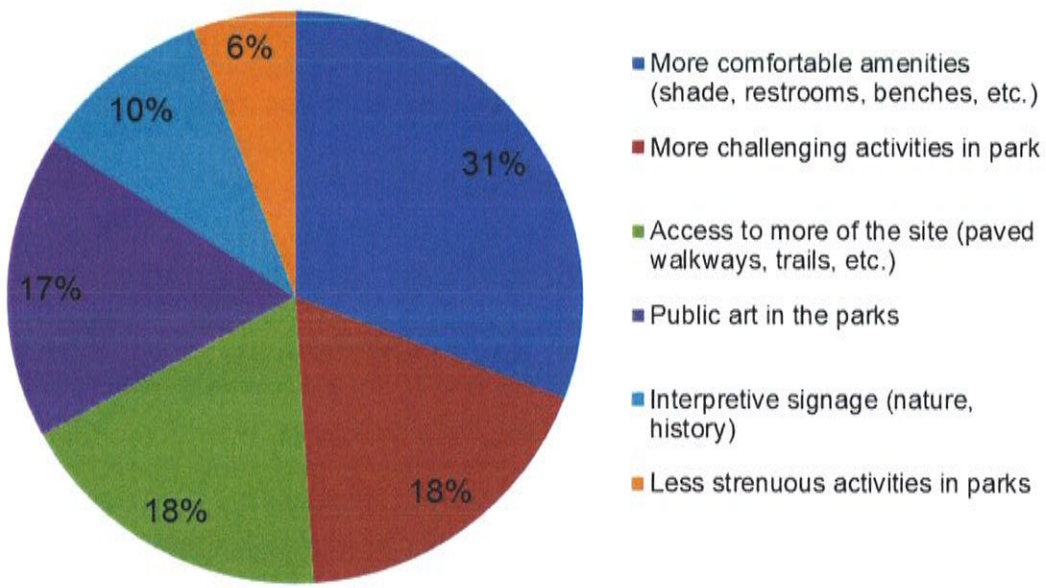
PARK FACILITIES

Objective B: Provide a broad spectrum of active and passive, indoor and outdoor park amenities throughout Irvine that support diverse recreation experiences, community gathering spots and opportunities for play.

Community livability and economic vitality are supported through a variety of recreation opportunities for residents, employees and visitors. Participants throughout the engagement process repeatedly expressed a desire for parks that offer a range of activities, facilities that support multiple uses and flexible spaces that can accommodate structured programs as well as drop-in activities. Gymnasia, athletic fields and courts are desired to support organized sports, and other non-traditional active use recreation spaces are needed to support health and fitness.

Figure 2-2: Amenity Preference

What would make your experience more enjoyable?



The responses of 690 participants in Community Intercept Events reveal an interest in a variety of enhancements.

Residents want facilities that support social gatherings and community events, as well as those that provide solitude, nature experiences and lifelong learning opportunities. Loop trails through parks, nature play areas, event venues, community gardens, performance centers, bike parks and dog parks are some of the many enhancements mentioned during public engagement activities. As such, the City's Park Standards Manual should be updated to create a wider variety of park amenities.

Recommendations

B1 Update guidelines for the provision of park facilities.

Trends show that recreation activity demands have changed dramatically since 2005 when the City adopted its standards for parks and park facilities. (Note: The facility standards were re-adopted by the Planning Commission in September 2015 but not changed from their 2005 form) Community demographics have also changed since that time. The City should consider revising the categories in which standards are set, resetting standards where demand has changed, reevaluating the role of school facilities, and considering guidelines for access and spatial distribution (based on travel distances) to supplement its numerical standards. The City should also continue to ensure that new opportunities are introduced in pilot programs to test their viability and popularity before developing multiple new facilities of any type.

For example, combining standards for community centers, gymnasia and senior centers will reflect the increasing trend toward multi-purpose centers that serve all ages and interests. Fewer cities are building small neighborhood community centers or stand-alone facilities for teens or seniors. Even in cities where private facilities meet the demand for weights and exercise equipment, the provision of combined multi-purpose facilities increases indoor programming options. Standards should be updated to reflect this trend.

B2 Revisit the role that private parks play in providing tennis courts.

Tennis is a very popular sport in Irvine. The United States Tennis Association (USTA) has established a recommended standard of one tennis court to be provided for every 10,000 population. Given this recommendation, a City the size of Irvine should provide approximately 25 tennis courts for its residents. The City manages 64 tennis courts, many of which are used continuously throughout the day.

The City coordinates with private developers when private parks are planned and built to ensure facility standards are followed. According to these standards, private parks are expected to provide 67 percent of lighted tennis courts and a portion of other types of sports courts, as long as they are available to all residents. Private parks are managed to serve a specific community and are not intended to serve all residents. For this reason, the City should consider providing more of the community's lighted tennis courts.

B3 Create buildings that serve as social activators with connections between indoor/outdoor spaces.

New facilities, as well as renovations to facilities, allow spaces to be updated to respond to recreation trends. Proper design of buildings may foster social interactions among all age groups. With the Southern California climate, connections between indoor/outdoor spaces should be considered to maximize useable space and diversity of experience.

Examples of this strategy include: a senior center and nearby community garden, shaded seating area or a low-impact pickleball court; community or recreation center and outdoor play areas, outdoor sports fields/courts (with indoor gym for indoor/outdoor sports camps and classes); and fine/ cultural arts center with outdoor arts plaza for events or outdoor small amphitheater for outdoor arts/music programs. Once constructed, Portola Springs Park will feature numerous indoor-outdoor connections and synergies, including an exercise room that opens into an adjacent exercise court.

B4 Develop flexible use areas.

New features or facilities in parks should be designed for flexible uses. For example, a plaza can host Tai Chi classes in the mornings, splash play in the afternoons and local band performances in the evenings, if designed appropriately. Appropriate infrastructure should be integrated into these flexible areas to support the different activities. Any open lawn area should be designed to support programmed and un-programmed activities, including unstructured play, impromptu public gatherings and events.

B5 Provide specialized play opportunities at community parks.

Community parks should provide larger scale destination play areas that are intended to draw visitors from throughout the City. Destination playgrounds should include nature play, thematic play, universal play, interactive / adventure play and water play features.

B6 Provide multi-purpose courts and combine selected court standards to accommodate trends and more variety in court sports.

Emerging interest in sports, such as badminton and pickleball, will lead to the need for facility variation and multi-purpose sports courts. Irvine's standards include specific court sports but do not provide the flexibility to consider other types of courts. Given the demand, the City should keep its tennis court standard and establish a minimum number of these courts in a grouping. However, other court requirements should be combined into a blended standard that allows for a variety of court types. This approach will keep the standard in place, but allow flexibility as new sports emerge and trends change. At the same time, the City should retire the specific standard for handball/racquetball courts, as demand does not warrant a separate court standard.

B7 Increase and broaden the standard for multi-purpose rectangular fields (e.g., soccer) and maintain the current standard for diamond fields (e.g., baseball/softball).

Emerging trends for non-traditional sports that use rectangular fields (e.g., lacrosse, rugby, ultimate frisbee, etc.) and increasing soccer interest point to a rising demand for rectangular athletic fields. This demand can be met, in part, by exploring the provision of dual or multi-use fields which would allow individual facilities to support a variety of sports. Soccer field standards should be broadened and reclassified as Rectangular Sports Fields and increased to cover other activities. Needs for lighted and unlighted fields should be addressed.

The underlying analysis for the *Parks Master Plan* indicates that the standard for baseball/softball fields is adequate, even though there has been expressed concern that there is a shortage of fields by the baseball/softball community. The Wall Street Journal reports that youth baseball participation in this country has decreased from 8.8 million to 5.3 million (from 5.4 million to 3.2 million for softball) from 2000 to 2013, due in large part to the industrialization and over-organization of youth sports. Efforts should be made

to inform the local sports community on local participation trends and the City's role as service providers to a large population of residents with a wide range of recreational interests. A resurging interest in activities, such as kickball, can be accommodated within the standard for diamond fields, particularly as trends indicate that baseball participation is anticipated to decline in the future. The City should also consider whether the requirement for a percentage of school fields should be reduced, and, if so, to what extent.

B8 Explore opportunities to provide different types of outdoor facilities.

While standards are not necessary for all types of outdoor facilities, community outreach showed there is a desire for a greater variety of outdoor recreation opportunities, such as track and field events, disc golf, archery, bike tracks and more. Chapter 3 describes some of the types of facility innovations that could support added recreation experiences.

B9 Modify and enhance playground guidelines.

Standards for playgrounds focus on the provision of playground equipment. Throughout the public engagement process, people expressed a desire for a variety of play opportunities such as interactive play spaces and nature play areas. The City should consider retaining numerical standards for play areas, but guidelines for play areas should be updated to encourage diverse play opportunities. All neighborhood and community parks should be required to provide some type of play environment. Play area guidelines for community parks should require some specialized play opportunity, whether it is a thematic play area, destination playground, universal playground, nature play area, interactive/adventure play area or water play feature.

Children at play in Irvine, CA

B10 Monitor needs for nature centers.

Community interest in additional access to nature, environmental education and nature interpretation can be supported through the provision of both outdoor and indoor facilities. Site opportunities noted in Chapter 3 suggest the development of outdoor classrooms, trails, trailheads and interpretive facilities. Additionally, the Turtle Rock Nature Center is in need of renovation and expansion. A new nature center may be warranted if the demand for indoor nature-based programs continues to rise. The standard for nature centers should be updated if this interest continues.

B11 Broaden the standard for art facilities.

Community outreach demonstrated a desire for facility space to support fine, performing and cultural arts. In the past, the City's arts facility has been focused specifically on fine arts. The City has yet to explore options to add a performing arts venue. Needs for this type of facility (or a stage at a facility that could support lectures and/or a community theater program) should be determined through a market analysis that takes into account theaters and performance halls (i.e., Barclay, potential OCGP facilities, etc.) operated by other providers.

B12 Coordinate with homeowners' associations when parks are renovated or facilities are replaced.

The City relies on private parks to meet neighborhood park needs for many residents. However, the type and extent of recreation opportunities provided at these sites varies greatly. Private parks should be considered as resources during the design review process in order to ensure that renovations to public parks and facilities are not duplicative and help meet the collective recreation needs and social benefits of the communities they serve.

RECREATION PROGRAMMING AND EVENTS

Objective C: Activate parks and address evolving community recreation needs through the provision of programs and events.

Irvine's recreation programs transcend traditional parks programming and lead the field in areas such as early childhood education programs, arts programs, aquatics, sports and special events. Programs range from introductory recreational activities to national caliber competitive programs. Engagement findings suggest that residents appreciate these programs and desire activities that are new, exciting, self-directed and varied to serve different interests. Casual, drop-in recreation opportunities that respond to residents with busy lifestyles are needed, as well as more traditional classes, camps and organized programs.

The City has a track record of ensuring that programs continually evolve to respond to Irvine's changing needs. As such, future projects should be responsive to program demands. This *Master Plan* provides guidance on program service provision, identifying program areas that can be expanded to support changing trends and new facilities, along with the tools needed to inform decisions on the types of programs and services that meet community expectations. A statistically-representative Parks and Recreation Telephone Survey found that providing additional programs and activities is the most desired change in Irvine parks, based on the percentage of respondents.

Recommendations

C1 Continue to incorporate emerging trends and community priorities into program service areas.

Community feedback suggests a focus on two program areas that should be further defined: nature programs and health and fitness programs. The nature programs service area may include nature interpretation, environmental education, science, technology, engineering and math (STEM) programs, and outdoor recreation such as gardening, birding, urban camping and fishing.

C2 Expand nature programming and environmental education and distribute opportunities throughout the City.

A growing body of research confirms that spending time in nature benefits children, offering them almost unlimited opportunities to explore and investigate, helping them build STEM skills that create a solid

foundation for future learning. Increasing access to open space would provide new opportunities for outdoor programming and education, particularly for children and youth.

Equitable geographic distribution of these programs will help provide access to all Irvine residents. Open space preserves are more appropriate than parks for many of these programs due to the types of uses they support, the range of native environments they provide and the distinct character of these sites. Utilizing sites that are adjacent to open space preserves, such as Portola Springs and Gateway Parks, will provide opportunities for cost savings and shared resources.

C3 Create a recreation strategic plan or recreation operations plan to address program expansion areas associated with new facility development.

This *Master Plan* contains recommendations for the development of several new major indoor facilities and specialized outdoor facilities to support indoor recreation, fine arts, cultural and performing arts, interpretive nature programs, indoor and outdoor athletics and indoor and outdoor recreation. These facilities should be activated through programming, events and services, which will, in turn, result in a significant increase in staffing and services.

While some facility development will be funded through developer park improvement credits, the City will need to identify additional funds to support programming operations. Prior to facility development, financial feasibility studies for major new facilities will help identify specific staffing and programming needs, as well as revenue-generation opportunities to offset some expenditures. In addition to this, during the next few years, the City will review system-wide strategic programming service areas, costs and operational needs as new parks and facilities are added and if open space facilities are added to make natural areas more accessible.

C4 Revise City program areas for planning purposes.

The City categorizes its program areas into eight categories. Some categories reflect the type of services (athletics, aquatics, fine arts, special events) and/or the groups that are served (senior services, disabilities services, youth outreach). All other programs are combined into one category (community park programs), which includes: child services, contract classes and recreation programs. For planning purposes, identifying all major program areas of emphasis separately will help the City to address community programming needs more efficiently and effectively.

C5 Expand indoor/outdoor programs as new facilities emerge and to activate existing parks and facilities.

When new facilities emerge or when facilities are upgraded, the City has the opportunity to develop additional programs with both indoor and outdoor elements. Examples include youth summer camps that involve outdoor and indoor sports; environmental education programs that involve outdoor nature excursions and indoor classroom time; and healthy cooking/eating programs that involve outdoor gardening and indoor cooking classes.

Expanding combined indoor and outdoor programs will require an expansion of staff and resources in many program areas. The City should consider balancing cost recovery with community demand in determining what programs to provide. As new and more specialized outdoor facilities are developed, there will be opportunities to add other programs that address emerging trends and growing needs. Pilot programs (e.g., nature play areas and bike pump tracks) are a good way to introduce new uses and users to a facility.

C6 Balance programming with drop-in opportunities for play while ensuring minimal impact to organized sports.

Community feedback supports a need to reserve time for drop-in facility use and unstructured play. Un-programmed, flexible use facilities will help address this need. Policies should be reviewed to consider these opportunities.

To minimize the impact to organized sports while balancing drop-in opportunities, the City should continue coordinating with non-profit sports leagues and interest groups. It has successfully facilitated youth sports by working with sports leagues, such as Little League and American Youth Soccer Organization (AYSO). The facilitated youth sports model could apply to other types of non-profit interest groups that provide programs at other recreation facilities for an appropriate fee. This model is different from contract programming, where the non-profit group is responsible for advertising and recruiting participants.

C7 Periodically revisit facility allocation, reservation and fee policies and procedures.

In August 2011 and December 2014, the Community Services Commission adopted the Allocation Procedure for Sports Facilities and the Public Facilities Reservation and Fees Policies, respectively. These allocation procedures ensure allocation priorities are set to fairly support recreation-based programs and competitive club and travel sports programs. They also place a priority on programs that serve residents. The fee policies address general rates and requirements for use, permitting and commercial use.

As new sports emerge, demand for adult and senior sports increase, and new athletic facilities are brought online, the policies and procedures should be reviewed to allow for emerging new uses and to determine where City programs will have priority over leagues and programs provided by others. Particularly as more and new types of facilities are developed, fees and policies should be revisited to ensure successful operations.

ACCESS, CONNECTIVITY AND EQUITY

Objective D: Ensure that the City's park, recreation and open space system is accessible to Irvine residents, including users of different abilities and demographic characteristics.

Convenient and safe access to parks, outdoor recreation and open space areas is a priority in Irvine. This includes a consideration for the ways that people travel to parks, the distance they travel and the ability to park safely when they arrive. Overall, community and neighborhood parks are evenly distributed and most areas are well served. Population growth will strain park facilities and parking demand (particularly in the IBC area), requiring ongoing planning to ensure equitable access. The development of multi-purpose trails, which was mentioned frequently by public engagement participants, can help link recreation facilities and open spaces to other community destinations while easing traffic and parking problems and providing a more walkable, connected community.

As the parks and recreation system evolves, it must continue to meet the needs of the City's diverse population with accessible, nearby and culturally-relevant recreation opportunities. The City's aging population suggests that accessibility considerations can be taken further to ensure that the entire system is inclusive of varying ages and abilities.

All playgrounds in Irvine, were evaluated to ensure Americans with Disabilities Act (ADA) access. Preserving access to recreation facilities for all residents is an important component of this *Master Plan* .

Recommendations

D1 Consider non-traditional recreation opportunities to satisfy the park needs of higher density developments.

Population distribution affects service level requirements, such as the number of park acres provided per 1,000 population. City calculations factor in neighborhood density to formulate park dedication requirements. However, exceptions are made for park standards when applied to the IBC and affordable housing developments. For example, IBC parks are anticipated to be smaller based on land availability and cost. Developers of affordable housing are allowed to reduce the dedication standard to 3.5 acres per 1,000 population. With less park land available in these areas, the City should evaluate non-traditional park design options, such as indoor recreation facilities, urban plazas, urban trails, etc. to maximize use of available space.

D2 Identify City roles in providing programs and establish program performance criteria.

There are many recreation providers in Irvine (i.e., private, non-profit, etc.), and the City is not meeting all community recreation needs alone. For each service area, the City should consider and identify primary and secondary roles in meeting needs, including key groups to serve and skill or instruction levels to support. For example, previously in

athletics, the stated focus was on youth programs. According to community interests in fitness, adults and seniors should be noted as a secondary service market for athletic programs. As senior services expand, the City's role in providing these programs should be revisited as well.

To establish program performance criteria, the City should have systems in place to identify changing public interests in programs and events and to track program participation, facility use and revenues by service area. Recreation software should be evaluated for its ability to coordinate scheduling, registration and data tracking by service area.

D3 Consider the geographic distribution of major facilities.

Major recreation facilities, such as aquatic centers, community centers and gymnasia, should be planned and sited based on service area, community demand and equitable access across the City. The locations of private and school facilities should be taken into consideration where these play a role in meeting local needs. Where smaller facilities are added to parks, these also should be dispersed geographically from existing facilities to decrease the travel distance to these recreation opportunities.

D4 Update park policies and standards to include travel distance guidelines for park locations.

The City's parkland requirements are based on acres per population, which accounts for population distribution but not the distance people must travel to reach parks. Modifying park standards to encourage travel distances of ½ mile for neighborhood parks and three miles for community parks will help ensure equitable access and encourage walking and biking to parks. The addition and enhancement of signage for the trail system to assist with way finding for pedestrians is also encouraged.

D5 Improve building circulation and ADA access.

Several older facilities were built before current ADA standards were established. Renovations and new buildings afford the opportunity to address new ADA requirements, and exceed them where possible. For example, wider hallways can accommodate peak traffic; sports fields

can be designed for greater accessibility and seating; swimming facilities may be equipped with proper lifts; and children's play areas and trails may be made accessible to people with mixed abilities.

D6 Comprehensively evaluate park signage.

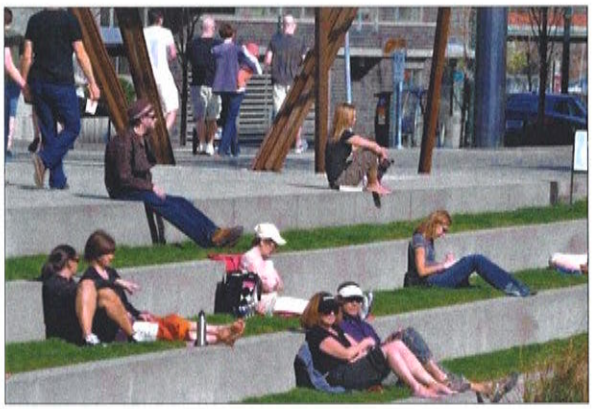
Park and trail signage could be enhanced to improve legibility and to ensure consistent branding across City park facilities. In some circumstances, unique signage might enhance a specific park theme or function. Such considerations should be addressed on a comprehensive basis in order to provide consistency across the park system.

PARK CHARACTER

Objective E: Create dynamic parks as special and unique places, adding or incorporating art and historic resources, innovative features, diverse landscaping, nature, varied color palettes, and welcoming amenities.

The development of thriving parks requires more than just the provision of land and facilities. The creation of unique and special places inspires special recreation experiences. Residents appreciate City parks and specialized facilities, reflecting the quality of a master planned community. City parks are well-maintained and attractive. At the same time, many parks at first glance look similar: manicured lawns; familiar play structures; well-manicured social spaces; and a comfortable look and feel. This *Master Plan* creates an opportunity for Irvine to reimagine its parks as distinctive places that capture the local history, surrounding natural environment, artistic sensibility and unique character of adjoining neighborhoods. As parks are refurbished or refreshed, a renewed focus on design and development can reinforce a unique sense of place in each park.

The creation of dynamic, special spaces can further enhance Irvine's reputation as a leader in community livability. Whether small changes are needed to enhance site comfort and encourage longer stays, or whether larger changes are needed to create social hubs for activities, re-developing with a theme in mind can help guide renovation decisions over time. Eventually all parks can connect people to the places where they live, work and recreate, by integrating site history, local art and natural resources.



Findings from the Visual Preferences Survey at the June Community Workshop suggest that many residents like or would consider parks of different characters, such as urban hardscapes (left) and nature-oriented designs (right) to support a variety of opportunities for socializing, recreation and play.

Recommendations

E1 Identify community context and reinforce a sense of place.

Using a design theme to guide design choices will reinforce a sense of place when redesigning or updating parks, especially in the case of community parks. Design themes that tell a unique story can be developed by connecting to the site history or taking inspiration from the surrounding community and environmental setting. A design theme will help determine material choices to enliven play and picnic areas and to inspire site-specific art or historical interpretive displays.

E2 Work with community and local artists to design/implement artistic and cultural features.

Irvine's strength in art may be demonstrated through the integration of art in parks and park facilities. Examples of site-specific art include: fountains; unique lampposts; decorative sidewalk paving; artistic planters; interpretive and educational features; murals; monuments; and, features along trails. However, it is important to keep in mind that replacement and maintenance constraints must be a primary consideration with the development of unique features. Additionally, security codes would impose some restrictions on design. When designing any non-standard features, artists should work with City maintenance, recreation and public safety staff to determine where maintenance efficiencies can be incorporated and where art can be interactive to support the park theme or play environment, while still maintaining a safe environment.

E3 Develop activity hubs in neighborhood and community parks.

Creating activity hubs and spots to support small-scale, sporting and non-sporting active or playful recreation features will foster individual or small group activities in Irvine's parks. Activity hubs and spots may include elements such as skate spots, uneven shooting hoops, outdoor ping pong tables, giant chess boards, bocce ball, volleyball, shuffleboard and horseshoes (similar to those amenities provided at local private parks like Beacon Park and Pavilion Park). It is important to note that consideration of such elements should include consultation with the City's Landscape and Maintenance Division of the Public Works Department as well as with the Community Services Department.

E4 Vary seating arrangements.

Consider seating arrangements in neighborhood and community parks for mid-size group seating (five to 15 people). The City may also consider providing flexible seating and seating for children along with other amenities such as play areas, plazas and trail heads. Providing seating with Wi-Fi is another opportunity in popular social areas.

E5 Integrate park theme or character into buildings.

As noted in Table D-2 (Site-Specific Major Facility Recommendations), many of the major facility buildings are older and will need updates in the near future. Additionally, several new community centers are planned to be built over the next few years. The combination of these plans presents an opportunity to integrate the park's theme or character into the building design. This recommendation applies to community centers, senior centers, fine arts centers and nature centers. The renovations at the Northwood Community Center provide an example of a successful integration of park character, built to resemble an old packing house that formerly occupied the location, which emphasizes Irvine's agricultural past. Portola Park also serves as a good example of the incorporation of thematic features.

E6 Add natural features and highlight nature.

Providing viewing areas where birds and butterflies frequent, adding plantings to

encourage more birds and butterflies and prioritizing channelized creeks for natural bank restoration are a few ways to integrate the surrounding natural environment into the park experience. Highlighting nature in neighborhood and community parks can include creating butterfly, hummingbird and native plant gardens with interpretive and educational elements. The City should encourage the development of outdoor classrooms and living laboratories at elementary schools located adjacent to parks. These outdoor classrooms and living laboratories may incorporate boulder groupings, small bridges and other niches where insect and plant discovery may occur. Once again, consultation with the Community Services Department and the Landscape Maintenance Division of the Public Works Department will be necessary, prior to implementation of these types of features.

E7 Incorporate walking trails.

Perimeter walking trails with viewpoints, boulders, plantings and interpretive features are examples of small changes that would enhance site comfort and encourage longer stays in parks and recreation areas. Walking trails also help to incorporate site amenities with local history, art and natural resources to create a cohesive park identity.

E8 Diversify play experiences across the City by providing unconventional features and amenities, including nature-based play environments.

To create dynamic parks and park facilities, the City should continue to provide traditional play experiences while adding new and varied play areas. Creating play experiences that are tailored to the specific landscape and scale of the park will help diversify play experiences across the City. For example, providing opportunities for play and recreation for older children and teens such as bocce, archery, challenge courses, zip lines, rope courses, net climbers, climbing boulders, skateboard parks and pump tracks can create such diversity. The City should consider testing new materials and construction methods for play environments that facilitate open-ended exploration and free-form play. The range of manufactured play equipment has expanded over the years, as new technologies and innovative designs now offer a large variety of play value and material options. As such, manufactured play equipment may be included in the play experience, but it should be combined with natural play elements to create a rich, unique and contextually hybridized play space.

Nature-based play environments include designated outdoor spaces that are made from natural components such as logs, sand, water, mud, boulders, hills, plants and trees. These materials encourage a more unstructured, open-ended, imaginative kind of play and represent the larger, wild environment in a way that feels safe and manageable to young visitors and their parents. Nature-based or nature-focused experiences with interpretive features, viewing areas and interactive nature elements can create or reinforce a unique sense of place in a park as a destination. These opportunities could be explored at parks that remain in the planning phases.

E9 Incorporate shade in all parks.

Shade is critical to health and wellness, as well as user comfort. Increased shade within and throughout parks was a prevalent request. Strategically adding shade trees, sails and shade structures (especially over play areas and seating areas), will ensure shade is incorporated in all parks.

E10 Provide quality support amenities.

Public engagement findings demonstrate that improvements to and maintenance of park amenities encourages park usage, and enhances user experience. Examples of such amenities include: lighting, restrooms, drinking fountains and signage. See Table D-1, Park Site Improvement Opportunities, for more examples.

E11 Address site entry, access, parking management.

Enhancing site entry points includes providing better wayfinding cues such as signage, clear pathways and lighting. Trailhead locations could be better identified on City maps in order to enhance access. The City should address parking needs, but consider other options such as joint use agreements to use nearby lots as well as better drop-off or pickup spaces in front of major facilities that provide programming.

OPEN SPACE RECREATION USES

Objective F: Balance access to open space for outdoor recreation with conservation needs.

Irvine's open spaces were originally preserved for ecological reasons. As recreation trends have shifted, people across California have increasingly engaged in hiking, mountain biking, bird watching and other recreation activities that take place in open space settings. These activities are among the fastest growing in California and have increasingly put pressure on an open space network that was largely established for preservation and conservation purposes.

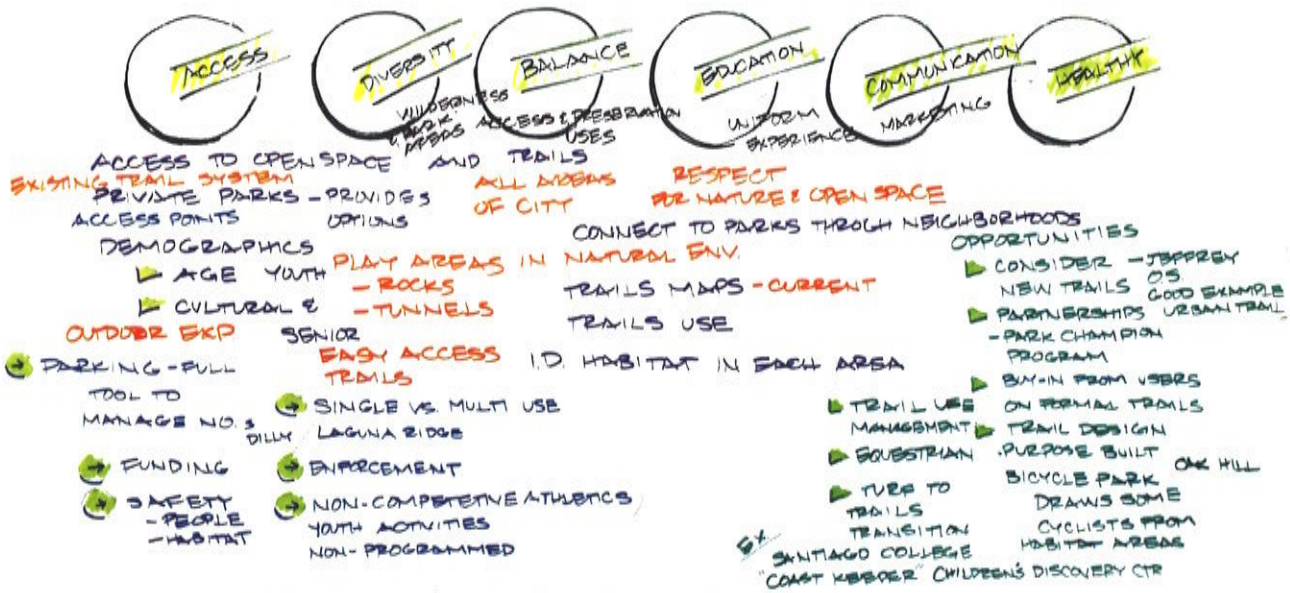
Participants in the community engagement process repeatedly expressed a desire for greater access to open space and connections to the outdoors, such as numerous requests for increased access to single-track mountain bike trails. In particular, nature trails, access to open spaces and nature education emerged as prominent topics across nearly all the engagement activities. The City is already responding to some of these needs through nature center programs and docent-led hikes and mountain bike tours in open space areas.

Although the City continues to be responsive to this feedback, it is important to provide some historical context of the City's open space system. In 1976, the City identified the need to establish and implement a measure to acquire and/or preserve natural open space land as an important component to the successful implementation of the City's General Plan with the inclusion of a Conservation and Open Space Element.

A landmark ballot initiative overwhelmingly passed in 1988 that guaranteed important habitat areas would be consolidated and preserved through a phased land dedication program with the Irvine Company. To implement this initiative the City and Irvine Company signed a Memorandum of Understanding (MOU) designed to protect and maintain the City's natural resources. The MOU identified specific areas of land to be preserved and dedicated to the City and stated the allowable land uses (preservation, passive recreation and other activities compatible with the protection of the habitat). The City became a signatory to a Natural Communities Conservation Plan (NCCP) and Implementation Agreement in 1996 along with twenty other participants including state, regional, local agencies and jurisdictions, affected landowners, utility companies and the University of California, Irvine.

The Nature Reserve of Orange County (NROC) was created as a non-profit entity to manage the NCCP Management Plan. This Plan describes future access plans, permitted uses, planned trails and trailheads and visitor facilities located with the habitat Reserve System. It was approved in 2007 by the City of Irvine's City Council, Community Services Commission, the City's Disability Advisory Board, the California Department of Fish and Game, the U.S. Fish and Wildlife Service and the NROC Board of Directors.

As such, any increased access to open space areas for recreation, education and increased connections to nature may require modifications to the plans described above. Policies around open space access that support recreation in appropriate places while minimizing activity in areas where recreation access should be limited or restricted to protect natural resources is acceptable; however, the primary purpose of the City's Open Space Preserve is the conservation of natural resources.



Comments from the Self-Directed Users/Trails Focus Group emphasized the need to balance conservation with increased access to open space while protecting nature, diversifying recreation and educational opportunities and supporting community health.

Recommendations

F1 Classify areas according to levels of access to encourage use of accessible areas and discourage use of restricted areas.

Categorizing Irvine's open space preserves into a tiered classification system would help the City encourage the use of accessible areas and discourage use of restricted areas. For example: Level 1 could include access for self-directed use of amenities and facilities, such as hiking, mountain biking and wildlife viewing. Level 2 could include limited access for programmed uses or docent-led hikes, and Level 3 could restrict public access to focus on resource protection. Careful consideration to adaptability should be paramount to any formally established classification system.

Public education, including signage, brochures and visual demarcation of restricted access areas should be used extensively to either restrict or promote access to open space areas, depending on the classification system. Recreation and school-based programs can be used to explain the environmental factors associated with resource protection and the damage associated with prohibited use. In areas where policies are shifting, the City should notify nearby neighbors and inform the general public through *Inside Irvine,* press releases and other means.

F2 Update open space preserve management plans and policies (as feasible) incorporating public feedback to determine the best balance between accessibility and environmental protection.

The majority of Irvine's open space is protected by a NCCP, with uses guided by a Recreation and Resource Management Plan (RRMP). At present, the Irvine Ranch Conservancy leads hikes and bike rides in select open space areas. However, several open space areas have "social trails" or footpaths and bike treads where people cross spaces where trails and access are not supported. Pressure to provide access to Irvine's open space preserves is likely to increase as many of Irvine's planned future residential growth areas are at the edge of the City and within walking or biking distance of open space preserves. Any increase in public access will require review by applicable City, State and Federal agencies. Changes in these policies warrant further discussion and would require considerable time and resources to achieve.

Identifying areas that are suitable for access, as well as those where restricted access is appropriate will continue to balance the goals of City conservation plans. These decisions can be facilitated using natural resource inventories, the recreation needs assessment, development plans and conservation and resource management plans. Engagement with community members, especially nearby neighbors and special interest groups, will be important early in the policy discussion. It is important to note that any new goals or policies that are developed and enacted for Irvine's open space preserves, would require revision to the Recreation and Resource Management Plans (2009) which would be subject to multi-agency review and approval.

F3 Develop facilities and trails that support nature programming, environmental education and other uses.

The success of nature and educational programming will depend, in part, on the provision of appropriate facilities. Outdoor classrooms, group camp sites, bus

turnarounds, restrooms and trails can promote or enhance outdoor learning experiences. Other key facilities include small group picnic shelters, gathering spaces and parking. The City should consider providing these types of facilities in community parks, special use sites (such as vistas and trailheads) and open space areas, where appropriate.

F4 Develop trails that connect to sites in Irvine and other jurisdictions.

Community engagement findings strongly support the development of additional trails throughout the City. The City should continue to develop a system of off-street, multi-purpose trails to provide connections between parks, open space areas, neighborhoods, retail and business areas and other community destinations in Irvine. Connections to other jurisdictions, such as trails connecting to regional open spaces, can serve similar purposes and even provide access to local beaches and to the Upper Newport Bay Preserve.

F5 Develop a variety of trails to avoid user conflicts.

Complementary provision of single-use trails will enable the City to create space for specialized activities that could create conflicts or unsafe situations in shared spaces. Examples of potential single-use trails include those designed for pedestrians only, mountain biking or equestrian activities.

F6 Develop support features to enhance the trail experience.

Depending on the types of trails provided, the City should consider appropriate support amenities to facilitate use, promote trail safety, provide educational opportunities and increase the enjoyment of the trail experience. Vistas, viewing blinds and benches provide spaces for resting and enjoying the natural scenery. Interpretive signage can describe the biological, geographic and historical aspects of a site. Trailheads provide key amenities such as parking as well as signage describing the trails, their connections and any access restrictions. En route trail signage and mileage markers assist with wayfinding and even encourage active recreation.

OPERATIONS, MAINTENANCE AND REHABILITATION

Objective G: Ensure that Irvine's parks and recreation system is operated, maintained and renovated in a manner that is cost-effective, while balancing user safety, satisfaction and funding availability.

Irvine sets a high standard for parks and recreation services, reflected in the well-maintained and expansive parks system. Outreach findings indicated an overall appreciation and pride in the quality of amenities and services provided by the City. Many respondents expressed the importance of maintaining this high quality over time as the parks system grows and parks age.

The City Council allocates significant resources for park maintenance and asset replacement, but acknowledges these funds are limited. Additional resources, including maintenance funds and long-term funding allocations, are needed to rehabilitate, refresh, replace and modernize infrastructure and address the needs of new parks and facilities as these are developed. The diversification of parks, development of high-impact, high-use parks in the IBC, and increased access to open space will also increase maintenance needs. A sustainable funding source must be identified to maintain assets at this high level and retain Irvine's position as a leader in the parks field. It will be increasingly important to innovate, reevaluate and resolve emerging issues, while capitalizing on maintenance and operational efficiencies, to sustain the system for the long term.

Recommendations

G1 Conduct financial feasibility and market studies and facility master plans when developing major new facilities.

Community feedback suggests that more specialized facilities are needed to support a desired level of recreation services. These include: larger community centers that incorporate active use and/or gymnasium space, nature centers, senior centers and arts centers. The City will need to consider the financial feasibility and market capacity of major facilities before bringing them online, evaluating opportunities for revenue generation to ensure these facilities are affordable.

These studies, including facility master plans, will help identify the appropriate size, scale and mix of indoor options. They will also identify costs associated with the construction and ongoing maintenance associated with the development of large indoor recreation facilities.

As noted in the *Park and Recreation Needs Assessment*, the City is only achieving 30 percent of its square footage standard for community centers, and it continues to build facilities that are smaller than trends suggest.[1] The building size in Irvine limits programming potential, especially for large group gatherings and active recreation.

Given the demand noted for senior programs, indoor gym space and programming to support health, wellness and fitness, additional square footage in targeted new facilities should incorporate more space to support active uses. (See Table D-2 in Appendix D for these opportunities for major facility enhancements.)

G2 Increase landscape diversity and sustainability to preserve ecological functions.

Increasing landscape diversity will provide ecological benefits and visual interest. In concert with the Landscape and Maintenance Division of the Public Works Department, updating Irvine's plant palette and utilizing native plants, wherever possible, will help the City encourage horticultural diversity in its parks and public places. The City should develop a Parks Tree Palette for adding/replacing trees and planning for canopy succession. The tree palette should include a wide variety of tree species including natives. The updated plant palette should also include a variety of carefully selected shrub, grass, succulent and groundcover species that have unique textures and colors best suited for Irvine's climate, soil and wildlife. The City should capitalize on water conservation opportunities by converting large turf areas to low-water planting beds, or by using lawn alternatives, such as California meadow sedge (Carex pansa), to minimize water intensive turf. Re-evaluating irrigation and watering regimes will also reduce outdoor water consumption.

Identifying and protecting habitat corridors in parks, trail corridors and open space locations and strategically connecting riparian areas, wetlands and other urban green spaces decreases disruption of natural systems, helps preserve vital ecological functions and also leads to increased biodiversity.

[1] *Many communities are building recreation and community centers at a minimum of 40,000-50,000 square feet, with larger facilities preferred. Irvine's community centers range from approximately 3,000 to 17,000 square feet in size. For more info, see Table D-2 in Appendix D.*

Finally, the City's recycling system should be applied and implemented as a sustainability measure to all parks and park facilities. Recycling receptacles should continue to be utilized and promoted within such facilities.

G3 Embrace stormwater management

Irvine's parks are a tremendous environmental asset with value that requires management for continued community benefit. Green infrastructure for effective stormwater management is a cost-effective approach to improve water quality. It will help the City stretch its infrastructure investments further by providing multiple environmental, economic and community benefits. Embracing stormwater management practices and utilizing green infrastructure elements such as rain gardens, bioswales, permeable pavers and detention ponds will reduce flooding, filter pollutants and replenish groundwater during storm events. The City should install interpretive signage about stormwater management at strategic park sites, which would also provide educational opportunities.

G4 Develop a comprehensive replacement schedule for park amenities.

The City should develop a comprehensive replacement schedule that considers level of use, lifetime expectations and safety, among other factors, in determining when playgrounds, picnic shelters, restrooms and athletic fields and courts should be renovated, refreshed or resurfaced. This type of schedule will help the City continue to provide park amenities that are consistent with community needs and expectations.

G5 Develop a renovation plan for ball fields.

Many ball fields could benefit from updated fencing and from backstop conversions to black/green vinyl. Additionally, several fields were designed according to outdated standards, and could be retrofitted to maximize playability. A comprehensive renovation plan for ball fields could assess specific needs for seating and fencing/backstop replacement.

PARTNERSHIPS

Objective H: Develop and maintain relationships with targeted public and private organizations and entities to support City objectives.

Irvine has always embraced the partnership concept, a critical reason for the successful park system found in the City today. The City provides more for the community by sharing facilities and spaces. For example, a partnership with IUSD provided a mechanism for construction, programming and maintenance of competitive swimming pools at the William Woollett Jr. Aquatics Center (adjacent to Irvine High School) and at the Northwood Aquatics Center (at Northwood High School). Partnerships also allow the City to combine financial, staff and time-based resources to meet resident needs. City staff has leveraged recreation expertise with various partners, such as physical education and recess programs for the IUSD and Tustin Unified School District (TUSD). In focus groups and interviews, participants suggested that partnerships would help provide access to emerging recreation activities.

This *Master Plan* recognizes and supports Irvine's collaborative approach to services, and encourages retaining existing partnerships as well as developing new ones. Additional opportunities exist with schools and school districts, Orange County Parks, nonprofit agencies (such as the Irvine Ranch Conservancy), homeowner associations, colleges and universities, neighboring community facilities and private facilities. These groups develop, manage and maintain a variety of programs and sites through independent, collaborative and joint-use initiatives. As a result, Irvine residents can and will continue to enjoy greatly expanded and enhanced parks and recreation experiences.

Recommendations

H1 Revisit coordination with schools in addressing facility needs and programming.

The City relies on IUSD facilities to meet its facility standards for athletic fields and courts based on an expectation that schools will provide most of the unlighted, drop-in sports facilities within the community. As a result of changes in IUSD facilities that occurred

between 1988 and 2005, the City increased its responsibility for athletic fields, particularly lighted facilities. While the City has joint use agreements in place with IUSD, TUSD and Concordia University for shared use, and such groups strive to provide school facilities consistent with Irvine Parks, *Master Plan* outreach participants stated that school athletic facilities are not developed or maintained at the same level of quality as City facilities for a variety of reasons. The City does not keep an inventory of school recreation facilities. Similar to creating an inventory of private park amenities, the City should conduct an inventory of local school recreation facilities, and make specific note of facilities located adjacent and/or near Irvine parks to better determine which resources are available to the community.

In light of the *Master Plan* findings, the City should reengage active discussions and revisit joint use agreements with school districts and university partners. Doing so will enable the City to address existing and future needs. Decisions that are based on these discussions should be factored into updating City facility standards. The Irvine Child Care Project, Recess and Physical Education Programs, afterschool recreation programs and volunteer service programs in schools have effectively applied the expertise of City recreation staff. As the City expands its educational programming, staff should discuss with the school districts and private schools the opportunities to enhance nature-based education and STEM programs for Irvine students. Developing a method for monitoring use of IUSD facilities by the public will help the City make future design decisions about what is needed at nearby parks.

H2 Identify other public and private partnerships that could support indoor facility needs.

The City should evaluate opportunities to partner with other public and private entities for public use of indoor programming space and gymnasia. For example, it may be possible to partner with private indoor gym or sporting facilities to make amenities accessible to the public during certain days or time periods. In return, the City could help fund maintenance and/or upgrades/enhancements to the private facilities. The City should also consider updating standards to reflect the roles that schools and other facilities play in meeting indoor recreation needs.

H3 Continue to rely on private parks to meet neighborhood needs for leisure swimming.

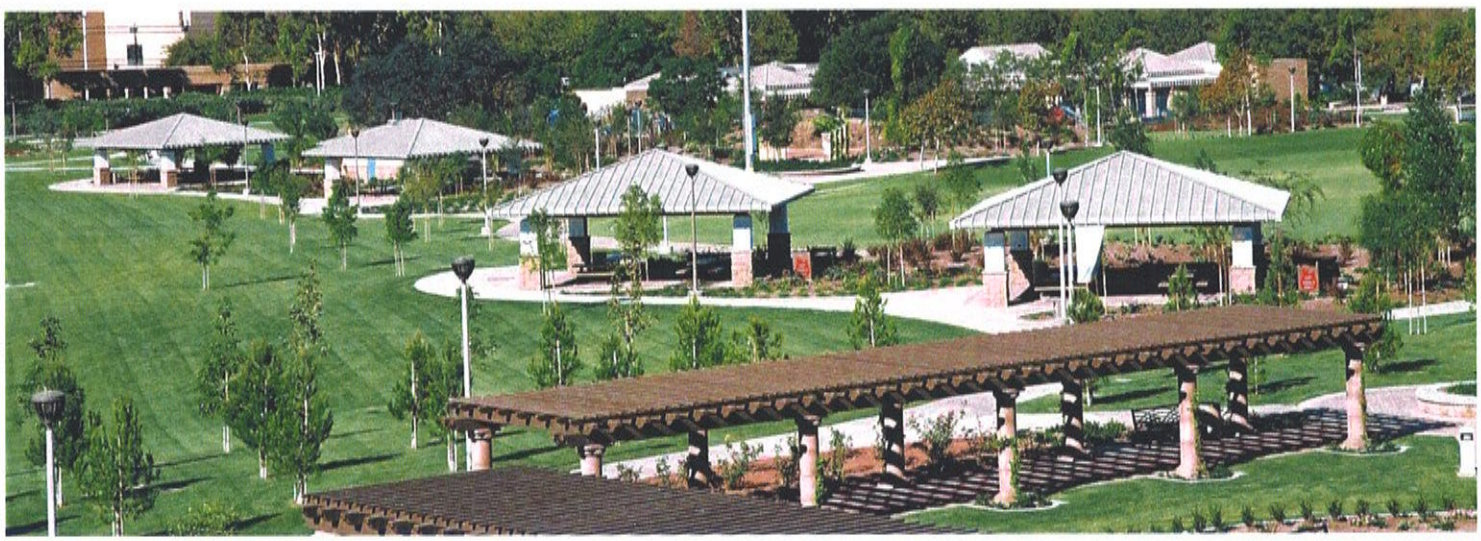
Irvine's extensive private pools meet most of the public need for leisure swimming. While some areas are under served by private pools, the City's role in meeting private facility needs is limited. Instead, the City may consider providing more programming time for drop-in swimming at pools. Irvine has achieved national recognition for hosting competitive swim meets, supported in large part by an active and organized swimming community. Development of a new competitive pool could provide the City with an added source of revenue, while also augmenting recreational swimming and water play opportunities.

H4 Coordinate with developers to increase park diversity and the unique character of parks.

While new and planned parks, such as the OCGP, have developed a unique character with diverse amenities, parks in Irvine tend to provide a similar mix of recreation options. The City should consider developing a design review checklist intended to help the City and developers make design decisions about current and future needs for parks in Irvine. In conjunction with the facility service level guidelines, the City could incorporate the checklist as a tool in the design and approval process.

SYSTEMWIDE GUIDANCE

The eight objectives and recommendations noted in this chapter provide overarching guidance and a framework for investments in the park and recreation system. Eventually, these objectives and recommendations can be integrated with the goals, objectives and policies of the City's General Plan to guide future system enhancements and development.



CHAPTER 3
Site Opportunities

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3. SITE OPPORTUNITIES

The City of Irvine provides a robust, nationally-recognized park and recreation system. Its recreation facilities, programs and partnerships model excellent customer service to meet high community expectations. The majority of the City's public parks and facilities are in good to excellent condition, as identified by a 2014 *City of Irvine Facility Condition Assessment Executive Summary*. While some facilities are aging, there is little evidence of deferred maintenance. Irvine's public parks are not only clean, green and safe, but they are welcoming community hubs activated by engaging recreation programs and events. While there are some notable exceptions, generally speaking, "improving" parks within this park system is essentially a process of fine tuning sites and transitioning parks to meet future expectations and desires for new recreation opportunities.

Site Opportunities

The following opportunities are identified for each park site where applicable:

- ***Build***: Acquire park land, add new parks and facilities, or demolish and fully *reconstruct buildings to modernize or expand them to support new uses.*
- ***Enhance***: *Improve, update and refresh parks and facilities to address new trends and better respond to evolving community needs.*
- ***Rehabilitate***: *Replace, repair or rehabilitate aging, worn, broken or sub-standard amenities and facilities to sustain existing recreation opportunities and restore to a safe operating condition.*

Based on a park condition and capacity analysis conducted in summer 2015, this chapter identifies site opportunities and placemaking options to **build, enhance and rehabilitate** parks and major facilities as the City develops and renovates parks in the future. This chapter:

- Defines the types of capital projects possible to "improve" City parks and major facilities;
- Maps opportunities to build, enhance and rehabilitate parks and major facilities across the City;
- Highlights sample design changes that should be made at nine parks and other key sites to better meet community needs; and
- Provides guidance for incorporating innovative facilities into City parks.

The City may respond to evolving recreation trends and community needs by taking advantage of these "site opportunities." While some projects may be completed quickly, others may take several decades to implement. Many of the "improvements" are anticipated to take place when parks are renovated or refreshed based on the age, condition and wear of the onsite facilities and amenities. With time, these types of options can further elevate Irvine's reputation for providing exceptional public parks.

PARK AND FACILITY OPPORTUNITIES

The *Master Plan* identifies improvement opportunities for 66 public parks and 25 major facilities. Potential site alternatives are described below for parks, followed by facilities.

Park Alternatives

Site-specific opportunities to build, enhance and rehabilitate public community parks, neighborhood parks, special use sites and planned parks are noted in Table D-1 in Appendix D. Categories of recommended options are also described below.

BUILD

- *Conduct Feasibility Study:* Assess the feasibility of the proposed development, including identifying potential partner involvement and evaluating the City's ability to program, operate and maintain the site.
- *Coordinate with Developer:* Coordinate with the developer regarding site acquisition, design and construction.
- *Acquire Park Land:* Acquire land for new park development, maximizing equitable access to the new park through location and proximity or connections to roads, sidewalks, trails and bikeways.
- *Design Master Plan:* Create an overall design for the site, incorporating facility innovations, new guidelines, best practices and flexible uses into the design in order to respond to community needs.
- *Prepare Construction Documents:* Finalize drawings and specifications for constructing the site's components according to *Master Plan* objectives.
- *Develop Site:* Develop, construct and landscape the entire site.

New Park Highlights

- ***New Park Construction**: There is an opportunity to build six new parks. Examples include new community parks at Portola Springs, Gateway and Los Olivos.*
- ***Urban Park Development**: The City has an opportunity to build its first urban neighborhood parks. Designed to serve mixed-use residential areas within the IBC, these parks could meet the needs of residents, employees and visitors while connecting the IBC to other parks and residential areas.*

ENHANCE

- *Develop/Deepen Design Intent:* Identify park design needs to respond to the local community context and reinforce a sense of place. This should include reevaluation of original design components that may have contributed to poor flow, nuisance or criminal activity.
- *Conduct Community Outreach:* Gather community input and incorporate it into the overall design intent.
- *Identify Park Theme, Art and Cultural Features:* Work with community leaders and local artists to identify park themes and design/implement unique features. Consider opportunities to engage the public in these decisions.
- *Add Play Opportunities:* Add greater variation in play experiences, such as challenging features, natural play elements, open-ended exploration and free-form play.
- *Complete Minor Facility Improvements:* Improve existing facilities or add support amenities and facilities such as concessions or restrooms.
- *Renovate/Add Entry and Parking Areas*: Improve and add park entryways to create a welcoming sense of arrival for people traveling via automobile, foot, bicycle, etc. and to orient people towards recreation opportunities at the site.
- *Add Internal Paths and Trails:* Add hard and/or soft-surface pathways for recreational use.
- *Add/Enhance Sports Fields:* Add and/or enhance soccer fields, ball fields, multi-use fields and other similar athletic fields.
- *Add/Enhance Sports Courts:* Add and/or enhance basketball, tennis, volleyball and other non-traditional sport courts.
- *Add Shade Features:* Add and/or enhance shade elements to support user comfort and health. These could be structural (i.e. shelter, canopy or sail) or natural (i.e. mature trees).

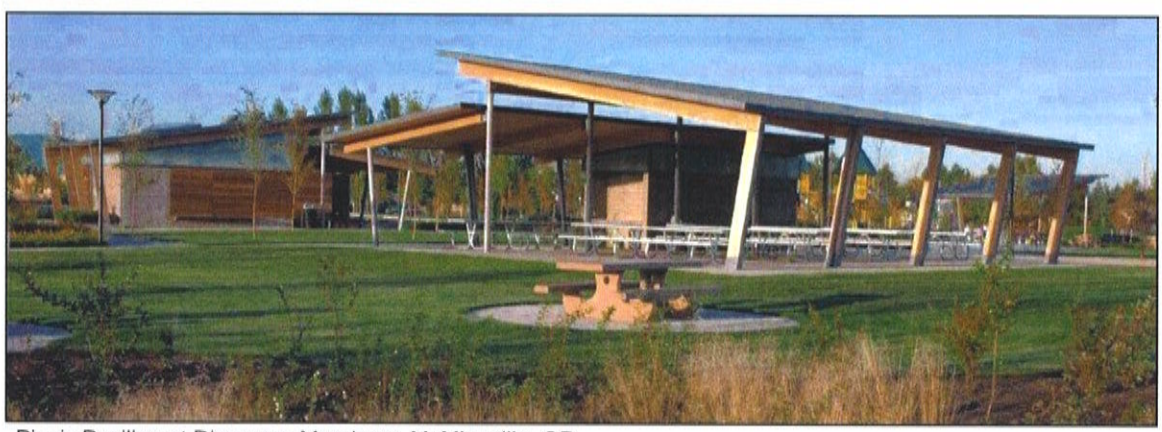
Park Enhancement Highlights

- *Seating Arrangements & Social Spaces:* The enhancement opportunity that *could benefit the most parks is adding or varying seating to create small social spaces. Seating could be improved at 15 community parks, 18 neighborhoods parks and the Central Bark Dog Park, which is a special use site.*
- *Park Theme, Art and Cultural Features: Identifying a park theme and installing art and cultural features in 15 community parks and 12 neighborhood parks may reinforce a sense of place and ensure each site provides a unique visitor experience.*
- *Parking Areas and Entrances: Improving site entrances and renovating parking areas at 13 community parks, 11 neighborhood parks and a special use site may enhance site orientation and reinforce a sense of place.*
- *Plant Diversity and Water Conservation: Increasing plant diversity and improving water conservation in 15 community parks, 32 neighborhood parks and 1 special use site may enhance the responsiveness of these park site to Irvine's climate conditions.*

- *Add Picnic Shelters:* Add a picnic shelter for large groups (50 or more), and/or consider a larger pavilion at appropriate community parks (150 people or more).

Left and Right: Variation in play elements at South Park, Hermosa Beach, CA

Left: Shaded elements at Phoenix Civic Space Park, Phoenix, AZ



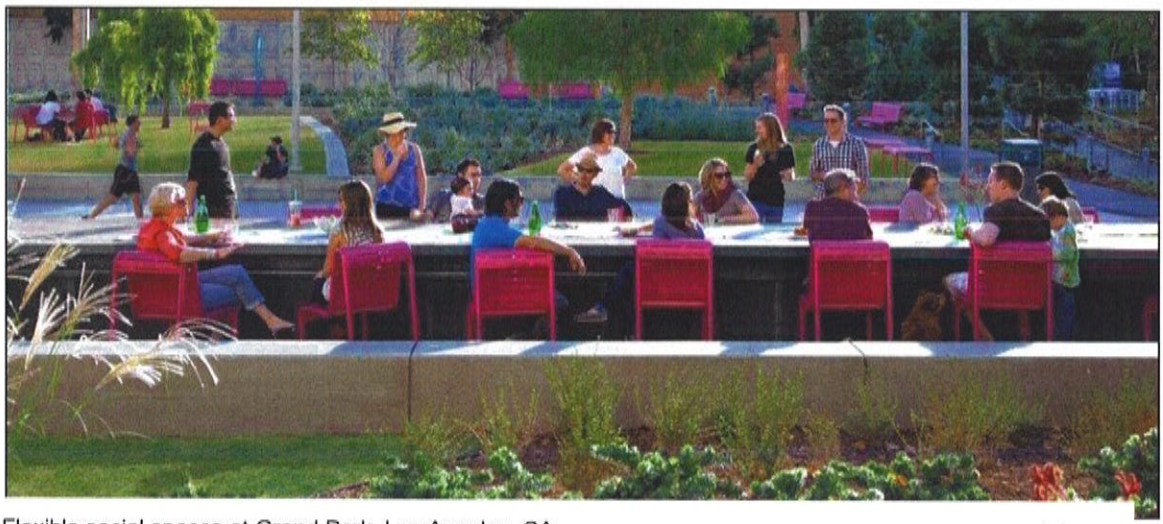
Picnic Pavilion at Discovery Meadows, McMinnville, OR

- *Enhance/Vary Seating Arrangements and Social Spaces*: Incorporate more mid-size group seating (5-15 people), movable furniture, flexible seating and seating for children.
- *Incorporate Flexible Use Area*: Incorporate areas designed to support multiple activities, both programmed and unprogrammed.
- *Repurpose Existing Use Area*: Replace an existing use with a different type of facility to increase site activity, enhance the design theme and/or accommodate changing recreation trends.
- *Integrate Nature Experience*: Design, incorporate or create diverse and healthy natural habitats that are accessible for play, respite and connectivity to nature. Add and/or increase natural landscaping in parks to facilitate authentic interactions with nature.
- *Incorporate Educational Features*: Identify and include interpretive elements and/or educational features.
- *Upgrade Site Furnishing Amenities*: Add and/or update existing site furnishings based on the lifecycle of such amenities and their contribution to the park's design theme.
- *Incorporate Color Palette*: Identify a color palette that is appropriate for the context and theme of the site. An overall color palette can take inspiration from site landscaping, trees, hardscape and softscape elements, buildings and site furnishings.
- *Add/Improve Lighting*: Add and/or enhance lighting to meet basic illumination needs for safety, security, visibility and comfort. Where feasible in order to meet Irvine Uniform Security Code requirements, lighting improvements should utilize energy-efficient lamps and contribute to dark sky principles that minimize glare and light pollution.
- *Add/Improve Signage*: Add wayfinding signage and/or update park signage where needed.
- *Increase Plant Diversity*: Integrate a variety of shrub, grass, succulent and groundcover species that are drought tolerant and adapted for Irvine's climate conditions.
- *Address Water Conservation*: Integrate a variety of improvements to meet State water conservation requirements. For example, convert underused turf areas to low-water planting beds and/or lawn alternatives, evaluate irrigation systems and/or incorporate low-flow fixtures in all new restrooms.

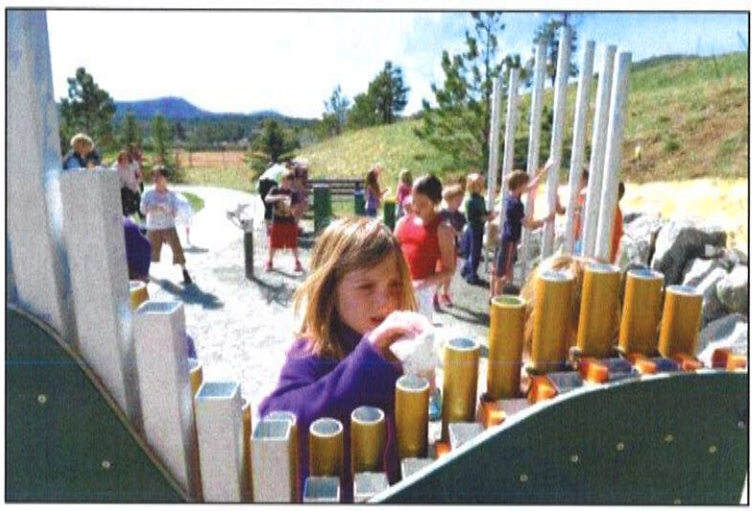
Site Improvements

Each park site could potentially be improved by building, enhancing or rehabilitating various elements. The parks that could benefit from the greatest number of improvements include:

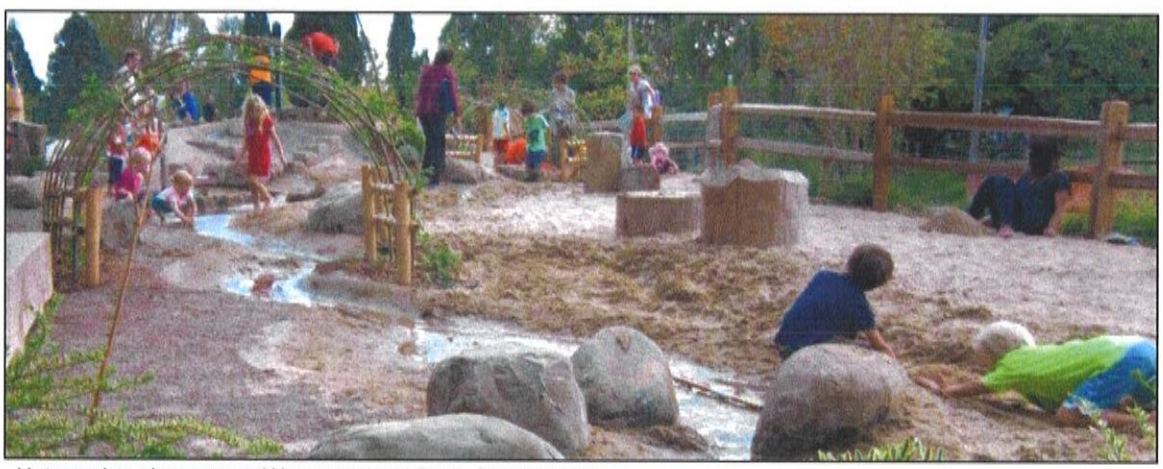
- Deerfield (18)
- Northwood (18)
- Turtle Rock (17)
- San Carlo (17)
- Mike Ward – Woodbridge (16)
- Plaza (16)
- Valencia (16)
- Heritage (15)
- University (15)
- Bommer Canyon (13)
- Hicks Canyon (13)
- Colonel Bill Barber Marine Corps Memorial (12)



Flexible social spaces at Grand Park, Los Angeles, CA



Left: Education elements at Stagecoach Park, Denver, CO



Nature play elements at Westmoreland Park, Portland OR

- *Improve Ecological Systems through Stormwater Management*: Utilize green infrastructure elements that improve downstream water quality and encourage environmentally-sensitive design, including bioretention basins and swales, permeable surfaces and soil erosion and sediment control strategies. In some areas, these improvements can be used to replicate natural systems by creating riparian areas, wetlands and urban green spaces.
- *Implement Urban Greening Strategies*: Increase the number of trees in order to expand the existing tree canopy and/or create additional shaded areas for walking, biking and passive recreation. Develop a park tree palette that encourages water-efficient, native and shade-producing species as landscapes are updated or trees are replaced.

Spiral garden with infiltrating stormwater element, Chaparral Park, Scottsdale, AZ

REHABILITATE

- *Update Maintenance Program*: For all additions and expansions, update the maintenance program to account for new conditions.
- *Replace Infrastructure and Assets*: Repair and/or replace aging and broken amenities.
- *Improve Play Area Accessibility*: Improve play equipment, paths or surfaces according to recommendations in the 2015 *ADA Assessment of Play Areas*.
- *Address Other Outdoor Site Accessibility Issues*: Make improvements to any outdoor areas that are not currently meeting accessibility standards.

Park Rehabilitation Highlights

- ***Accessibility***: Improving play area accessibility was the most common opportunity noted. A total of 43 sites need playground access improvements. Many of these updates could be achieved either as stand-alone projects or in conjunction with larger, more comprehensive renovation efforts. Through economies of scale, there may be opportunities to update specific playground features concurrently across multiple sites.

Major Facility Opportunities

Major facilities include community centers, senior centers, fine arts centers, nature centers and/or aquatics facilities. These facilities are commonly located at community parks and are major activity hubs that host a wide variety of recreational and educational programs and events. Opportunities for major existing and planned facilities are noted in Table D-2 in Appendix D, and are highlighted in the box below. In terms of further improving Irvine's park system, the following facility options are encouraged when new parks are being developed and/or when existing parks are being renovated.

BUILD

- *Construct New Building*: Construct a new building to support recreational needs, after first considering the financial feasibility and best potential uses for the space.
- *Renovate and Modernize Building*: Completely demolish an existing structure and/or rebuild a completely new structure and/or demolish a building down to its structural core and/or completely overhaul and modernize it to bring the structure up to current building codes.
- *Renovate and Enlarge Building*: During renovation, build, rebuild and/or add on to facilities to create larger structures than may have initially been planned. Some facilities may need to be enlarged in order to maximize their recreation potential.

Facility Construction Highlights

- ***New Construction***: Seven new facilities are planned, including two at future parks, to meet indoor recreation needs. These include community centers at Portola Springs and Los Olivos Community Parks. Please refer to Table D-2 in Appendix D for a list of these facilities.
- **Expanded or Combined Facilities**: Rather than building smaller, stand-alone facilities specializing in a single use (as has been done at Heritage Park, for example), the City has an opportunity to expand and combine different types of facilities into larger multi-use centers that synergize a variety of activities and programs. For example, Quail Hill will be constructed to support both community recreation and the arts. The Turtle Rock Nature Center and Community Center are other facilities that could potentially be combined in order to support community interest in environmental education and/or nature-based experiences.
- ***Major Renovations***: In the coming years, several major facilities may undergo complete renovations, creating opportunities not only to modernize these assets but also to better adapt them to revenue-generating and programming needs. Renovations will also provide opportunities to enhance park character and to better connect the structures with surrounding park uses. Both Senior Centers should be considered for such renovations.
- ***Context-Based Facility Planning***: Although current plans for Bill Barber Park include a community center, further evaluation is needed to determine whether this is still the best use for this dynamic and well-loved site. Similarly, plans for a community center at Hicks Canyon should be reconsidered, as the resources necessary to construct this smaller neighborhood-scale facility could potentially be diverted to a nearby site to create a larger community building, consistent with recreation needs and trends.

Northwood Community Center underwent a modernization and expansion in 2013

ENHANCE

- *Refresh, Update or Improve Building*: Remodel and/or improve a building within its existing footprint to increase programming opportunities. Projects at this scale typically involve several rooms, if not entire facilities. As an example, an enhancement project could involve the full update and enlargement of a kitchen with new vents and appliances to support catering for programs and events as well as a concurrent update to nearby meeting rooms to add Wi-Fi, videoconferencing and integrated technology capabilities.

Facility Enhancement Highlights

- ***Community Center Enhancements***: Both the Deerfield Community Center and Heritage *Community Center were built in the late 1970's and will need to be updated in the future.*
- ***Minor Projects***: Seven facilities were constructed or remodeled in the last *ten years. These buildings may need minor repairs or wear-and-tear rehabilitation as per City facility inspections.*

REHABILITATE

- *Rehabilitate and/or Replace Building Elements*: Improve and/or replace worn or old features or individual elements, as needed, based on lifecycle and condition of amenities. For example, the facility may need new paint, a new roof, HVAC system, new furniture or new storage cabinets.

Distribution of Park and Facility Projects

Opportunities to improve City parks and facilities are distributed across the community. Map 2 identifies the location of all potential opportunities to Build, Enhance and/or Rehabilitate public parks. Given the number of enhancement opportunities, these alternatives are characterized as "major" and "minor" enhancements. Major and minor enhancements are distinguished by cost and by the number of potential projects involved at each site.

Map 3 shows the location of all opportunities to Build, Enhance and/or Rehabilitate major facilities.

IRVINE PARKS MASTER PLAN

Map 2: Park Site Improvement Opportunities

Build

- Community Park
- Neighborhood Park

Enhance

- Major Enhancements
- Minor Enhancements

Rehabilitate

See Table D-1: Park Site Improvement Opportunities

Irvine Business Complex

- IBC Neighborhood Park(s) Location, To Be Determined

Irvine Parks

- Neighborhood Park
- Community Park
- Special Use Sites

Other Planned Parks

- Orange County Great Park - Planned
- Jeffrey Open Space Trail (JOST) - Planned

Other Parks

- Orange County Great Park (Existing - 2016)
- William R. Mason Regional Park

Open Space

- Irvine Open Space
- Surrounding Open Space

Base Map Features

- Irvine City Boundary
- Irvine Sphere of Influence
- Major Streets
- Metrolink Line and Stations
- Creeks/Drainage Channels
- Water Bodies

Miles 0 1 2

May 2016
Sources: City of Irvine, OCTA and OC Parks.

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IRVINE PARKS MASTER PLAN

Map 3: Opportunities for Existing and Planned Major Facilities

Build

- Community Centers
- Senior Centers
- Other Major Indoor Facilities
- Other Major Outdoor Facilities
- Planned Facilities

Enhance

- Community Centers
- Other Major Indoor Facilities

Rehabilitate

- Community Centers
- Senior Centers

Irvine Parks

- Neighborhood Park
- Community Park
- Special Use Sites

Other Parks

- Orange County Great Park
- William R. Mason Regional Park

Open Space

- Irvine Open Space
- Surrounding Open Space

Base Map Features

- Irvine City Boundary
- Irvine Sphere of Influence
- Major Streets
- Metrolink Line and Stations
- Creeks/Drainage Channels
- Water Bodies

0 1 2 Miles

May 2016
Sources: City of Irvine, OCTA and OC Parks.

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HIGHLIGHTS OF PARK AND FACILITY OPPORTUNITIES

These opportunities for park and facility development and enhancement represent new ideas for several key park sites. The systemwide recommendations from Chapter 2 also highlight opportunities for improved connections and synergies with other City recreation spaces, including planned parks, the OCGP and open space. This section highlights these opportunities.

Key Community Park Sites

To illustrate how *Master Plan* recommendations and enhancement opportunities could be implemented at some of the City's most frequented and popular community parks, the following pages feature potential concept drawings for eight sites:

- Bommer Canyon Park
- Colonel Bill Barber Marine Corps Memorial Park
- Deerfield Park
- Harvard Park
- Heritage Park
- Mike Ward Park - Woodbridge
- Rancho San Joaquin Park
- Turtle Rock Park

BOMMER CANYON PARK

Unique among the City's community parks, Bommer Canyon is situated in the middle of an open space preserve. Though portions of the park are gated and closed when not reserved (with access limited in certain areas according to adopted federal conservation agreements), a variety of trails are open daily from 7 a.m. to sunset. One of the primary features of the park is an aging, yet historic, ranch-style picnic and events venue. Via the Mapita online questionnaire, outreach participants identified this park as either their favorite, most frequently visited or most familiar site. Figure 3-1 illustrates opportunities for Bommer Canyon, which are described below.

- *North Side Entrance:* Located south of the Bommer Canyon Trailhead, access to the park is provided via a dirt parking area, which gives way to trails and historical

cattle ranch structures. These areas could be enhanced via a formalized entrance, enhanced parking area, improved vehicle circulation and renovation of the former cattle corral into an interpretive feature and/or ranch-themed play area. These improvements could also expand interpretation and recreation options at the park.

- *Entry Nodes:* Enhanced site identification and/or wayfinding signage could improve site orientation.

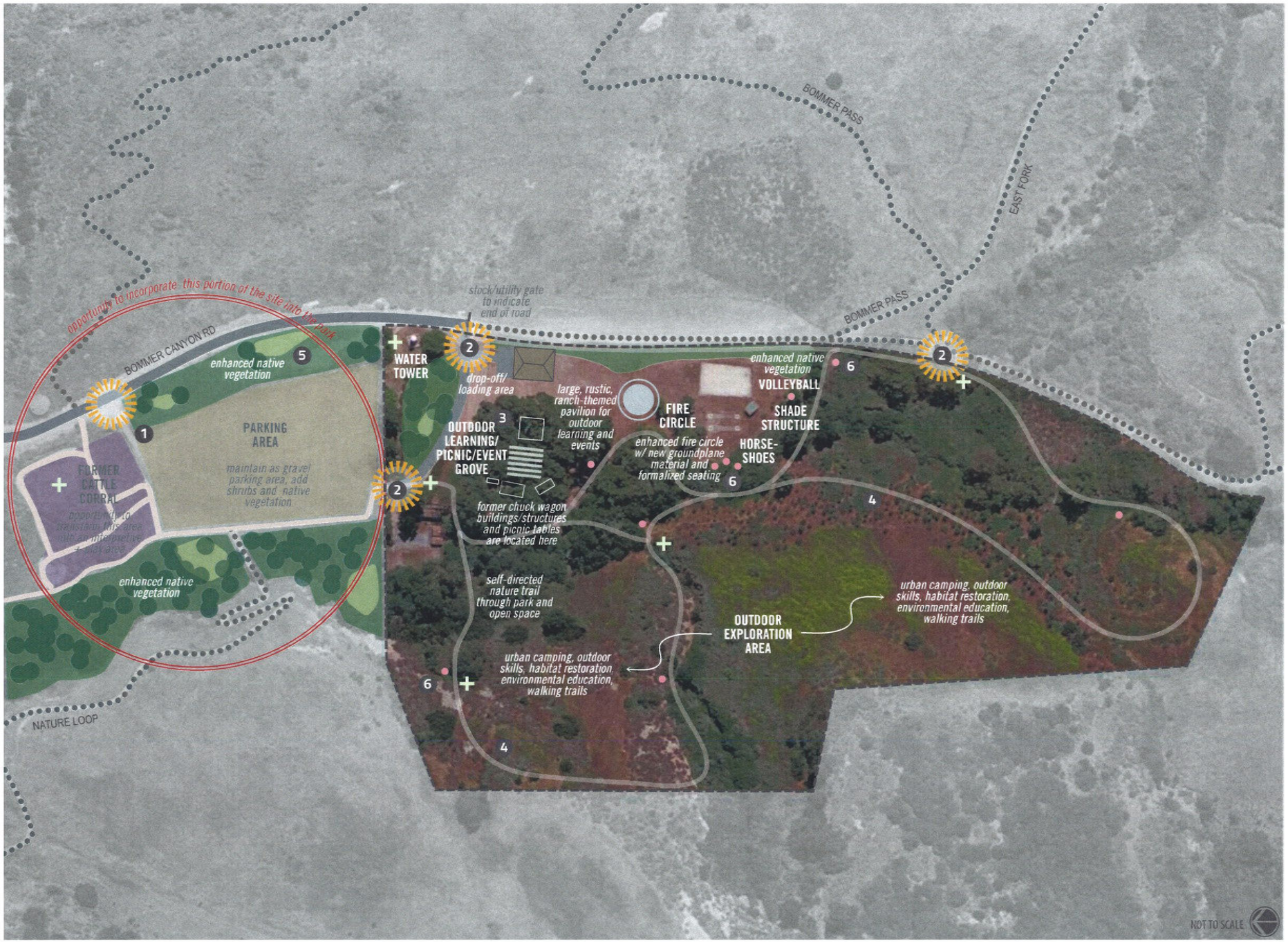
- *Outdoor Learning/Picnicking/Event Area*: With some upgraded amenities, the sycamore grove could become a central gathering area, used for outdoor classes, picnics and/or events. An adjacent, rentable open-air pavilion could anchor this area and act as an outdoor classroom, meeting space and/or events venue. An enhanced fire circle and activity area could provide a harmonious amenity adjacent to the grove. Permanent restrooms, a catering kitchen and/or general accessibility improvements could make this space more functional.

- *Enhanced Trail Connections:* As feasible given existing conservation agreements, soft-surface trails could be incorporated throughout the park, expanding on the nearby nature loop and providing more self-guided exploration opportunities across the site. Improved signage could be provided along these trails as well as along existing pathways. These trails should be as accessible as feasible given site grading, and could be designed to encourage visitors to experience more of the area's native habitats. There may also be opportunities to support equestrian activities through addition of a staging area and/or watering trough near the trails.

- *Planting:* Native trees, shrubs, and plantings could be incorporated wherever possible to restore and/or enhance the landscape.

- *Seating Options:* Seatwalls, benches and/or other social spaces could be added throughout the park to encourage quiet relaxation as well as informal group gatherings.

Figure 3-1: Bommer Canyon Park



1 NORTH SIDE ENTRANCE
There is an opportunity to incorporate the north end of the site into the park. Formalizing the entrance, enhancing the parking area, and transforming the former cattle corral into an interpretive feature or ranch-themed play area will create a grand entrance and expand the interpretation and recreation options at the park.

2 ENTRY NODES
Enhanced site identification and wayfinding signage will improve site legibility.

3 OUTDOOR LEARNING/PICNICKING/EVENT AREA
With some upgraded amenities, the sycamore grove could become a central gathering area for outdoor learning, picnic, and events. An adjacent open-air pavilion could anchor this area and act as an outdoor classroom, meeting area, or event space. The enhanced fire circle and game area provide a harmonius amenity adjacent to the grove.

4 ENHANCED TRAIL CONNECTIONS
Soft-surface trails throughout thepark will expand on the nearby nature loop and provide more self-guided tours across the site. They will also encourage visitors to experience more of the outlying areas of open space and learn more about this area's native habitat.

5 PLANTING
Native trees, shrubs, and plantings should be incorporated wherever possible to restore and enhance the landscape.

6 SEATING OPTIONS
Seatwalls, benches, and other seating options should be added throughout the park for individual and group gatherings.

May 2016
Sources: City of Irvine, Google Earth, OCTA, and OC Parks

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COLONEL BILL BARBER MARINE CORPS MEMORIAL PARK

Colonel Bill Barber Marine Corps Memorial Park is one of the most widely-recognized parks in Irvine. This high-use site supports citywide events, organized sports as well as unstructured recreation ranging from play to picnicking. Figure 3-2 illustrates site opportunities, which are highlighted below.

- *Additional Eastside Park Amenities:* The previous master plan recommends that the undeveloped eastern portion of the park include an amphitheater and a combined community center and gym. As there is already a community center nearby at Sweet Shade Park, and as parking is already a concern at Bill Barber during major events, these elements may no longer be the best use for this valuable site.

  To emphasize community priorities, there may be an opportunity to develop a larger amphitheater, event pavilion and orchard-style lawn with overflow parking at this location or at another location within the City, similar to the OCGP. Additional parking areas could potentially be used to support a local farmers market.

- *Entry Nodes:* Enhanced site identification and wayfinding signage could improve site legibility. Signage in each parking area could indicate where additional parking is available.

- *Enhanced Connections to The Trail:* Outdoor fitness equipment, a self-service bike repair station featuring tools and air pumps and distance markers to other parks and destinations could be added along the San Diego Creek to further link that regional trail amenity to the park.

- *Public Art:* Sculptures and/or other art installations could be added throughout the park to enhance its character. There is an opportunity to build on the existing memorial and overall theme of celebrating and recognizing community leaders to create a deepened sense of purpose.

- *Planting:* Turf can potentially be replaced with drought-tolerant grasses in non-sport and non-programmed areas in order to limit maintenance and water use. Potential landscape changes should be mindful of existing uses, particularly in areas surrounding picnic shelters, which are often programmed during private events. Trees and understory planting areas could be added along Harvard Avenue to create a buffer/screen from surrounding traffic.

- *Seating Areas:* Seatwalls, benches, and/or other seating options could be added throughout the park to promote individual and group gatherings.

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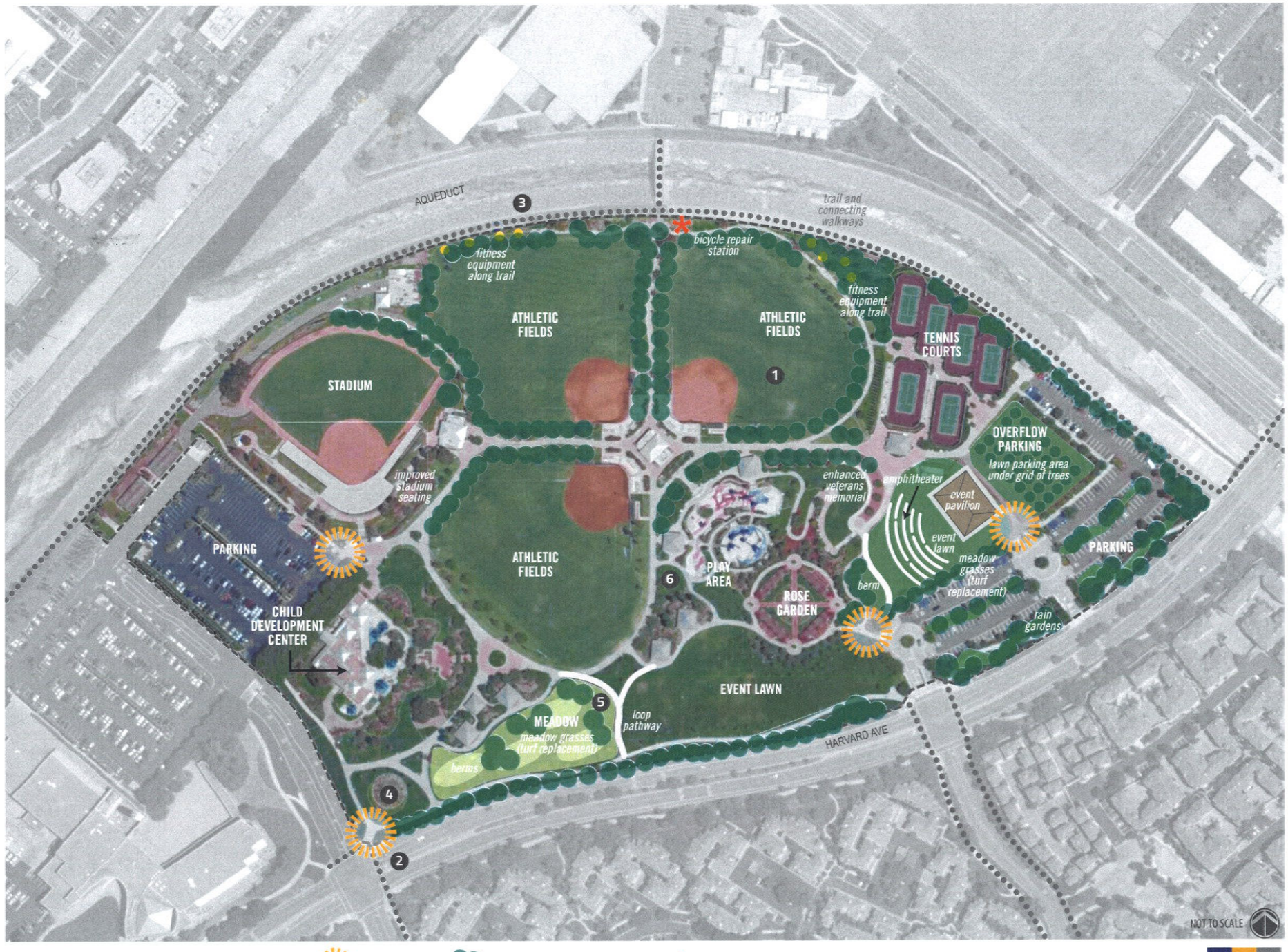
IRVINE PARKS MASTER PLAN

Figure 3-2: Colonel Bill Barber Marine Corps Memorial Park



1 ADDITIONAL EASTSIDE PARK AMENITIES
A reservable event pavilion, flexible-use amphitheater/lawn, and additional overflow parking or a community center and gym/fieldhouse could be considered in this location.

2 ENTRY NODES
Enhanced site identification and wayfinding signage will improve site legibility. Signage in each parking area could indicate where additional parking is available.

3 ENHANCED CONNECTIONS TO THE TRAIL
Outdoor fitness equipment, a bike repair station, and distance markers to other parks and destinations could be added along the Class I Bikeway to link it to the park.

4 PUBLIC ART
Sculptures or other art installations could be added throughout the park to enhance its character.

5 PLANTING
Turf in non-sport and non-programmed areas should be replaced with drought-tolerant grasses to reduce maintenance and water use. Trees and understory plantings should be added along Harvard Ave to create a buffer/screen.

6 SEATING AREAS
Seatwalls, benches, and other seating options could be added throughout the park for individual and group gatherings.

May 2016
Sources: City of Irvine, Google Earth, OCTA, and OC Parks

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DEERFIELD PARK

Figure 3-3 illustrates opportunities for Deerfield Park, which are described below.

- *New Facility Innovations:* If disc golf were to be relocated to another location, the racquetball courts and disc golf areas could be repurposed to provide space for one of the Facility Innovations listed at the end of this chapter.

- *Enhanced Play Opportunities*: Several separate play elements could be consolidated into a unique thematic play area with separate areas designed for children ages 2-5 and 5-12. The play areas could potentially include fitness equipment, a small water spray feature with shade sails and universally-accessible components.

- *Centralized Open Space*: The center of the park could incorporate both a flat open lawn for programs and free play, as well as a berm or mound with native plantings and places to roll down the hill or sit and watch surrounding park activities.

- *Updated Community Center, Parking and Entry:* This older facility could be refreshed, with enhancements made to the entry, drop-off area, adjacent outdoor plaza and circular parking area in the process.

- *New Picnic Shelters*: Two additional and reservable picnic shelters (one designed for small groups and the other designed for medium-sized gatherings) could provide needed social spaces.

- *Plantings:* Gradual introduction of new tree plantings and drought-tolerant grasses and/or groundcover could help reduce long-term maintenance and water costs.

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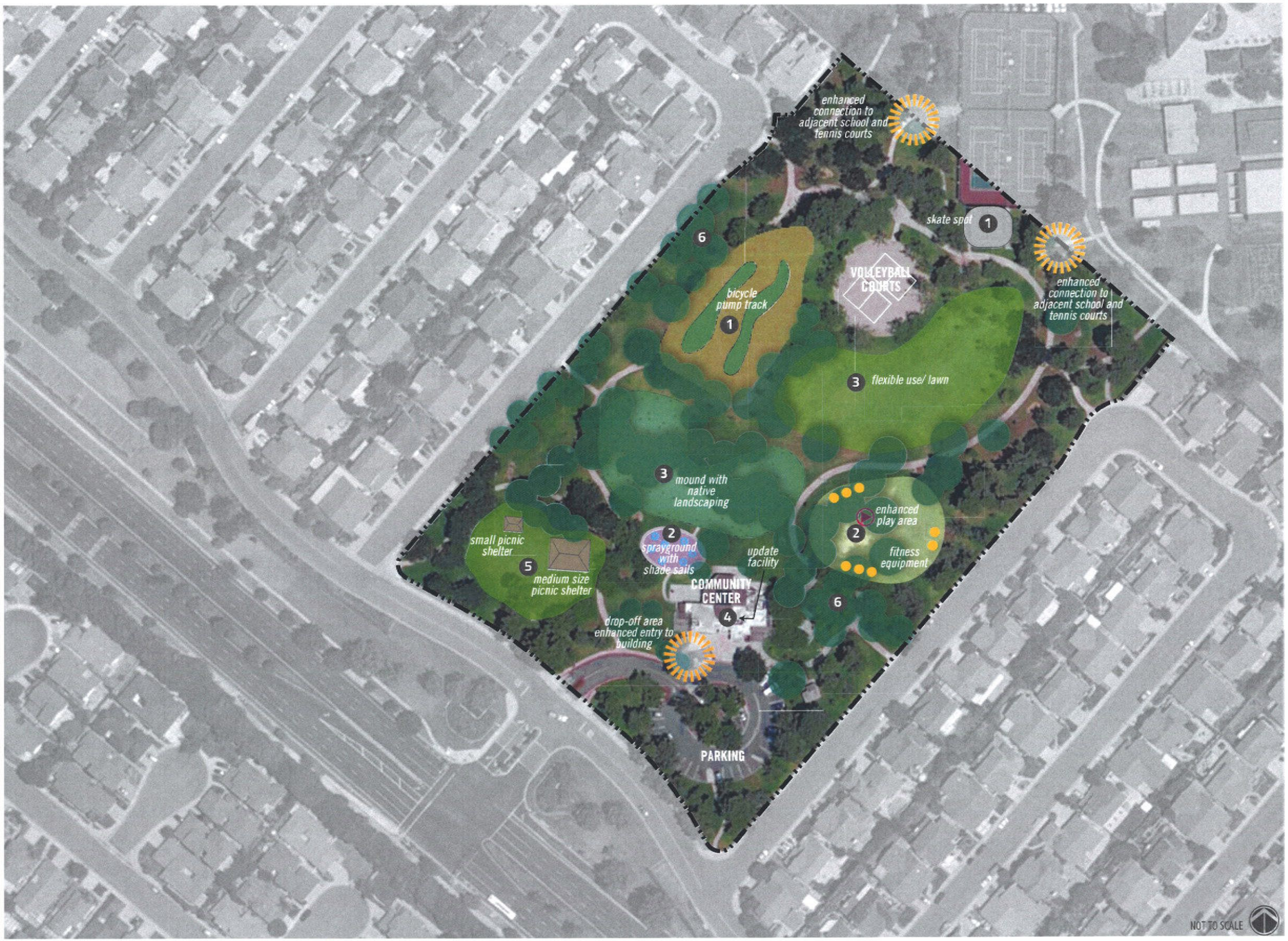
IRVINE PARKS MASTER PLAN

Figure 3-3: Deerfield Park



1. NEW FACILITY INNOVATIONS
The racquetball courts and disc golf course can be repurposed to newer opportunities, such as a skate spot and bicycle pump track to diversify recreation opportunities

2. ENHANCED PLAY OPPORTUNITIES
Several separate play elements can be consolidated into a unique thematic play area with equipment for ages 2-5 and 5-12, fitness equipment and a small spray feature with shade sails.

3. CENTRALIZED OPEN SPACE
The center of the park could incorporate both a flat open lawn for programs and play, as well as a berm or mound with native plantings and places to roll down the hill or sit to watch other park activities.

4. UPDATED COMMUNITY CENTER, PARKING AND ENTRY
This older facility will need to be refreshed, considering the entry, drop-off area, adjacent outdoor plaza and circular parking area that could be remodeled for better use.

5. NEW PICNIC SHELTERS
Two reservable picnic shelters (a small group and medium size shelter) would provide gathering places.

6. PLANTINGS
Tree plantings and drought-tolerant grasses or groundcover would help reduce maintenance and water use.

May 2016
Sources: City of Irvine, Google Earth, OCTA, and OC Parks

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HARVARD PARK

Located adjacent to Peters Canyon Wash, Harvard Park is primarily oriented toward athletics, featuring a smaller community center and relatively few additional recreation opportunities. Figure 3-4 illustrates potential enhancements at this site, which are described below.

- *Central Focal/Social Space:* To create additional recreation opportunities, the area adjacent to the parking lot and community center could be redesigned into a centralized social space, featuring thematic play elements, fitness equipment, seating and tables. Ball nets may be needed to protect this area and the parking lot from foul balls.

- *Enhanced Connections to the Trail:* The entry to the park from the regional trail could be refreshed to encourage trail users to take advantage of the concessions and social spaces at the park. Wayfinding signage could also be added in this area to highlight the distance to other destinations accessible via the trail network.

- *Community Center Expansion:* Although space is limited, a renovation of the community center could potentially include a teen room and/or multipurpose activity room, as feasible.

- *Shaded Seating Area*: A shaded seating area near the skate park, ballfield and/or community center could support small group gatherings and respite during athletic events.

- *Native Plantings:* Tree plantings and/or drought-tolerant grasses or groundcover could be added in non-sport turf areas to reduce maintenance and/or water costs. Trees added in parking areas and around the skate park could provide both shade and/or stormwater management opportunities.

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IRVINE PARKS MASTER PLAN

Figure 3-4: Harvard Park

1. CENTRAL FOCAL/SOCIAL SPACE
Repurposing the west end of the parking lot would allow this site to have centralized social area. Thematic play elements, fitness equipment, seating and tables could be added near existing concessions.

2. ENHANCED CONNECTIONS TO THE TRAIL
The park entry from the regional trail could be refreshed to encourage trail users to take advantage of the concessions/social space at the park. There is an opportunity to add wayfinding signage indicating the distance to other community destinations via the trail.

3. COMMUNITY CENTER EXPANSION
While there is limited space, the community center when renovated would benefit from a teen room and/or multipurpose activity room if feasible.

4. SHADED SEATING AREA
A shade seating area near the skate park, ballfield and community center would support small group gathering and shaded respite for athletic events.

5. NATIVE PLANTINGS
Tree plantings and drought-tolerant grasses or groundcover could be added on all non-sport turf areas to reduce maintenance and water use. Trees added in parking areas and around the skate park would help with shade and stormwater management.

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Sources: City of Irvine, Google Earth, OCTA, and OC Parks

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HERITAGE PARK

Located next to Irvine High School, this community park hosts five major facilities (including a County library), a national-caliber competitive aquatics center, a tennis complex and various school athletic fields and facilities. Figure 3-5 illustrates opportunities for Heritage Park, which are described below.

- *Expanded Aquatics Center and New Drop-Off Area:* The William Woollett Jr. Aquatics Center could be updated to better support national-scale swimming events. Through this process, the City may wish to consider adding a new fifty to sixty-five meter competition pool to the complex, along with enhanced locker rooms, seating and concession areas. Expenses for this project could potentially be mitigated via donations from, or partnerships with, local nonprofit organizations. Any potential aquatics project would need to consider options for additional parking, as well as impacts on surrounding park uses. Creation of a tree-lined drop-off lane near the center could potentially improve access off of Walnut Avenue. An indoor therapy pool may also be a potential amenity at this complex to support lifelong swimming opportunities.

- *A New Fine Arts Center*: The Irvine Fine Arts building could be demolished and rebuilt in the same location, could be appended to the existing community center to create a larger multi-purpose facility, or could potentially be relocated to the Cultural Terrace at the OCGP to better synergize with the creative and artistic elements considered for that site . Should the facility be renovated or expanded in place, additional spaces could be provided for indoor-outdoor programs and/or display events. Should Fine Arts be relocated to the Cultural Terrace, the vacant space at Heritage could potentially be repurposed into a flexible community space, featuring a gymnasium and program and performance venue.

- *Stream Channel / Stormwater Feature*: Introducing a streambed and/or rain garden at the site could be a way to cleanse and recirculate pond water and enhance the natural habitat for birds and other wildlife. New seating and educational signage could provide more passive spaces for park users to learn, reflect and relax.

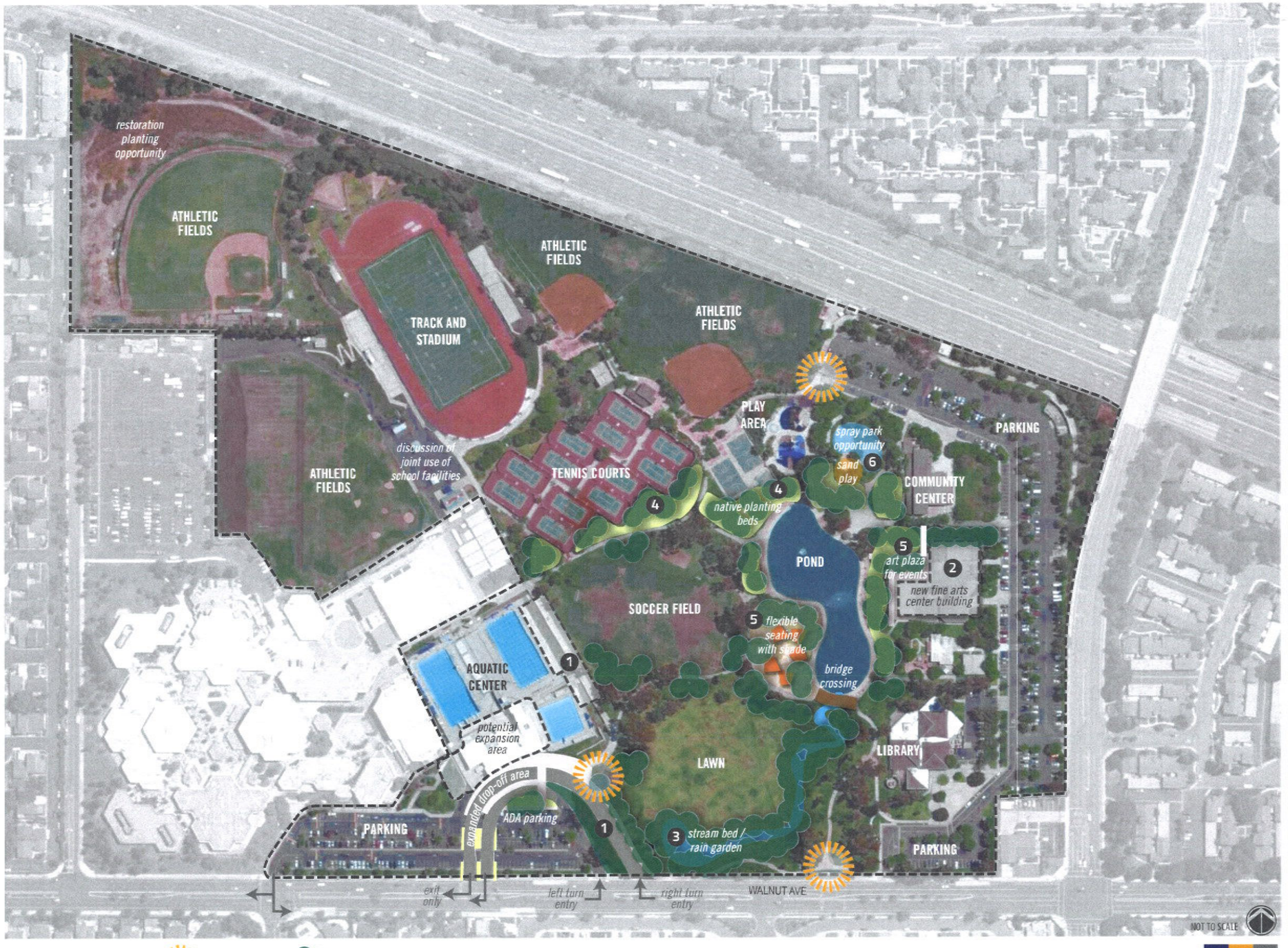
- *Native Planting Beds*: Natural habitat could be reintroduced to the site by replacing turf and ground cover. Additional trees could be added to provide shade, particularly around the pond.

- *Seating and Art*: A variety of seating options could be added throughout the park to promote individual relaxation and/or group gatherings. Flexible café-style seating with colorful shade sails and/or artwork could be introduced near the pond.

- *Play Area Enhancements:* The play area could potentially be renovated to introduce water and/or natural play components.

IRVINE PARKS MASTER PLAN

Figure 3-5: Heritage Park



1 EXPANDED AQUATIC CENTER AND NEW DROP-OFF AREA
The William Woollett Jr. Aquatic Center could be updated to better support national scale swim events. An additional drop-off lane with tree lined entry could prevent traffic congestion at Walnut Ave.

2 A NEW FINE ARTS CENTER
The Irvine fine arts building will be demolished and rebuilt in the same location providing a better connection to surrounding outdoor space for community art installations and events.

3 STREAM CHANNEL / STORMWATER FEATURE
A new stream bed or rain garden with riparian plantings could be added to cleanse and recirculate pond water and enhance the natural habitat in the park for birds and other wildlife. New seating and educational signage could provide more passive space for park users and provide outdoor learning opportunities.

4 NATIVE PLANTING BEDS
Natural habitat could be increased by replacing turf areas with native understory plantings, ground cover plants and increased tree canopy, particularly around the pond.

5 SEATING AND ART
A variety of seating options could be added throughout the park for individual and group gatherings of different sizes. Flexible cafe table seating could be incorporated into the park near the pond area with colorful shade sails and artwork.

6 PLAY AREA ENHANCEMENTS
There is an opportunity to renovate play area, add water play and natural play elements.

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May 2016
Sources: City of Irvine, Google Earth, OCTA, and OC Parks

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MIKE WARD—WOODBRIDGE PARK

Home to the Lakeview Senior Center/ Adult Day Health Care Services Center, Mike Ward Park includes a large lawn overlooking Woodbridge's South Lake. The site is adjacent to Woodbridge Village Center, drawing visitors throughout the course of the day. Figure 3-6 illustrates opportunities for this site, which are described below.

- *Expanded Senior Center:* There is an opportunity to expand and/or renovate the existing senior center to increase capacity for indoor game, fitness, gathering and/or programming space. The Lakeview Senior Center facility should also be modernized to accommodate accessibility and aesthetic improvements.

- *Improved Patio and Courtyard*: With the renovation and/or expansion of the senior center, adjacent outdoor spaces could be redesigned to better promote indoor-outdoor recreation opportunities. Cinder block walls in the courtyard could be replaced with stucco and/or artwork/murals. An attractive shaded back patio could offer views across the park.

- *Shaded Activity Yard with Social Space*: The expanded senior center could open onto a shaded activity area with bocce, shuffleboard, card and chess tables and small group seating spaces where seniors could socialize and relax.

- *Berm and Seatwalls*: A berm with native plantings could be added to buffer the activity yard from the open lawn/event space. Stepped seatwalls in front of the berm could create natural views of the amphitheater and lake.

- *Covered Amphitheater and Event Lawn*: The existing paved performance area could be replaced with a larger covered amphitheater stage and/or gazebo, which could provide additional rental revenue. A flexible-use lawn could be used for performance seating, as well as programming and play space at different times of the day.

- *Added Activities*: By removing the underutilized racquetball/handball courts, innovative features like a climbing spire for children could be introduced. This space could also be used to add courts that support pickleball, a sport that has experienced renewed popularity, particularly with the senior population. Raised garden beds (to be used or allocated through the Senior Center) could also add new recreation opportunities.

- *Planting:* Adding drought-tolerant trees and grasses could reduce maintenance and water use.

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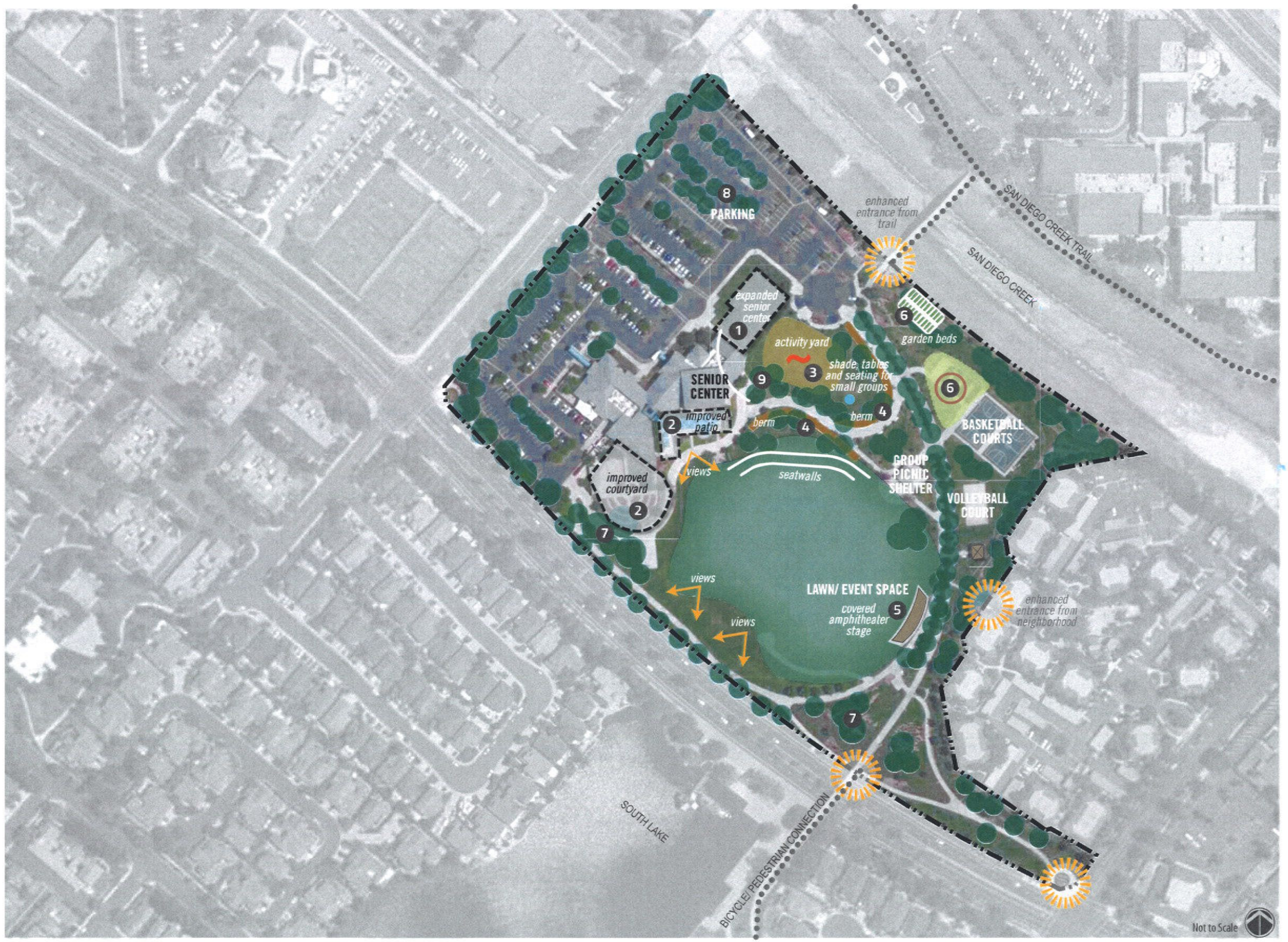
IRVINE PARKS MASTER PLAN

Figure 3-6: Mike Ward Park-Woodbridge



1. EXPANDED SENIOR CENTER
There is an opportunity to expand and renovate the existing senior center to increase activity, fitness and programming space.

2. IMPROVED PATIO AND COURTYARD
With the renovation and expansion of the senior center, outdoor spaces could be improved in appearance and in connection to the park. Cinder block walls in the courtyard could be replaced with stucco or artwork/murals. An attractive shaded back patio could have views of the park by removing the wall and hedged seating area.

3. SHADED ACTIVITY YARD WITH SOCIAL SPACE
The expanded senior center could open to a shaded activity area with bocce, shuffleboard, card and chess tables, and small group seating for seniors to socialize and play.

4. BERM AND SEATWALLS
A berm with native plantings could be added to separate the activity yard from the open lawn/event space, path and climbing spire to create a comfortable sense of enclosure. Stepped seatwalls in front of the berm could create natural views of the amphitheater and lake.

5. COVERED AMPHITHEATER AND EVENT LAWN
The existing paved performance area could be replaced with a larger covered amphitheater stage with trees behind to buffer view of houses. A flexible-use lawn could be used for performance seating, as well as programming and play space at different times.

6. ADDED ACTIVITIES
Repurposed racquetball/handball courts allow space for pickle ball courts adjacent to other active use facilities. Raised garden beds (to be used or reserved though the Senior Center) would add a new use.

7. PLANTING
Adding tree plantings and drought-tolerant grasses and groundcover will reduce maintenance and water use.

January 2017
Sources: City of Irvine, Google Earth, OCTA, and OC Parks

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RANCHO SAN JOAQUIN PARK

This small site primarily supports the Rancho Senior Center. Figure 3-7 illustrates opportunities for Rancho San Joaquin Park, which are described below.

- *Senior Center Expansion*: There is an opportunity to expand the existing senior center and/or attached patio in order to improve and re-program adjacent spaces. The Rancho Senior Center could be modernized and/or reconfigured to include wider hallways, better acoustics, a media/technology resource room, additional fitness/active recreation space, additional storage and office space and better indoor/outdoor connections.

- *Garden Area*: There may be opportunities to repurpose some of the open lawn area into accessible raised gardening beds.

- *Loop Path*: A short loop path could be introduced to wind through the garden and lawn areas. New tree plantings could be added to provide additional shade to the path and/or adjacent seating opportunities.

TURTLE ROCK PARK

Located near Bommer Canyon, Turtle Rock Park includes natural themes and components, including trails and an on-site Nature Center. The park also includes a community center as well as a variety of active and passive recreation areas. Figure 3-8 illustrates opportunities for Turtle Rock Park, which are described below.

- *Conversion to Nature-Themed Park*: Replacing and/or refreshing park facilities with nature-oriented, passive and low-impact features will help brand this site even further. As part of this renovation, the backstop could potentially be removed, the playground could be transformed into a nature play area and the basketball courts could be repurposed into a game court or activity spot. Additional amenities could include a tree house for play and exploration, interpretive components and, possibly, resurfaced/restriped tennis courts for dual pickleball and/or tennis use.

- *Combined Nature & Community Center:* Combining, modernizing and/or expanding the Community Center and Nature Center could add new space for community programming, environmental education and/or nature interpretation. An adjacent

outdoor learning plaza could incorporate a small amphitheater as well as patios with trail access and views of nature. A direct pedestrian undercrossing or overcrossing could potentially link the park with Bommer Canyon by way of the Shady Canyon Hiking and Riding Trail.

- *Planting and Turf Reduction:* Replacing turf with drought-tolerant grasses and/or adding more natural plantings along the creek could improve onsite ecological functions.

IRVINE PARKS MASTER PLAN

Figure 3-7: Rancho San Joaquin Park

1. SENIOR CENTER EXPANSION
Site provides options to expand existing senior center and attached patio, improve and re-program adjacent spaces.

2. GARDEN AREA
Current open lawn area provides opportunity to expand community gardening opportunities with additional accessible raised beds.

3. LOOP PATH
A short loop path through garden and lawn areas could be added, with new tree plantings for additional shade, seating opportunities (benches and/or tables), and native planting/ butterfly garden area.

MIG

May 2016
Sources: City of Irvine, Google Earth, OCTA, and OC Parks

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IRVINE PARKS MASTER PLAN

Figure 3-8: Turtle Rock Park

1. CONVERSION TO NATURE-THEMED PARK
Replacing or refreshing park facilities with nature-oriented, passive and low impact features will distinguish this site. This includes removing the backstop, replacing the playground with a nature-play area, repurposing the basketball court as an activity spot, adding a tree house, adding interpretive elements and resurfacing/striping the tennis courts for pickleball.

2. COMBINED NATURE & COMMUNITY CENTER
Combining, modernizing and expanding the Community Center and Nature Center would enhance space for community programming, environmental education and nature interpretation. An adjacent outdoor learning plaza may incorporate a small amphitheater and patios with trail access, views of the natural area, and indoor/outdoor programming space for reserved uses and programs.

3. QUIET SEATING AREAS
Individual and small group seating and benches could be located in the natural area and across a meadow for reading, contemplation, and outdoor enjoyment.

4. RESERVABLE PICNIC SHELTERS
A refreshed picnic area and small, rustic shelters with surrounding landscaping provide a scenic group-gathering space.

5. PLANTING AND TURF REDUCTION
Turf replacement with drought-tolerant grasses and added natural plantings and access points along the creek will improve the ecological function of the site.

May 2016
Sources: City of Irvine, Google Earth, OCTA, and OC Parks

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Planned Parks and Other Sites

In addition to the community park sites identified above, there are other sites that could present unique opportunities for Irvine:

- IBC Neighborhood Park or Parks
- Gateway Community Park
- Portola Springs Community Park
- Los Olivos Community Park
- Orange County Great Park
- Open Space Opportunities

IBC NEIGHBORHOOD PARK

As a mixed-use area featuring multiple clusters of residential development, the IBC presents an opportunity for the City to develop its first urban park(s). Given typical influxes of workers and visitors into this area, the park(s) will likely attract workers during the daytime and residents in the evening and weekends. Depending on land availability, it may be possible to acquire and/or develop two 1 to 1.5-acre park sites. One park site could be used to provide more traditionally "outdoor" recreation amenities, while by acquiring an existing office or warehouse building and repurposing it into a gymnasium. A second park could be used to satisfy "indoor" recreation needs and serve as a form of Community Park. Figure 3-9 introduces a 1.5-acre conceptual urban park.

- *Site Selection and Context*: Given that IBC parks tend to be smaller than other neighborhood parks and are located in a high density, heavily traveled area, park siting guidelines should be established. Surrounding uses should be considered when selecting a location for the park(s), as park users will be drawn from adjacent residential, office and/or retail areas. At least one site edge should front an interior public street; ideally not an arterial roadway to provide a neighborhood scale and accessible entry. Access to on-street parking should be considered, along with users' ability to reach the park via walking or cycling paths. If feasible, a neighborhood park could be sited along San Diego Creek in order to provide an entryway to the trail network, and to synergize activities with those existing amenities.

- *Dry Streambed and Nature Experience*: An artificial "dry streambed" feature could wind through the site, providing an area for native and drought tolerant planting, opportunities for environmental education and nature play. This feature could be used to help manage stormwater on the site.

- *Children's Play Area*: Play features and/or elements, such as small climbing sculptures, provide programming and play options for children. Given the park's urban context, a nature-themed or "urban jungle" play experience may also provide interesting design opportunities.

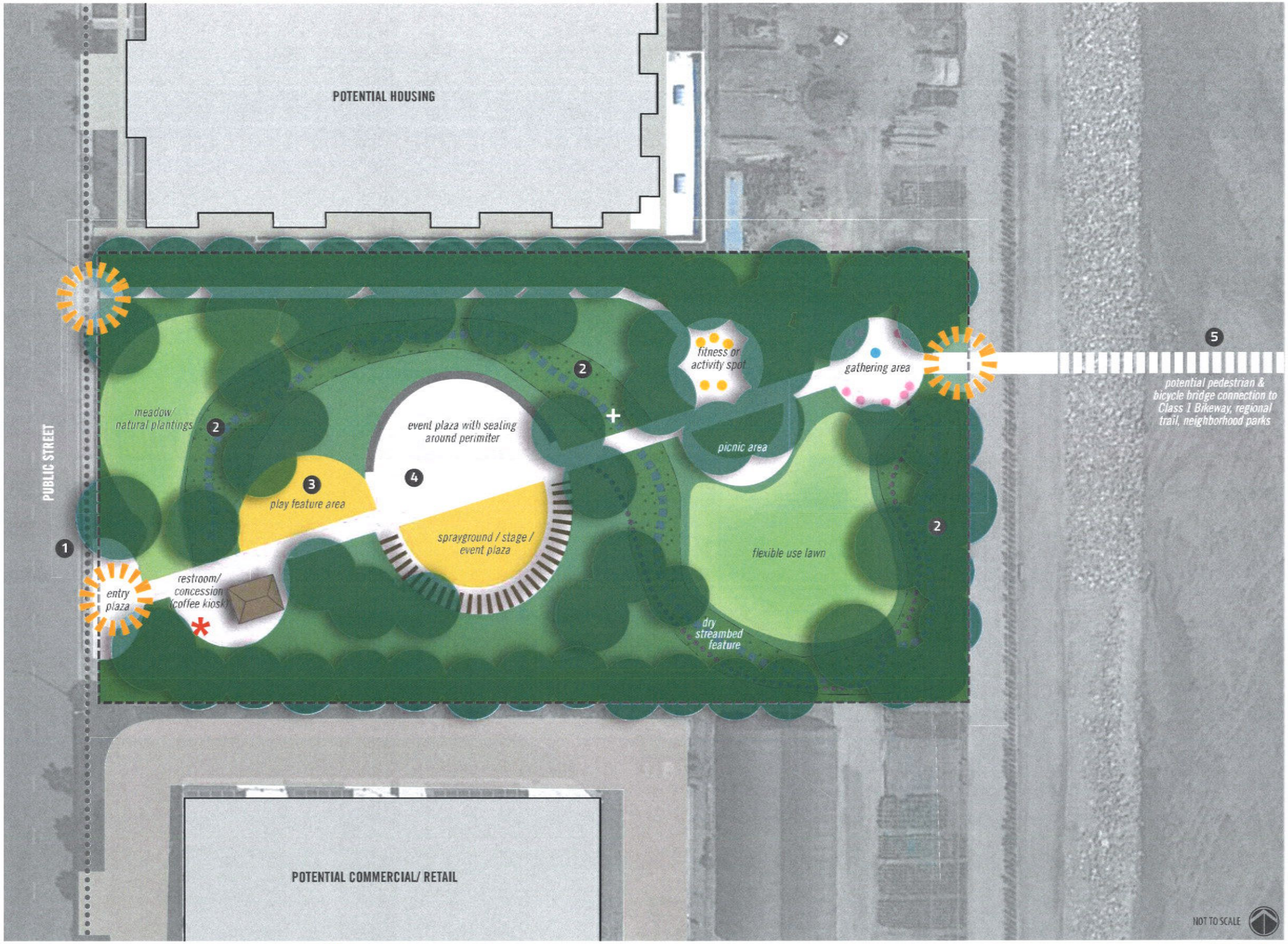
- *Central Plaza and Gathering Area*: A central plaza, gathering area and/or spray ground could be designed to accommodate multiple uses, ranging from small group gatherings to neighborhood events and performances.

- *Regional Trail Connections*: As mentioned above, it may be possible to link the park site with adjacent trail networks. In lieu of providing a large suburban-style community park in the IBC (as has been suggested by the IBC Vision Plan), the City could consider opportunities for linking IBC neighborhoods with San Marco and San Carlo Parks, and ultimately Colonel Bill Barber Marine Corps Memorial Park, via bike and pedestrian bridges across Jamboree and San Diego Creek.

- *Shaded Social Space*: Small spaces shaded by pergolas and/or shade sails could create areas for park visitors to escape the hustle and bustle of surrounding streets.

IRVINE PARKS MASTER PLAN

Figure 3-9: IBC Neighborhood Park Prototype



1. SITE SELECTION AND CONTEXT
Site selection takes into account the surrounding context, with park users to be drawn from residential, office and/or retail nearby. At least one edge of site fronts a public street. Consider access to street parking and ability of users to reach park via walking, bicycle, etc.

2. DRY STREAMBED AND NATURE EXPERIENCE
A "dry streambed" feature winds through the site, providing an area for native / drought tolerant planting, opportunities for environmental education and nature play. This feature may be used to help manage stormwater on the site.

3. CHILDREN'S PLAY AREA
Play features and elements, such as small climbing sculptures or urban play equipment, provide programming for children.

4. CENTRAL PLAZA AND GATHERING AREA
A central plaza, gathering area and a spray ground may be designed to accomodate multiple uses, from small group seating areas to events & performances.

5. REGIONAL TRAIL CONNECTIONS
Consider opportunities in site selection to provide new non-motorized (bicycle and pedestrian) connections to regional trails and bikeways, other nearby parks, and regional natural features such as San Diego Creek and the San Joaquin Marsh.

6. SHADED SOCIAL SPACE
There is an opportunity to provide a pergola or shade sails over grouped benches near this entry.

May 2016
Sources: City of Irvine, Google Earth, OCTA, and OC Parks

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GATEWAY PARK

Since 2003, plans for the future Gateway Park have included four softball-soccer field overlays, six tennis courts, six basketball courts, one sand volleyball court, one handball court, a playground and a community center. Based on community outreach priorities identified in this *Master Plan*, as well as the fact that numerous sports fields and courts will be provided nearby at the OCGP Sports Park, there may be an opportunity to vary the amenities originally planned for this site. Considering the site's proximity to the Northern Open Space Preserve as well as its location at the terminus of the Jeffrey Open Space Trail (JOST), it may be possible to design the site as a link between Irvine and its surrounding open space, utilizing recreational amenities compatible with this context. A key feature of this park could be an 18-hole disc golf course, relocated from Deerfield Park. Gateway may also be an ideal setting for an outdoor classroom, nature trails, a universal or thematic playground or a large reservable picnic shelter/pavilion for events and programs.

PORTOLA SPRINGS PARK

Portola Springs Community Center will feature a Native American wing and adjacent garden. Image Credit: Irvine Company

Portola Springs Park is planned as a 25-acre multi-use community park. It will include two softball fields, two soccer fields, one warm-up/practice field, three tennis courts, six pickleball courts, one sand volleyball court, a 12,000-square-foot community center, a children's play area and natural trail. The park will be proximate to nearby trail and open space amenities.

LOS OLIVOS PARK

Planned to include just over 12 acres of community parkland, Los Olivos Park will offer additional recreation opportunities for residents of the emerging Spectrum and Los Olivos neighborhoods. Park amenities are planned to include four lighted tennis courts; one lighted basketball court; one lighted, multipurpose soccer field; one lighted softball/baseball field; and a 6,000-square-foot community building. To vary the tennis play experience, there may be opportunities to surface the courts using turf or clay.

ORANGE COUNTY GREAT PARK

The OCGP will be constructed as planned, pending additional public outreach which was ongoing at the time this *Master Plan* was developed. As the City explores features to include in the Cultural Terrace, there is an opportunity to consider the feasibility and market for a performing and cultural arts venue or for the relocation of the Fine Arts Center from Heritage Park . Community outreach findings and the facility analysis conducted for the *Parks and Recreation Needs Assessment* identified a community desire for a multipurpose community theater with programming, event and performance space for the creative arts, dance, theatre and cultural arts. While needs for outdoor amphitheaters could partially be met in Mike Ward and Bill Barber parks, no community park site is suitable for the type of large indoor/outdoor facility that could support community music, theater and performing arts classes and programs. A market, financial feasibility and programming study would be needed to further evaluate opportunities for this type of event and programming venue, particularly where nearby universities offer performance halls.

At this time, a golf course is also planned for the OCGP. A feasibility study for the proposed golf course would also be beneficial to identify demand trends, style of course, size and price point. Additionally, the study could evaluate a potential clubhouse, operations and public/private partnerships.

OPEN SPACE OPPORTUNITIES

Through community engagement opportunities, residents expressed a strong desire to have increased connections with, and access to, nature. To provide such opportunities, parks adjacent to open space (such as Turtle Rock) can be designed to have even stronger natural themes and components. The City should continue to develop extensions to the JOST, perhaps exploring Gateway Park as a connection between the JOST and the Northern Open Space. While Bommer Canyon Trailhead is already open from 7 a.m. to sunset, seven days a week, there may be additional opportunities to increase parking capacity at the site, or to pursue additional programs that could fit within conservation agreement requirements. In terms of programming, the City could pilot outdoor and wilderness-oriented activities, including urban camping, mountain biking, nature identification and self-directed hiking. The City could also explore opportunities for open space education and interpretation classes designed to introduce the public to the unique habitat, history and culture of our area. Gateway Park provides an opportunity to develop a unique historical, cultural and educational natural environment for the community.

FACILITY INNOVATIONS

Based on community feedback and emerging recreation trends, opportunities exist to expand the variety of recreation amenities available in Irvine public parks. While Irvine parks are already recognized for their quality, additional recreation amenities like the ones listed in the coming pages could help round out the park system and provide new activities and experiences for visitors as funds and opportunities become available. Specific locations for these amenities have not yet been identified, as the improvements are conceptual and would require further study, analysis and prioritization.

Examples are organized into the following categories:

I. Play Areas
II. Specialized Facilities
III. Specialized Athletic Facilities
IV. Event Venues
V. Gardens
VI. Social Spaces
VII. Natural/ Educational Features
VIII. Trails

As not all of these conceptual amenities are readily familiar, each example includes a brief description of the facility as well as an indication of the type of park setting for which it would best be suited. Innovations in this section are based on community feedback, emerging recreation trends and overall community priorities and preferences as identified through the public engagement process. Each element is tied to the key outreach themes that would be advanced through development of that type of facility. These outreach themes are described in detail in Appendix B and are listed in the side bar to the right.

Outreach Themes:

Based on outreach activities, several key themes emerged:

- Connectivity and Access
- Diversity of Activities, Amenities and Facilities
- Education
- Evolving Needs
- Flexibility
- Health, Wellness and the Outdoors
- Partnerships
- Standards and Maintenance

I. Play Areas

I.A DESTINATION PLAY AREA

A destination play area is a large, themed playground that may feature adventure play, water play and/or nature play components. Its unique play elements are designed to attract people from across the City and to support imaginative, creative and active play for both children and families.

Park Type Where Appropriate

- Community Park

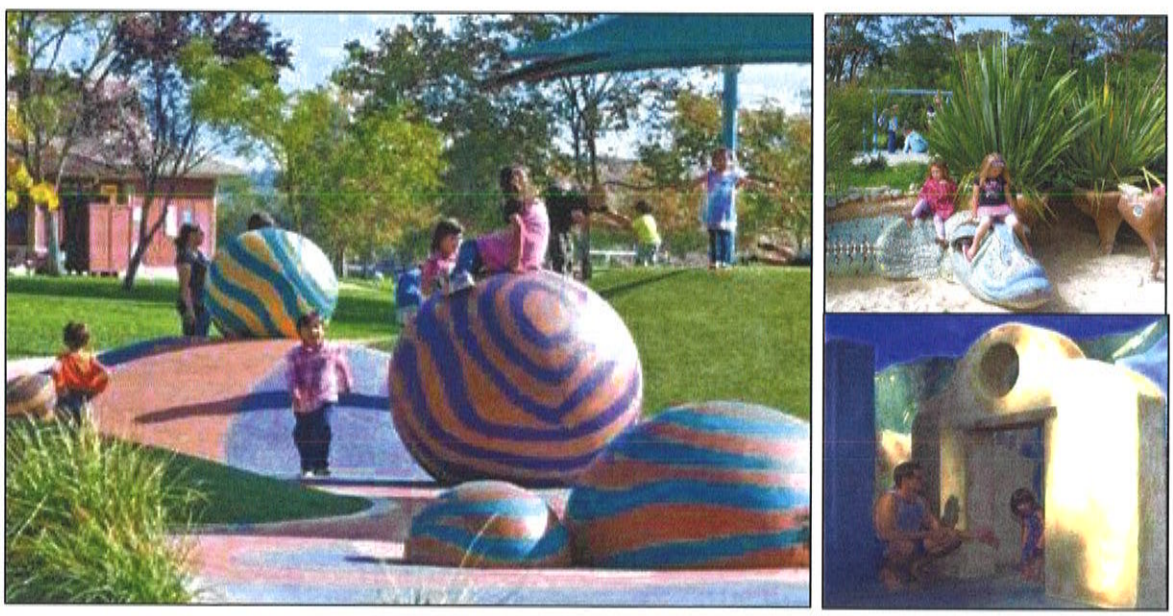
Community Outreach Themes Supported

- Diversity of Activities, Amenities and Facilities
- Health, Wellness and the Outdoors

Implementation Ideal

- Locate in three to five parks dispersed around the City
- Disperse geographically from the Adventure Playground at University Park

Examples



Left: Always Dream Play Area, Fremont, California; Top Right: Koret Children's Quarters, Golden Gate Park, California; Bottom Right: Chase Palm Park, Santa Barbara, California

I.B NATURE PLAY AREA

Nature play areas are play spaces comprised of natural components such as plants, logs, water, sand, mud, boulders, hills and trees. The goal of a nature play area is to inspire children to explore the natural world in a safe and manageable environment.

Park Type Where Appropriate

- Community Park (for larger-scale nature play areas)
- Neighborhood Park (for smaller-scale nature play areas)

Community Outreach Themes Supported

- Diversity of Activities, Amenities and Facilities
- Education
- Health, Wellness and the Outdoors

Implementation Ideal

- Locate in three to five parks dispersed around the City
- Disperse geographically from existing nature play opportunities at Turtle Rock Park
- For thematic ambience and synergy, site at parks adjacent to open space or regional trails, or else in dense urban settings in the IBC where nature is lacking

Examples

Tamarack Nature Center, Ramsey County, Minnesota

Royal Park Nature Play playground, Parkville VIC, Australia

I.C UNIVERSAL PLAY AREA

Universal play areas are play spaces designed to be used by people of all ages and abilities, to the greatest extent possible, without the need for adaptation. Well-designed sites support child development, integrated play and social opportunities for children and family members with mobility, visual, hearing and other impairments.

Park Type Where Appropriate

- Community Park

Community Outreach Themes Supported

- Diversity of Activities, Amenities and Facilities
- Health, Wellness and the Outdoors
- Connectivity and Access
- Education

Implementation Ideal

- Provide in an accessible location
- Disperse geographically from similar facilities

Examples

Brookside Park, Reese's Retreat, Pasadena, California

Bluebell Park, Knowsley, United Kingdom

I.D WATER PLAY AREA

These play areas integrate interactive water features using little or no standing water. Water play areas may occur in a variety of configurations and include hand-operated water pumps and channels, ground nozzles that spray water upwards from a slip-resistant rain deck or shower-type features. Water use can be controlled by a pump or motion-controlled sensor tied to a shut-off valve to conserve water. While fresh water may be used, many water play areas apply a water filtration and recirculation system for efficient use. Nevertheless, some designs can require frequent refilling and incur additional maintenance costs, so the feasibility of these amenities should be carefully considered in a drought context. Water play can be combined with sand play or added to unique elements such as hydraulophones to make music. Water play areas also work well in urban plazas that can double as event spaces when the water features are turned off.

Park Type Where Appropriate

- Community Park
- IBC Neighborhood Park

Community Outreach Themes Supported

- Diversity of Activities, Amenities and Facilities
- Health, Wellness and the Outdoors
- Education

Implementation Ideal

- Locate in three to five parks dispersed around the City
- Consider for areas without nearby swimming pools

Examples

Livermore Park Water Play Area, Folsom, California; The water play areas use a minimal amount of recirculated and treated water.

Gardens By The Bay, Singapore

Grand Park, Los Angeles, California

II. Specialized Facilities

II.A BIKE SKILLS PARK

Bike skills parks include a variety of amenities, such as bike tracks and trails with natural or simulated topography, designed to introduce riders to the basics of off-road cycling. Bike skills parks are becoming more common as standalone recreation facilities, particularly in communities with nearby mountain biking trails. Bike parks may include:

- Bike Pump Track: A feature that generates momentum on a bike without pedaling. By shifting weight on the bike and "pumping" over rollers and through turns, a rider can produce forward motion.
- Bike Flow Trail: A purpose-built trail that maximizes the natural attributes of the terrain while minimizing interruptions imposed by sharp turns or abrupt braking. Flow trails are generally descents, though some climbing sections may be included. They create a rolling rhythm by smoothly combining features like banked turns, rollers and jumps to guide riders through the landscape in a seamless fashion.
- Bike Dirt Jump or other Skills Features: A launching platform or other obstacle course features designed to produce air time, teach balance and other bike skills.

Park Type Where Appropriate

- Community Park

Community Outreach Themes Supported

- Diversity of Activities, Amenities and Facilities
- Health, Wellness and the Outdoors
- Evolving Needs

Implementation Ideal

- Pilot programs at test sites with the possibility of a more permanent addition if successful

Examples

Top Left: Bike Skills Park, New Columbia Neighborhood, Portland, Oregon; Top Right: Teeter Totters, Dupont State Park, North Carolina; Bottom Left: Urban/asphalt pump track, Chur, Switzerland; Bottom Right: Brunel Way Pump Track, Bristol, England

II.B DOG RUN

Dog runs typically include dedicated fenced-in areas within parks where dogs may be exercised untethered. Surfaces typically include turf, decomposed granite, synthetic turf or a combination of the three. Site amenities can include dog waste dispensers, seating and gated entries, if fenced. Additional site amenities may include drinking stations, water pools, shade structures, picnic tables, rolling topography, lighting and landscaping. Smaller than a dog park, a dog run may or may not have separate areas for large and small dogs.

Park Type Where Appropriate

- Community Park
- Neighborhood Park
- Special Use Site

Community Outreach Themes Supported

- Diversity of Activities, Amenities and Facilities
- Health, Wellness and the Outdoors

Implementation Ideal

- Pilot programs at test sites at community parks with the possibility of a more permanent addition if successful
- Park sites with sufficient parking for increased visitors
- Compatible with surrounding uses

Examples

Left: Schuyklkill River Park Dog Run, Philadelphia, PA; Right: Richmond Street Dog Run, Boston, MA

II.C OUTDOOR EXERCISE EQUIPMENT

Rather than going to a private gym, outdoor exercise areas introduce durable fitness equipment into public parks or along trails. Equipment is usually designed for all ages and fitness levels, adding a social, multigenerational element to outdoor public spaces. Typically provided in a fitness cluster of 4-10 pieces, the low-impact, low-maintenance exercise equipment can be grouped in an activity spot, provided adjacent to traditional playgrounds, or dispersed along trails for a par course experience. Surfacing under fitness equipment should be provided so as to meet current codes.

Park Type Where Appropriate

- Community Park
- Along urban and natural trails
- IBC Neighborhood Park

Community Outreach Themes Supported

- Diversity of Activities, Amenities and Facilities
- Evolving Needs
- Health, Wellness and the Outdoors

Implementation Ideal

- Pilot programs at test sites with the possibility of a more permanent addition if successful

Examples

Left: Big Lake Trail in City Park, New Orleans, LA; Right: Community Center Park in Camarillo, CA

II.D ACTIVITY SPOT

An activity spot unites several small-scale, non-sport active or playful recreation features that foster individual or small group activities. Typically designed to be separate from traditional play areas, activity spots may include skate spots, uneven shooting hoops , outdoor ping pong tables, giant chess boards, chess tables, pop-up play installations, hill slides/climbers (often adjacent to stairs), slack lines, hammocks, unique swings, mini foot golf, putting greens, etc. to support fitness and social interaction. Skating activities in particular may be integrated into a plaza-style design featuring architectural focal points, "skate-able" art, transitions, aesthetic enhancements and integrated landscaping – all designed to suit a wide range of skill levels.

Park Type Where Appropriate

- Community Park
- Neighborhood Park

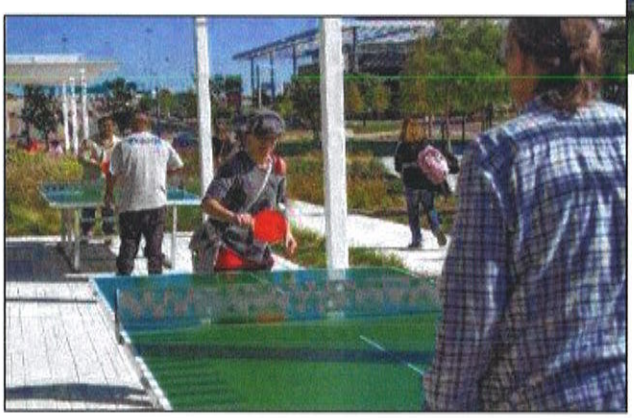
Community Outreach Themes Supported

- Evolving Needs
- Diversity of Activities, Amenities and Facilities
- Health, Wellness and the Outdoors

Implementation Ideal

- Locate in three to five parks dispersed around the City
- Provide near schools, retail centers, offices and urban settings

Examples



Top Left: Veterans Park Skate Spot, Tracy, California; Top Right: Chess Plaza, UT Dallas, Texas; Bottom Left: Ping Pong Tables at Klyde Warren Park, Dallas, Texas; Bottom Right: Imagination play with moveable furniture, Klyde Warren Park, Dallas, Texas

II.E TAI CHI LAWN OR COURT

Tai Chi is an art that emphasizes natural movement and can be practiced in a variety of locations. Outdoor training areas are often located in flat, well-lit areas, free from noise and other distractions. Many practitioners prefer to work in natural settings. Along these lines, Tai Chi lawns or courts may include a 48-foot-diameter area of flag-stone situated in a serene natural setting. When not programmed for Tai Chi, these areas can be used for a variety of outdoor fitness classes.

Park Type Where Appropriate

- Community Park

Community Outreach Themes Supported

- Evolving Needs
- Diversity of Activities, Amenities and Facilities
- Flexibility
- Health, Wellness and the Outdoors

Implementation Ideal

- Locate in three to five parks dispersed around the City

Examples

Left: Tai Chi lawn at Meadow Park, San Luis Obispo, CA; Right: Cabin John Regional Park, Bethesda, MD

III. Specialized Athletic Facilities

III.A ARCHERY RANGE

These archery facilities provide shooting stations and safety berms where users of different ages and abilities can safely engage in target practice. Ranges may vary in size from smaller half-acre compounds with a few targets up to 5 to 10-acre sites used to host national tournaments and Olympic qualifiers.

Park Type Where Appropriate

- Community Park

Community Outreach Themes Supported

- Diversity of Activities, Amenities and Facilities
- Health, Wellness and the Outdoors

Implementation Ideal

- Provide in an accessible location
- Explore partnerships with non-profits for implementation and funding opportunities

Examples

Left and Top Right: Mile Square Regional Park Archery Range, Orange County, CA; Bottom Right: Archery Range, Santiago Creek, Orange County, CA

III.B DISC GOLF COURSE

Disc golf courses are typically designed as 9 or 18-hole courses where players toss discs instead of putting/driving with clubs and golf balls. Natural terrain often dictates course design, including flat and sloping surfaces, tree-lined fairways and rugged out-of-play areas. Courses can include a series of numbered posts and baskets set at varying intervals to serve as "holes." Each hole can be identified with signage. Tee pads may be hard or soft-surfaced, but concrete or rubber is ideal to reduce wear. Championship courses are typically built with one to two acres per hole. Recreational courses can have two to three holes per acre. Typical facility sizes range from 6 to 40 acres, depending on the skill level for which the course is designed.

Park Type Where Appropriate

- Community Park
- Special Use Site

Community Outreach Themes Supported

- Evolving Needs
- Diversity of Activities, Amenities and Facilities
- Health, Wellness and the Outdoors

Implementation Ideal

- Provide in an accessible location
- Explore partnerships with non-profits for implementation and funding opportunities

Examples

Left: North County Park, Cape Girardeau County, MO; Right: Central Park Disc Golf Course, Huntington Beach, CA

III.C MULTI-PURPOSE SPORTS FIELD (SYNTHETIC)

These rectangular play fields, with a minimum 68,500 square feet in area and a variety of field dimensions and markings, can accommodate numerous sports including football, soccer, lacrosse and field hockey. Synthetic turf can be installed to create opportunities for more frequent and intensive use. These fields may include lighting, bleachers and permanent or movable goals designed to suit multiple configurations.

Park Type Where Appropriate

- Community Park

Community Outreach Themes Supported

- Flexibility
- Diversity of Activities, Amenities and Facilities
- Evolving Needs
- Health, Wellness and Outdoors

Implementation Ideal

- Gage success of at one facility before expanding to other park sites

Examples

Left: Multi-purpose synthetic turf fields for football and soccer at Towncenter Community Park, Santee, CA; Right: Multi-purpose synthetic turf fields at Sage Hill School, Newport Coast, CA

III.D SPORTS COURTS

Unlike single-use courts, sports courts can come in a variety of dimensions, surfaces and configurations to support flexible play. Well-designed courts provide opportunities for traditional sports like basketball, sand volleyball and tennis, as well as emerging activities like pickleball, bocce, petanque, badminton, futsal, racquetball, wallball and horseshoes.

Park Type Where Appropriate

- Community Park
- Neighborhood Park

Community Outreach Themes Supported

- Evolving Needs
- Diversity of Activities, Amenities and Facilities
- Health, Wellness and the Outdoors
- Flexibility

Implementation Ideal

- Pilot programs at test sites with the possibility of a more permanent addition if successful

Examples

Futsal court in Vance park, Portland, OR

Left: Pickleball courts in Tapo Canyon Community Park, Simi Valley, CA

Right: Bocce ball court in Albert Park, San Rafael, CA

III.E TRACK AND FIELD VENUE

These facilities can include competition-quality track and field venues for running, jumping and throwing.

Park Type Where Appropriate

- Community Park
- Local School, shared via joint-use agreement

Community Outreach Themes Supported

- Diversity of Activities, Amenities and Facilities
- Health, Wellness and the Outdoors
- Flexibility

Implementation Ideal

- Provide in an accessible location
- Partnerships with non-profits for implementation and funding opportunities

Example

Riverbank Park, Newark, New Jersey

IV. Event Venues

IV.A OUTDOOR FESTIVAL AND EVENTS VENUE

These gathering spaces can come in a variety of shapes and forms, featuring turf or hardscape seating areas with access, utilities and infrastructure designed to support large group events of 200 to several thousand people. The site should offer sufficient space for portable equipment, stages and support amenities and furnishings (such as temporary restrooms, trash receptacles, benches, bike racks, etc.) brought in for events.

Park Type Where Appropriate

- Community Park

Community Outreach Themes Supported

- Diversity of Activities, Amenities and Facilities
- Health, Wellness and the Outdoors

Implementation Ideal

- Provide in an accessible location
- Sites with sufficient parking for increased visitors

Examples

Left: Director's Park Plaza, Portland, Oregon; Right: Paine's Park, Philadelphia, Pennsylvania

IV.B OUTDOOR PERFORMANCE SPACE

These areas typically include an outdoor amphitheater, stage or performance space with nearby electrical outlets. Seating may be hard- or soft-surfaced, with permanent, movable or else no designated seating. Space provided may be sufficient to accommodate groups of anywhere from 200 to 1,000 people. Support amenities such as shade, restrooms and concessions are often provided.

Park Type Where Appropriate

- Community Park

Community Outreach Themes Supported

- Diversity of Activities, Amenities and Facilities
- Evolving Needs
- Health, Wellness and the Outdoors

Implementation Ideal

- Locate in three to five parks dispersed around the City
- Locations that already feature/host outdoor events

Examples

Right: Veterans Memorial Amphitheater, City of St. Louis Park, MN

Cubhert Amphitheater, Eugene, OR

Left: Meinig Park, Sandy, OR

V. Gardens

V.A COMMUNITY GARDEN

Community gardens usually consist of raised garden plots situated in areas with solar, soil, and topographic conditions suited to agriculture. Plot sizes may vary, but typically include a minimum twenty-five square feet per plot, with wide walkways (approximately 4 feet) adjacent to each plot. Gardens are often fenced around the perimeter, and may be managed and maintained by volunteers. Community gardens may include demonstration areas that are used for educational and social purposes.

Park Type Where Appropriate

- Community Park
- Neighborhood Park
- Special Use Site

Community Outreach Themes Supported

- Health, Wellness and the Outdoors
- Education
- Evolving Needs
- Partnerships

Implementation Ideal

- Pilot programs at test sites with the possibility of a more permanent addition if successful
- Near IBC or Spectrum where private yards are limited

Examples

Luscher Farm Community Gardens, Lake Oswego, OR

Johns Community Garden, Portland, OR

V.B DEMONSTRATION GARDEN OR BOTANICAL GARDEN

Demonstration gardens introduce visitors to different plant palettes or else to new cultivation techniques such as organic gardening and xeriscaping. Botanical gardens may be more formal in arrangement, yet can also provide opportunities for visitors to learn about regional plant palettes and various landscape design principles.

Park Type Where Appropriate

- Community Park
- Neighborhood Park

Community Outreach Themes Supported

- Health, Wellness and the Outdoors
- Education
- Evolving Needs
- Partnerships

Implementation Ideal

- Pilot programs at test sites with the possibility of a more permanent addition if successful

Examples

Left: Brightside Demonstration Garden, St. Louis, Missouri

V1. Social Spaces

VI.A PARK PAVILION

A pavilion typically includes a large shelter structure designed for groups of 150 to 200 people. Pavilions are typically reservable, and may include tables (picnic or portable), seating, barbecue grills, water, electricity, nearby restrooms and easy access for loading/unloading supplies. With movable tables and chairs, the pavilion may be flexibly programmed for other uses such as recreation classes and events.

Park Type Where Appropriate

- Community Park

Community Outreach Themes Supported

- Diversity of Activities, Amenities and Facilities
- Health, Wellness and t he Outdoors
- Flexibility

Implementation Ideal

- Provide according to updated level of service standards

Examples

Top Left: Abbott Loop Community Park, Anchorage, AK; Top Right: State Game Lodge Pavilion, Custer, SD; Bottom: Fairgrounds Park, Loveland, CO

VII. Natural/ Educational Features

VII.A INTERPRETATION VENUE

These educational and informational features introduce visitors to sites of local historical significance, cultural heritage and natural resources.

Park Type Where Appropriate

- Community Park
- Neighborhood Park

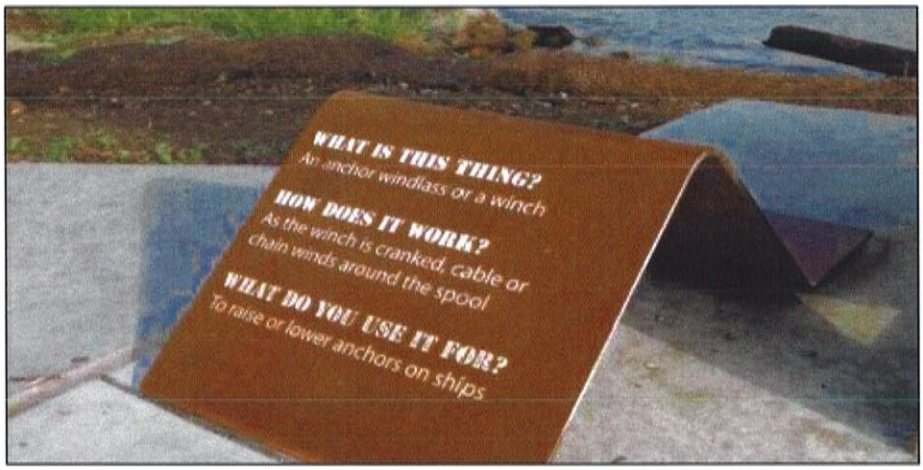
Community Outreach Themes Supported

- Education
- Diversity of Activities, Amenities and Facilities
- Health, Wellness and the Outdoors

Implementation Ideal

- Pilot programs at test sites with the possibility of a more permanent addition if successful
- Locate near open space

Examples



Top: An interpretive sign explains a large bioswale in Kitsap County, Washington

Middle: Bay trail interpretation signage of the history of the shoreline, Alameda, California

Bottom: Interpretive Kiosk, Dills Park, Paramount, California

VII.C OUTDOOR CLASSROOM

These small gathering spaces are designed to facilitate nature-based learning and discovery.

Park Type Where Appropriate

- Community Park

Community Outreach Themes Supported

- Education
- Diversity of Activities, Amenities and Facilities
- Health, Wellness and the Outdoors

Implementation Ideal

- Pilot programs at test sites with the possibility of a more permanent addition if successful
- Locate near school or where bus parking is possible
- Integrate at Gateway Park

Examples

Left: Outdoor classroom, Red Pine Trail, Niskayuna, New York; Right: Grundy Lake Provincial Park, Ontario, Canada

VIII.B NATURE TRAIL

Dependent on Natural Community Conservation and Habitat Conservation Plan and adopted Recreation and Resource Management Plans, there may be opportunities to create additional soft-surfaced nature trails in appropriate areas of the City's open space. Amenities may include a trail head, directional signage and, where appropriate, interpretive signage, drinking fountains, benches or alternative seating such as boulders or seatwalls.

Park Type Where Appropriate

- Community Park
- Special Use Site

Community Outreach Themes Supported

- Connectivity and Access
- Diversity of Activities, Amenities and Facilities
- Health, Wellness and the Outdoors
- Education

Implementation Ideal

- Provide according to updated level of service standards
- Pursue as feasible within context of existing conservation agreements

Examples

Left: Forest Park Trail, Portland, Oregon; Right: Horseshoe Trail, Irvine Regional Park, Orange, California

POTENTIAL PARK IMPROVEMENT FUNDING SOURCES

To maintain Irvine's wide-ranging park system and programs, implement new park improvement opportunities and renovate existing facilities or build new ones, the City must continue to lead as an innovator by using fiscally sustainable and sensible funding sources. This section includes a menu of funding options for park and facility improvements and associated maintenance, many of which the City of Irvine already utilizes.

General Fund and Assessments

GENERAL FUND

The operations budget, or General Fund budget, is the City's annual fiscal operating plan for the receipt and disbursement of funds used to provide daily, routine public services to the community. This is the City's primary source for operating revenue. The operations budget outlines the many municipal services, programs and projects provided by the City during the fiscal year. It also identifies specific General Fund revenue estimates and expenditures necessary to implement services to the community. Revenue sources for the General Fund include assessment revenue, development fees, documentary transfer tax, service fees, fines and forfeitures, franchise and hotel taxes, licenses and permits, miscellaneous revenues, motor vehicle in-lieu revenues, program and services fees, property taxes, revenue from other agencies, sales taxes and utility user taxes. General Fund expenditures are related to capital equipment, contract services, internal services, repairs and maintenance, salary and benefits, supplies, training expenses, utilities and miscellaneous expenses.

The City's General Fund incurs a majority of park capital and operations expenses. While parks and recreation services are highly valued, General Fund resources will always be competitive. Changing priorities and needs across all City services make the level of funding for parks and recreation less predictable. Further, there is no automatic increase in operations support funds with the passage of time or added facilities. While general fund dollars will continue to be an important funding source for parks and recreation (particularly operational costs), there are several other potential sources of funding to consider.

ASSESSMENT DISTRICTS

An assessment district is a mechanism that allows cities to assess housing units or land parcels to maintain and improve street lighting, landscaping and parks that provide a special benefit to designated areas. Assessment districts help each property owner pay a fair share of the costs of such improvements over a period of years at reasonable interest rates. This ensures that the cost will be spread to all properties that receive direct and special benefit from the improvements constructed. Establishment of a new district or revision to an existing district requires a vote of the property owners. The majority of returned votes must be in favor of establishing the district.

LANDSCAPE, LIGHTING AND PARK MAINTENANCE DISTRICT

The City manages the Landscape, Lighting and Park Maintenance (LLPM) special assessment district, which provides funds for park and parkway landscaping, lighting and park maintenance. The key services provided by the LLPM related to parks include lights, athletic fields, playgrounds, playground equipment, public restrooms, park furniture, site amenities and appurtenant facilities in public parks and recreation facilities within the boundaries of the City of Irvine. The territory included in the District is generally described as being conterminous with the boundaries of the City of Irvine, thereby covering the entire City.

This district is projected to bring in $8.59 million dollars in revenue in Fiscal Year 2016-17. Total service costs are estimated at $17.7 million for that fiscal year. The services eligible under the authorizing vote for this district will exceed these levels by $9.1 million; the difference will be covered largely by the General Fund. It is possible to increase the per-parcel rate for this District, with a successful vote of a majority of property owners. While increased assessments are not generally popular, it is a resource to consider. As an existing source there is an established knowledge and logic to what it covers (i.e., dedicated to parks) and the enabling legislation allows for great flexibility in using LLPM resources for either capital or operational expenses (which is uncommon in most funding sources).

MELLO-ROOS COMMUNITY FACILITY DISTRICT

The Mello-Roos Community Facilities Act of 1982 allows any county, city, special district, school district or joint powers authority to establish a Mello-Roos Community Facilities District ("CFD") to finance public improvements and services. The services and improvements that Mello-Roos CFDs can finance include parks, as well as streets, sewer systems and other basic infrastructure, police protection, fire protection, ambulance services, schools, libraries, museums and other cultural facilities. Formation

of a CFD requires a two-thirds vote of residents living within the proposed boundaries. If there are fewer than 12 residents, then the vote is instead conducted of current landowners. The assessment cannot be based on property value; instead, it is based on the size of the property or square footage of structures. By law, the CFD is also entitled to recover expenses needed to form the CFD and administer the annual special taxes and bonded debt. The special assessment continues until bonds are paid off and then is typically reduced to a level to maintain the investments.

In the City of Irvine, Mello-Roos taxes are a funding mechanism used for nearly every community built since 1988. Newly constructed homes in Irvine also have the tax. Communities that do not have Mello Roos taxes include El Camino Real, Turtle Rock, University Park and most of Northwood and Woodbridge. This is due to the fact that these were some of the first Irvine communities built before 1988.

Dedications and Fees

PARK LAND DEDICAITON AND IN-LIEU FEE (QUIMBY ACT)

The Quimby Act (California Government Code Section 66477) authorizes cities to require the dedication of land or to impose fees for park or recreational purposes as a condition of approval of certain types of residential development projects. Any land required to be dedicated and/or fees required to be paid are to be used to acquire new parkland or fund capital improvements at existing recreation and park facilities which will serve residents of the new development. Revenues generated through the Quimby Act cannot be used for the operation and maintenance of park facilities.

Pursuant to the Quimby Act, the Irvine's Parks and Recreation Element of the General Plan and the Subdivision Ordinance (Section 5-5-1004 of the Irvine Municipal Code) require developers to dedicate park land and/or improvements/amenities and/or pay fees in lieu of dedication, at a rate of five acres per 1,000 persons. The City of Irvine public park system is divided into two park categories: community parks and neighborhood parks. Neighborhood parks are further divided into public and private parks. The allocation of land and improvements is apportioned at two acres to community parks and three acres to public and/or private neighborhood parks.

Eligible Minimum Improvements (Park Credits)

In addition to the dedication of land and/or park in-lieu fees, the City of Irvine allows the requirements of the Quimby Act to be satisfied through developer provision of eligible

minimum improvements, recreational amenities and design and improvement costs for the development of parks as an equivalent substitute for park dedication in-lieu fees or park land dedication requirements. The City prepared a schedule of recreational improvement values for public parks and private parks.

All projects seeking park dedication credit for minimum improvements, recreational amenities, design and construction costs, land off-site and/or in-lieu fees require an appraisal to assess the fair market value of land. The purpose of the appraisal is to estimate the cost for purchasing parkland within the development or with another development with similar characteristics.

The City's Park/Public Facility Standards provides guidance in acceptance of park land, collection of park fees, or provision of in lieu improvements and criteria for design of public and private parks.

IMPACT FEES

An impact fee is a monetary exaction other than a tax or special assessment. It is charged by a local governmental agency to an applicant in connection with approval of a development project for the purpose of defraying all or a portion of the cost of park facilities related to the proposed development project. The legal requirements for enactment of a development impact fee program are set forth in Government Code § 66000- 66025 (the "Mitigation Fee Act"), the bulk of which was adopted as 1987's Assembly Bill (AB) 1600 and thus are commonly referred to as "AB 1600 requirements." If a development impact fee does not relate to the impact created by development or exceeds the reasonable cost of providing the public service, then the fee may be declared a special tax and must then be subject to a two-thirds voter approval. Although the City of Irvine does have impact fees for schools, fire facilities, transportation and other infrastructure needs for new communities, it does not have impact fees for parks. The City relies on the Quimby Act (Section 5-5-1004 of the Irvine Municipal Code) to acquire and pay for new parks related to new development.

This served the City well as new major residential developments were established. However, as the type of development changes and the City matures, a fresh look at the methods of participation in the development of the park system is warranted. Quimby Act land dedication, and any fees or development in-lieu fees, are triggered by the subdivision of land. Many redevelopment projects, most notably multi-story residential or mixed-use buildings, do not require a subdivision and therefore contribute no additional funding to off-set the demand created by additional residential units. Conversely, impact fees would be triggered during the building permit process and they are based on the

the number of additional units, rather than the number of lots. The City has the ability to apply impact fees to residential, commercial or industrial development as each has a measureable connection (or nexus) to increased park use. To establish this connection, a nexus study is a step that the City should consider.

USER FEES

Facility use and program fees are updated regularly and they are based on cost-recovery. Fees and charges apply directly to the users of facilities and programs, which provides a relatively direct line between the money paid and the service provided. These charges also capture some of the cost of providing services to those who do not live in Irvine. It is important to note that increases in these participation costs can also create a perceived barrier (financial or psychological) to the level of participation. This is generally most pronounced for lower income households. This effect should always be a consideration when participation fees are increased.

There are several fees and charges that may be used to fund park maintenance and operations.

Facility-Use Charges

Facility charges generate revenue for parks by charging for the use of City facilities (e.g., sport fields, picnic shelters, pool usage, open space access and multi-purpose rooms at park facilities). These charges may cover direct costs generated by facility use, such as field lighting or trash removal. Rates may also be set higher to subsidize parks maintenance and address the long-term impacts of facility use. The Community Services Department established Public Facilities Reservation and Fee Policies and identifies the facility rental fees.

Programming Fees

User fees for recreation programming generate revenue by charging users for some or all of the costs of providing services and materials. Charges for programming are often based on a cost-recovery strategy or fee philosophy determined by the City. The fee philosophy or cost-recovery strategy may partially subsidize (with General Fund or other revenue) some types of programs due to their community benefit, while requiring others to fully recover their cost. Some communities charge higher fees for non-residents than for residents. Some programming fees also include built-in charges for facility use, maintenance and even for ongoing capital reinvestment. The City of Irvine currently has programming fees for its aquatic, adult, adult sports, fitness, preschool,

senior, youth, youth sports, child services and afterschool and teen school year programs. The Revenue and Resource Estimates section of the City's budget provides a description, trend and revenue estimates for programming fees.

Entry Fees

Park entry fees, day-use fees or parking fees are used by some larger jurisdictions to generate revenue for parks. These are more commonly seen at larger regional parks or for specialized facilities such as swimming pools or recreation centers, rather than at neighborhood and community parks. Some communities charge entry fees for certain special events. William J. Woollett, Jr. Aquatics Center and Northwood High School swimming pools have entry fees for open lap swimming sessions. Entry fees vary between adults (age 15 to 54), seniors (age 55 and over) and juniors (age 17 and under). Memberships are available to frequent users who want discounted entry fees.

Concessions

Food, beverage and merchandise vendors or concessionaires that operate restaurants, coffee kiosks, rentals of equipment (such as bicycles or kayaks) or provide other revenue-generating facilities or services in parks can also generate excess revenues to support the park system. The City can set-up specific arrangements with vendors and concessionaires for these services. Vendors are also required to obtain a license from the City.

Park Sponsorships

The City may solicit sponsors who are willing to pay for advertising, signage, facility naming rights, etc., generating funds to support operations. In addition, sponsors are often sought to support a particular event or program.

Miscellaneous Rentals

Many cities and districts are evaluating a variety of opportunities to generate revenue in parks. For example, some agencies generate revenue from cellular phone towers or billboards on park land. Some agencies provide vendor pads with hookups, where food carts can be parked, offering a rental space rather than taking a portion of proceeds from vendor sales in a concessions agreement.

Bonds

GENERAL OBLIGATION BOND

The City has the authority to request voter approval for general obligation bonds to finance the construction of improvements to the park system with a time-limited property tax increase. Requirements for a high threshold of approval (two-thirds of voters) makes general obligation bond tax measures uncommon, but the time-limited nature of these measures (the tax expires when the bonds are paid-off) improves public perception in many cases. In many communities, parks and recreation polls among a city's top priorities and Irvine has a compelling mix of high-profile projects that could be packaged into an appealing bond measure. General Obligation bonds can only be used for capital improvements, not maintenance and operations.

REVENUE BONDS

Revenue bonds are sold to finance revenue-generating facilities, such as community centers, performing arts centers and in some cases, sports complexes. The interest and capital are paid from the revenue produced from the operation of such a facility. Typically, the city issuing the bond will have to guarantee the repayment, meaning that if revenue does not cover the necessary payments, the city will be required to pay in some other way. This method is viable when there is a reliable, predictable revenue stream that is separate from the City's general funds.

Partnerships

Many cities recognize the need to collaborate with volunteers, businesses, public and private agencies and others to support parks and recreation. These collaborative efforts can bring in significant revenue, labor and other resources for projects. Depending on the nature of the partnership, these efforts also can increase the city's expenditures to support park land owned by other park and recreation jurisdictions. Examples of some of Irvine's partnerships include relationships with the Irvine Unified School District, Irvine Ranch Conservancy and other agencies and organizations in Orange County that directly support the Irvine parks system.

PUBLIC/PRIVATE OR PUBLIC/NON-PROFIT PARTNERSHIP

This concept is increasingly popular for park and recreation agencies. The public agency enters into a working agreement with a private corporation to help fund, build and/or operate a public facility. The public agency often will approach the partnership with one of three incentives: offering free land (often a park) on which the partner can place a facility, access to an existing facility or certain tax advantages.

While the City strives to provide a rich and diverse recreation system that supports a wide variety of community interests and pursuits, some recreation amenities may be difficult for the City to support on its own, given space, cost, capacity or other feasibility concerns. If there are strong local advocates or organizations dedicated to emerging or otherwise underrepresented interests and activities, the City may be able to partner with these groups to encourage new participation opportunities within the community. For example, rather than constructing and operating a specialized recreation facility at a community park, the City may be able to offer financial or staffing assistance to private or non-profit facilities. In exchange for this support, City residents could enjoy joint-use privileges at these facilities for nominal or no fees.

Should new or specialized recreation opportunities or enhancements be feasible at City parks, the City may be able to gather funding support from local organized sport groups, clubs and non-profit organizations. For example, a non-profit organization that regularly hosts events at City parks may be able to partner with the City to finance mutually-agreeable enhancements to said facilities. Through these and other types of partnerships, the City can continue to provide quality recreation opportunities for Irvine residents.

INTERAGENCY PARTNERSHIPS

Partnerships between agencies are useful in terms of providing both facilities and programs. Irvine's partnership with the Irvine Unified School District is an example of an interagency partnership.

HOMEOWNER ASSOCIATIONS

A city may negotiate agreements with developers during the development process for park operations and maintenance to be managed by homeowners associations (HOAs).

There are nearly 250 HOAs in the City of Irvine, with many of them taking on responsibilities based on their declarations of covenants, conditions and restrictions (CC&Rs). Such responsibilities can include: upkeep of common areas, private parks, playgrounds, clubhouses and fitness centers, athletic courts and swimming pool facilities. Associations fund their maintenance programs through association fees. These private facilities and parks are only accessible to residents residing within the HOA and the general public is typically restricted in accessing these facilities.

Homeowners associations can cover residential areas such as traditional single-family neighborhoods within larger master plan communities or residential condominiums and high-rise condominiums. Apartment communities are typically owned and managed by a single entity and are not subject to an HOA. Some HOAs within Planning Areas such as Woodbury, Westpark and Rancho San Joaquin may allow apartment residents to utilize HOA-owned neighborhood amenities (private neighborhood parks, pools and sports courts) within an area managed by a neighboring HOA.

Some residential neighborhoods are covered by both a Master HOA and a Sub-Association (Sub HOA). Sub HOAs are usually found within attached unit buildings and some clustered planned unit developments (e.g. smaller condominium communities). Typically, the Master HOA will focus on maintaining larger common areas (e.g., private parks) that serve a larger subdivision, while the Sub HOA will cover common areas such as smaller landscaped areas within the clustered planned unit development and the exterior of attached unit buildings.

VOLUNTEERS

Volunteers can increase the quality and quantity of public services at a minimal cost while providing an opportunity for citizens to contribute to the betterment of their community. Studies suggest that for every $1 invested in volunteers, a city can realize as much as $10 in benefits. With tight fiscal conditions, more local governments are expanding volunteer programs. These can include individuals or groups who agree to take on specific tasks or perform certain services, such as maintenance, restoration, programming, capital development and special event support. Volunteers may provide direct and indirect support to the park system. For example, the Fine Arts Center in Irvine has a program for year-round volunteers to assist with ceramics, photography, jewelry and printmaking. Seasonal volunteer opportunities are also available for art festivals and art exhibit receptions. Other volunteer opportunities are available at the Turtle Rock Nature Center, Irvine Open Space Preserve, senior centers, The Great Park Farm + Food Lab and Animal Care Center.

PARTNERSHIPS WITH COMMUNITY ORGANIZATIONS

A city may craft agreements with various community organizations for park improvements, operations and maintenance. Many park agencies work with organizations to develop or help develop facilities such as dog parks, community gardens, disc golf courses, mountain bike and other trail networks, bicycle skills courses and conservation projects (such as native plant restoration). In some communities,

neighborhood groups fund projects such as new playgrounds, sports organizations, sports field improvements or maintenance. This type of partnership requires careful consideration and the crafting of agreements to clarify roles and responsibilities.

Grants and Technical Assistance

GRANTS

Many park improvement projects would be competitive for State and Federal grant programs. There are two important considerations for evaluating grant-funding opportunities. The first is, with many different programs, significant staff or consultant time is necessary in order to track, administer and manage grant-funded projects. The second consideration is that nearly all government grant programs require some level of local matching funds.

PRIVATE GRANTS AND FOUNDATIONS/PHILANTHROPY

Grants and foundations provide money for a wide range of projects and make awards based on criteria related to their mission and funding priorities. Public agencies are often not eligible for funding from these sources, but registered non-profits are eligible. In some cities, parks conservancies or friends' groups pursue private funding. In the right circumstances, foundations may provide funding assistance for larger capital improvement projects or specific programs, such as specialized facilities that are consistent with their mission statement and philanthropic values.

An example of a friends group is the Friends of Outreach, an Irvine-based, non-profit organization that helps support the City of Irvine senior outreach programs. The all-volunteer group conducts service projects, fund-raising programs and weekly social activities at Lakeview Senior Center.

GOVERNMENT GRANT PROGRAMS

There are a number of government grant programs available for park and recreation projects. Key programs are:

Recreation Trails Program

This is a grant program funded through the California Parks and Recreation Department. Projects eligible under this program include: 1) maintenance and

restoration of existing trails, 2) development and rehabilitation of trailhead facilities, 3) construction of new recreation trails and 4) acquisition of easements and fee simple title to property. Grants are distributed on an annual basis and require a 20 percent match.

Habitat Conservation Fund

This is a grant program funded through the California Parks and Recreation Department Office of Grants and Local Services, which administers this fund and allocates approximately $2 million each year to cities, counties and districts. Projects eligible under this program include nature interpretation programs, protection of plant and animal species and acquisition and development of wildlife corridors and trails.

Land and Water Conservation Funds

This grant program is funded by the National Park Service and administered by California State Parks. In the past this was one of the major sources of grant money for local agencies, but starting in the 1990's this grant program was severely cut. The funds can be used for acquisition and development of outdoor facilities and require a 50 percent match.

US Fish and Wildlife Service (USFW)

USFW may provide technical assistance and administer funding for projects that enhance water quality, including debris removal, flood mitigation and enhancements to water crossings.

California Department of Fish and Wildlife (CDFW)

CDFW may provide technical assistance and administer funding for projects that enhance water quality, including debris removal, flood mitigation and enhancements to water crossings.

State Bicycle Funds

A portion of the revenue from state gas taxes is distributed to California cities for the development of bicycle lanes. This can be a good funding source for developing bicycle lanes and off street bicycle trails.

Motor Vehicle Emissions Reduction Grants

The South Coast Air Quality Management District (AQMD) administers this grant, which offers competitive funding for projects that provide significant motor vehicle emission reductions at the lowest cost per ton of emissions reduced. This could include air quality related studies, bicycle facility improvements and bicycle-safety enforcement. Bicycle facility improvement projects include those that promote bicycle use for commuting and other utilitarian trips including Class I, Class II and Class III bike routes.

Other Funding Sources

DONATIONS

The donations of cash, land or in-kind services by service agencies, private groups or individuals can be an effective way to raise money for specific projects. The Friends of Outreach, a non-profit, 501 (c)(3) group is set up to take tax-deductible donations.

EXCHANGE OF PROPERTY

If the City has an excess piece of property with some development value, it could be traded for a private piece of property more suitable for park use.

PUBLIC LAND TRUSTS

Land trusts such as the Trust for Public Land, Inc. and the Nature Conservancy will acquire and hold land for eventual acquisition by a public agency or community land trust. These private and nonprofit organizations can also assist local agencies in identifying land for protection, as well as help raise funds through charitable campaigns and legislative or voter initiatives to acquire open space lands

UNIQUE FUNDING OPPORTUNITIES

It may be possible to gather funds for park improvements and enhancements in other unique and creative ways. For example, residents and local businesses could purchase benches, shade structures or paver bricks that could be added to public parks. While helping mitigate City costs for construction and development, these strategies could also foster an elevated sense of ownership and community pride in the park system.

Investment in the park system will require funding commitments from a variety of sources. While initial factors associated with project prioritization revolve around community need and demand, cost considerations are also important components. A full project assessment cannot be completed without cost estimates and potential funding sources. As the City moves forward with implementation of the *Master Plan*, these funding options must be carefully considered.

NEXT STEPS

Irvine possesses a robust network of parks, trails and open spaces that serve a diverse array of interests. Moving into the future, the City will find itself in the enviable, although potentially challenging, position of deciding which enhancement efforts could best elevate this already-exemplary public park system.

Implementation will be guided by the innovative visions, opportunities and recommendations described throughout this *Master Plan*. By relying on community feedback and responding to evolving needs and expectations, implementation of the *Master Plan* recommendations will ensure that Irvine's parks remain vital assets to our diverse, thriving and active community.

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APPENDIX A:
Parks and Open Space Inventory

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APPENDIX A: PARKS AND OPEN SPACE INVENTORY

Appendix A presents three inventory tables that document the acreage and facilities associated with public parks, regional parks and open space in Irvine:

Table A-1: Irvine Parks and Park Facility Inventory by Classification

Table A-2: Regional Parks Inventory

Table A-3: Irvine Open Space Inventory

These public sites are owned, operated and/or managed by the City of Irvine, with the exception of William R. Mason Regional Park, which is under the jurisdiction of the County of Orange.

The City classifies public parks as community parks, neighborhood parks and special use sites, as shown in Table A-1. The City also provides recreation opportunities at the Orange County Great Park (Table A-2), in open space areas (Table A-3) and trail corridors. These recreation resources are summarized below:

COMMUNITY PARKS

Community parks are medium to large, multi-purpose parks that serve as "village hubs" for the entire community. Ranging from 10 to 48 acres in size, they typically support a variety of recreation opportunities and provide specialized facilities such as sports fields and courts, thematic playgrounds, and community centers. Community parks provide a majority of the athletic facilities in Irvine . These parks typically support organized recreation programs, special events and large-group gatherings. They serve residents and visitors with many different interests. Examples of community parks in Irvine include Colonel Bill Barber Marine Corps Memorial Park, Heritage Community Park and Harvard Community Park.

NEIGHBORHOOD PARKS

Neighborhood parks are smaller parks that provide access to green space and essential recreation opportunities, typically for residents who live within walking or biking distance of the park. Ranging from one to 10 acres in size, these parks provide facilities such as playgrounds and picnic areas to support small group gatherings and drop-in use. Larger neighborhood parks provide athletic fields, basketball courts, volleyball courts and similar facilities. Examples of public neighborhood parks in Irvine include Orchard Park, San Carlo Park and Chaparral Park.

In addition to public neighborhood parks, homeowners associations own and manage many private neighborhood parks throughout the City for the residents of their communities.

SPECIAL USE SITES

Special use sites offer unique amenities and stand-alone facilities that serve a citywide audience. Examples are the Irvine Animal Care Center, Central Bark Dog Park and Sepulveda Vista Point.

ORANGE COUNTY GREAT PARK

The OCGP is the City's largest park, currently in development at the site of the former The Marine Corps Air Station El Toro. El Toro operated from 1943 to 1999 as the home of Marine Corps aviation on the West Coast. Upon its closure, the County of Orange was tasked with developing a Community Reuse Plan to guide future development of the former base. After initial plans to build an international airport on the site met with extensive opposition, Orange County voters passed "Measure W" in 2001, which authorized the repurposing of the former military base for a large regional-scale park and mixed-use development. Heritage Fields, a private developer, purchased the land in 2005 and, as a prerequisite to enhanced private development intensity, entered into a development agreement with the City of Irvine that, among other things, required it to transfer 1,347 acres to the City of Irvine to develop the OCGP. A master plan for development of the OCGP was approved in 2007 and modified in 2011 and 2014. When complete, the park will span over 1,200 acres. Currently, more than 200 acres are developed (as of 2015) and 688 acres are in planning and design, and grading phases. Since a master plan for this site has been established, no specific facility recommendations for the OCGP are made in this *Master Plan*.

OPEN SPACE

Throughout its development history, Irvine has taken careful precautions to preserve its natural resources and wildlife habitats. Today, Irvine is home to more than 6,500 acres of wetlands, oak woodlands, grasslands and coastal sage scrub. Much of the City's open space restricts public access, but a few preserves allow visitor use or are designed as trail corridors to encourage use. Irvine's open space areas include the JOST, Southern Open Space Preserve, Northern Open Space Preserve, and Turtle Rock Open Space.

REGIONAL TRAILS

Irvine has a robust system of bikeways and trails that allow visitors to traverse on foot, wheel and horseback. The 355 miles of bikeways and regional trails are developed and maintained according to the City's 2011 *Bicycle Transportation Plan*. Regional trails are paved paths with their own rights-of-way that give joggers, cyclists, skaters and others a safe place to travel.

RESOURCES PROVIDED BY OTHERS

In addition to the City's public park system, residents of Irvine have access to park and recreation resources provided by school districts, their homeowners associations and the County of Orange. Private gyms, golf courses and commercial recreation providers (such as dance, yoga or martial arts studios) also give residents additional access to various programs. Third-party providers of recreation opportunities in Irvine include:

- County Parks such as William R. Mason Regional Park (see Table A-3)
- Schools
- Colleges and Universities
- Private Neighborhood Parks
- Private Facilities

The City of Irvine partners with school districts, local colleges and other organizations to maximize park and facility resources for the community. A joint-use agreement between the City and IUSD allows sports leagues to utilize school fields and indoor gymnasia. High school students use the City's William Woollett Jr. Aquatics Center located at Heritage Community Park (adjacent to Irvine High School). Many of the City's park facilities are adjacent to schools, which in turn maximizes recreational amenities and open grass areas for local residents. Map A-1 identifies the location of parks in proximity to schools, colleges and universities that also provide recreation resources to the community.

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Table A-1: Irvine Parks and Park Facility Inventory by Classification

CITY PARKS	Acreage	ATHLETIC FACILITIES										OUTDOOR RECREATION FACILITIES							INDOOR FACILITIES					TRAILS			PARK AMENITIES							OTHER		NOTES/OTHER
		Ball Diamond	Soccer Field	Batting Cages	Volleyball Court	Disc Golf Course	Fitness Par Course	Basketball Court	Tennis Court	Racquetball / Handball Court	Shuffleboard Court	Pool	Child Play Area	Open Play Area (Turf)	Amphitheater / Stage	Lake / Pond	Horseshoes	Group Picnic Area	Community Center	Nature Center	Senior Center	Fine Arts Center	Other	Off-Street Trail Access	Soft-surfaced Trail / Nature Trail	Hard-surfaced Trail	Restrooms	Drinking Fountains	Concession Stand	Outdoor Sinks	Picnic Tables	Barbeques	Electrical Outlets	Bounce Houses Allowed w/ permit	Adjacent to School	
Community Parks																																				
Bommer Canyon	15.0				1 u									1	1		•	1				--	1	•	•		2	1			25	1	•			Creek, restricted hours, gated; cookhouse
Colonel Bill Barber Marine Corps Memorial	48.0	4	3	4 u					6				2	1	1			6					1	•			5	17	2		24	4	•	•r		Tennis office, roller hockey facility
Cypress	17.9	2	1					1	3				1	1					1								1	5			8	6	•			
David Sills Lower Peters Canyon	10.3		1						8				1														1	2			8	2				
Deerfield	10.1				2	1	1		4	2			2	1				1	1								1	5		1	11	4	•	•r	•	
Harvard	26.9	7	4	4 u														1	1					•			2	8	1		10	5	•			Harvard Sk8 Park (Skate Park)
Heritage	36.5	3 1bu	3		1 u			3 1hu	12	2		3	2	1	1	1		1	1			1	2				4	11			29	22		•r	•	Child Resource Center, Athletic Building, Youth Program Center, William Woollett Jr. Aquatics Center
Hicks Canyon	16.7	2	2										1	1				2						•			1	3	1		6	4	•			
Las Lomas	18.3	2	2					2	2	1 u			2	1				2	1								1	6	1		14	7			•	
Mark Daily Athletic Fields	9.8	4 1b	2	2 u																				•			1	2					•			
Mike Ward - Woodbridge	22.0				1 u			2		4	1				1		•	1			1			•			3	2			4	2	•	•r		Lakeview Senior Center/ Adult Day Health Care Services Center
Northwood	17.7	2 1bu	2 u				1	2 hu	2	2 u	1		1	1				2	1								3	4			14	4	•	•r		1/2 mile track
Oak Creek	11.7	1 bu	2										2					1									1	2			8	8	•			
Quail Hill	16.0	2	3					2										1						•			1	4			3	2	•			Trail crossing to stage area
Rancho San Joaquin	2.1																				1		1				1	1				1	•			Rancho Senior Center, Historical Society Museum
Trabuco Center	2.6																				•															Senior and Multigenerational Community Center
Turtle Rock	25.1	1 bu			1				4				3	1	1			1	1	1				•	•		2	5			28	12	•	•r		Creek
University	16.3	1	3		2			1 h	4	3			2	1				3	1								1	3			12	2	•		•	Adventure Playground
Windrow	18.9	2	1	4 u				1 h					2	1				3	1					•			1	3	1		4		•			
Woodbury	10.7	2	1 u					2					2	1				3	1					•			1	2			11	4	•	•r	•	
Community Parks Subtotal	*352.6*	*35*	*30*	*14*	*8*	*1*	*2*	*16*	*45*	*14*	*2*	*3*	*21*	*11*	*5*	*1*	*2*	*26*	*9*	*1*	*3*	*1*	*5*	*10*	*2*	*0*	*33*	*86*	*6*	*1*	*219*	*90*	*15*	*7*	*5*	
Neighborhood Parks																																				
Alderwood	0.7													1														1			3			•		
Blue Gum	2.7				1 u								1	1														1			2	3		•		
Brywood	6.0	2 u	1 u										1	1				1										1		1	7	6			•	
Canyon	3.4							1 hu					1	1													1	1			3	2		•		
Carrotwood	3.1		1 u		1 u			1 u					1	1				1 u										1				1				
Chaparral	9.6					1							2	1										•				1			6	6				
Citrusglen	3.1								4				1	1				1						•			1	1			4	2	•	•		
College	7.6				1 u								1	1														1			10	7		•	•	
Comstock	1.0							1 u					1	1				1									1	1			3	2	•	•		
Coralwood	2.7												1	1														1			6	2		•	•	
Creekview	0.7																							•				1			3					
Cypress Grove	9.4	1 u	1 u	1 u				1 u					1	1													1	3			8	6			•	
Dovecreek	7.8	2 u	1 u										1					1						•			1	3			4	2	•		•	
Flagstone	2.3													1				1						•				1			7	2		•		
Hoeptner	2.2								2				1	1										•				2						•		
Homestead	2.1								3				1	1				1						•			1	3			4		•	•		
Knollcrest	5.0								2				2					1									1	4			4	2	•	•		
Meadowood	10.1	2 u	1 u		1			1 u					1	1				1									1	1			8	2	•		•	

CITY PARKS	Acreage	ATHLETIC FACILITIES										OUTDOOR RECREATION FACILITIES							INDOOR FACILITIES					TRAILS			PARK AMENITIES							OTHER		NOTES/OTHER
		Ball Diamond	Soccer Field	Batting Cages	Volleyball Court	Disc Golf Course	Fitness Par Course	Basketball Court	Tennis Court	Racquetball / Handball Court	Shuffleboard Court	Pool	Child Play Area	Open Play Area (Turf)	Amphitheater / Stage	Lake / Pond	Horseshoes	Group Picnic Area	Community Center	Nature Center	Senior Center	Fine Arts Center	Other	Off-Street Trail Access	Soft-surfaced Trail / Nature Trail	Hard-surfaced Trail	Restrooms	Drinking Fountains	Concession Stand	Outdoor Sinks	Picnic Tables	Barbeques	Electrical Outlets	Bounce Houses Allowed w/ permit	Adjacent to School	
Orchard	6.0	1 u	1 u					2					2	1				1									1	1			8	3				
Pepperwood	3.1												1	1														1				4		•		
Pinewood	2.1												2	1				1										1			6	4		•		
Plaza	7.7	1 u	1 u										1					1									1	2			11	6	•		•	
Presley	2.9				1								2	1				2										2			6	6		•	•	
Racquet Club	2.2								2				1	1														1			2	1		•		
Ranch	8.7												1	1				1														2		•		
San Carlo	6.0								2				1	1				2										1			12	5		•	•	
San Leandro	4.0	2 1u 1bu	1 u										2	1				1									1	1			9	2			•	
San Marco	5.1							1 u					1	1				1						•			1	2			6	2		•		
Settlers	6.0		1 u		1 u			2					1	1				1									1	2			6	3	•		•	
Silkwood	3.9				1 u								1	1										•				1			4	1		•		
Stonegate	6.0	1 u	1 u		1 u			2	2				2					1									1	4			6	2				
Sweet Shade	7.9							2 u					2	1				1	1								1	3			4	2	•	•		1/4 mile track
Sycamore	6.9												1	1				2										1			7	3		•		
Valencia	6.0		1 u										1	1				1						•			1	1			4	2	•	•	•	
Valley Oak	3.0							1 u	2				1	1				1						•			1	1			8	6	•	•		
Willows	3.6							1 u					1	1				2										2			5	2		•		
Neighborhood Parks Subtotal	*170.6*	*12*	*11*	*1*	*8*	*0*	*1*	*16*	*19*	*0*	*0*	*0*	*41*	*31*	*0*	*0*	*0*	*28*	*1*	*0*	*0*	*0*	*0*	*11*	*0*	*0*	*17*	*55*	*0*	*1*	*186*	*101*	*11*	*24*	*12*	
Special Use Sites																																				
Animal Care Center	5.0																						4				2	2								Cat building, 2 dog kennel buildings, Building Number 13
Bommer Vista Point	0.5																							•			1	1					•			
Central Bark Dog Park	2.8																										1	1								Off leash areas (large/small dog areas), porta-potties, dog drinking fountains
Sepulveda Vista Point	1.3																														3					Restricted hours, gated
Special Use Sites Subtotal	*9.6*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*4*	*1*	*0*	*0*	*4*	*4*	*0*	*0*	*3*	*0*	*1*	*0*	*0*	
Totals for Park Facilities	532.8	47	41	15	16	1	3	32	64	14	2	3	62	42	5	1	2	54	10	1	3	1	9	22	2	0	54	145	6	2	408	191	27	31	17	

Revised 05/04/16

u Unlighted
h Half court only
b Backstop only
r Reservable

Table A-2: Regional Parks Inventory

Other Providers	Acreage	ATHLETIC FACILITIES											OUTDOOR RECREATION FACILITIES							INDOOR FACILITIES					TRAILS			PARK AMENITIES							OTHER		NOTES
		Ball Diamond	Soccer Field	Batting Cages	Volleyball Court	Disc Golf Course	Fitness Par Course	Basketball Court	Tennis Court	Racquetball / Handball Court	Shuffleboard Court		Pool	Child Play Area	Open Play Area (Turf)	Amphitheater / Stage	Lake / Pond	Horseshoes	Group Picnic Area	Community Center	Nature Center	Senior Center	Fine Arts Center	Other	Off-Street Trail Access	Soft-surfaced Trail / Nature Trail	Hard-surfaced Trail	Restrooms	Drinking Fountains	Concession Stand	Outdoor Sinks	Picnic Tables	Barbeques	Electrical Outlets	Bounce Houses Allowed w/ permit	Adjacent to School	
Regional Parks																																					
Orange County Great Park	230.0		4					#						1	1	1	1						1	1			•									Gallery, Artist's studios, demonstration garden, farmer's market, Walkable Historic Timeline, Visitors Center, Great Park Balloon, Carousel, Special event space, Festival site
William R Mason Regional Park	339.0	2					3		6					3	1	1	1	•	1						•	•	•	3				21					123 acre golf course
Orange County Parks Subtotal	*569.0*	*2*	*4*	*0*	*0*	*0*	*3*	*4*	*6*	*0*	*0*		*0*	*4*	*2*	*2*	*2*	*1*	*1*	*0*	*0*	*0*	*1*	*1*	*1*	*1*	*2*	*3*	*0*	*0*	*0*	*21*	*0*	*0*	*0*	*0*	
Totals for Other Providers	**569.0**	2	4	0	0	0	3	4	6	0	0		0	4	2	2	2	1	1	0	0	0	1	1	1	1	2	3	0	0	0	21	0	0	0	0	

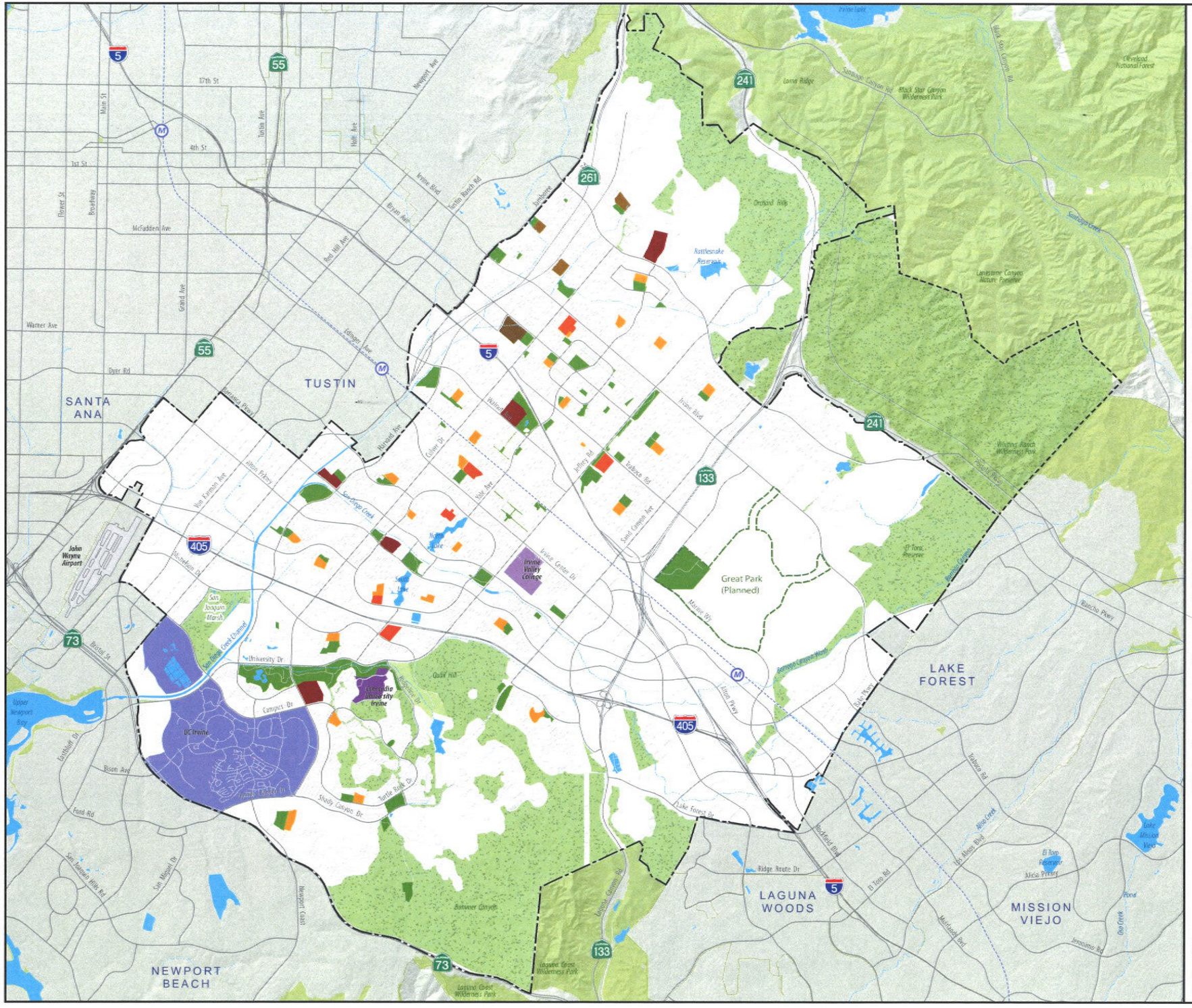
Revised 05/04/16

u Unlighted
h Half court only
b Backstop only
r Reservable

Table A-3: Irvine Open Space Inventory

CITY OPEN SPACE	Developed Acreage	Undeveloped Acreage	Total Acreage	Developed Amenities & Facilities								Programming Opportunities			
				Hard-surface Trail	Soft-surface Trail	Interpretive Signage	Trailhead	Picnic Tables	Shelter	Parking	Restroom	Guided Hikes	Self Guided Hikes	Nature Interpretation	Environmental Education
Southern Open Space Preserve		1,880.5	1,880.5												
Bommer Canyon Trailhead	3.2		3.2		•		1				1	•	•	•	•
Quail Hill Trailhead	2.8		2.8		•		1	4			1	•	•	•	•
Northern Open Space Preserve		4,554.8	4,554.8												
Orchard Hills Trailhead	1.7		1.7		•		1	2		1	1	•		•	•
Jeffrey Open Space Trail (JOST)	35.5		35.5	•	•			4			1				
Turtle Rock Areas		75.7	75.7												
Totals for Open Space	**43.2**	**6,511.0**	**6,554.2**	**1**	**4**	**0**	**3**	**10**	**0**	**1**	**4**	**3**	**2**	**3**	**3**

Revised 05/04/16



IRVINE PARKS MASTER PLAN

Map A-1: Proximity of Schools and Colleges to Parks

Schools

Irvine Unified School District

- Elementary Schools
- Middle Schools
- High Schools

Tustin Unified School District

- Elementary Schools
- High School

Colleges and Universities

- Irvine Valley College
- Concordia University Irvine
- UC Irvine

Parks and Open Space

- Parks
- Irvine Open Space
- Surrounding Open Space

Base Map Features

- Irvine City Boundary
- Irvine Sphere of Influence
- Major Streets
- Metrolink Line and Stations
- Creeks/Drainage Channels
- Water Bodies

Miles
0 1 2

April 2016
Sources: City of Irvine, OCTA and OC Parks.

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APPENDIX B:
Community Outreach Findings Summary

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APPENDIX B: COMMUNITY OUTREACH FINDINGS

An extensive, multi-faceted community outreach program was conducted to collect public opinion and identify the priorities of diverse cross sections of Irvine's population for the development of the Parks Master Plan.

METHODOLOGY

Between January 2015 and March 2016, MIG and City of Irvine staff coordinated and facilitated the outreach activities listed in Table B-1 below. Each activity was designed to reach a targeted audience as noted in the *Master Plan Public Engagement Plan*.

Table B-1: Outreach Activities

Activity Name	Dates	Total Participants
Stakeholder Interviews	01/29/15-04/28/15	29
Focus Groups	02/17/15-05/28/15	109
Community Intercept Events	02/28/15-03/30/15	690
Mapita Online Questionnaire	02/17/15-04/13/15	450
Parks and Recreation Telephone Survey	03/18/15-03/25/15	400
Community Services Commission Meeting	04/01/15	30*
Sports Committee Meeting	04/14/15	25
Sports/Aquatics Online Questionnaires	04/14/15-5/06/15	1
Community Workshop #1	06/03/15	17
Webpage Emailed Feedback	01/01/15-07/21/15	60
High School Youth Action Team Survey	05/13/15-06/02/15	128
Plan Development Workshop	10/01/15	16
City Council Meeting	10/13/2015	35*
Community Workshop #2	10/29/15	36
Planning Commission Meeting #1	12/3/15	30*
Planning Commission Meeting #2	01/21/16	30*
Irvine Residents with Disabilities Advisory Board (IRDAB) Meeting	03/01/16	12
Total		2,098

**Attendance figures for Commission and City Council Meetings are estimates.*

Nearly 2,100 participants shared their insights regarding desired amenities and preferences for parks, recreation facilities, open space, trails, programs and events. To ensure that the *Master Plan* reflects the priorities and needs of the community, the public engagement process involved targeted audiences and as many people as possible, including Irvine residents, parks users, community leaders and special interest groups. For a complete description of methodologies employed, please see the individual summaries for each outreach activity, available as a technical supplement to the *Master Plan.*

An overview of the activities follows:

- ***Stakeholder Interviews:*** A total of 11 small-group stakeholder interviews were conducted with representatives from community organizations, City departments, other government agencies, and the development community. Stakeholders provided feedback on challenges, opportunities and ideas in specific subjects related to Irvine parks, recreation facilities, programs, open space and trails.

- ***Focus Groups:*** A total of eight focus group meetings were held with members of local advisory committees, boards, special interest groups, and non-profits. The meetings included facilitated discussions about the vision for Irvine parks and open space, as well as existing issues, opportunities and challenges in the parks and recreation system.

- ***Community Intercept Events:*** Interactive display boards were set up at five community events in parks to collect feedback regarding user experiences, attitudes, behaviors and preferences. Participants used "dot" stickers to indicate their answers to specific questions on the boards. Intercept events occurred at the Bill Barber Community Park Softball Opening Ceremonies, Orange County Great Park Farmer's Market, Bommer Canyon Wilderness Access Day, Northwood Community Park and the Heritage Park Teen Concert. This outreach strategy helped reach community members who may not otherwise have participated in the master planning process by effectively bringing participation opportunities to them.

- ***Mapita Online Questionnaire:*** An online mapping tool called Mapita was used to collect public feedback on park visitation and use, favorite park and recreation opportunities and barriers to park access. Approximately 450 participants used Mapita to identify and reference specific geographic locations in correlation with their answers to place-based questions. Participants marked locations with digital "pins" on the online map before answering multiple choice and open-ended questions.

- ***Parks and Recreation Survey:*** A total of 400 Irvine residents participated in a random-sample phone survey, which collected statistically-representative data on the recreation activities and system enhancements desired by City residents, including people with and without a specific interest in parks and recreation.

- ***Community Services Commission Meeting:*** MIG presented to the Commission to provide an overview of the planning process, strategies for outreach, preliminary findings and next steps. The commission provided input on key issues for the *Master Plan*.

Intercept board used at community event

- ***Sports Committee Meeting:*** At a regular quarterly meeting held on April 14, 2015, the Irvine Sports Committee met to discuss sports field and facility needs, the equitable distribution of facilities and programs, field allocation, policies and fees and sports facility funding priorities.

- ***Sports/Aquatics Online Questionnaires:*** In conjunction with the regular meetings of the Irvine Sports Committee and the Irvine Aquatic Advisory Board, committee and board members completed an online questionnaire to provide detailed input regarding athletics and aquatics needs.

- ***Community Workshops:*** Two community workshops were held to test and affirm themes and opinions collected through completed outreach efforts. The workshops featured a mix of engagement strategies, combining group exercises with go-at-your-own-pace activity stations and an interactive priorities survey. Areas of input included community values, visitation patterns, desired experiences and barriers to access in Irvine parks.

- ***City Council Meeting:*** City staff delivered an update on the community engagement process, the existing system summary and the needs assessment to City Council on October 13, 2015. The Council provided comments and raised issues the *Master Plan* should address. A potential timeframe for adoption hearings was also discussed.

- ***Webpage Emailed Feedback:*** A City webpage was developed to present the planning process and encourage Irvine residents to sign up for email notification about public involvement opportunities. The webpage also provided a dedicated email address (ParksUpdate@cityofirvine.org) that residents could use to provide feedback or questions to City staff.

- ***High School Youth Action Team Survey:*** From May 13 to June 2, 2015, members of the High School Youth Action Team (HSYAT) completed surveys to provide feedback on their favorite parks, the ways in which they access those parks and the activities they pursue while visiting parks in Irvine. HSYAT consists of students from Irvine's six public high schools.

- ***Plan Development Workshop:*** On October 1, 2015, an informal work session was held at the Irvine Civic Center, Conference and Training Center between City staff from the Department of Community Services, Department of Community Development and MIG. The purpose of the workshop was to ensure that both departments had an opportunity to provide initial direction and content suggestions for the Parks Master Plan.

- ***Planning Commission Meetings:*** City staff presented to the Planning Commission on December 3, 2015 and January 21, 2016 to provide updates on the Parks Master Plan.

- ***Irvine Residents with Disabilities Advisory Board (IRDAB) Meeting:*** City staff presented an update on the Master Plan process on March 1, 2016.

COMMUNITY VALUES

During the stakeholder interviews and focus group meetings, participants shared their ideas of what matters most for parks, programs, facilities, open space and trails. A preliminary list of community values was compiled from these ideas. As overall outreach efforts progressed, this list was continuously refined. Ultimately, five values emerged consistently across outreach activities. These are noted in the sidebar to the right.

Since the City is known for providing first-class recreation opportunities for its residents, values relating to resident perception of Irvine's park system are of particular importance. Throughout the engagement process, participants expressed recognition of and tremendous appreciation for the high quality of parks and recreation facilities already provided. In the telephone survey, for example, nearly 90% of participants reported that existing parks and recreation facilities did an excellent (47.4) or good (39.3) job in meeting their household's recreation needs. More broadly, the responses and comments provided by participants suggest the relative value of new recreation opportunities. This too indicates the positive perception of the system overall and residents' desire to remain at the forefront of recreation trends.

Values

Based on outreach activities, the following values matter most to the community for parks, programs, facilities, open space and trails in Irvine.

- Access
- Diversity
- Education
- Excellence
- Health

KEY THEMES AND PRIORITIES

From the outreach activities collectively, several themes and community priorities emerged that were common across activities. These are noted in the sidebar and summarized in alphabetical order as follows:

Connectivity and Access

Results from outreach activities revealed that convenient and safe access to parks, outdoor recreation and open space areas is a great priority. This includes a consideration of the ways in which people travel to parks, the distance they have to travel and the ability to park safely when they arrive. Ensuring access through Americans with Disabilities Act (ADA) compliance was also an important topic. Additionally, participants in the various outreach forums expressed an interest in trails that connect parks, recreation facilities and open spaces to other community destinations and that support both recreation and active transportation, such as bicycling and walking.

Outreach Themes

Key outreach themes:

- Connectivity and Access
- Diversity
- Education
- Evolving Needs
- Flexibility
- Health, Wellness, Outdoors
- Partnerships
- Standards and Maintenance

Diversity of Activities, Amenities and Facilities

Participants consistently articulated their desire for a greater variety of recreation opportunities and park spaces. Flexible indoor recreation facilities and active use gymnasia were especially highlighted as a need throughout the engagement process. Following the same trend outdoors, parks with a variety of recreation opportunities were among respondents' favorite and most frequently visited places. This was illustrated most vividly at the intercept events, where participants expressed a desire to see more of all park facility elements in almost equal proportions. Provision of additional and enhanced types of facilities, particularly those that incorporate support amenities such as restrooms, drinking fountains, shade and Wi-Fi, will be most appreciated by users.

Education

Opportunities to integrate education within park activities and programs emerged as a priority for the community. Participants pointed to education programs as a means to engage youth in nature conservation and outdoor learning. Providing reading, creative, scientific and academic opportunities was also identified as important. Also, several key park sites have unique opportunities to integrate historical, educational and interpretive features.

Evolving Needs

Responses suggested an understanding by participants that changing demographics present a shift in park demands. For example, seniors, teens and single young adults seek different park activities and facilities than families with children. The parks, recreation and open space system will need to address the growing diversity in age, culture, abilities and needs. The recreation needs associated with population growth—particularly in new residential developments and in new mixed used areas in the IBC—presents additional strains on the existing park and recreation facilities, which should also be taken into account in planning for the future.

Flexibility

Because Irvine includes many different user groups with different interests, recreation needs and skill levels, residents noted that flexible recreation spaces are important to accommodate a variety of uses and serve different groups of people. For example, multipurpose athletic fields and courts can support several different types of sports activities within the same field or facility. Outdoor park space with open turf areas were noted as a way to accommodate active and passive recreation at different times of the day. Participants also noted that facilities and activities should be flexible in order to accommodate casual users, self-directed play and drop-in activities.

Health, Wellness and the Outdoors

Engaging in physical activity exercise and enjoying the outdoors were mentioned frequently as the top reasons for visiting Irvine parks and open space. Responses in multiple outreach forums noted both needs and opportunities to increase the numbers of facilities, programs and activities that support fitness and healthy living. Connecting people to nature and providing opportunities to play outdoors are key priorities for Irvine residents.

Partnerships

Collaboration between the City, other government agencies, businesses and non-profit organizations was discussed by participants in the focus groups and interviews. Suggestions included creating or expanding partnerships with local school districts for programs and shared-use facilities, developing partnerships with non-profit organizations to create "park champions" that can build, restore and repair trails and open spaces, and exploring possible partnerships with private companies to fund additional facilities and programs.

Standards and Maintenance

Results from the focus groups, stakeholder interviews and surveys indicated an overall appreciation and pride in the high standards Irvine upholds in its parks, facilities, programming and park maintenance. Respondents also expressed the importance of maintaining this high quality over time as the parks system grows and the parks age.

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APPENDIX C:
Parks and Park Facility Standards

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APPENDIX C: PARKS AND PARK FACILITY STANDARDS

The City of Irvine defines service level standards for parks and recreation facilities in four documents:

- *City of Irvine General Plan (1995):* Adopted by City Council in 1999 and supplemented in August 2012, the General Plan provides goals, objectives and policies for parks, recreation and open space.
- *Parks and Park Facilities Standards (2015):* Adopted by the Planning Commission in September 2015, these standards provide guidance in acceptance of park land, collection of park fees or provision of in lieu improvements, and criteria for design of public and private parks. The 2015 document re-adopted the same facility standards that were originally developed in 1988 and refined and adopted in 2005.
- *Irvine Municipal Code Subdivision Ordinance (2015):* Adopted on April 28, 2015, and amended on August 11, 2015, the standards described in Section 5-5-1004 set out the conditions for when fees or park land dedication are required for proposed subdivisions.
- *City of Irvine Zoning Ordinance (2015):* Adopted on April 13, 2010 and amended on August 11, 2015, Section 2-22-1 of the Zoning Ordinance provides guidance and regulations for park plan and park design to address and resolve major issues associated with the development of public and private parks.

Standards for park land and park facilities are summarized in this appendix for reference. Chapter 2 provides guidance for updating these standards.

CURRENT PARK LAND STANDARDS

Irvine's park land requirement is to provide five acres of park land/or fees in lieu for every 1,000 residents, further defined as two acres of community parks and three acres of either public or private neighborhood parks. For reference, Table C-1 depicts these park land standards.

Park land standards vary for public and private parks, and in some cases, they depend on the planning area in which development occurs. For example, although community parks are required to have a minimum size of 20 acres in most planning areas, the exception is Planning Area 4, Lower Peters Canyon, where the minimum size for community parks is 10 acres. Private neighborhood parks can also be substantially

smaller in size than public parks. The Irvine Business Complex (IBC) has its own park land standards; for instance, in the IBC, community parks requirements are met solely through payment of in lieu fees.

Publicly available neighborhood open spaces are encouraged in the IBC overlay zone. The City is currently re-considering options, such as reuse of existing buildings, linear parks within utility areas, etc., to be able to meet urban recreation needs and ensure access to park land where available in or near the IBC.

Table C-1: Summary of City Park Standards by Type

Park Type	Minimum Size	Minimum Width	Minimum Population Served	Population Density (Dwelling Units / Acre)
Community Parks	20 acres (1)	n/a	10,000	n/a
Public Neighborhood Parks	4 acres	n/a	2,500	n/a
Private Neighborhood Parks	1/3 acre (2), (3)	100 ft.	n/a	30 or less
	6,000 s.f. (about 1.4 tenths of an acre) (2), (3)	100 ft.	n/a	31 or more

Sources: City of Irvine General Plan Supplement No. 8 June 2012; Parks and Park Facility Standards, 2015.
Notes: (1) Minimum size of 10 acres in Planning Area 4, Lowers Peter Canyon
(2) Or equivalent in lieu fees
(3) Exception in Planning Area 36, Irvine Business Complex (IBC) Design Criteria Section 10

CURRENT PARK FACILITY STANDARDS

The City applies population-based standards to identify the number of park facilities needed to support residential development. These take the form of either one facility per number of people served or the square footage of an indoor facility needed to serve 10,000 residents. Table C-2 summarizes current standards noted in the adopted *Parks and Park Facilities Standards.*

As noted in the table, Irvine Unified School District (IUSD) and private parks play a role in meeting select standards. The school standards assume continued shared use of IUSD facilities, through the Joint Use Agreement between the City and IUSD.

Table C-2: Irvine Recreational Facility Standards (2005)

Recreational Facilities		Standard (per Population)	Responsible Agency		
Fields and Courts			**City**	**Private**	**IUSD**
Soccer Fields	Unlighted	1 / 4,250	20%		80%
	Lighted	1 / 8,500	90%		10%
Baseball/ Softball	Unlighted	1 / 2,500	20%		80%
	Lighted	1 / 5,000	75%		25%
Basketball Courts	Unlighted	1 / 1,250	10%	(1)	90%
	Lighted	1 / 5,000	60%	(1)	40%
Volleyball Courts	Unlighted	1 / 5,000	33%	(1)	67%
Racquetball/ Handball	Unlighted	1 / 5,000	25%	(1)	75%
Tennis Courts	Lighted	1 / 2,500	33%	67%	
Public Community Buildings					
Community Center		10,000 s.f. / 10,000			
Senior Center		1,000 s.f. / 10,000			
Youth/ Family Center		Included in Community Center			
Art Center		1,000 s.f. / 10,000			
Gymnasium		1,000 s.f. / 10,000			
Public Pools					
50-meter competition		1 pool / 100,000			
Recreation Jr. Olympic		1 pool/ 20,000			
Other Facilities					
Children's Playground (1)		1.8 s.f. / Person outside of Planning Area 36			
		1.2 s.f. / Person in Planning Area 36			
Picnic Tables		1 table / acre (2 min.)			
Barbecues		1 group BBQ / 4 tables or 1 family BBQ / 2 tables			

Source: Parks and Park Facility Standards, 2015.
Notes: (1) Can be provided in public or private parks, as long as available to all residents.

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APPENDIX D:

Site Specific Enhancements

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Table D-1: Park Site Improvement Opportunities

Park Name	Acreage	Description of Design and Development Opportunities	Build						Enhance																								Rehabilitate				Total Number of Improvement Opportunities	Major Facility Opportunity (See Table D-2)
			Conduct Feasibility Study	Acquire Park Land	Design Master Plan	Prepare Construction Documents	Develop Site	Coordinate with Developer	Develop/Deepen Design Intent	Conduct Community Outreach	Identify Park Theme, Art and Cultural Features	Add Play Opportunities	Complete Minor Facility Improvements	Renovate/Add Entry/Parking Areas	Add Internal Paths/Trails	Add/Enhance Sports Fields	Add/Enhance Sports Courts	Add Shade Features	Add Picnic Shelters	Enhance Seating Arrangements and Social Spaces	Incorporate Flexible Use Area	Repurpose Existing Use Area	Integrate Nature Experience	Incorporate Educational Features	Upgrade Site Furnishing Amenities	Incorporate Materials Color Palette	Add/Improve Lighting	Add/Improve Signage	Increase Plant Diversity	Address Water Conservation	Improve Ecological Systems Through Stormwater Management	Implement Urban Greening Strategies	Update Maintenance Program	Replace Infrastructure/Assets	Improve Play Area Accessibility	Address Other Outdoor Site Accessibility Issues		
Community Parks																																						
Bommer Canyon	15.0	A nature-oriented community park with a refreshed event facility, expanded trail access and outdoor programming that complements the surrounding open space and supports nature education and immersion programs. Update the park facilities based on the existing ranch theme to include a pavilion, outdoor classroom and nature interpretation venue to support group gatherings and outdoor and educational programs. Add restrooms and a catering kitchen to support events. Explore opportunities to expand parking facilities and improve circulation. Improve trail signage and accessibility where possible.							●		●		●	●	●			●	●	●			●	●					●		●			●				13	
Colonel Bill Barber	48.0	A multi-use sports complex with flexible spaces to hold large citywide events. Public outreach and a feasibility study will be conducted to evaluate opportunities for this park, including options for the unprogrammed space to support events and group activities (community center/gym or event pavilion, outdoor event venue and amphitheater). Other opportunities include updating social spaces and play opportunities and enhancing minor entry points.							●	●	●			●		●				●	●								●	●	●		●		●			12	●
Cypress	17.9	A multi-use community park with a variety of recreational experiences with opportunities to define a park theme. There are potential for additional landscape improvements and incorporating shade elements.							●	●	●	●						●					●	●											●			8	
David Sills Lower Peters Canyon	10.3	A multi-use sports complex with opportunities to improve play areas, refurbish play area surface, enhance landscaping and improve entry points.							●		●	●		●						●									●						●			7	
Deerfield	10.1	A community hub that supports a variety of recreational experiences with improvement opportunities to enhance fitness stations, add water and universal play opportunities and upgrade or expand the community center. There are other opportunities to replace racquetball courts with a new use, enhance landscaping, enhance entry points, address irrigation/drainage issues and create bike staging opportunities. It is recommended that the disc golf course be removed due to incompatibility and replaced with new use from the list of Facility Innovations.							●		●	●		●			●		●	●	●	●	●	●	●	●			●	●	●		●		●			18	●

Park Name	Acreage	Description of Design and Development Opportunities	Build						Enhance																							Rehabilitate				Total Number of Improvement Opportunities	Major Facility Opportunity (See Table D-2)
			Conduct Feasibility Study	Acquire Park Land	Design Master Plan	Prepare Construction Documents	Develop Site	Coordinate with Developer	Develop/Deepen Design Intent	Conduct Community Outreach	Identify Park Theme, Art and Cultural Features	Add Play Opportunities	Complete Minor Facility Improvements	Renovate/Add Entry/Parking Areas	Add Internal Paths/Trails	Add/Enhance Sports Fields	Add/Enhance Sports Courts	Add Shade Features	Add Picnic Shelters	Enhance Seating Arrangements and Social Spaces	Incorporate Flexible Use Area	Repurpose Existing Use Area	Integrate Nature Experience	Incorporate Educational Features	Upgrade Site Furnishing Amenities	Incorporate Materials Color Palette	Add/Improve Lighting	Add/Improve Signage	Increase Plant Diversity	Address Water Conservation	Improve Ecological Systems Through Stormwater Management	Implement Urban Greening Strategies	Update Maintenance Program	Replace Infrastructure/Assets	Improve Play Area Accessibility	Address Other Outdoor Site Accessibility Issues		
Harvard	26.9	A multi-use sports complex and community hub for active recreation opportunities with opportunities to enhance landscaping and update facilities. Potential to increase community center building size. Other opportunities include incorporating ADA updates, enhancing wayfinding signage, updating restroom facility and addressing irrigation/drainage issues. Explore design features to prevent errant balls from hitting parked cars.										●		●				●		●							●	●	●	●		●			●	10	●
Heritage	36.5	A diverse community park with a variety of recreation experiences, multiple athletic fields and courts, several community facilities and large pond area. There is an opportunity to modernize the Irvine Fine Arts Center and renovate or expand the Community Center into a multi-use facility. There are also opportunities to repurpose racquetball courts into other recreation space, update concession facility, enhance wayfinding signage, add shade features, add art/cultural features and assess pond area. Consider options for refreshing/replacing pond area with a facility innovation like an enlarged splash play area. Explore adding convenient parking.								●	●	●	●	●				●		●	●	●	●			●		●		●			●		●		15	●
Hicks Canyon	16.7	A multi-use sports complex with opportunities to improve play opportunities, social areas and enhance landscaping and site amenities. There is potential for a new community center. There are also opportunities to improve social spaces, remove/replace BBQs, add bike racks and potential for sand volleyball courts adjacent to soccer fields. The use of reclaimed water offers an educational opportunity.							●	●	●	●					●			●					●	●	●		●	●		●			●		13	●
Las Lomas	18.3	A multi-use sports complex with opportunities to add a sustainable water play area, enhance landscaping and add native plantings.							●	●	●	●								●		●						●	●	●	●			●		11	
Mark Daily Athletic Fields	9.8	A multi-use sports complex with opportunities to provide landscaping enhancements, update facilities, update ADA accessibility for spectators/players at fields and explore options to address parking issues.												●												●			●	●		●				6	

Park Name	Acreage	Description of Design and Development Opportunities	Build						Enhance																								Rehabilitate				Total Number of Improvement Opportunities	Major Facility Opportunity (See Table D-2)
			Conduct Feasibility Study	Acquire Park Land	Design Master Plan	Prepare Construction Documents	Develop Site	Coordinate with Developer	Develop/Deepen Design Intent	Conduct Community Outreach	Identify Park Theme, Art and Cultural Features	Add Play Opportunities	Complete Minor Facility Improvements	Renovate/Add Entry/Parking Areas	Add Internal Paths/Trails	Add/Enhance Sports Fields	Add/Enhance Sports Courts	Add Shade Features	Add Picnic Shelters	Enhance Seating Arrangements and Social Spaces	Incorporate Flexible Use Area	Repurpose Existing Use Area	Integrate Nature Experience	Incorporate Educational Features	Upgrade Site Furnishing Amenities	Incorporate Materials Color Palette	Add/Improve Lighting	Add/Improve Signage	Increase Plant Diversity	Address Water Conservation	Improve Ecological Systems Through Stormwater Management	Implement Urban Greening Strategies	Update Maintenance Program	Replace Infrastructure/Assets	Improve Play Area Accessibility	Address Other Outdoor Site Accessibility Issues		
Mike Ward - Woodbridge	22.0	A community hub with an opportunity to completely renovate and expand the Lakeview Senior Center & Adult Day Care Health Services Center with shaded outdoor plaza. Opportunity to add improvements that encourage senior socialization, health and wellness (e.g., bocce ball, pickleball courts, shade, community garden, senior fitness equipment and passive recreation areas for quiet reading). Potential for improved and expanded outdoor performance space to support concerts. There are other opportunities to enhance minor entry points/connections, add evergreen trees for year-round shade and convert racquetball courts into a flexible recreation space (e.g., climbing wall or the above-mentioned pickleball courts).									•		•	•			•	•	•	•	•	•	•	•				•	•	•		•	•				16	
Northwood	17.7	A community hub that supports a variety of recreational experiences and sports fields with opportunities to improve site amenities, add gathering spaces, repurpose existing use areas and explore the potential to add a sustainable water play area. Playground drawbridge needs traction (slippery).							•	•	•	•		•						•	•	•	•	•	•	•		•	•	•		•		•	•		18	
Oak Creek	11.7	A community hub with opportunities to provide landscaping enhancements and play opportunities with the potential to add a new community center. Other opportunities include removing turf in non-use areas, using reclaimed water as an educational opportunity, adding evergreen trees, exploring potential to add soccer practice fields or disc golf under powerlines; exploring potential for shared parking with adjoining office use, and incorporating health and wellness opportunities for surrounding office employees.									•	•		•				•		•		•		•					•	•					•			10	•
Quail Hill	16.0	A community hub with a new community center with fine arts component. There are opportunities to connect surrounding open spaces and trails and add adventure play features.							•		•									•			•	•				•	•	•	•					9	•
Rancho San Joaquin	2.1	Opportunity to modernize and slightly expand the Rancho San Joaquin Senior Center, adding flexible use lawn for small outdoor events, shaded seating area, nature spot, loop trail and expanded community garden.											•	•	•			•			•		•						•	•		•	•				10	•
Trabuco Center	2.6	A special use park with the Trabuco Senior Center.																																			0	

Park Name	Acreage	Description of Design and Development Opportunities	Build						Enhance																								Rehabilitate				Total Number of Improvement Opportunities	Major Facility Opportunity (See Table D-2)
			Conduct Feasibility Study	Acquire Park Land	Design Master Plan	Prepare Construction Documents	Develop Site	Coordinate with Developer	Develop/Deepen Design Intent	Conduct Community Outreach	Identify Park Theme, Art and Cultural Features	Add Play Opportunities	Complete Minor Facility Improvements	Renovate/Add Entry/Parking Areas	Add Internal Paths/Trails	Add/Enhance Sports Fields	Add/Enhance Sports Courts	Add Shade Features	Add Picnic Shelters	Enhance Seating Arrangements and Social Spaces	Incorporate Flexible Use Area	Repurpose Existing Use Area	Integrate Nature Experience	Incorporate Educational Features	Upgrade Site Furnishing Amenities	Incorporate Materials Color Palette	Add/Improve Lighting	Add/Improve Signage	Increase Plant Diversity	Address Water Conservation	Improve Ecological Systems Through Stormwater Management	Implement Urban Greening Strategies	Update Maintenance Program	Replace Infrastructure/Assets	Improve Play Area Accessibility	Address Other Outdoor Site Accessibility Issues		
Turtle Rock	25.1	A nature-oriented community park with opportunities to reconstruct and merge the Community Center and Nature Center to better support community programming, childcare, and environmental education and nature interpretation. Other opportunities include enhancing entry areas, introducing indoor/outdoor programming and educational space tied to open space areas, adding nature play elements, updating site amenities and improving parking. There is also potential to update the enclosed play area near tennis courts, resurface the tennis courts to support low-impact pickleball, and refurbish several structures.							•		•	•	•	•			•			•			•	•	•			•	•		•	•	•	•		17	•
University	16.3	A diverse community park with a variety of recreation experiences, multiple athletic fields and courts, a community center and large adventure play area. There are opportunities to add ball field amenities, enhance landscaping, enhance entry, incorporate ADA updates to field dugouts, add wayfinding signage and address play area heat build up caused by building rooftop materlal. There is potential to convert racquetball courts to other flexible recreation space.							•		•	•				•	•						•	•	•	•			•	•	•	•			•	•	15	
Windrow	18.9	A multi-use sports complex with opportunities to enhance landscaping, shaded social spaces, improve wayfinding and add connections to the surrounding neighborhood.							•		•			•						•			•						•	•	•				•	9	
Woodbury	10.7	A community hub with a variety of recreational experiences and sports fields and courts with opportunities to improve shaded social spaces.																•		•										•				•	4	
		Totals for community parks	0	0	0	0	0	0	12	6	15	11	5	13	2	2	4	9	3	15	6	5	13	9	7	4	0	6	16	15	8	9	8	2	12	4	221	9
		Percentages for community parks	0%	0%	0%	0%	0%	0%	60%	30%	75%	55%	25%	65%	10%	10%	20%	45%	15%	75%	30%	25%	65%	45%	35%	20%	0%	30%	80%	75%	40%	45%	40%	10%	60%	20%		
Neighborhood Parks																																						
Alderwood	0.7	A small park that is redesigned to reflect the surrounding neighborhood character. This park has opportunities to enhance social spaces, improve site furnishings, and to improve connectivity to surrounding residential areas.							•					•						•					•				•	•					•	7	
Blue Gum	2.7	A neighborhood park with opportunities to define a park theme that reflects the neighborhood character and add art and cultural features. There are opportunities to improve play elements and enhance landscaping.							•	•	•	•								•									•	•				•		8	
Brywood	6.0	A neighborhood park with opportunities to improve site accessibility, enhance landscaping, and add trail connections.													•														•	•				•	•	5	

Park Name	Acreage	Description of Design and Development Opportunities	Build						Enhance																							Rehabilitate				Total Number of Improvement Opportunities	Major Facility Opportunity (See Table D-2)
			Conduct Feasibility Study	Acquire Park Land	Design Master Plan	Prepare Construction Documents	Develop Site	Coordinate with Developer	Develop/Deepen Design Intent	Conduct Community Outreach	Identify Park Theme, Art and Cultural Features	Add Play Opportunities	Complete Minor Facility Improvements	Renovate/Add Entry/Parking Areas	Add Internal Paths/Trails	Add/Enhance Sports Fields	Add/Enhance Sports Courts	Add Shade Features	Add Picnic Shelters	Enhance Seating Arrangements and Social Spaces	Incorporate Flexible Use Area	Repurpose Existing Use Area	Integrate Nature Experience	Incorporate Educational Features	Upgrade Site Furnishing Amenities	Incorporate Materials Color Palette	Add/Improve Lighting	Add/Improve Signage	Increase Plant Diversity	Address Water Conservation	Improve Ecological Systems Through Stormwater Management	Implement Urban Greening Strategies	Update Maintenance Program	Replace Infrastructure/Assets	Improve Play Area Accessibility	Address Other Outdoor Site Accessibility Issues		
Canyon	3.4	A neighborhood park with enhanced maintenance program and updated irrigation features. This park has opportunities to add play features, enhance landscaping and renovate entry and parking areas.										●		●														●	●			●	●	●		7	
Carrotwood	3.1	A neighborhood park with enhanced site furnishings such as seating and shade structures, and improved landscaping.																●							●				●	●				●		5	
Chaparral	9.6	A neighborhood park that provides opportunities to experience nature, implement new urban greening strategies and enhance wayfinding and signage.																					●		●			●	●	●	●	●			●		8	
Citrus Glen	3.1	A neighborhood park with enhanced site furnishings and improved signage and wayfinding.																							●			●							●		3	
College	7.6	A neighborhood park with a redesigned park theme that reflects the local character and has improved art and cultural features. This park has opportunities to add new play features, flexible/ multipurpose areas, and enhanced social spaces.							●		●	●								●	●			●					●	●				●		9	
Comstock	1.0	A small park with opportunities for enhanced landscaping and accessible play features.																										●	●					●		3	
Coralwood	2.7	A neighborhood park redesigned to reflect the surrounding neighborhood character and serve nearby residents with active and social recreation opportunities.							●	●	●	●		●						●	●								●	●					●		10	
Creekview	0.7	A small park with opportunities for incorporating interpretive features, social spaces and for implementing innovative urban greening strategies.																		●				●					●	●	●	●					6	
Cypress Grove Park	9.4	A new neighborhood park that has been recently developed to meet local needs.																																			0	
Dovecreek	7.8	A neighborhood park with an updated maintenance program, improved social spaces and accessible play areas.							●		●	●								●									●	●			●		●		8	
Flagstone	2.3	A neighborhood park with opportunities for enhanced landscaping, improved ecological systems for better stormwater management and enhanced play areas.										●																	●	●	●	●					5	
Hoeptner	2.2	A neighborhood park with enhanced landscaping and improved signage and wayfinding.																									●	●	●					●		4	
Homestead	2.1	A neighborhood park with opportunities to define a park theme that reflects the neighborhood character and add art and cultural features. This park provides opportunities to put in new play features.							●		●	●											●											●		5	
Knollcrest	5.0	A neighborhood park with opportunities for repurposing underutilized turf areas, improving social spaces and enhancing landscaping.																		●		●						●	●					●	●	6	

Park Name	Acreage	Description of Design and Development Opportunities	Build						Enhance																								Rehabilitate				Total Number of Improvement Opportunities	Major Facility Opportunity (See Table D-2)
			Conduct Feasibility Study	Acquire Park Land	Design Master Plan	Prepare Construction Documents	Develop Site	Coordinate with Developer	Develop/Deepen Design Intent	Conduct Community Outreach	Identify Park Theme, Art and Cultural Features	Add Play Opportunities	Complete Minor Facility Improvements	Renovate/Add Entry/Parking Areas	Add Internal Paths/Trails	Add/Enhance Sports Fields	Add/Enhance Sports Courts	Add Shade Features	Add Picnic Shelters	Enhance Seating Arrangements and Social Spaces	Incorporate Flexible Use Area	Repurpose Existing Use Area	Integrate Nature Experience	Incorporate Educational Features	Upgrade Site Furnishing Amenities	Incorporate Materials Color Palette	Add/Improve Lighting	Add/Improve Signage	Increase Plant Diversity	Address Water Conservation	Improve Ecological Systems Through Stormwater Management	Implement Urban Greening Strategies	Update Maintenance Program	Replace Infrastructure/Assets	Improve Play Area Accessibility	Address Other Outdoor Site Accessibility Issues		
Meadowood	10.1	A neighborhood park with a redesigned park theme that reflects the local character and has improved art and cultural features. This park has opportunities to enhance sports fields, improve parking areas, and enhance landscaping.							●		●			●		●				●								●	●					●		8	
Orchard	6.0	A neighborhood park with opportunities for reorganizing social spaces, enhancing connectivity and site accessibility, and adding multipurpose, flexible areas that can accommodate different uses.											●							●	●								●	●					●		6	
Pepperwood	3.1	A neighborhood park with opportunities for enhancing landscaping and adding social spaces with site furnishings.																		●									●	●					●		4	
Pinewood	2.1	A small park with opportunities for improving play area accessibility, enhancing nature experiences for visitors and improving landscaping.																					●						●						●		3	
Plaza	7.7	A neighborhood park which is redesigned to reflect the local character and has updated play equipment. Would benefit from improved social spaces; enhanced connectivity within the park and to surrounding areas and new educational/interpretive features that connect people with nature.							●	●	●	●			●					●	●		●	●		●			●	●	●	●			●	●	16	
Presley	2.9	A neighborhood park with opportunities to rethink the park design to better reflect the surrounding neighborhood character and enhance play areas. This park has opportunities for updated site furnishings and a new material color palette.							●			●		●						●					●	●		●	●	●					●		10	
Racquet Club	2.2	A neighborhood park with improved shade structures, accessible play areas and improved landscaping.										●						●											●	●					●		5	
Ranch	8.7	A neighborhood park with opportunities to rethink the park design to better reflect the surrounding neighborhood character and enhance play areas. This park has opportunities for updated site furnishings, accessible play areas and enhanced landscaping.							●			●		●														●	●	●			●		●		8	
San Carlo	6.0	A neighborhood park which is redesigned to reflect the local character and has updated play equipment. Opportunities for improved social spaces; new educational /interpretive features that connect people with nature; updated maintenance program; and updated material and color palette.							●	●	●	●								●	●		●		●	●			●	●	●	●		●	●	●	17	
San Leandro	4.0	A neighborhood park with opportunities for landscape improvements; enhanced parking lot/entry design; improved signage and wayfinding; and lighting improvements.												●														●	●	●	●				●		6	

Park Name	Acreage	Description of Design and Development Opportunities	Build						Enhance																								Rehabilitate				Total Number of Improvement Opportunities	Major Facility Opportunity (See Table D-2)
			Conduct Feasibility Study	Acquire Park Land	Design Master Plan	Prepare Construction Documents	Develop Site	Coordinate with Developer	Develop/Deepen Design Intent	Conduct Community Outreach	Identify Park Theme, Art and Cultural Features	Add Play Opportunities	Complete Minor Facility Improvements	Renovate/Add Entry/Parking Areas	Add Internal Paths/Trails	Add/Enhance Sports Fields	Add/Enhance Sports Courts	Add Shade Features	Add Picnic Shelters	Enhance Seating Arrangements and Social Spaces	Incorporate Flexible Use Area	Repurpose Existing Use Area	Integrate Nature Experience	Incorporate Educational Features	Upgrade Site Furnishing Amenities	Incorporate Materials Color Palette	Add/Improve Lighting	Add/Improve Signage	Increase Plant Diversity	Address Water Conservation	Improve Ecological Systems Through Stormwater Management	Implement Urban Greening Strategies	Update Maintenance Program	Replace Infrastructure/Assets	Improve Play Area Accessibility	Address Other Outdoor Site Accessibility Issues		
San Marco	5.1	A neighborhood park with new shade structures, improved entry, and landscape enhancement.							●	●	●			●				●							●				●	●	●	●				●	11	
Settlers	6.0	A neighborhood park with opportunities for landscape improvements and new multipurpose, flexible social spaces that can serve different uses at different times.																		●	●								●	●					●		5	
Silkwood	3.9	A neighborhood park which is redesigned to reflect the local character and has updated play equipment with opportunities for improved social spaces; new educational / interpretive features that connect people with nature; and enhanced internal connectivity to all its amenities and features.							●					●	●								●		●		●		●	●	●				●		10	
Stonegate	6.0	A neighborhood park which has improved social spaces; new educational/ interpretive features that connect people with nature and accessible play areas.																		●	●			●											●		4	
Sweet Shade	7.9	A neighborhood park with an updated community center and opportunities for enhancing social spaces, site furnishings, and accessible play areas.										●								●	●								●	●					●		6	
Sycamore	6.9	A neighborhood park with opportunities for improving play area accessibility, enhancing nature experiences for visitors and improving landscaping.							●		●	●									●		●	●					●	●		●				●		10	
Valencia	6.0	A neighborhood park that is redesigned to reflect the local community character. This park has opportunities for providing enhanced social spaces, updated ecological systems for better stormwater management and new urban greening strategies.							●		●	●		●				●		●			●	●	●	●			●	●	●	●		●	●		16	
Valley Oak	3.0	A neighborhood park that is redesigned to reflect the local community character. This park has opportunities for providing enhanced social spaces, updated ecological systems for better stormwater management and new urban greening strategies.							●		●							●		●	●								●	●	●	●			●		10	
Willows	3.6	A neighborhood park with enhanced landscaping and accessible play areas.												●															●	●					●	●	5	
		Totals for neighborhood parks	0	0	0	0	0	0	16	5	12	15	1	11	3	1	0	5	0	18	10	1	8	6	9	4	2	7	32	31	9	8	4	3	31	7	259	0
		Percentages for neighborhood parks	0%	0%	0%	0%	0%	0%	46%	14%	34%	43%	3%	31%	9%	3%	0%	14%	0%	51%	29%	3%	23%	17%	26%	11%	6%	20%	91%	89%	26%	23%	11%	9%	89%	20%		
Special Use Sites																																						
Bommer Vista Point	0.5	Vista point with opportunities for minimal enhancements.											●																								1	
Central Bark Dog Park	2.8	A dog park with opportunities to improve social spaces and upgrade amenities.											●	●	●			●		●																	5	
Sepulveda Vista Point	1.3	Vista point with opportunities to improve trail connectivity.											●																								1	

Park Name	Acreage	Description of Design and Development Opportunities	Build						Enhance																												Rehabilitate				Total Number of Improvement Opportunities	Major Facility Opportunity (See Table D-2)
			Conduct Feasibility Study	Acquire Park Land	Design Master Plan	Prepare Construction Documents	Develop Site	Coordinate with Developer	Develop/Deepen Design Intent	Conduct Community Outreach	Identify Park Theme, Art and Cultural Features	Add Play Opportunities	Complete Minor Facility Improvements	Renovate/Add Entry/Parking Areas	Add Internal Paths/Trails	Add/Enhance Sports Fields	Add/Enhance Sports Courts	Add Shade Features	Add Picnic Shelters	Enhance Seating Arrangements and Social Spaces	Incorporate Flexible Use Area	Repurpose Existing Use Area	Integrate Nature Experience	Incorporate Educational Features	Upgrade Site Furnishing Amenities	Incorporate Materials Color Palette	Add/Improve Lighting	Add/Improve Signage	Increase Plant Diversity	Address Water Conservation	Improve Ecological Systems Through Stormwater Management	Implement Urban Greening Strategies	Update Maintenance Program	Replace Infrastructure/Assets	Improve Play Area Accessibility	Address Other Outdoor Site Accessibility Issues		
		Totals for special use sites	0	0	0	0	0	0	0	0	0	0	3	1	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0
		Percentages for special use sites	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	33%	33%	0%	0%	33%	0%	33%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%				
Planned Parks																																									
Portola Community Park	25.0	A multi-use community park with sports fields, courts, nature-themed playground, Native Garden and community center.					●	●																															2	●
Gateway Community Park	70.5	A gateway to the JOST and surrounding open space, supporting both active and passive recreation opportunities including trails, disc golf, flexible fields, nature play and a possible indoor gymnasium.			●	●	●	●																															4	●
Los Olivos Community Park	12.5	A village hub to support athletics, social gatherings, and a variety of recreation experiences.				●	●	●																															3	●
Northwood Point Neighborhood Park	6.1	A neighborhood park developed to reflect the local character and serve nearby residents with active and social recreation opportunities.			●	●	●	●																															4	
IBC Neighborhood Park(s)	3.0	An intensive use site that provides urban playspace, green space and gathering/social space for nearby neighbors.		●	●	●	●																																4	
		Totals for planned parks	0	1	3	4	5	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	3
		Percentages for planned parks	0%	17%	50%	67%	83%	67%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%				
		Totals for all parks	0	1	3	4	5	4	28	11	27	26	9	25	6	3	4	15	3	34	16	6	21	15	16	8	2	13	48	46	17	17	12	5	43	11	504	12
		Percentages for all parks	0%	2%	5%	6%	8%	6%	44%	17%	42%	41%	14%	39%	9%	5%	6%	23%	5%	53%	25%	9%	33%	23%	25%	13%	3%	20%	75%	72%	27%	27%	19%	8%	67%	17%				

Table D-2: Site-Specific Major Facility Enhancement Opportunities[1]

				Build			Enhance	Rehabilitate		
Facility Name	**Park Location**	**Year Built/ Rehabilitated or Planned for Construction**	**Existing or Planned Square Footage**	**Construct**	**Renovate and Modernize Building**	**Enlarge Building Renovation or Construction**	**Refresh, Update or Improve Building [3]**	**Rehabilitate or Replace Building Elements [4]**	**Potential Square Footage [5]**	**Additional Notes**
Community Centers										
Cypress Community Center	Cypress	2014	6,500					•	6,500	
Deerfield Community Center	Deerfield	1979	5,028				•		5,028	There may be opportunities to expand the community center should disc golf be relocated.
Harvard Community Center	Harvard	1979	4,972			•			6,000	When updating building, conduct a site, building and parking evaluation to determine if there are opportunities to add a teen room or multi-purpose room that supports active recreation uses at this site.
Heritage Community Center	Heritage	1978	19,772				•	•	19,772	There may be opportunities to transform this center via renovation and/or expansion into a multi-use facility featuring a flexible community events, performance space and gymnasium.
Las Lomas Community Center	Las Lomas	2005	5,093					•	5,093	
Northwood Community Center	Northwood	1982/2013	7,375					•	7,375	
Sweet Shade Community Center	Sweet Shade	2009	3,000					•	3,000	
Turtle Rock Community Center	Turtle Rock	1979	16,936			•			20,000	Jointly evaluate renovation and reconstruction opportunities for combining the Community Center and Nature Center considering cost efficiencies, programming synergies, revenue-generating options and opportunities to provide one green building consistent with the natural character and nature-based programming at this site. Evaluate options to increase community use for all ages, incorporate a multi-purpose room that supports active and passive uses, and share classrooms to support community programming, childcare, and environmental education and nature interpretation. Consider indoor and outdoor spaces (e.g., outdoor classrooms, patios, views, trail access) in conjunction with this remodel. (Note: The potential indoor capacity of the combined Turtle Rock Community Center and Turtle Rock Nature Center is 25,000 s.f.).
University Community Center	University	1976/2010	6,043					•	6,043	
Woodbury Community Center	Woodbury	2005	4,001					•	4,001	
Senior Centers										
Lakeview Senior Center and Adult Day Care Health Services Center	Mike Ward - Woodbridge	1993	30,600			•			40,000	Evaluate options to reconfigure and/or enlarge the facility to include wider hallway, media/technology resource room, more fitness/active recreation space, larger game room, more storage and office space and better indoor- outdoor connections. Enhance the outdoor passive area with a shaded, comfortable plaza and social spaces that include amenities that complement senior health and wellness. Expand and modernize facility.
Trabuco Senior Center	Trabuco	2016	7,500					•	7,500	
Rancho Senior Center	San Joaquin	1978	11,010			•			15,000	Given site constraints, evaluate options to modernize and reconfigure facility to include wider hallways, better acoustics, a media/technology resource room, more fitness/active recreation space, more storage and office space, and better indoor/outdoor connection. Enhance the outdoor garden and provide an accessible loop trail for outdoor walking, plus a seating area under the trees. Address parking issues.

Facility Name	Park Location	Year Built/ Rehabilitated or Planned for Construction	Existing or Planned Square Footage	Build: Construct	Build: Renovate and Modernize Building	Build: Enlarge Building in Renovation or Construction[2]	Enhance: Refresh, Update or Improve Building[3]	Rehabilitate: Rehabilitate or Replace Building Elements[4]	Potential Square Footage[4]	Additional Notes
Other Major Indoor Facilities										
Irvine Fine Arts Center	Heritage	1979	18,600		•				18,600	Conduct a feasibility study, master plan and operational pro forma for a new Fine Arts Center in the same space as the current building. Modernize features, considering programming, revenue-generating opportunities and indoor/outdoor uses, particularly to support group events and reserved uses.
Turtle Rock Nature Center	Turtle Rock	1979	2,810			•			5,000	See Turtle Rock Community Center notes.
Irvine Child Resource/Youth Employment Center	Heritage	1988	3,000				•		3,000	
Irvine Child Development Center	Bill Barber	1989	11,162				•		11,162	
Other Major Outdoor Facilities										
William Woollett Jr. Aquatics Center	Heritage	1979/2005[5]	13,040			•			15,000	Evaluate opportunities to update and expand facility to better support national scale events. Consider enhanced locker rooms and lobby, incorporating additional office space and concessions. Renovate back hill to enhance seating. Extend or improve the drop off/pick up drive for access, potentially using the adjacent greenspace.
Planned Major Facilities										
Portola Community Center	Portola	2017-18[7]	12,006	•					12,006	Coordinate with the developer to construct as planned.
Gateway Community Center and Gymnasium	Gateway	2018[7]	12,000	•					50,000	Work with the developer to identify options to develop a larger multi-purpose, active-use community and recreation center with gymnasium and/or other indoor recreation space (40,000-65,000 sf).
Los Olivos Community Center	Los Olivos	2019[7]	6,000	•					6,000	Coordinate with the developer to construct as planned.
Quail Hill Community Center	Quail Hill	2016[7]	11,800	•					11,800	Construct as planned.
Oak Creek Community Center	Oak Creek	TBD	6,000	•					25,000	Consider options to build a larger facility to include a small gymnasium or active recreation space.
Bill Barber Community Center/Gymnasium	Bill Barber	TBD	45,000	•					45,000	This park is home to major athletic events and festivals, such as the Irvine Global Village Festival. It has space intended for the construction of a large community center/gym and amphitheater, but not enough space for parking to support both uses. In lieu of building a community center/gym at this location, evaluate opportunities for a 1) event pavilion, 2) multi-use event and performance space, or 3) a fieldhouse for sports such as indoor soccer, volleyball and pickleball.
Hicks Canyon Community Center	Hicks Canyon	TBD	5,500	•					5,500	Relocate the planned neighborhood center to another park in north Irvine. The planned community center (5,500 sf) is too small to provide indoor active recreation facilities.

Notes:

1. The opportunities for building renovation and modernization are based on facility lifecycles and recreation needs identified in the Parks and Recreation Needs Assessment. Building condition studies, feasibility studies, market and operational analyses, facility master planning, and consideration of building enhancements in conjunction with the redevelopment of other site features may be needed to determine recommendations to proceed.
2. When building is constructed or fully renovated, options to provide a larger facility should be evaluated to support added recreation opportunities. (For planned new construction, the potential square footage of the building may be different from what is currently planned.)
3. A refresh involves updating, improving and remodeling the building. For older facilities, if a building evaluation identifies structural issues and/or major renovation needs to bring the facility up to code, then full renovation and modernization may be necessary.
4. This column indicates "potential" square footage if facility evaluations indicate that the building should be enlarged to support additional programming options. This information is for general planning and cost estimating only. The actual square footage for a proposed facilities will be identified through feasibility studies, market analyses and facility master plans.
5. All buildings that are not being updated or modernized are anticipated to need repairs or replacement of specific amenities as they continue to age. This type of capital replacement is budgeted through Major Facility Asset Replacement funds.
6. Estimated renovation date as noted by City of Irvine.
7. Current plans as of 2016, City of Irvine.

APPENDIX E:

Community Request Evaluations

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COMMUNITY REQUEST EVALUATION TOOL

The City provides a wide variety of recreation opportunities and programs in its parks, public facilities and open spaces. Many residents wish to contribute to the vitality of the Irvine park system by proposing park or facility enhancements, programs, special events or donations. The Community Request Evaluation Tool is designed to help the City evaluate whether the implementation of these opportunities aligns with community goals and visions, as expressed through the *Parks Master Plan*.

Process

Evaluating requests in a consistent manner eliminates confusion or uncertainty for both community members and City staff. This tool also reinforces the primacy of the *Master Plan* in these matters. The process should generally follow five steps:

- **Step 1:** A community member or advocate develops an idea.
- **Step 2:** City staff provides the Community Request and Proposal Form and the community member provides the requested information.
- **Step 3:** City staff reviews the potential impacts of the proposal, including other project displacements, capital costs and operating costs.
- **Step 4:** City staff completes a formal review.
- **Step 5:** A decision is made and next steps are determined as appropriate.

COMMUNITY REQUEST AND PROPOSAL FORM

This form provides an opportunity for community members to request or propose park or facility enhancements, programs, special events and/or donations. It allows City staff to evaluate proposals in the context of Irvine's *Parks Master Plan*. Please fill out the entire form and return the completed form to the City of Irvine Community Services Department.

Project Champion

Name and Affiliation:
Address:
Phone and Email:

Project Proposal

Date of Request/Proposal:
Park or Site Name:
Project Description (attach additional sheets as needed):
This request or proposal is for a: ☐ Park or Facility Project (adds or improves a feature or amenity in a park) ☐ Program/Event/Activity (adds a program/event/activity in a facility, park or open space area) ☐ Donation (provides funding for a specific park, facility, program or event)

This request or proposal meets the following *Parks Master Plan* Objectives:		
Objective	**√ or N/A**	**Explanation**
A: Provide a variety of public and private parks to meet resident needs.		
B: Provide a broad spectrum of active and passive, indoor and outdoor park amenities throughout Irvine that support diverse recreation experiences, community gathering spots and opportunities for play.		
C: Activate parks and address community recreation needs through the provision of programs and events.		
D: Ensure that the City's park, recreation and open space system is accessible to Irvine residents, including users of different abilities and demographic characteristics.		
E: Create dynamic parks as special and unique places, adding or incorporating art and historic resources, innovative features, diverse landscaping, nature, varied color palettes and welcoming amenities.		
F: Balance access to open space for outdoor recreation with conservation needs.		
G: Ensure that Irvine's parks and recreation system is operated, maintained and renovated in a manner that is cost-effective, while balancing user safety, security, satisfaction and funding availability.		
H: Develop and maintain relationships with targeted public and private organizations		

Request or Proposal Costs

This proposal anticipates the following costs to build or implement (check one):

High	$250,000+	
Medium	$50,000 - 249,999	
Low	$0 - 49,999	

Proposed Donation

_____

_____

_____

_____

_____

_____

Project Evaluation Statement

This request or proposal supports _____ objectives identified in the Master Plan and will serve _____ people. It has a _____ cost.

4.3

REQUEST FOR CITY COUNCIL ACTION

MEETING DATE: MAY 9, 2017

TITLE: A RESOLUTION OF INTENT TO CONSIDER GRANTING NONEXCLUSIVE FRANCHISE AGREEMENTS FOR COMMERCIAL WASTE COLLECTION AND RECYCLING SERVICES

Director of Public Works

City Manager

RECOMMENDED ACTION

Adopt – A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, DECLARING ITS INTENT TO CONSIDER GRANTING NONEXCLUSIVE FRANCHISE AGREEMENTS FOR COMMERCIAL WASTE COLLECTION AND RECYCLING SERVICES AND SETTING FORTH THE PROPOSED TERMS AND CONDITIONS OF SAID FRANCHISE

EXECUTIVE SUMMARY

On June 28, 2016, the City Council approved a new exclusive waste collection franchise agreement with Waste Management of Orange County (WM) for residential and village commercial designated areas of the City (Attachment 1). All other commercial properties in the City (i.e., those properties not within the village commercial areas) are open for competitive services and rates from any of 21 nonexclusive haulers authorized to provide said services through separate individual nonexclusive franchise agreements with the City. A map of the existing nonexclusive commercial service areas, not designated as village commercial, is included as Attachment 2. Because the nonexclusive agreements cover areas of the City not subject to the City's exclusive franchise, those nonexclusive agreements have traditionally not been considered for a public competitive bidding process or for inclusion in the City's existing exclusive franchise. Absent direction from the City Council, staff did not consider an exclusive franchise program for those commercial areas. However, if that interest exists today or in the future, staff can prepare to address such an arrangement.

The June 28 staff report indicated staff's intent to update the service area map with the next iteration of nonexclusive franchise agreements. Staff initiated discussions with the existing nonexclusive haulers in July 2016 and continued to engage interested parties in review of the proposed updated service area map. A list of the City's existing authorized nonexclusive haulers in included as Attachment 3. The City's existing

agreements with its nonexclusive haulers expire on June 30, 2017 and staff recommends consideration of the proposed new franchise agreement and the accompanying revised map (Attachment 4) by the City Council.

The proposed new agreement retains many of the same provisions of the existing agreement, including a tiered franchise fee structure designed to promote recycling. The proposed agreement also enhances programs necessary for City compliance with state waste diversion mandates and provisions for hauler qualifications and insurance. In addition, as referenced above, the proposed new agreement also provides a revised service area map.

Pursuant to the City Charter, the award of a franchise requires the City Council to first adopt a resolution declaring its intent to approve and grant said franchise, set forth the terms and conditions thereof, and set the place and time for a public hearing thereon. The recommended resolution (Attachment 5) satisfies this requirement and sets May 23, 2017 as the public hearing date for City Council consideration of the proposed new franchise. The City Charter also requires that franchise agreements be adopted by ordinance. The proposed public hearing on May 23 will satisfy this requirement for the reading and introduction of an ordinance approving the proposed franchise agreements, with a second reading and adoption of the ordinance on June 13, 2017.

As referenced above, the existing nonexclusive franchise agreements are set to terminate on June 30, 2017 and the City Charter requires that the proposed franchise agreement be approved by ordinance. The proposed resolution takes into account the timing related to the effectiveness of an ordinance, and the possibility that the City Council may take action other than as recommended by staff. In this regard, the proposed resolution authorizes the extension of the term of the existing nonexclusive franchise agreements for a period of up to six months to ensure there is no interruption in services prior to the time the City Council's action on this matter become final.

COMMISSION/BOARD/COMMITTEE RECOMMENDATION

This item is scheduled for review by the City's Finance Commission on May 15, 2017.

ANALYSIS

Staff and the City Attorney have prepared the proposed new nonexclusive waste collection franchise agreement for consideration by the City Council. The draft agreement was shared with the City's existing franchisees and staff is not aware of any objection to the proposed terms of the agreement. Discussions regarding the proposed revisions to the service map are ongoing.

The terms of the proposed new agreement retain provisions contained in the existing nonexclusive franchise agreement while augmenting provisions to address new state

laws and specified program enhancements. The following is a summary of the terms and conditions proposed by staff for City Council consideration:

1. **Term:** A new nine-year term from July 13, 2017 to August 31, 2026 to coincide with the term of the City's exclusive agreement with Waste Management.

2. **Retention of Existing Agreement Benefits:**
   a. Open and competitive program for commercial properties located within the nonexclusive franchise area.
   b. Support for public education programs.
   c. A tiered franchise fee that promotes recycling.

3. **AB 341 Commercial Recycling Compliance:** Continued recycling programs for commercial properties within the franchise area with new expanded outreach and compliance assistance from haulers to enhance the City's compliance with state law AB 341, that mandates commercial recycling statewide.

4. **Organics Program:** Competitive organics waste program for businesses in the franchise area that are required to comply with State law AB1826 requiring certain businesses to recycle "organics" (discarded food, green waste, nonhazardous wood waste, and food-soiled paper).

5. **Assignment:** Revised provisions, such that any corporate restructuring or other action that results in the "Contractor" being owned and controlled by any entity other than the original franchisee will require City Council approval of the contract assignment.

6. **Hauler Performance Reviews:** Annual compliance reviews to consider contractor performance, potential new services, application of new technologies, customer complaints, and developments in waste handling laws.

7. **Revised Nonexclusive and Village Commercial Map:** The existing franchise agreement includes a map depicting those commercial areas subject to the proposed nonexclusive franchise agreement, and those areas known as "Village Commercial Premises" that are subject to the City's exclusive franchise. The proposed new agreement provides an updated map to account for existing land uses, future development and development of the Great Park area.

As referenced above, pursuant to the City Charter, the award of a franchise requires the City Council to first adopt a resolution declaring its intent to approve and grant said franchise. The recommended action satisfies this requirement and approval of the proposed resolution (Attachment 5) sets May 23, 2017 as the public hearing date for City Council consideration of the proposed franchise. An ordinance approving the proposed new franchise agreement would not be effective until 30 days following the second reading of the ordinance (i.e., July 13, 2017). To provide the City with the maximum flexibility in considering the proposed new agreements, and to ensure there is no interruption in services prior to such time as the City Council's action on the proposed agreements become final, the proposed resolution also serves to extend the existing nonexclusive franchise agreements for up to six months. The proposed resolution provides that the existing agreements be extended until the earlier of December 31, 2017, or the date that a new nonexclusive franchise agreement has been approved by the City Council and becomes effective.

ALTERNATIVES CONSIDERED

The City Council may elect to discontinue the City's existing nonexclusive franchise program and direct staff to initiate a competitive bid process for exclusive waste handling services for the commercial business areas of the City, similar to its exclusive arrangement with Waste Management for village commercial properties and return with the results of the bidding process for consideration by the City Council. The City Council may also direct staff to negotiate terms for an exclusive arrangement with any of the existing nonexclusive haulers for exclusive services to the commercial areas and return with the result of that negotiation process for further consideration by the City Council. Under either of these scenarios, an extension to the existing nonexclusive agreements would be recommended by staff to ensure uninterrupted service to the commercial areas. It should also be noted that in considering the potential for an exclusive arrangement for the City's commercial properties, state law requires that the City provide its haulers with a five-year notice period of the proposed termination of its franchise. Therefore, a five-year transition period would be required to be incorporated with either of these two alternatives. These alternatives are not recommended by staff because the open and competitive program has worked well for commercial properties and promotes an open market rate competitive service for Irvine businesses located within the nonexclusive franchise area.

If the City Council elects to move forward with the proposed new nonexclusive franchise agreement, the City Council may also direct staff to make further revisions to the proposed map as deemed appropriate by the City Council or may direct that no changes be made to the map at this time.

FINANCIAL IMPACT

Under the proposed terms, the franchise agreements are expected to generate annual franchise fee revenues of approximately $500,000 to the City's General Fund (consistent with existing franchise fee levels). These revenue estimates will vary depending on the amount of waste diverted from the landfill by the haulers over the term of the agreements.

REPORT PREPARED BY Michael J. Byrne, Senior Management Analyst
Rebecca Bridgeford, Public Works Administrator

ATTACHMENT

1. June 28, 2016 City Council Staff Report (without attachments)
2. Existing Service Area Map
3. Authorized Nonexclusive Haulers
4. Draft Nonexclusive Franchise Agreement and Revised Service Area Map
5. Resolution

REQUEST FOR CITY COUNCIL ACTION

MEETING DATE: JUNE 28, 2016

TITLE: CONSIDERATION OF AN ORDINANCE GRANTING AN EXCLUSIVE FRANCHISE TO WASTE MANAGEMENT COLLECTION AND RECYCLING, INC. DBA WASTE MANAGEMENT OF ORANGE COUNTY FOR SOLID WASTE HANDLING SERVICES TO RESIDENTIAL AND VILLAGE COMMERCIAL PREMISES

Director of Public Works

City Manager

RECOMMENDED ACTION

1. Receive staff report.
2. Open the public hearing; receive public input.
3. Close the public hearing.
4. City Council comments and questions.
5. Introduce for first reading and read by title only - AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, GRANTING A SOLID WASTE HANDLING FRANCHISE TO WASTE MANAGEMENT COLLECTION AND RECYCLING, INC. DBA WASTE MANAGEMENT OF ORANGE COUNTY, FOR THE PERIOD OF SEPTEMBER 1, 2016 THROUGH AUGUST 31, 2026

EXECUTIVE SUMMARY

On June 14, 2016, the City Council adopted a Resolution declaring its intent to consider granting a new franchise to Waste Management of Orange County (WM), setting forth the proposed terms and conditions thereof, and setting a public hearing date of June 28, 2016 as the date for the City Council to consider the proposed franchise. A copy of the June 14, 2016 staff report is included as Attachment 1. The public hearing on this matter was advertised per City policy on June 16, 2016.

On June 14, 2016, the City received a letter from the Los Angeles County Disposal Association indicating its interest in meeting with City representatives prior to the approval of a new franchise agreement. A meeting was held on June 22, 2016 with invitations extended to all 22 of the City's non-exclusive haulers. The meeting was attended by representatives from 8 haulers and staff provided information and responded to questions regarding the proposed new exclusive franchise agreement with WM. As of the printing date of this report, no other members of the public have submitted comments on the proposed franchise.

ATTACHMENT 1

In accordance with the City Charter, the City Council may grant a franchise following a public hearing process. The recommended actions are the required next steps in the process should the City Council elect to grant a franchise to WM as recommended by staff.

On July 28, 2015, the City Council directed staff to negotiate and present for City Council consideration a new exclusive franchise agreement with WM for residential and village commercial waste and recycling collection services. These services have traditionally been provided under exclusive franchise agreements with WM and its predecessor without competitively bidding prior franchises. A copy of the July 28, 2015 staff report and meeting minutes are included for reference as Attachment 2.

The City's existing franchise agreement with WM is due to expire on June 30, 2017. This agreement is generally comprised of two major components. First, it requires WM to provide weekly trash and recycling service to all residential properties in the City regardless of village location. Second, the agreement designates certain commercial properties in or near residential villages as "Village Commercial". These commercial properties are included in the exclusive franchise area and may only receive their trash and recycling services from WM. Under the terms of its exclusive franchise agreement with the City, WM also is required to provide trash, recycling, and green waste collection services to all City facilities and public parks at no cost to the City.

An exclusive franchise for the City's residential and village commercial areas limits trash collection operations to one hauler, thereby providing uniform waste collection services to residents and mitigating traffic and infrastructure impacts to residential areas that would potentially occur if multiple trash haulers operated in those areas. These services have historically been provided at a very high service level and at a cost to Irvine residents that for many years has been the lowest in Orange County. The proposed franchise agreement would lower rates in the first year further still.

All other commercial properties in the City (i.e., those properties not within the village commercial areas) are now, and under the proposed new agreement would continue to be, open for competitive services and rates from any of 22 non-exclusive haulers authorized to provide said services through separate individual agreements with the City. A map of the existing non-exclusive commercial service areas (not designated as "Village Commercial") is included as Attachment 3.

The July 28, 2015 City Council staff report (Attachment 2) indicated the franchise service areas would be modified to reflect new residential villages with the next franchise. The proposed new agreement provides a framework for updating the existing map to account for new residential villages, future village commercial development and future build-out of the City's Great Park property. In an effort to alleviate potential concerns regarding impacts to existing non-exclusive open competitive commercial areas, revisions to the existing map are proposed to be deferred to coincide with

anticipated revisions that will be the subject of discussions over the next year with all non-exclusive authorized haulers. All commercial properties within the non-exclusive areas will remain eligible for competitive pricing and services from City authorized non-exclusive franchise haulers. The City's agreements with its non-exclusive haulers expire on June 30, 2017. Staff anticipates presenting those agreements separately for renewal consideration by the City Council in early 2017. Because the non-exclusive agreements cover areas of the City not subject to the existing exclusive franchise, those non-exclusive agreements have traditionally not been considered for a public competitive bidding process by the City. Absent direction from the City Council, staff did not consider an exclusive franchise program for those commercial areas. However, if that interest exists today or in the future, staff can prepare to address such an arrangement prior to the June 30, 2017 expiration of the existing non-exclusive agreements. Staff recommends addressing the non-exclusive franchise renewals by way of a separate process following a decision on the proposed new exclusive franchise agreement with WM. Note that prior to the June 28, 2016 City Council meeting, but after this report was prepared, a meeting was held with all non-exclusive franchise agreement haulers to discuss this issue. Any new information from that meeting will be presented as part of staff presentation at the June 28, 2016 public hearing.

From the outset, the key feature of negotiations with WM has been the City's interest to enhance services to the residential community as expressed by the City Council at its July 28, 2015 meeting and to extend to our residents the benefit (e.g. lower rates) that WM realizes from Irvine's growing residential customer base. Toward that end, the proposed new exclusive franchise agreement retains the provisions of the existing agreement, including low price guarantees for Irvine residents and village commercial businesses, and public education programs while enhancing services for which the City Council has expressed an interest, such as bulky item collection and programs necessary for City compliance with State waste diversion mandates.

The proposed agreement is expected to continue to generate annual franchise fee revenues to the City's General Fund of approximately $600,000 (consistent with existing franchise fee levels) and provides for sharing in 50% of profits from revenue generated from anticipated future City-approved planned residential and village commercial growth. It is proposed that the City receive its share of this profit in the form of reduced rates for curbside residential customers, valued at more than $2.1 million over the proposed 10-year term of the agreement.

COMMISSION/BOARD/COMMITTEE RECOMMENDATION

On June 20, 2016 the Finance Commission voted 4-0-1 (Chair Dressler, Commissioners Koh, Montgomery and Reyno voting yes and Vice Chair Bartlett was absent) to recommend the City Council award a new exclusive franchise to Waste Management Collection & Recycling, Inc. dba Waste Management of Orange County

for solid waste handling services to residential and village commercial premises in the City.

ANALYSIS

As previously directed by the City Council, staff and WM representatives, with assistance from the City Attorney's office, have negotiated terms for a proposed new exclusive waste collection franchise agreement for consideration by the City Council. The terms of the proposed new agreement retain the favorable provisions contained in the existing franchise agreement while augmenting provisions to address new state laws and specified City Council expressed interests for program enhancements. The following is a summary of the proposed terms and conditions for City Council consideration:

1. **Term:** A new ten-year term from September 1, 2016 to August 31, 2026.

2. **Franchise Area:** All residential premises and designated Village Commercial premises. All other areas will continue to be covered by the City's non-exclusive franchise agreements that provide for competitive waste hauler pricing and services.

3. **Retention of Existing Agreement Benefits:**
   a. Guaranteed lowest curbside residential rate in Orange County. This rate is based on an annual rate survey as shown in Attachment 4.
   b. A guaranteed maximum rate for all multi-family residential properties and commercial properties within the designated village commercial franchise area that is within the lowest third of commercial rates in Orange County. This rate is based on an annual rate survey as shown in Attachment 5.
   c. Free recycling collection for all curbside residential premises and village commercial properties located within the franchise area.
   d. Funding for public education programs.
   e. Development planning assistance.
   f. Free waste collection services to all City facilities and public parks.
   g. A reduced curbside residential rate for low volume waste generators and a discounted senior rate, based on an annual rate survey as shown in Attachment 4.
   h. 5% franchise fee.

4. **Profit Revenue Sharing:** Half of WM profit revenue from anticipated new planned residential and village commercial growth will be credited to Irvine residents resulting in a monthly rate reduced from the current rate (estimated by WM at 30-cents per month, from $11.79 to $11.49). Over the term of the agreement this results in WM sharing $2.1 million of profits from its revenue with Irvine residents.

5. **Multi-Family Bulky Item Collection:** Enhanced program available for residents at multi-family complexes (subject to private property management approval) providing free monthly collection on pre-announced dates coordinated with each complex.

6. **Single-Family Bulky Item Collection:** Increased program frequency from two to four free bulky item curbside collection service calls annually.

7. **Assisted Services for Qualified Customers:** "Walk out service" for disabled persons and senior citizens needing assistance moving waste and recycling carts to and from the curbside for collection. This new service includes free curbside collection of Household Hazardous Waste, eliminating the need for qualifying residents to load and transport materials to County collection facilities.

8. **Sharps Program:** Medical Sharps Kits will be provided, upon request, for collection and proper disposal of medical needles. Each kit will include a self-addressed pre-paid postage mailer to facilitate delivery to an authorized processor.

9. **AB 341 Commercial Recycling Compliance:** Continued free recycling programs for village commercial properties within the exclusive franchise area, and new expanded outreach and compliance assistance with State law AB 341 mandating commercial recycling statewide.

10. **Organics Program:** A competitive initial (year 1 - 3) organics waste rate for businesses in the designated village commercial franchise area that are required to comply with State law AB1826 mandating certain businesses to recycle "organics" (discarded food, green waste, nonhazardous wood waste, and food-soiled paper), and a guarantee to be in the lowest third of rates charged in all other Orange County cities with similar services in years 4 – 10.

11. **Village Commercial Map:** The existing franchise agreement includes a map (Attachment 3) depicting certain commercial areas ("Village Commercial Premises") subject to the existing franchise provisions of the agreement. The same map is used in the new agreement. In an effort to alleviate potential concerns regarding impacts to existing non-exclusive open competitive commercial areas, revisions to the existing map are proposed to be deferred to coincide with anticipated revisions that will be the subject of discussions over the next year with all non-exclusive authorized haulers. The proposed new agreement provides a framework for updating the existing map to account for future village commercial development and build-out of the City's Great Park property.

12. **Biennial Review:** Scheduled performance reviews to consider contractor performance, potential new services, application of new technologies, customer complaints, and developments in waste handling laws. Service complaints must be immediately addressed by WM.

13. **Assignment:** Revised provisions, such that any corporate restructuring or other action that results in the "Contractor" being owned and controlled by any entity other than Waste Management of Orange County will require City Council approval of the contract assignment.

The City's Charter requires that any franchise granted by the City Council be authorized pursuant to an ordinance. The recommended ordinance and accompanying Franchise Agreement (Attachment 6) is presented for consideration by the City Council for this purpose. The proposed ordinance becomes effective 30-days after a second reading tentatively scheduled for July 12, 2016.

ALTERNATIVES CONSIDERED

The City Council could elect not to grant the proposed franchise to WM and instead direct staff to initiate a competitive bid process for exclusive waste handling services. This alternative is not recommended because the proposed terms negotiated with WM guarantee the lowest curbside residential rate in Orange County, provide significant benefit to village commercial customers within the proposed franchise area, and provide for revenue sharing from anticipated planned residential and village commercial growth that will be credited to residential customers resulting in reduced rates for Irvine residents. It is unlikely that similar or more favorable provisions could be secured through a completive bid process. It should also be noted that WM has consistently provided dependable service to the community at a very high level.

FINANCIAL IMPACT

If, at the conclusion of the public hearing process, the City Council elects to award a new exclusive franchise to WM containing the proposed terms, the franchise agreement is expected to continue to generate annual franchise fee revenues of approximately $600,000 (consistent with existing franchise fee levels) and a profit sharing benefit to Irvine residents valued at more than $2.1 million over the proposed 10-year term of the agreement.

REPORT PREPARED BY Michael J. Byrne, Senior Management Analyst

ATTACHMENTS

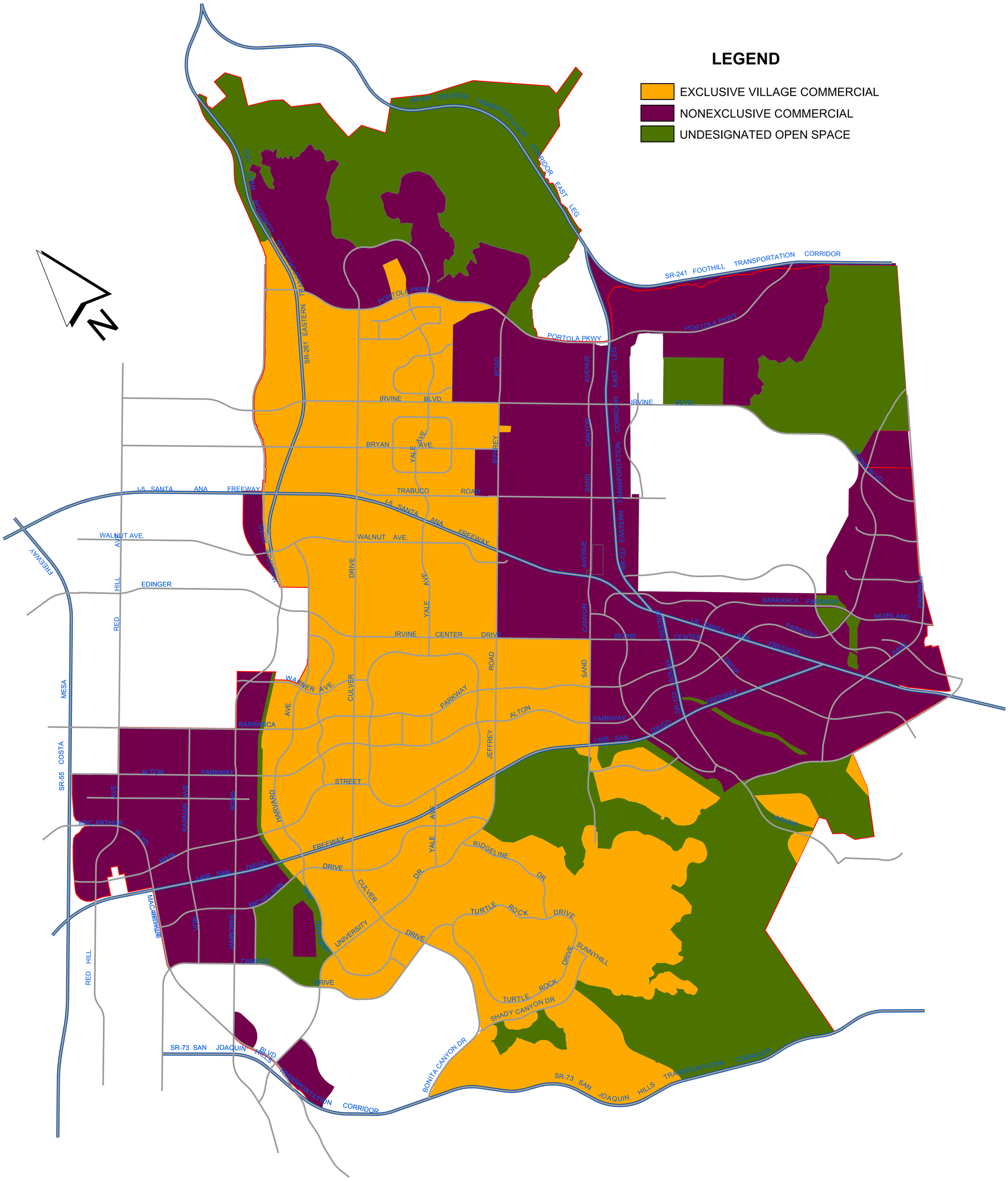
1. June 14, 2016 Staff Report with Errata
2. July 28, 2015 Staff Report and Meeting Minutes
3. Existing Village Commercial Map
4. Annual Curbside Residential Rate Survey, August 2015
5. Annual Commercial Rate Survey, August 2015
6. Proposed City Council Ordinance and Franchise Agreement

EXISTING SERVICE AREA MAP

Exhibit D

CITY OF IRVINE

COMMERCIAL SOLID WASTE COLLECTION SERVICE AREAS



NOTE: Pursuant to California Public Resources Code Section 49520, et seq., some solid waste haulers may have legal rights to provide waste services to certain areas in the City regardless of the area designations on this map. All franchised haulers are eligible to provide collection of Construction and Demolition Debris and Temporary Bin Service, as defined in the Nonexclusive Franchise Agreement, to any premises within the City on an as needed and temporary basis. The terms and limitations of this agreement shall not apply to waste services provided at the facilities or properties of public agencies within the City limits that are not subject to the legal jurisdiction of the City of Irvine, including but not limited to public schools and colleges, and services to State, County and other governmental agencies.

DATE: November 8, 2007 N:\Community Development\Building and Safety\GIS\projects\PublicWorks\ByrneM_Waste_Collection_cn\ByrneM_Waste_Collection_2007_11_07_cn.mxd

ATTACHMENT 2

Nonexclusive Franchise Waste Haulers

Company Name	Headquarters
A-2-Z Construction Svcs	Irvine
California Waste Services (CWS)	Gardena
CR&R, Inc.	Stanton
Direct Disposal	Huntington Beach
In-and-Out Removal	Pomona
Interior Removal Specialist (IRS) Demolition	South Gate
JPA Construction Clean-Up Svcs, Inc.	Santa Ana
Key Disposal, Inc.	Montebello
Mission Recycling	Pomona
NASA Services, Inc.	Montebello
New Green Day Recycling, L.L.C.	Los Angeles
Pacific Line Cleanup, Inc.	Laguna Niguel
Rainbow Disposal Co., Inc.	Huntington Beach
Republic Services	Anaheim
Robert's Waste & Recycling	Santa Ana
Southern Calif. Environmental, Inc.	Huntington Beach
Tierra Verde Industries	Irvine
United Pacific Waste	Pico Rivera
Universal Waste Systems Inc.	Santa Fe Springs
Ware Disposal, Inc.	Santa Ana
Waste Management of Orange County	Santa Ana

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NONEXCLUSIVE FRANCHISE AGREEMENT FOR COMMERCIAL SOLID WASTE COLLECTION

BETWEEN THE CITY OF IRVINE AND

_____

EFFECTIVE DATE:

_____

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NONEXCLUSIVE FRANCHISE AGREEMENT

This Nonexclusive Franchise Agreement ("Agreement") is entered into and effective as of _____, __, 2017, by and between the CITY OF IRVINE, a California municipal corporation ("City") and _____ ("Franchisee"), relating to the provision of certain Solid Waste Handling Services within the City which are not subject to City's Exclusive Franchise Agreement. City and Franchisee are referred to herein collectively as the "Parties" and individually as a "Party."

RECITALS

A. The Legislature of the State of California, by enactment of the California Integrated Waste Management Act of 1989 ("AB 939"), has declared that it is in the public interest to authorize and require local agencies to make adequate provision for the disposal of all Solid Waste within their jurisdictions. AB 939 requires, among other things, that every local agency Divert at least fifty percent (50%) of its Solid Waste from Landfills by the year 2000 or face possible fines of up to Ten Thousand Dollars ($10,000) per day.

B. City previously entered several nonexclusive franchise agreements with various franchisees, approved by City's City Council on November 27, 2007 (the "Prior Agreement").

C. The Prior Agreement expires on June 30, 2017, and the Parties enter this Agreement with the intent of restating and amending the Prior Agreement to: (i) reflect service standards and legal requirements in the Solid Waste industry which have changed over time, (ii) document agreed upon changes to the scope of the nonexclusive franchise granted in the Prior Agreement, and (iii) memorialize that this Agreement shall supersede the Prior Agreement, except with respect to certain continuing obligations as more specifically set forth herein.

D. It is the intent of the Parties that Franchisee, and not City, shall be solely responsible for establishing and collecting all charges for Solid Waste Handling Services provided by Franchisee pursuant to this Agreement.

E. City and Franchisee are mindful of the provisions of the laws governing the safe Collection, transport, Recycling, and disposal of Solid Waste, including AB 939, AB 341, AB 1594, AB 1826, RCRA, and CERCLA. City and Franchisee desire to leave no doubts as to their respective roles, and to memorialize that by entering into this Agreement City is not thereby becoming an "arranger" or a "generator" as those terms are used in CERCLA, and that it is Franchisee, not City, who is "arranging for" the Collection, transport for disposal, composting, and Recycling of municipal Solid Waste in the City which may contain Hazardous Substances. City and Franchisee understand and agree that it is Franchisee, and not City, who will arrange to collect Solid Waste, that City has not, and, by this Agreement does not, instruct Franchisee on its Collection methods, nor supervise the Collection process, nor do the Parties intend to place title to such Solid Waste in City, but rather intend that whatever, if any, title in and to such Solid Waste that otherwise might exist in or with City in the absence of this Agreement is hereby transferred to Franchisee, and further that if Franchisee gains title to such Solid Waste it is by operation of law and agreement with its Customers and is not the result of this Agreement. By entering this Agreement, City and Franchisee further desire to confirm that Franchisee has agreed to indemnify

City in connection with any claims relating to the inadvertent or intentional collection, transportation and/or disposal by Franchisee of Hazardous Contaminants that may occur in connection with Franchisee's performance under this Agreement in accordance with the terms and conditions set forth herein.

F. To comply with the Diversion requirements of AB 939 and support "Zero Waste" principles, as adopted by the City Council on July 10, 2007, pursuant to Irvine City Council Resolution No. 07-95, while at the same time fostering competition, City deems it necessary to implement a program, as reflected by this Agreement, to effectively manage the commercial sector waste stream, to discourage landfilling and encourage waste reduction and Recycling.

G. By entering into this Agreement, Franchisee agrees to provide such Services as are necessary to ensure City complies with the requirements of all Applicable Laws including specifically, without limitation, AB 939, AB 341, AB 1826, and Public Resources Code Section 40000, et seq., in connection with the Solid Waste Handling Services it provides hereunder, and represents and warrants that it has the experience and qualifications to conduct the services detailed herein.

H. The City Council hereby determines and finds that the public interest, health, safety and wellbeing will be served by entering this Agreement.

COVENANTS

Based upon the foregoing Recitals and for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Parties agree as follows:

SECTION 1
RECITALS

The Parties acknowledge the above Recitals are true and correct and incorporate them herein as if they were fully restated.

SECTION 2
DEFINITIONS

Whenever any term used in this Agreement has been defined by the California Public Resources Code or the Municipal Code, the definition of such term set forth therein shall apply unless the term is otherwise defined in this Agreement; and, terms defined in this Agreement shall have such meaning as defined in this Agreement for purposes of this Agreement. Otherwise, terms used in this Agreement shall have their ordinary meaning.

2.1 AB 341. "AB 341" shall mean Assembly Bill 341 from the 2011-2012 Regular Session of the California Legislature (Chapter 476, Statutes 2011), relating to mandatory commercial Recycling.

2.2 AB 939. "AB 939" shall mean the California Integrated Waste Management Act of 1989, currently codified as California Public Resources Code Section 40000 et seq., as it may be amended from time to time.

2.3 AB 1594. "AB 1594" shall mean Assembly Bill 1594 from the 2013-2014 Regular Session of the California Legislature (Chapter 719, Statutes 2014), relating to the ban on the use of Green Waste as alternative daily cover at landfills.

2.4 AB 1826. "AB 1826" shall mean Assembly Bill 1826 from the 2013-2014 Regular Session of the California Legislature (Chapter 727, Statutes 2014).

2.5 Animal Waste. "Animal Waste" shall mean animal carcasses, dead animals, and/or parts or portions of dead animals. Animal Waste shall not include manure.

2.6 Annual Report. "Annual Report" shall have the meaning ascribed in Section 10.1 of this Agreement.

2.7 Applicable Laws. "Applicable Laws" shall mean all federal, state, county, and local laws, regulations, rules, orders, judgments, decrees, permits, approvals, or other requirements of any governmental agency having jurisdiction over an aspect of this Agreement that are in force on the Effective Date, and as may be enacted, issued or amended thereafter, including without limitation City's Municipal Code, AB 341, AB 939, AB 1594, AB 1826, CERCLA, and RCRA.

2.8 Bins. "Bins" shall mean dumpsters, three yard bins, Recycling Bins, 10, 36 and 40 yard Roll-Off Boxes, commercial compactors, 10 yard lowboy containers, and any similar such devices, regardless of size or capacity, provided by Franchisee to any Customer for use in Solid Waste Handling Services.

2.9 CalRecycle. "CalRecycle" shall mean the State of California Department of Resources Recycling and Recovery, the department within the State Natural Resources Agency responsible for the administration of the Integrated Waste Management Act of 1989, California Public Resources Code Section 40000 et seq.("Act"), or any successor department or agency created or designated for such purpose pursuant to the Act.

2.10 CDI Processing Facility. "CDI Processing Facility" shall mean a Processing Facility that receives any combination of C&D Debris and Type A Inert Debris for the purpose of Recycling or reuse.

2.11 CERCLA. "CERCLA" shall mean the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (42 USC §9601 et seq.).

2.12 City. "City" shall mean the City of Irvine, a municipal corporation, located in Orange County, California.

2.13 City Council. "City Council" shall mean the City Council of the City of Irvine.

2.14 City Indemnitees. "City Indemnitees" shall mean the City and its past and present elected and appointed officials, officers, commissions, boards, members, employees, representatives, agents, consultants, and volunteers.

2.15 City Limits. "City Limits" shall mean the territorial boundaries of the City together with all amendments and changes thereto, which boundaries are depicted on maps, incorporated herein by reference, that are kept on file in the office of the City Clerk of the City of Irvine, and which are from time to time amended to reflect changes.

2.16 City Manager. "City Manager" shall mean the City Manager of the City of Irvine or his or her designee.

2.17 Collect/Collection. "Collect" or "Collection" shall mean to take physical possession of, transport, and remove (i) Solid Waste from a Premises, or (ii) any other materials that do not otherwise constitute Solid Waste, but that are discarded by a Customer pursuant to this Agreement.

2.18 Collection Vehicles. "Collection Vehicles" shall mean vehicles used by Franchisee in the performance of Solid Waste Handling Services.

2.19 Commercial Premises. "Commercial Premises" shall mean property upon which a business activity is conducted, including but not limited to retail sales, services, manufacturing, assembling, storage, or wholesale operations, but excluding businesses conducted upon residential premises that are permitted under applicable zoning regulations and that do not constitute the primary use of the property. Commercial Premises include hotels, motels, assisted living facilities, convalescent centers, nursing homes, and institutional premises, including, without limitation, churches and private schools.

2.20 Construction and Demolition (C&D) Debris. "Construction and Demolition Debris" or "C&D Debris" shall mean Solid Waste generated, produced, or discarded in connection with construction, demolition, landscaping, land clearing, or general clean-up activities within the City, including, but not limited to, concrete, plaster, drywall, Green Waste, wood, wood scraps, metals, dirt, rock and rubble, without regard to whether such materials are Recycled.

2.21 County Agreement. "County Agreement" shall mean that certain Waste Disposal Agreement, as the same may be amended from time to time, entered into among various Orange County cities, including specifically the City of Irvine, and the County of Orange relating to the use of County landfills for the disposal of Solid Waste Collected in such cities, and which is on file in the office of the Clerk of the City of Irvine.

2.22 Customer. "Customer" shall mean any person or entity receiving Solid Waste Handling Services, including Recycling services, from Franchisee pursuant to this Agreement.

2.23 Diversion. "Diversion" or "Divert" shall mean the diversion of Solid Waste, in accordance with all applicable federal, state and local requirements, from disposal at Solid Waste Landfills or transformation facilities through Recycling, reuse, or composting.

2.24 Division 7. "Division 7" shall mean Title 6, Division 7 of City's Municipal Code, pertaining to Solid Waste, as it may be amended or recodified from time to time.

2.25 Dwelling Unit. "Dwelling Unit" shall have the meaning set forth in City Zoning Code Section 1-2-1, as of the Effective Date.

2.26 Effective Date. "Effective Date" shall mean July 13, 2017.

2.27 Environmental Laws. "Environmental Laws" shall mean all federal and state statutes, county, local and City ordinances concerning public health, safety and the environment including, by way of example and not limitation, CERCLA; RCRA; the Federal Clean Water Act, 33 USC §1251 et seq.; the Federal Clean Air Act, 42 USC §7401 et seq.; the Toxic Substances Control Act, 15 USC §2601 et seq.; the Occupational Safety and Health Act, 29 USC §651 et seq.; the California Hazardous Waste Control Act, California Health and Safety Code §25100 et seq.; the Carpenter-Presley-Tanner Hazardous Substance Account Act, California Health and Safety Code §25300 et seq.; the Porter-Cologne Water Quality Control Act, California Water Code §13000 et seq.; the Safe Drinking Water and Toxic Enforcement Act, California Health and Safety Code §25249.5 et seq.; as currently in force or as hereafter amended, and all rules and regulations promulgated thereunder.

2.28 Exclusive Franchise Agreement. "Exclusive Franchise Agreement" shall mean that certain agreement with Waste Management Collection & Recycling, Inc., a California corporation, dba Waste Management of Orange County ("Waste Management"), or its permitted successor or assignee, effective as of September 1, 2016, as amended from time to time, and which relates to exclusive Solid Waste Handling Services for Residential Premises and Village Commercial Premises in the City, and all Premises and facilities owned and/or operated by City or, if such agreement is terminated prior to the end of the term thereof, an agreement entered into with another hauler on substantially similar terms as are set forth in the above-described agreement with Waste Management.

2.29 Exclusive Franchisee. "Exclusive Franchisee" shall mean the franchisee set forth in the Exclusive Franchise Agreement.

2.30 Exclusive Franchise Premises. "Exclusive Franchise Premises" shall mean those Premises subject to the Exclusive Franchise Agreement, and specifically all Residential Premises, all Village Commercial Premises (which term is defined to include all Mixed-Use Developments), and all Premises owned and/or operated by City.

2.31 Food Waste. "Food Waste" shall mean compostable Organic materials, excluding Green Waste, including but not limited to: (i) all food (including fruits, vegetables, meat, poultry, seafood, shellfish, bones, rice, beans, pasta, bread, cheese and eggshells); (ii) food-soiled compostable paper (including napkins, paper towels, paper plates); and (iii) tea bags, coffee grounds and filters.

2.32 Franchisee. "Franchisee" shall mean the entity identified as the "Franchisee" in the preamble to this Agreement, or any entity pursuant to the terms hereof permitted to become the successor or assignee thereof.

2.33 Franchise Fee. "Franchise Fee" shall mean the franchise fee set forth herein and more fully defined in Section 7.

2.34 Generator. "Generator" shall mean any person or entity that generates, produces, or discards Solid Waste, including Recyclable Material.

2.35 Green Waste. "Green Waste" shall mean any plant material that is kept separate from other Solid Waste at the point of generation and contains no greater than one percent (1%) of physical contaminants by weight. Green Waste includes, but is not limited to, yard trimmings, untreated wood wastes, natural fiber products, and C&D Debris wood waste. Green Waste does not include food, food materials, biosolids, plant material mixed with Solid Waste, material processed from commingled waste, wood containing lead-based paint or wood preservative, or mixed C&D Debris.

2.36 Green Waste Composting Facility. "Green Waste Composting Facility" shall mean a Processing Facility that receives and processes Green Waste for the purposes of recycling or reuse. A Green Waste Composting Facility may also handle manure and paper products. A Processing Facility that handles feedstock that is not a Green Waste, manure, or a paper product shall not be considered a Green Waste Composting Facility.

2.37 Gross Receipts. "Gross Receipts" shall mean and include all monies, fees, charges, consideration, and revenue received by, or imputed to Franchisee and any affiliates, parent companies, subsidiaries and/or subcontractors of Franchisee, in connection with, arising from, or in any way attributable to the services carried out by or on behalf of Franchisee pursuant to this Agreement. Gross Receipts includes, without limitation, any amounts Collected by Franchisee from its Customers which reflects Tipping Fees or other costs incurred by Franchisee to provide services pursuant to this Agreement. As qualified exceptions to the above definition, and except as otherwise note below, Gross Receipts shall not include:

(a) Amounts Collected by Franchisee from its Customers which reflect that portion (if any) of the Franchise Fees imposed upon Franchisee by City which Franchisee may choose to pass on to its Customers; provided, however, any such amounts which exceed a Customer's pro-rata share of the Franchise Fee actually imposed upon Franchisee by City shall not be exempted from the definition of Gross Receipts.

(b) Revenue from the resale of Recyclable Materials.

2.38 Hazardous Contaminant. "Hazardous Contaminant" shall mean any "hazardous material," as that term is defined under California Health & Safety Code Section 25501(n); any "hazardous substance," as that term is defined herein or under California Health & Safety Code Sections 25281(h), 25501(n), and under Title 42, Section 9601(14) of the United States Code; any "hazardous waste," as that term is defined herein and under Title 42, Section 6903(5) of the United States Code and under California Health & Safety Code Section 25501(n); any chemical which the Governor has identified as a chemical known to the State to cause cancer or reproductive toxicity pursuant to California Health & Safety Code Section 25249.8; any crude oil or refined or unrefined petroleum product or any fraction or derivative thereof; and any asbestos or asbestos-containing material. The term "Hazardous Contaminant" shall also include any and all amendments to the above-referenced statutory and regulatory provisions made before or after the date of execution of this Agreement.

2.39 Hazardous Substance. "Hazardous Substance" shall mean any of the following: (a) any substances defined, regulated or listed (directly or by reference) as "Hazardous Substances," "hazardous materials," "Hazardous Wastes," "toxic waste," or "toxic substances" or similarly identified as hazardous to human health or the environment, in or pursuant to (i) CERCLA; (ii) the Hazardous Materials Transportation Act, 49 USC §5101, et seq.; (iii) RCRA; (iv) the Clean Water Act, 33 USC §1251 et seq.; (v) California Health and Safety Code §§25115-25117, 25249.8, 25281, and 25316; (vi) the Clean Air Act, 42 USC §7401 et seq.; and (vii) the California Water Code §13050; (b) any substances identified in any and all amendments, rules or regulations promulgated thereunder to such enumerated statutes or acts currently existing or hereafter enacted; and (c) any other hazardous or toxic substance, material, chemical, waste or pollutant identified and/or regulated as hazardous or toxic under any other applicable federal, state or local laws or regulations, including any of the Environmental Laws, currently existing or hereinafter enacted, including, without limitation, friable asbestos, polychlorinated biphenyl's ("PCBs"), petroleum, natural gas and synthetic fuel products, and by-products.

2.40 Hazardous Waste. "Hazardous Waste" shall mean all substances defined as Hazardous Waste, acutely Hazardous Waste, or extremely Hazardous Waste by the State of California in Health and Safety Code §25110.02, §25115, and §25117 or in the future amendments to or recodifications of such statutes or identified and listed as Hazardous Waste by the US Environmental Protection Agency (EPA), pursuant to RCRA, all future amendments thereto, and all rules and regulations promulgated thereunder.

2.41 HHWE. "HHWE" shall mean City's Household Hazardous Waste Element approved by the State of California pursuant to the requirements of AB 939.

2.42 Inert Debris. "Inert Debris" shall mean Solid Waste that is Source-Separated or separated for reuse; does not contain Hazardous Waste, Hazardous Contaminants, Hazardous Substances, or soluble pollutants at concentrations in excess of water quality objectives set by applicable Federal, State, and local authorities, including the City; and does not contain significant quantities of decomposable waste. Inert Debris may not contain more than 1% putrescible waste by volume calculated on a monthly basis, and the putrescible wastes shall not constitute a nuisance, as determined by the City Manager.

2.42.1 Type A Inert Debris. "Type A Inert Debris" shall mean C&D Debris, including but not limited to concrete, fully cured asphalt, glass, fiberglass, asphalt or fiberglass roofing shingles, brick, slag, ceramics, plaster, clay and clay products, that meets the definition of "Inert Debris."

2.43 Landfill. "Landfill" shall mean a Solid Waste landfill as defined by Public Resources Code Section 40195.1 for which a current Solid Waste facilities permit has been issued by CalRecycle or which is currently permitted under the regulatory scheme of another state.

2.44 Material Recovery Facility (MRF). "Material Recovery Facility (MRF)" shall mean a Processing Facility permitted by the State of California where Solid Waste and/or Recyclable Materials are sorted or separated, by hand or by use of machinery, for the purpose

of Recycling, reuse, and/or composting, and which can reasonably demonstrate through documentation an average annual Diversion rate of at least fifty percent (50%).

2.45 Medical Waste. "Medical Waste" shall mean waste that is generated in the diagnosis, treatment, or immunization of human beings or animals, in research pertaining thereto, or in the production or testing of biologicals, including, without limitation, blood-soaked bandages, culture dishes and other glassware, discarded surgical gloves, discarded surgical instruments, discarded needles used to give shots or draw blood (e.g., medical sharps), cultures, stocks, swabs used to inoculate cultures, removed body organs (e.g., tonsils, appendices, limbs), and discarded lancets.

2.46 Mixed-Use Development. "Mixed-Use Development" shall mean Premises where Bins are shared by Customers from both Commercial Premises and Multi-Family Dwellings. Mixed-Use Developments shall be deemed to be Village Commercial Premises for purposes of this Agreement. The term Mixed-Use Development has been defined for purposes of this Agreement, and is specifically intended to have a different definition and meaning than the term "Mixed-use development" as set forth and defined in City's Municipal Code.

2.47 Multi-Family Dwelling. "Multi-Family Dwelling" shall mean any building or lot containing more than one Dwelling Unit and at which the Dwelling Units receive Solid Waste Handling Services through the use of shared Bins pursuant to the terms of the Exclusive Franchise Agreement.

2.48 Municipal Code. "Municipal Code" shall mean City's Municipal Code of Ordinances, including City's Zoning Code, and all uncodified ordinances duly adopted by City, as such may be amended from time to time.

2.49 NPDES. "NPDES" shall mean the National Pollutant Discharge Elimination System, a permit program established by the 1987 Water Quality Act to control non-point source pollution.

2.50 Organics. "Organics" shall mean Food Waste and Green Waste.

2.51 Premises. "Premises" shall mean any land, building and/or structure, or portion thereof, in the City where Solid Waste is produced, generated or accumulated.

2.52 Processing Facility. "Processing Facility" shall mean a facility approved pursuant to Section 3.6 of this Agreement that receives or processes Solid Waste, including but not limited to MRF's.

2.53 RCRA. "RCRA" shall mean the Resource Conservation and Recovery Act ("RCRA") (42 U.S.C. § 9601 et seq.).

2.54 Recycle or Recycling. "Recycle" or "Recycling" shall mean the process of Collecting, sorting, cleaning, treating and/or reconstituting materials that would otherwise be disposed of and returning these materials to the economic mainstream in the form of raw materials for new, reused or reconstituted products.

2.55 Recyclable Material (Recyclables). "Recyclable Material" or "Recyclables" shall mean that Solid Waste discarded within Premises that are subject to this Agreement and which is capable of being Recycled.

2.56 Residential Premises. "Residential Premises" shall mean all Premises upon which Dwelling Units exist.

2.57 Solid Waste. "Solid Waste" shall mean and include all discarded putrescible and nonputrescible solid, semisolid, and liquid wastes, including garbage, trash, refuse, rubbish, construction waste, industrial waste, commercial Solid Waste, bulky items, and any other discarded solid, semisolid, and liquid waste permitted to be disposed of at a Class III landfill and which are included within the definition of "Nonhazardous Solid Waste" set forth in the California Code of Regulations, as it may be amended from time to time. Solid Waste does not include Hazardous Contaminants, Hazardous Substances, Hazardous Waste, low-level radioactive waste, untreated Medical Waste, or Special Wastes.

2.58 Solid Waste Handling Services. "Solid Waste Handling Services" shall mean the Collection, and thereafter the transfer, transport, Recycling, processing, and disposal of Solid Waste.

2.59 Source Reduction. "Source Reduction" shall mean the process of reducing the amount of Solid Waste generated by the person or organization generating such Solid Waste.

2.60 Source Separation. "Source Separation" or "Source-Separated" describes the segregation of Recyclable Materials from other Solid Waste by the Generator, combined with Franchisee's use of a collection process for such segregated Recyclable Materials by which they are kept segregated and are delivered to a Processing Facility for Recycling purposes, or to another destination for Recycling, reuse, or end-use purposes.

2.61 Special Wastes. "Special Wastes" shall mean waste materials including sewage, sludge, industrial sludge, asbestos, auto bodies, tires, used motor oil, Animal Waste, explosive substances, radioactive materials, and other materials which may not be disposed of at a Class III landfill or which require special handling.

2.62 SRRE. "SRRE" shall mean City's Source Reduction and Recycling Element approved by the State of California pursuant to the requirements of AB 939.

2.63 State-Mandated Compliance Reports. "State-Mandated Compliance Reports" shall mean all reports required for City to meet its reporting obligations imposed by statutory mandates, including, but not limited AB 939, AB 341, and 1826, and the regulations implementing such mandates.

2.64 Temporary Bin Service. "Temporary Bin Service" shall mean Solid Waste Handling Services provided by a Solid Waste enterprise on an as needed and temporary basis to any Premises within the City in connection with, including but not limited to, construction, demolition, cleanup or other projects that do not qualify as a "Covered Project" pursuant to Section 6-7-901 of the Irvine Municipal Code, and by use of temporarily placed Bins.

2.65 Term. "Term" shall have the meaning ascribed in Section 5 of this Agreement.

2.66 Tipping Fee. "Tipping Fee" shall mean the fee charged to Franchisee to dispose of Solid Waste at a Landfill, Processing Facility, or other disposal location.

2.67 Transformation. "Transformation" shall mean incineration, pyrolysis, distillation, gasification, or biological conversion other than composting. "Transformation" does not include composting.

2.68 Village Commercial Premises. "Village Commercial Premises" shall mean that subset of Commercial Premises which have been designated by City as falling within the scope of the Exclusive Franchise Agreement, and which the Parties agree are not within the scope of the nonexclusive franchise granted by this Agreement. The specific Commercial Premises which are designated as Village Commercial Premises for purposes of this Agreement are (i) those Commercial Premises which are located in areas designated as "Exclusive Village Commercial" on the Village Commercial Premises Map, attached hereto as Exhibit A; (ii) Mixed-Use Developments, whether currently in existence or developed in the future, which are deemed for purposes of this Agreement to be Village Commercial Premises, regardless of their location and whether or not said location is designated as "Exclusive Village Commercial" on the Village Commercial Premises Map; and (iii) any Commercial Premises within Planning Area 51 that is re-designated following the Effective Date to a Village Commercial Premises designation as a result of an amendment to the Village Commercial Premises Map pursuant to the terms hereof. Notwithstanding anything herein to the contrary, Village Commercial Premises shall not include hotels, motels, assisted living facilities, convalescent centers or nursing homes, regardless of their location.

2.69 Village Commercial Premises Map. "Village Commercial Premises Map" shall mean the map attached hereto as Exhibit A, titled "Commercial Solid Waste Collection Service Areas." The purpose of the Village Commercial Premises Map is to designate which Commercial Premises are designated as "Exclusive Village Commercial" Premises for purposes of this Agreement, and are thereby within the scope of the Exclusive Franchise Agreement and conversely outside of the scope of the nonexclusive franchise granted by this Agreement. The Village Commercial Premises Map is not intended to identify the location of Residential Premises, including Premises at which Mixed-Use Developments exist; and, accordingly, Mixed-Use Developments (which are deemed to be Village Commercial Premises) may exist in areas designated as "Nonexclusive Commercial" on the Village Commercial Premises Map.

SECTION 3
NONEXCLUSIVE FRANCHISE

3.1 Grant of Franchise.

3.1.1 General Grant. City hereby grants to Franchisee, and Franchisee shall have throughout the duration of this Agreement, the nonexclusive franchise, right, license and privilege to provide Solid Waste Handling Services within the City Limits, with respect to Solid Waste not subject to the Exclusive Franchise Agreement. Generally speaking, the rights granted

herein pertain to: (1) Solid Waste Handling Services to Commercial Premises, excepting Village Commercial Premises, occurring on a regular schedule (such as weekly service); and (2) Temporary Bin Services to any Premises in the City (including Exclusive Franchise Premises). In the event of any uncertainty, ambiguity, and/or dispute as to whether a particular Premises is subject to the Exclusive Franchise Agreement, the determination shall be made by the City Manager, and such determination shall be final. The Parties agree that any such determination is occurring pursuant to Public Resources Code Section 49523, is agreed to by the Parties upon mutually satisfactory terms, and is part of the consideration for entering into this Agreement.

3.1.2 Amendments to Scope of Franchise: The Parties acknowledge that as of the Effective Date, the Village Commercial Premises Map includes that certain land area located in the City's Great Park known as "Planning Area 51" and further shows a current conceptual plan by which to divide Planning Area 51 into individual "Districts." The City has not yet finalized its plans for Planning Area 51, and final Districts and boundaries therefore have yet to be established. Once the final planning for Planning Area 51 is complete, the Village Commercial Premises Map will be amended to depict those premises within Planning Area 51 that are designated as "Exclusive Village Commercial" Premises and those which are designated as "Nonexclusive Commercial" Premises. As of the Effective Date (but subject to change in the future as final plans for Planning Area 51 develop), it is anticipated that land currently shown as Districts 1, 4, 5, 7 and 8 within Planning Area 51 will be developed primarily for residential purposes, and accordingly City anticipates such Districts within Planning Area 51 will be designated as Village Commercial Premises. Moreover, City anticipates that land shown as Districts 2, 3, and 6 within Planning Area 51 will not be developed for residential purposes, and accordingly City does not anticipate designating such Districts within Planning Area 51 as Village Commercial Premises. City shall have the exclusive right to exercise its discretion to determine whether to designate properties within Planning Area 51 as Village Commercial Premises, although in doing so City will bear in mind the following: (i) City's primary consideration will be to minimize Collection Vehicle traffic in Residential Premises; (ii) the Village Commercial Premises designation is intended to apply to Premises located in close proximity to residential areas, which are established to provide for the unified commercial needs of neighborhood residents. Franchisee agrees that City may amend the Village Commercial Premises Map from time to time to reflect changes to Planning Area 51 as its planning is finalized by City, and that such changes will be reflected on amended maps to be maintained by the City Manager. Moreover, the Parties agree that any such changes effectuated by such amendments to the Village Commercial Premises Map are occurring pursuant to Public Resources Code Section 49523, are agreed to by the Parties upon mutually satisfactory terms, and are part of the consideration for entering into this Agreement. Franchisee expressly acknowledges that any change in scope of the franchise granted hereunder that may occur during the term hereof as a result of a change to the Village Commercial Premises Map as described in this Section is occurring pursuant to Public Resources Code Section 49523, and is not a waiver of rights set forth in Public Resources Code Section 49520 which would be subject to the provisions of Public Resources Code Section 49524.

3.1.3 Encroachment on Public Rights-of-Way. Included in the rights granted hereunder, is the right for Franchisee to place Bins in City's public rights-of-way, subject to the provisions of Division 7.

3.2 Limitations on Scope of Franchise.

3.2.1 Nonexclusive. This Agreement shall be nonexclusive, and no provision hereof shall be deemed to require City to grant similar franchises to one or to any particular number of franchisees, nor to restrict or prohibit City from doing so. Franchisee understands and acknowledges City may enter similar nonexclusive franchise agreements pursuant to the same, or substantially similar terms, with any qualified Solid Waste enterprise.

3.2.2 Exclusions. Notwithstanding any other provisions set forth in this Agreement to the contrary, the nonexclusive contract, right, franchise, license, and privilege granted herein excludes:

(a) Solid Waste Handling Services for Exclusive Franchise Premises as defined by this Agreement.

(b) except as provided otherwise herein, the Collection, transportation, or disposal of Hazardous Contaminants; Hazardous Substances; Hazardous Waste; items commonly known in the waste industry as "universal waste" and/or "e-waste"; biohazardous waste; untreated Medical Waste; infectious waste; Animal Waste; used cooking fats, oils, grease and similar waste; Special Waste; or other materials which do not constitute Solid Waste.

(c) Those Solid Waste Handling Services, if any, which are governed by or subject to any legal right held by any Solid Waste enterprise to continue to operate (whether pursuant to a pre-existing Solid Waste permit, license, agreement, franchise, or otherwise), so long as any such legal right shall continue to exist.

3.3 Rights in Annexed Territories. It is the intention of the Parties that, subject to all of the limitations set forth in Section 3.2 above, the nonexclusive franchise granted herein shall apply to any property incorporated into the City Limits during the Term hereof; provided, however, the exercise of the rights granted herein within annexed territories shall be limited by and subject to any legal right held by any Solid Waste enterprise to continue to operate (whether pursuant to a pre-existing Solid Waste permit, license, agreement, franchise, or otherwise), so long as any such legal right shall continue to exist.

3.4 Acknowledgment that Modification to Rights is Occurring Pursuant to Public Resources Code Section 49523. If Franchisee has a pre-existing permit, license, agreement, franchise or other rights to provide services in the City, including because of being a Franchisee under the Prior Agreement, then Franchisee expressly acknowledges that any change or modification to the scope of such rights that may be effectuated by this Agreement is occurring pursuant to Public Resources Code Section 49523, is included herein upon mutually satisfactory terms, and is part of the consideration for entering into this Agreement. Moreover, Franchisee expressly acknowledges that any change in scope of such prior rights is occurring pursuant to Public Resources Code Section 49523, and is not a waiver of rights set forth in Public Resources Code Section 49520 which would be subject to the provisions of Public Resources Code Section 49524. Franchisee acknowledges that City has advised it that if it has rights pursuant to Public Resources Code Section 49520 which it does not wish

to modify by entering this Agreement, it may choose to continue to operate in City pursuant to such rights rather than enter into this Agreement.

3.5 Notice Pursuant to Public Resources Code Section 49520. The rights granted pursuant to the terms hereof shall expire upon the end of the Term of this Agreement as set forth in Section 5 below. Franchisee shall have no right to continue to provide services in City pursuant to Public Recourses Code Section 49520, or otherwise, following the end of the Term hereof unless a subsequent franchise, contract, or permit is granted to Franchisee by City, or unless this Agreement is amended to provide such rights. This provision is intended to, and shall serve as the notice contemplated by Section 49520 with respect to the franchise rights granted herein.

3.6 Processing Facility Approval.

3.6.1 Approval Required. In order for a Processing Facility to qualify as a CDI Processing Facility, Green Waste Composting Facility, or MRF for purposes of the Franchise Fee calculation, the Processing Facility must be approved by the City pursuant to this Section 3.6 at all relevant times. Facilities that are not approved pursuant to this Section 3.6 at all relevant times shall be considered "other disposal facilities" for purposes of the Franchise Fee calculation.

3.6.2 Processing Facility Audit. City reserves the right to the full extent permissible by law to deny approval to any Processing Facility that does not permit City to audit the Processing Facility for appropriate Franchise Fee and Diversion allocations. The audit may include, but is not limited to, requests for a detailed summary of the facility operations, visual inspections of the facility's sorting and other processes, reviews of Diversion calculation methodology, and requests for an adequate explanation of the selection process of loads to be sorted or directed for disposal.

3.6.3 Other Jurisdiction Approval. If another jurisdiction has provided written approval to a particular Processing Facility, the City may, but is not required to, accept this approval in lieu of its own approval process.

3.6.4 Processing Facility Approval List. Upon request, Franchisee may obtain an approved Processing Facility list from the City Manager. Any requested changes or additions to the approved Processing Facility list shall be submitted to the City Manager in writing. Franchisee must obtain the City Manager's written approval prior to Franchisee's use of any facility not appearing on the approved Processing Facility list.

3.6.5 Approval Timeframe. Processing Facility approval shall be at the sole discretion of the City Manager. Approval decisions shall be made in a timely manner following a request for approval. The City estimates typical approval review may take up to thirty (30) days. The City may provide temporary approval for facilities in cases where a lengthy audit or additional information is being prepared or reviewed.

SECTION 4
ACCEPTANCE; WAIVER

Franchisee agrees to be bound by and comply with all the requirements of this Agreement. Franchisee waives Franchisee's right to challenge the terms of this Agreement under federal, state, or local law, or administrative regulation. Additionally, by and upon the execution of this Agreement, Franchisee agrees to the termination of the Prior Agreement as of the Effective Date, agrees to waive any and all rights under the Prior Agreement, and agrees to release and hold the City harmless from any of the City's obligations thereunder (excepting, however, the right to compensation accrued and unpaid for services provided prior to the Effective Date); provided, however, nothing contained in this provision is intended to or shall relieve Franchisee from any obligation existing under the Prior Agreement pertaining to insurance, indemnification, or other legal obligations to City or Franchisee's Customers (as opposed to obligations to provide service pursuant to the terms thereof), or from any obligation set forth in the Prior Agreement which are called out as surviving the termination thereof, and all such obligations, including specifically those indemnification obligations relating to Environmental Laws, general liability, and AB 939 shall survive the termination of the Prior Agreement.

SECTION 5
TERM

The term of this Agreement shall commence on July 13, 2017 and end at midnight on August 31, 2026, unless this Agreement is terminated at an earlier date pursuant to Section 15 hereof, or otherwise.

SECTION 6
CONDITIONS TO EFFECTIVENESS OF AGREEMENT

The satisfaction of each and all of the conditions set out below, each of which may be waived in whole or in part by City in writing, is a condition precedent to the effectiveness of this Agreement:

6.1 Accuracy of Representation. All representations and warranties made by Franchisee and set forth in this Agreement shall be accurate, true, and correct on and as of the Effective Date of this Agreement.

6.2 Absence of Litigation. There shall be no litigation pending in any court challenging the award of this Agreement to Franchisee or the execution of this Agreement or seeking to restrain or enjoin its performance.

6.3 Furnishing of Insurance and Bond or Letter of Credit. Franchisee shall have furnished evidence of the insurance and Surety required by Section 14 hereof, and shall comply with all ongoing requirements relating thereto.

6.4 Effectiveness of City Council Action. The City Council Ordinance approving this Agreement shall have become effective pursuant to California law.

SECTION 7
FRANCHISEE'S CONSIDERATION

As part of its consideration for the nonexclusive franchise rights contained herein, Franchisee shall provide a Franchise Fee in compliance with this Section 7.

7.1 Franchise Fee Payment. Franchisee shall pay to City, in lawful money of the United States, the Franchise Fee as calculated pursuant to Section 7.2 during the entire Term of this Agreement. Said Franchise Fee shall be due to City in four (4) quarterly payments, which shall be due on or before the forty-fifth (45^{th}) day after the end of each calendar quarter (January-March, April-June, July-September, October-December). The Franchise Fee shall be delivered to the City Manager on or before May 15, August 14, November 14, and February 14. Franchise Fee payments shall be accompanied by a statement certified by an officer of Franchisee attesting to the accuracy of the amounts paid.

7.2 Franchise Fee Calculation. City intends the Franchise Fee calculation procedure to promote Diversion. Franchise Fee calculation is based on Franchisee's Gross Receipts and the percentage of Solid Waste Franchisee delivered to, and that was accepted by, various Processing Facilities and other disposal facilities during the immediately preceding calendar quarter. Franchise Fees due to the City shall be paid quarterly and accompanied by a calculation form developed and approved by the City, signed and completed by the Franchisee. The amount of Franchise Fees due to the City shall be determined by:

(a) calculating the total Gross Receipts derived from the Collection of Solid Waste in the City by Franchisee for the quarterly period;

(b) determining the percentage share of total Gross Receipts attributed to the Collection of Solid Waste according to the percentage of the total Collected Solid Waste delivered by Franchisee to each of the various Processing Facilities and other disposal facilities identified in this Section 7.2; and

(c) calculating and paying Franchise Fees on such Gross Receipts at the following rates based on the type of Processing Facility or other disposal facility utilized by the Franchisee during the quarter, such that on that portion of total Gross Receipts derived from Solid Waste Collected and delivered to:

(i) a Landfill, the Franchise Fee shall be 10%;

(ii) a MRF, the Franchise Fee shall be 3%;

(iii) a CDI Processing Facility, the Franchise Fee shall be 0%;

(iv) a Green Waste Composting Facility, the Franchise Fee shall be 0%;

(v) an end user approved by the City Manager in writing, the Franchise Fee shall be 0%; and

(vi) other disposal facilities, the Franchise Fee shall be 10%.

By way of example only, under the Franchise Fee calculation methodology described in this Section 7.2, a Franchisee that earns $60,000 in Gross Receipts by collecting 100,000 tons of Solid Waste in a given calendar quarter, and delivers half of the Collected waste tonnage to the Landfill and the other half of the Collected waste tonnage to a MRF, would pay a total of $3,900 in Franchise Fees (equal to a 10% Franchise Fee on that portion of the Gross Receipts attributed to Solid Waste landfilled and a lower 3% Franchise Fee on that portion of Gross Receipts attributed to Solid Waste delivered by Franchisee to a MRF.

7.3 Franchise Fee Review. The Franchise Fee calculation percentages specified in Section 7.2 will be reviewed by City on an ongoing basis, but not more often than annually, and if deemed necessary or appropriate by City, may be reduced or increased by approval of the City Council. City shall provide Franchisee with ninety (90) days advance written notice of any fee adjustment before such an adjustment shall take effect.

SECTION 8
ADDITIONAL CHARGES AND INTEREST FOR LATE PAYMENTS

In the event Franchisee fails to make any of the payments provided for in this Agreement on or before the dates due, Franchisee shall pay as consideration the following amounts:

8.1 A sum of money equal to the Franchise Fee due;

8.2 A sum of money equal to five percent (5%) of the amount due. This amount is required in order to defray those additional expenses and costs incurred by City by reason of the delinquent payment including, but not limited to, the cost of administering, accounting for, and collecting said delinquent payment and the cost to City of postponing services and projects necessitated by the delay in receiving the revenue; and

8.3 Interest on the delinquent sum (excluding the late payment charge referred to in Section 8.2) at the maximum legal rate, with said sum to be applied as interest for loss of use of the money due and to be calculated commencing on the date first due through and including the date upon which full payment, including all interest and penalties, is made.

SECTION 9
OPERATING PROCEDURES

9.1 General. Franchisee shall furnish all labor, supervision, materials, supplies, and equipment necessary to provide Solid Waste Handling Services in accordance with the terms of this Agreement.

9.2 Compliance with Applicable Laws. Franchisee shall fully comply with all Applicable Laws, including without limitation, Division 7 as it may be amended from time to time. Franchisee shall obtain and maintain, at Franchisee's sole cost and expense, all permits and licenses applicable to Franchisee's operations under this Agreement, including specifically, without limitation, a City of Irvine Business License.

9.3 Vehicles and Equipment. All Collection Vehicles and all Bins used by Franchisee in the performance of Solid Waste Handling Services hereunder shall comply with the vehicle and equipment requirements set forth in Division 7 and the provisions of this Section 9.

9.3.1 General Requirements for Collection Vehicles. All Collection Vehicles shall comply with all rules and regulations of the South Coast Air Quality Management District, the Air Resource Board, and any other regulatory body that may be in effect during the Term of this Agreement, as well as other federal, state and local laws and regulations that may be enacted during the Term of this Agreement. All Collection Vehicles shall meet or exceed such air quality standards as may be adopted by the forgeoing regulatory bodies during the Term. All Collection Vehicles shall comply with the requirements in the South Coast Air Quality Management District's ("SCAQMD") Rule 1193 (Clean On-Road Residential and Commercial Refuse Collection Vehicles).

9.3.2 Specific Requirements for Collection Vehicles. Each Collection Vehicle utilized by Franchisee in the performance of Solid Waste Handling Services shall meet the following minimum standards:

(a) Each Collection Vehicle shall be fueled by clean air technology in accordance with Applicable Laws.

(b) Each Collection Vehicle shall be registered with the California Department of Motor Vehicles.

(c) Each Collection Vehicle shall be inspected regularly by Franchisee to ensure it meets the requirements of the California Vehicle Code and the California Highway Patrol. Franchisee shall provide copies of its Biannual Inspection of Terminal inspection reports to City within thirty (30) days of its receipt of such reports and shall make all records related to its Collection Vehicles, including Franchisee's maintenance records, available to City upon request by the City Manager.

(d) Each Collection Vehicle shall be equipped with devices capable of covering every open section of the Collection Vehicle in which Solid Waste may be placed and, while operating upon the public rights-of-way, shall be covered so as to prevent any Solid Waste from falling or being blown or otherwise dislodged from the Collection Vehicle.

(e) Each Collection Vehicle shall be continuously maintained so as to both: (1) meet the highest industry standards with regards to efforts to prevent liquid from leaking and to the degree possible ensure each Collection Vehicle is "watertight" and "leak-proof" and, (2) at all times comply with the provisions of all Applicable Laws, including, without limitation, the Vehicle Code and any applicable NPDES permit, with regard to materials leaking from Collection Vehicles. Franchisee shall be responsible to promptly clean any spillage or Solid Waste that leaks or otherwise escapes the Collection Vehicle.

(f) As frequently as determined necessary by the City Manager, each Collection Vehicle shall be painted and shall have routine body work performed so that such vehicles do not become unsightly, as determined by the City Manager.

(g) Franchisee's name, local or toll free telephone number, and a vehicle number shall be visibly printed or painted in letters not less than five (5) inches in height on both sides of each Collection Vehicle. Any other information or signage printed, painted, or displayed on Franchisee's Collection Vehicles, when such vehicles are providing Collection services within City Limits, shall be subject to approval by City. Collection Vehicles are not required to be for exclusive use in the City.

(h) Each Collection Vehicle shall be maintained in a clean and sanitary condition both inside and out and shall be washed at least once every seven (7) calendar days and steam cleaned on a regular basis.

(i) Each Collection Vehicle shall carry a broom, shovel, and operable fire extinguisher, and shall be equipped with a communication device sufficient to allow the driver to communicate directly with Franchisee's dispatcher and/or main office.

(j) Each Collection Vehicle shall be kept in good repair and working order, and shall be equipped with appropriate safety equipment, including any new safety related technologies that become standard in the waste industry, and at a minimum shall have a video monitor-based back-up system, or its equivalent. Franchisee shall keep a sufficient supply of replacement parts and equipment on hand to ensure adequate vehicle maintenance and timely and continuous performance of the Solid Waste Handling Services contemplated by this Agreement.

(k) Franchisee shall inspect each Collection Vehicle daily to ensure that all equipment is operating properly. Collection Vehicles which are not operating properly shall be removed from service until repaired and operating properly. Franchisee shall perform all scheduled maintenance functions upon Collection Vehicles in accordance with the manufacturer's specifications and schedule. Franchisee shall repair, or arrange for the repair of, all of its vehicles and equipment for which repairs are needed because of accident, breakdown or any other cause so as to maintain all equipment in a safe and operable condition. Franchisee shall keep accurate records of all Collection Vehicle maintenance and repair, recorded according to date and mileage, including signed verifications that repairs and maintenance have been properly performed, and shall make such records available to City upon request.

(l) No Collection Vehicle shall be utilized if it is leaking brake, hydraulic, or other fluids, and Franchisee shall clean up any leaks or spills from its Collection Vehicles per the NPDES permits in effect at the time. No fluids shall be washed into storm drains at any time. All NPDES dry-cleaning measures shall be complied with. All Collection Vehicles must be equipped with absorbent for such cleanup efforts.

(m) Franchisee shall annually furnish City a written inventory of all equipment, including Collection Vehicles, used in providing Solid Waste Handling Services pursuant to this Agreement. This inventory shall list all equipment by manufacturer, ID number, date of acquisition, type and capacity.

(n) Franchisee shall utilize Collection Vehicles of a size, weight, nature, and type so as to not be unreasonably intrusive on the community with respect to noise, emissions,

maneuverability, safety, and other factors, and to avoid or minimize pavement damage and wear and tear of the street or adjacent properties, as approved by the City Manager.

(o) Franchisee shall not load Collection Vehicles in excess of the manufacturer's recommendations or limitations imposed by state or local laws or regulations. Noise levels of equipment used for Collection shall not exceed 75db (seventy-five decibels) when measured at a distance of twenty-five (25) feet from the Collection Vehicle, five (5) feet from the ground.

(p) The average fleet age, when applied to all Collection Vehicles used by Franchisee within City Limits, shall be no more than ten (10) years of age at any time during the Term, nor may any Collection Vehicle be purchased for use within City Limits that is over seven (7) years of age at the time of purchase. For purposes of the average fleet age requirement, Collection Vehicles refurbished to specifications approved by the City Manager shall be considered as new when placed back into service.

9.3.3 Specific Requirements for Bins.

(a) Franchisee shall be responsible to maintain and replace, as necessary, all of its Bins.

(b) All of Franchisee's Bins shall be maintained by Franchisee in good repair, and any question as to the meaning of this standard shall be resolved by the City Manager.

(c) Franchisee shall ensure it maintains an accurate list that contains the total number and type of its Bins at each service address, as well as the frequency of Collection for each such Bin. Franchisee shall keep this list up to date at all times, provide it to City upon request, and shall include a current updated list with each Annual Report submitted pursuant to Section 10.1.

(d) All Bins which are used primarily for the disposal of Solid Waste containing liquids shall be maintained by Franchisee in a watertight condition; and shall at all times comply with the provisions of any applicable NPDES permit.

(e) Franchisee shall replace any damaged or unsightly Bins, and shall remove any graffiti that appears on its Bins, within one (1) business day after becoming aware of the damage or unsightly condition.

(f) All Bins shall be kept freshly painted in a uniform fashion.

(g) Franchisee's name and local telephone number shall be placed on all front load bins and roll-off boxes used for Solid Waste Handling Services within the City, in letters not less than three (3) inches high, so as to be visible when the Bin is placed in use. Any smaller wheeled style automated carts shall contain, at a minimum, Franchisee's name and a distinct logo or identification number.

9.4 Performance Standards. Franchisee shall perform Solid Waste Handling Services hereunder in a workmanlike manner consistent with good housekeeping standards

and all relevant provisions of Applicable Laws, including without limitations, the provisions of Division 7.

9.5 Noise and Disruption. Franchisee shall perform Solid Waste Handling Services hereunder in such a manner as to minimize noise and other disruptive impacts including, without limitation, those upon traffic.

9.6 Restriction on Manner of Collection.

9.6.1 No Commingling Without Consent. In order to ensure City complies with the provisions of AB 939, and to accurately account for and report the amount of Solid Waste including Recyclable Material Collected within the City Limits and processed, Recycled and/or disposed pursuant to this Agreement, no load of Solid Waste Collected by Franchisee from within the City Limits shall be commingled with Solid Waste collected by Franchisee from any person or place outside the City Limits or outside the area governed by this Agreement. Notwithstanding the foregoing, City, in its sole and absolute discretion, may allow Franchisee to commingle Solid Waste or Recyclable Material it Collects within the City Limits with that collected from persons or places outside the City Limits or outside the area governed by this Agreement, if:

(a) Franchisee proposes a means acceptable to City by which to accurately identify and report the Solid Waste and Recyclable Material collected from both within and outside the City Limits and specifically within areas covered by this Agreement as distinctive from areas not covered by this Agreement; and

(b) Franchisee obtains written consent from the City Manager to implement commingling pursuant to any such proposal; and

(c) Franchisee's proposal as approved by the City Manager is successfully implemented such that timely and accurate information regarding the Solid Waste and/or Recyclable Material Collected from within the City Limits, and specifically within areas covered by this Agreement, and the amount of Solid Waste and/or Recyclable Material Collected within the City that is Diverted from Landfills as a result of Recycling or other programs, is provided for all reporting purposes; and

(d) Franchisee's proposal meets all obligations that may exist relating to the use of certain Landfills for deposit of Solid Waste Collected in the City, including any such obligations imposed by the County Agreement.

9.6.2 Withdrawal of Consent for Commingling. The City Manager may, by giving written notice to Franchisee, with or without cause, withdraw any consent given to Franchisee by which commingling is authorized.

9.7 Precautions Regarding the Collection of Hazardous Materials.

9.7.1 Contractual Prohibition Requirement. Franchisee shall include as a condition to its contractual agreement with its Customers a provision prohibiting disposal of Hazardous Waste in any of Franchisee's Collection Vehicles, Bins, or other equipment.

9.7.2 Load Check Program. Franchisee shall implement a load check program that includes, at a minimum, a visual check of all Bins to be emptied to protect against inclusion of Hazardous Waste. Franchisee shall prepare a written record of all Hazardous Waste discovered during load checks. The records shall comply with all City, county, state and federal Hazardous Waste Regulations, shall be maintained for a minimum of five (5) years following the expiration of the Franchise, and shall be made available to the City Manager upon request. Further, prior to destroying or discarding any of such records, Franchisee shall notify City, and upon City's election, Franchisee shall deliver such records to City. Franchisee shall handle and dispose of any such Hazardous Materials in accordance with Applicable Laws.

9.8 Service Routes. Franchisee hereby acknowledges and agrees that the City Manager shall have the authority to set Solid Waste Handling Service routes, including but not limited to entry and exit points to and from Commercial Premises, and to direct Franchisee's Collection Vehicles to follow such routes, when necessary, in the City Manager's sole discretion, to reduce negative impacts on residential areas and City infrastructure.

9.9 Commercial Premises Recycling Services.

9.9.1 Franchisee shall promote, offer and provide a Recycling program for its Customers (the "Commercial Premises Recycling Program") that at a minimum meets the standards required under AB 341, and such program shall be consistent with any Ordinances adopted by the City to implement AB 341. Franchisee shall also assist the City in identifying Customers that are not in compliance with the Recycling requirements set forth in AB 341. Franchisee shall provide periodic, but not less than annually, on-site visits to its Customers to offer and promote Recycling services, determine if such Customer is receiving Recycling services from a third party in compliance with the requirements of AB 341, attempt to resolve any logistical detriments to providing Recycling services thereunder, and notify and request assistance from City for potential follow-up action where there is repeated refusal to implement the Commercial Premises Recycling Program. Concurrently with Franchisee's submittal of quarterly and Annual Reports, Franchisee shall submit a report to City that summarizes the results of each on-site visit, including, without limitation, the date and time of the visit, Customer contact information, and visit results, all in a form approved by City. Each such report shall also notify City of any Customer who refused Franchisee's request for an on-site visit, including, without limitation, the Customer's name and contact number, the date and time Franchisee contacted the Customer, and the reason for the Customer's refusal to schedule an on-site visit. City agrees to provide reasonable assistance to Franchisee, which may include adding its name to materials prepared for distribution to its Customers regarding AB 341 requirements, consideration of ordinances which may assist with gaining compliance with AB 341 requirements, and occasional participation by City personnel in meetings with Customers who repeatedly refuse to implement the Commercial Premises Recycling Program. Franchisee shall be responsible for ensuring that its Commercial Premises Recycling Program, combined with its other programs, enables it to achieve the required Diversion rates specified in this Agreement and may be required to modify its program from time to time to meet such Diversion requirements.

9.9.2 Franchisee shall provide commingled or Source Separated Recycling Collection services to all of its Customers. Franchisee shall Collect Recyclable Material from each

Customer at frequencies agreed upon with such Customer, but not less than once per week. As of the Effective Date, Customers shall be allowed to deposit, at a minimum, the following materials in Recycling Bins for Collection by Franchisee: paper (all types – anything that "tears"), cardboard, wooden pallets, beverage containers, plastics (including, without limitation, PET, HDPE,#3-7), plastic film, plastic bags, polystyrene packaging material, metals, and other Recyclable materials standard in the Recycling industry, as determined by the City Manager. Franchisee agrees to meet from time to time with City, as needed, and in good faith, to consider modifications to the above minimum list of Recyclable Material, and/or to address developments in processing technologies, emerging uses for various types of materials, changes in available markets, or other relevant issues.

9.9.3 On an ongoing basis throughout the Term, Franchisee shall make a proactive effort, utilizing outreach methods and frequency approved by the City Manager, to make all Commercial Premises aware of the availability of its Recycling services and programs. Such efforts shall include, without limitation, the annual publication and distribution of a brochure specifically outlining and describing its Recycling services and programs to all applicable Customers in City. As part of its quarterly reports to City, Franchisee shall provide details on such efforts to inform its Customers that its Recycling services are available in a form approved by the City Manager, including but not limited to provision of business names, business contacts, and phone numbers of such Customers contacted, and, if requested by City, samples of materials provided to said Customers during the subject quarter.

9.10 Commercial Organics Program. Franchisee shall promote, offer and provide an Organics Collection program to all of its Customers (the "Commercial Organics Program"), to be approved by the City Manager, that at a minimum meets the requirements of AB 1826. Franchisee's Commercial Organics Program shall provide for the Collection of Organics separately from other Solid Waste, in Bins, bags, or by other methods approved in advance by the City Manager, and shall thereafter deliver or arrange for the on-going delivery of such Collected Organics to a Diversion facility approved by City. Franchisee shall also assist City in identifying Customers that are not in compliance with the requirements set forth in AB 1826. Franchisee shall provide periodic, but not less than annually, on-site visits to its Customers to offer and promote its Commercial Organics Program, determine if such Customer is receiving Organics services from a third party in compliance with the requirements of AB 1826, attempt to resolve any logistical detriments to providing services offered thereunder, and notify and request assistance from the City for potential follow up action where there is a repeated refusal to implement the Commercial Organics Program. Concurrently with Franchisee's submittal of its quarterly and Annual Reports, Franchisee shall submit a report that summarizes the results of each on-site visit, including, without limitation, the date and time of the visit, Customer contact information, and visit results, all in a form approved by City. Each such report shall also notify City of any Customer who refused Franchisee's request for an on-site visit, including, without limitation, the Customer's name and contact number, the date and time Franchisee contacted the Customer, and the reason for the Customer's refusal to schedule an on-site visit. City agrees to provide reasonable assistance to Franchisee, which may include adding its name to materials prepared for distribution to Customers regarding AB 1826 requirements, consideration of ordinances which may assist with gaining compliance with AB 1826 requirements, and occasional participation by City personnel in meetings with Customers who repeatedly refuse to

implement the Commercial Organics Program. Franchisee shall be responsible for ensuring that its Commercial Organics Program, combined with its other programs, enables it to achieve the required Diversion rates specified in this Agreement and may be required to modify its program from time to time to meet such Diversion requirements. Franchisee shall produce, keep current, and provide information specifically outlining its Commercial Organics Program, which shall specifically include the annual publication and distribution of a brochure describing this service to all applicable Customers in City. On an ongoing basis throughout the Term, Franchisee shall make a proactive effort, utilizing outreach methods and frequency approved by the City Manager, to make all Commercial Premises aware of the availability of its Commercial Organics program. Such efforts shall include, without limitation, the annual publication and distribution of a brochure specifically outlining and describing its Commercial Organics program to all applicable Customers in City. As part of its quarterly reports to City, Franchisee shall provide details on such efforts to inform its Customers that its Commercial Organics program is available in a form approved by the City Manager, including but not limited to provision of business names, business contacts, and phone numbers of such Customers contacted, and, if requested by the City Manager, samples of materials provided to said Customers during the subject quarter.

9.11 Other Collection Programs As May Be Required by Law. In the event CalRecycle, or any federal or state law or regulation, imposes upon City or Franchisee a requirement for the implementation of any Source Separated program for the Collection of any type of discarded material (whether or not meeting the definition of Solid Waste hereunder) not already covered by this Agreement but applicable to Franchisee's Customers, Franchisee shall design and present a program to City to comply with such requirement, which program shall meet the City Manager's reasonable approval ("Proposed Program").

Franchisee shall present the Proposed Program within ninety (90) days of a request to do so by City. The Proposed Program shall include a detailed description of the following: (1) method of Collection; (2) equipment to be used; (3) materials to be Collected; and (4) proposed promotional and public education materials.

9.12 Guaranteed Minimum Franchisee Recycling Rate. Franchisee shall conduct its operations hereunder such that a minimum of fifty percent (50%) of all Solid Waste Collected from Franchisee's Customers (taking into account Diversion achieved by efforts other than its services) is Diverted from disposal at Landfills for each calendar year beginning January 1, 2018 ("Recycling Diversion Requirement"). For the purposes of this Section, Diversion includes only Recycling methods, Transformation (and/or other forms of converting Solid Waste into energy), and other processes which are accepted by the State toward meeting City's Diversion goal under AB 939. Franchisee shall not be entitled to a reduction in the Recycling Diversion Requirement, or a rate adjustment, if or when:

- Transformation or other facilities are no longer available for any reason;
- CalRecycle Diversion credit under AB 939 or other Applicable Laws is no longer provided for Solid Waste sent to a Transformation facility; or
- CalRecycle Diversion credit under AB 939, AB 1594, or other Applicable Laws

expires for Green Waste used as alternative daily Landfill cover.

At such time as City discovers that CalRecyle Diversion credit under AB 939 or other Applicable Law will no longer be provided for Solid Waste sent to a Transformation facility, City shall issue formal notice to Franchisee that any Solid Waste delivered to a Transformation facility from the date specified in City's notice through the end of that calendar year shall be subject to the 10% Franchise Fee, and shall not be eligible for Diversion credit. Notwithstanding anything in this Agreement to the contrary, Franchisee's Diversion requirements under this Agreement shall be subject to all Applicable Laws, such that if Diversion requirements in the State of California increase, Franchisee shall be required to comply with such increased Diversion requirement.

To comply with this Section, Franchisee is required to submit timely tonnage reports supporting the Recycling Diversion Requirement, and to provide supporting documentation as may be requested by City or its designee as part of, or independent of, an audit. Failure to meet, and fully support, the Recycling Diversion Requirement may result in termination of this Agreement pursuant to Section 15.

9.12.1 Implementation of Additional Diversion Services. In the event City does not meet the current Diversion goal of fifty percent (50%) imposed by AB 939, and City finds that Franchisee is not achieving the minimum fifty percent (50%) Diversion requirement pursuant to this Section 9.12, City may direct Franchisee to perform additional services (including the implementation of new Diversion programs) or modify the manner in which it performs existing services, and Franchisee agrees to do so.

9.13 Compliance and Penalties. City may provide Franchisee with written notice of violations of this Section. If Franchisee fails to cure any noticed violation within a reasonable period of time determined in City's sole discretion, the end date of which is stated in the written notice, the City may charge Franchisee up to Two Hundred Fifty Dollars ($250) per day for each violation identified in the written notice. Upon request, City may in its sole discretion, but is not required to, extend Franchisee's period to cure. The penalties in this Section are in addition to any penalties assessed pursuant to other provisions in this Agreement.

SECTION 10
REPORTING REQUIREMENTS

The Parties acknowledge that City will require reporting at various intervals by which information important to City can be compiled and analyzed. Throughout the Term the Parties agree to work together to address City's needs with respect to the information to be contained in reports prepared by Franchisee. The following is intended as a starting point in order to have established an objective baseline for reporting, but the frequency and content of the reports called out below may be changed by agreement of the Parties; provided any such change is approved by the City Manager in writing.

10.1 Annual Report. On or before the 45th day following January 1st of each year during the Term of this Agreement, Franchisee shall submit a written annual report and operations plan through completion and submittal of a form developed and approved by the

City Manager (each such report, an "Annual Report"). The Annual Report shall be accompanied by a statement certified by an officer of Franchisee attesting to the accuracy of the information provided. The Annual Report shall include, but may not be limited to, information on the amount of Solid Waste Collected, disposed of, and Diverted, the methods utilized to Collect such Solid Waste, and identifying the disposal and non-disposal facilities to which the Franchisee delivered such Solid Waste. At a minimum, the Annual Report shall include all of the following:

10.1.1 Total Tonnage Collected and Diverted. A summary of the total tons of Solid Waste Collected in City in the preceding year as well as a summary of the total tonnage Diverted from the State's landfill systems during that time frame.

10.1.2 State-Mandated Compliance Reports. Information and State-Mandated Compliance Reports, in a form and content approved by the City Manager.

10.1.3 Yearly Comparison. In the second year and each subsequent year during the Term of the Agreement, Franchisee shall provide a year-by-year comparison, by weight, of Solid Waste disposal and Diversion.

10.1.4 Gross Receipts and Franchise Fee. Franchisee shall provide a total revenue statement, certified by the chief financial officer of Franchisee, setting forth the quarterly Franchise Fees paid and the basis for the calculation thereof, including specifically a breakdown of sources of revenue included in Gross Receipts and the amount of revenue derived from each such source comprising Gross Receipts.

10.1.5 Landfill and Processing Facilities. Franchisee shall provide the name and location of all Landfills, Processing Facilities, end users, and other disposal facilities used to dispose of material Collected from the City.

10.1.6 Customer/Bin Counts. Franchisee shall provide the number of Customers that received routine commercial service, the number of Customers that received Temporary Bin Service, and the Bin data required to be compiled and submitted by Franchisee pursuant to Section 9.3.3. In addition, Franchisee shall provide the number of Customers serviced in the City by processing type, including: Landfill Customers, MRF Customers, and Green Waste Composting Facility Customers. Also, Franchisee shall include the number of Source-Separated Recycling Customers.

10.1.7 Diversion Efforts. Franchisee shall describe Diversion efforts provided to Customers. Include staffing time, educational information provided, and other activities provided to help promote Recycling within commercial and industrial businesses.

10.1.8 Franchisee Recycling Plan. Franchisee shall provide an annual update to the Recycling Plan required by Section 10.3. In addition, Franchisee shall summarize each previous year's Recycling Plan.

10.1.9 Vehicle List. Franchisee shall provide an updated list of vehicles to be used to provide Solid Waste Handling Services in the City.

10.1.10 Processing Facility Listing. Franchisee shall provide an updated list of Processing Facilities to be used by Franchisee.

10.2 Quarterly Summary Reports. No later than forty five (45) days following each calendar quarter during the Term of this Agreement, Franchisee shall submit quarterly reports including the same information required by Section 10.1 under the headings: Tonnage, Diversion, and State-Mandated Compliance Reports; Gross Receipts and Franchise Fee; Landfill and Processing Facilities; Customer Counts; and Diversion Efforts.

The quarterly reports shall be submitted to the City Manager. Each quarterly report shall be accompanied by a statement, included at the bottom of such report, by the chief financial officer of Franchisee certifying to the accuracy of the report.

The Franchise shall maintain in its files for the Term of this Agreement, and at least three (3) years thereafter, tonnage receipts provided to Franchisee by each Landfill or Processing Facility used by Franchisee to dispose of waste Collected in the City. Franchisee shall provide such receipts for the audit financial analysis or upon request of City. This data will be used by City to verify Franchisee's quarterly reports. City may require, in its discretion, and Franchisee shall provide, additional information in connection with the quarterly reports, such as the number and types of businesses serviced, or other information City deems useful or appropriate.

10.3 Franchisee Recycling Plan.

10.3.1 Recycling Plan. Franchisee shall develop and submit a Recycling Plan which must be approved in writing by the City Manager before Franchisee commences Solid Waste Handling Services under this Agreement. Approval of the Recycling Plan shall be in the City Manager's sole discretion. Approval shall be based on the City Manager's review of the following Recycling Plan requirements. The City Manager may authorize, in writing, Franchisee to commence Solid Waste Handling Services while the Franchisee's Recycling Plan is under review. Should the City Manager subsequently reject Franchisee's Recycling Plan, Franchisee must immediately cease operations unless otherwise authorized, in writing, by the City Manager to continue services while Franchisee develops a new Recycling Plan. The Recycling Plan shall include the following:

(a) Statement of Overall Recycling Goals and Focus.

(b) Statement of Targeted Means to Increase Diversion Opportunities.

(c) Processing Facilities and Diversion information including:

- Processing Facilities to be used and their respective types.
- Estimated Solid Waste weight to be Collected by Franchisee within the City Limits in the current calendar year.
- Estimated Solid Waste Collected within the City Limits to be delivered by Franchisee and accepted by each Processing Facility in the current calendar year.

- How, if at all, Solid Waste will be processed between Collection and delivery to a Processing Facility.

- The Diversion rate of each Processing Facility.

(d) Marketing and Education Strategy information including:

- Franchisee staff and dedicated hours per week focused on Diversion.

- Information Franchisee intends to provide its Customers to encourage Diversion (e.g. brochures, guides, price incentives).

(e) Target Goals information including:

- Franchisee's Diversion Target Goals, in tonnage, by material type and Processing Facility.

- Franchisee's Customer Target Goals to increase the number of Customers that have Recycling, reuse, composting, or other Recycling services, including efforts to increase Source Reduction.

10.3.2 Annual Update. Franchisee shall submit on an annual basis an updated Recycling Plan as described in this Section 10.3. In addition, the annual Franchise Recycling Plan shall summarize each previous year.

10.4 Adverse Information. Franchisee shall provide City copies of all reports, pleadings, applications, notifications, communications, and documents, as well as copies of all decisions, correspondence, and actions, and other material adversely affecting this Agreement, or related in any manner to Franchisee's performance of this Agreement, submitted or received by Franchisee to or from the United States Environmental Protection Agency, CalRecycle, the California Regional Water Quality Control Board, and any other federal, state, regional, or local regulatory agency. Copies shall be submitted to City simultaneously with Franchisee's filing of such matters with said agencies. Franchisee's routine correspondence to said agencies need not be automatically submitted to City, but shall be made available to City upon written request. Franchisee shall submit to City such other information or reports in such forms and at such times as City may reasonably request or require.

10.5 Other Reporting Requirements. All reports and records required under this or any other Section of this Agreement shall be furnished at the sole expense of Franchisee. Franchisee agrees to submit such reports and information on computer discs or electronically in a format compatible with City's computer system as it may be upgraded from time to time, if requested by City. A copy of each of Franchisee's annual and other periodic public financial reports and those of each of its parent, subsidiary, and affiliated corporations and other entities, as City requests, shall be submitted to City within thirty (30) days after City giving

notice to Franchisee of such a request. Franchisee shall submit to City such other information or reports in such forms and at such times as City may reasonably request or require.

10.6 Failure to Report. The refusal, failure, or neglect of Franchisee to file any of the reports required by this Agreement within thirty (30) days such report is due, or the inclusion of any materially false or misleading statement or representation made knowingly by Franchisee in such report, shall be deemed a material breach of this Agreement, and shall subject Franchisee to all remedies, legal or equitable, which are available to City under this Agreement or otherwise. In the event City elects to suspend Franchisee's franchise rights for Franchisee's failure to file a report, as a condition to Franchisee's reinstatement, Franchisee shall be required to pay to City a penalty in the amount of Five Hundred Dollars ($500) for each thirty (30) day period in which the applicable report is delinquent.

10.7 Confidentiality. To the extent permitted by law, City shall endeavor to keep confidential any confidential information, such as Customer information or information regarding Franchisee's financial matters, that is submitted in connection with any reports required hereunder.

SECTION 11
AB 939 OBLIGATIONS, GUARANTEE, AND INDEMNIFICATION

11.1 Warranties and Representations.

(a) Franchisee warrants and represents that it is familiar with City's SRRE, it is familiar with City's waste stream, and it has the ability to and will provide sufficient programs and services to ensure City will meet or exceed the Diversion requirements (including, without limitation, amounts of Solid Waste to be Diverted, time frames for Diversion, and any other requirements) set forth in AB 939, and all amendments thereto, with respect to the Customers it services hereunder.

(b) Without regard to any related indemnification requirements, Franchisee guarantees to City that it shall carry out its obligations under this Agreement so that (1) both it and City will at all times be in compliance with the requirements of all Applicable Laws, including specifically AB 939, AB 341, and AB 1826, and (2) City will meet or exceed the Diversion requirements (including, without limitation, amounts of Solid Waste to be Diverted, time frames for Diversion, and any other requirements) set forth in AB 939, AB 341, and AB 1826, as well as the regulations implementing each of them and any and all amendments to each of them, with respect to the Customers Franchisee services hereunder. In meeting this obligation, Franchisee shall be mindful of and comply with all requirements of the County Agreement, including specifically, without limitation, the requirements thereof generally relating to (i) the delivery of Solid Waste only to transfer stations that provide quarterly certifications of Solid Waste delivered, and (ii) the disposal of residual Solid Waste that remains after Recycling processes have been completed. Commencing immediately upon the Effective Date, Franchisee shall implement all programs necessary to ensure City complies with all state-mandated programs relevant to the services provided hereunder and shall perform public education, awareness, and outreach activities as required by any state-mandated program or as reasonably required by the City Manager. Franchisee shall submit to the City Manager for review and approval all proposed written public

educational, awareness and outreach materials. Franchisee shall engage in any required education, awareness, and outreach activities within thirty (30) days of commencing services to any new Customers, and on not less than an annual basis with all existing Customers. Franchisee shall provide City with quarterly and annual written reports in a form acceptable to the City Manager and adequate to meet City's filing and reporting requirements with CalRecycle and the County of Orange, including any associated with AB 939, AB 341, and AB 1826 throughout the Term of this Agreement. At City's request, Franchisee shall be responsible to prepare, or assist City with the preparation of, all reports and other information as may be required by any agency, including specifically, the State of California, in order to comply with any Applicable Laws related to the services contemplated by this Agreement.

11.2 Mutual Cooperation. City and Franchisee shall reasonably cooperate in good faith with all efforts by each other to meet City's Diversion and other compliance requirements imposed by AB 939, AB 341, AB 1826, and other Applicable Laws. In this regard, City's obligations shall include, without limitation, making such petitions, requests and applications as may be reasonably requested by Franchisee for time extensions in meeting Diversion goals, reductions in Diversion goals, or other exceptions from the terms of AB 939, AB 341, AB 1826, and other Applicable Laws.

11.3 Performance Requirements. Franchisee's obligations pursuant to the provisions of this Section shall include, but not be limited to, the following terms:

11.3.1 Indemnification Requirements. Franchisee agrees to defend, with counsel approved by City, indemnify, and hold harmless the City Indemnitees from and against all fines and/or penalties and other liabilities which may be imposed by CalRecycle or any other regulatory agency if (1) Franchisee fails or refuses to timely provide information relating to its operations which is required pursuant to this Agreement or any Applicable Laws and such failure or refusal prevents or delays City from submitting reports required by Applicable Laws in a timely manner; or (2) the Source Reduction and Recycling goals, Diversion goals, program implementation requirements, or any other requirements of Applicable Laws are not met with respect to the Customers Franchisee services hereunder.

11.3.2 Assistance to City; Payment of Fees, Fines, and Penalties. In addition, Franchisee agrees, at its sole cost and expense, to:

(a) Assist City in responding to inquiries from CalRecycle;

(b) Assist City in preparing for, and participating in, CalRecycle's biennial review of City's compliance with Applicable Laws;

(c) Assist City in applying for an extension, if so directed by City;

(d) Assist City in any hearing conducted by CalRecycle relating to City's compliance with Applicable Laws;

(e) Assist City in the development and implementation of a public awareness and education program that is consistent with Applicable Laws, as well as any related requirements of Applicable Laws;

(f) Provide City with advice on Recycling, Source Reduction, and other technical assistance related to compliance with the Applicable Laws;

(g) Defend, with counsel acceptable to City, the City Indemnitees against the imposition of fines and/or penalties, or any other liabilities, issued by CalRecycle as a result of Franchisee's failure to comply with Applicable Laws, including, without limitation, AB 939, AB 341, and AB 1826; and

(h) Be responsible for and pay, any fees, penalties or other costs imposed against City by CalRecyle and Indemnify and hold harmless City against any fines, penalties, or other liabilities, levied against it for violation of any state-mandated Diversion requirements, or violation of any other provision of Applicable Laws; provided, however, Franchisee's obligation to indemnify City for any penalties or fines set forth in this sub-paragraph shall be in proportion to the amount of such fines or penalties imposed because of Franchisee's delay or failure to perform its obligations hereunder.

11.4 Annual Compliance Review. City intends to review Franchisee's performance annually at its expense to ensure compliance with the terms and provisions of this Agreement ("Annual Compliance Review"). At a minimum, City intends to have internal staff or outside consultants review Franchisee's performance to ensure ongoing compliance with the terms hereof, including, but not limited to, the payment of required fees, performance of the Solid Waste Handling Services stated herein, implementation of programs required under the Agreement, Franchisee's maintenance and upkeep of records, and Franchisee's compliance with all Applicable Laws. Franchisee shall provide any and all information reasonably requested by City in connection with its efforts to ensure compliance with the terms hereof, regardless of whether such information is specifically otherwise called out herein as an item that Franchisee is required to maintain and provide to City.

SECTION 12
FRANCHISEE'S BOOKS AND RECORDS; AUDITS

12.1 Examination of Records. Franchisee shall maintain all records relating to the Solid Waste Handling Services provided hereunder, including but not limited to Customer lists, billing records, accounts payable records, maps, service requests, cash receipts records, AB 939 compliance records, and other documents and materials which reasonably relate to Franchisee's compliance with and performance of the provisions of this Agreement (the "Records"), for the full Term of this Agreement, and an additional period thereafter of not less than three (3) years, or any longer period required by law. City shall have the right, upon five (5) business days advance notice, to inspect the Records. Such Records shall be made available to City at Franchisee's regular place of business, but in no event outside the County of Orange.

12.2 CERCLA Defense Records. City views the ability to defend against CERCLA and related litigation as a matter of great importance. For this reason, the City regards the ability to prove where Solid Waste Collected in the City was taken for disposal, as well as where it was not taken, to be matters of concern. Franchisee shall maintain data retention and preservation systems which can establish where Solid Waste Collected in the City was

landfilled (and therefore establish where it was not landfilled) for not less than five (5) years following the termination of this Agreement, and agrees to notify City's Risk Manager, City Clerk and City Attorney before destroying such records thereafter. At any time, including after the expiration of the Term hereof, Franchisee shall provide copies of such records to City. The requirements of this Section shall survive the expiration of the Term of this Agreement.

12.3 Audits by City. City shall have the right to conduct or to contract with an independent auditing firm to perform an audit, at City's expense, of Franchisee's records (the "City Audit") to ensure compliance with the provisions of this Agreement on an annual and/or as-needed basis, to be determined by the City. The City Audit shall include, without limitation, a review of Franchisee's cash receipts records, Solid Waste tonnage Collection, Diversion, and other related records, as well as those of each of its parent, subsidiary and/or affiliated companies, as appropriate, to determine Franchisee's Gross Receipts, the accuracy of Franchise Fees paid, and such other information as is reasonably deemed appropriate by the City Manager to evaluate Franchisee's performance hereunder. As part of the City Audit Franchisee's Customer's accounts and related records may be subject to review. While Franchisee will not be required to submit detailed account records, such as the names and addresses of Customers, to the City in connection with required reports hereunder, Franchisee shall make such records and information available for review in connection with the City Audit at Franchisee's business offices.

Should any City Audit reveal an underpayment of any Franchise Fee required pursuant to this Agreement, the amount of such underpayment shall become due and payable to City not later than fifteen (15) days after written notice of such underpayment is sent to Franchisee by City, complete with any additional late charges as set forth herein. If a City Audit reveals inaccuracies or inconsistencies in more than five percent (5%) of all Customer accounts, either with Franchisee's operations or billing systems, or an underpayment of Franchise Fees of more than three percent (3%), Franchisee shall bear the entire cost of such City Audit and shall pay a sum necessary to cover such costs to the City within thirty (30) days of demand.

12.4 Inspection. City shall have the right to inspect Franchisee's books and records related to the Franchisee's performance under this Agreement. The inspections shall be allowed at any time during normal business hours, but City shall provide at least two (2) days advance written notice before City commences an inspection of Franchisee's books and records. Among other things, City shall be allowed to review Franchisee's contracts with its Customers, and shall be allowed to communicate directly with Franchisee's Customers, for the purpose of determining whether Franchisee is in compliance with this Agreement. City shall not reveal any trade secrets or proprietary information obtained during their review of Franchisee's books and records.

SECTION 13
RULES AND REGULATIONS OF CITY MANAGER

The City Manager shall have the power to establish rules and regulations respecting the accumulation, Collection and transportation of Solid Waste not inconsistent with the provisions of this Agreement, providing such rules and regulations are found to be reasonably necessary by the

City Manager for enforcement of the provisions of this Agreement, or any and all applicable laws and ordinances, and for the preservation of the public peace, health and safety. Franchisee agrees to comply with any and all such rules and regulations.

SECTION 14
INDEMNIFICATION; LEGAL EXPENSES; BONDS; INSURANCE

14.1 Indemnification of City.

14.1.1 General Indemnification.

(a) Franchisee hereby agrees to and shall indemnify and hold harmless the City Indemnitees from and against any and all loss, liability, penalty, forfeiture, claim, demand, action, proceeding or suit in law or equity of any and every kind and description (including, but not limited to, injury to and death of any person and damage to property, or for contribution or indemnity claimed by third parties) arising out of, resulting from, and/or in any way connected with this Agreement including: (1) the negligence or willful misconduct of Franchisee, its officers, employees, agents, and/or subcontractors in performing services under this Agreement; (2) the failure of Franchisee, its officers, employees, agents, and/or subcontractors to comply in all respects with the provisions of this Agreement (including without limitation Franchisee's obligation to ensure City complies with the requirements of the County Agreement), all Applicable Laws (including, without limitation, the Environmental Laws), ordinances and regulations, and/or applicable permits and licenses; (3) the acts of Franchisee, its officers, employees, agents, and/or subcontractors in performing services under this Agreement for which strict liability is imposed by law (including, without limitation, the Environmental Laws); and (4) any challenge to the award of, or any provisions of this Agreement (including any claim that the application of any provision hereof violates any provision of the California Constitution). The foregoing indemnity and hold harmless provisions shall apply regardless of whether such loss, liability, penalty, forfeiture, claim, demand, action, proceeding, suit, injury, death or damage is also caused in part by any of City Indemnitees' negligence, but shall not extend to matters resulting from the City Indemnitees' sole negligence, or willful misconduct. Franchisee further agrees to and shall, upon demand of City, at Franchisee's sole cost and expense, defend (with attorneys acceptable to City) the City Indemnitees against any claims, actions, suits in law or equity or other proceedings, whether judicial, quasi-judicial or administrative in nature, arising or resulting from any of the aforementioned events, and to reimburse City for any and all costs and expenses City incurs in providing any such defense, either before, during or after the time Franchisee elects to provide such defense, including any and all costs incurred in overseeing any defense to be provided herein by Franchisee. Franchisee shall receive credit towards this indemnity obligation for any sums received by or for the benefit of City from insurance obtained by Franchisee for the benefit of City

(b) Franchisee, upon demand of City, made by and through the City Attorney, shall protect City and appear in and defend the City Indemnitees in any claims or actions by third parties, whether judicial, administrative or otherwise, including, but not limited to disputes and litigation over the definitions of "Solid Waste" or "Recyclable Material," the scope of the rights granted herein, conflicts between the rights granted herein and rights asserted by other Persons, or the limits of City's authority with respect to the grant of licenses, or agreements,

exclusive or otherwise, asserting rights under the Dormant Commerce Clause or any other federal or state laws to provide Collection services in the City.

(c) The provisions of this Section shall not terminate or expire, shall be given the broadest possible interpretation, and shall survive the expiration or earlier termination of this Agreement.

14.1.2 Hazardous Substances Indemnification.

(a) Without regard to any insurance coverage or requirements (but giving credit to Franchisee for any sums received by or for the benefit of City from insurance obtained by Franchisee for the benefit of City), and without limiting the above general indemnification obligation in any way, Franchisee specifically agrees to and shall, to the maximum extent permitted by law, defend (with counsel acceptable to City) reimburse, indemnify, and hold the City Indemnitees harmless from and against any and all claims, actions, liabilities, damages, demands, judgments, losses, costs, liens, expenses, suits, actions, attorneys' fees, consultant fees, penalties and any and all other losses, damages, fees and expenses of whatever kind or nature ("Claims") (including but not limited to response costs, investigative costs, assessment costs, monitoring costs, treatment costs, cleanup costs, removal costs, remediation costs, and similar costs, damages and expenses) that arise out of or are alleged to arise out of or in any way relate to any action, inaction or omission of Franchisee that:

(i) results in any demand, claim, notice, order, or lawsuit, asserting that any of the Indemnitees is liable, responsible or in any way obligated to investigate, assess, monitor, study, test, treat, remove, remediate, or otherwise cleanup, any Hazardous Contaminant (as defined herein); or

(ii) relates to material Collected, transported, Recycled, treated or disposed of by Franchisee.

(b) Franchisee's obligations pursuant to this Section shall apply, without limitation, to:

(i) any Claims brought pursuant to or based on the provisions of CERCLA, RCRA, the California Hazardous Substances Account Act (California Health & Safety Code Sections 25300 et seq.), the California Hazardous Waste Control Laws (California Health and Safety Code Sections 25100 et seq.), the California Porter-Cologne Act (California Water Code Section 13000 et seq.), and any and all amendments and regulations thereto, and any other Federal, State, regional or local environmental statutory or regulatory provision;

(ii) any Claims based on or arising out of or alleged to be arising out of the ownership, use, lease, sale, design, construction, maintenance or operation by Franchisee of any facility;

(iii) any Claims based on or arising out of or alleged to be arising out of the marketing, sale, distribution, storage, transportation, disposal, processing or use of any materials recovered by Franchisee;

(iv) any Claims based on or arising out of or alleged to be arising out of any breach of any express or implied warranty, representation or covenant arising out of or in connection with this Agreement.

14.1.3 Additional Indemnification Requirements.

(a) The indemnity and defense obligations in this Section 14 shall apply irrespective of the negligence or willful misconduct of Franchisee or any affiliate of Franchisee.

(b) The provisions of this Section shall not terminate or expire, shall be given the broadest possible interpretation, and shall survive the termination or expiration of this Agreement.

(c) With regard to any claim covered by this provision arising from the delivery of Solid Waste to the Orange County landfill system pursuant to the terms of the County Agreement, the indemnity provisions hereof are intended to be supplemental to any indemnification obligations owed to the City by the County of Orange pursuant to the County Agreement.

14.2 Surety. Contemporaneously with execution of this Agreement, as security for Franchisee's faithful performance of all obligations of this Agreement, Franchisee shall provide a surety mechanism (the "Surety") as more fully defined below in the amount of Ten Thousand Dollars ($10,000). The Surety may be comprised of either a performance bond or an irrevocable letter of credit, or a combination of both. If a letter of credit is utilized to satisfy some or all of the Surety requirements, it shall be drawn upon a financial institution with an office within fifty (50) miles of City, and otherwise in a form acceptable to the City Attorney. The performance bond, if any, shall be issued by a duly authorized corporate surety company authorized to do business in California, and in a form acceptable to the City Attorney. The cost of the Surety shall be the sole responsibility of Franchisee. The Surety shall be released within ninety (90) days after both (i) the expiration of the Term of this Agreement, and (ii) Franchisee's satisfactory performance of all obligations hereunder.

14.3 Forfeiture of Surety. In the event Franchisee shall for any reason become unable, or fail in any way, to perform as required by this Agreement, City may declare a portion or all of the Surety, as may be necessary to recompense and make whole the City, forfeited to the City. Upon partial or full forfeiture of the Surety, Franchisee shall restore the Surety to its original amount within thirty (30) days of the City's notice to do so. Failure to restore the Surety to its full amount within thirty (30) days shall be a material breach of this Agreement.

14.4 Use of Surety by City. Notwithstanding any provision hereof to the contrary, thirty (30) days following City providing Franchisee with written notice of its failure to pay City any amount owing under this Agreement, either the letter of credit or performance bond comprising the Surety may be utilized by City for purposes including, but not limited to: (1) payment of sums due under the terms of this Agreement which Franchisee has failed to timely pay to City, including specifically liquidated damages; and (2) reimbursement of costs borne by City to correct violations of this Agreement not corrected by Franchisee.

14.5 Replacement Letter of Credit. City may draw upon the entire letter of credit (if any) utilized to meet Franchisee's obligations pertaining to the Surety, and convert it to a cash deposit, if Franchisee fails to cause the letter of credit to be extended or replaced with another satisfactory letter of credit no later than sixty (60) days prior to its expiration.

14.6 Insurance Coverage. Franchisee shall procure and maintain during the entire Term of this Agreement the following types of insurance and shall maintain the following minimum levels of coverage, which shall apply to any claims which may arise from or in connection with Franchisee's performance hereunder or the actions or inactions of any of Franchisee's officers, agents, representatives, employees, or subcontractors in connection with Franchisee's performance. The insurance requirements hereunder in no way limit Franchisee's various defense and indemnification obligations or any other obligations as set forth herein.

14.6.1 Comprehensive General Liability. Insurance which affords coverage at least as broad as Insurance Services Office "occurrence" form CG 00 01 including completed operations and contractual liability, with limits of liability of not less than Two Million Dollars ($2,000,000) per occurrence and Four Million Dollars ($4,000,000) annual aggregate for liability arising out of Franchisee's performance of this Agreement. The limits shall be provided by either a single primary policy or combination of policies. If limits are provided with excess and/or umbrella coverage the limits combined with the primary will equal the minimum limits set forth above. If written with an aggregate, the aggregate shall be double the occurrence limit. Such insurance shall be endorsed to:

(a) Name the City of Irvine and its employees, representatives, officers, officials, agents, representatives, and volunteers (collectively hereinafter "City and City Personnel") as additional insured for claims arising out of Franchisee's performance of this Agreement.

(b) Provide that the insurance is primary and non-contributing with any other valid and collectible insurance or self-insurance available to City.

A statement on an insurance certificate will not be accepted in lieu of the actual endorsement.

14.6.2 Automobile Liability Insurance. Insurance with a limit of liability of not less than Two Million Dollars ($2,000,000) each occurrence and Two Million Dollars ($2,000,000) annual aggregate. The limits shall be provided by either a single primary policy or combination of policies. If limits are provided with excess and/or umbrella coverage the limits combined with the primary will equal the minimum limits set above. Such insurance shall include coverage for all "owned," "hired" and "non-owned" vehicles, or coverage for "any auto." Such insurance shall be endorsed to:

(a) Name the City and City Personnel as additional insureds for claims arising out of Franchisee's performance of this Agreement.

(b) Provide that the insurance is primary and non-contributing with any other valid and collectible insurance or self-insurance available to City.

A statement on an insurance certificate will not be accepted in lieu of the actual endorsement.

14.6.3 Workers' Compensation Insurance.

(a) In accordance with the Labor Code of California and covering all employees of Franchisee providing any service in the performance of this agreement. Such insurance shall be endorsed to waive the insurer's right of subrogation against the City and City Personnel with respect to the performance of Franchisee's obligations under this Agreement.

A statement on an insurance certificate will not be accepted in lieu of the actual endorsement unless your insurance carrier is the State of California Insurance Fund (SCIF) and the endorsement numbers 2570 and 2065 are referenced on the certificate of insurance.

Franchisee's completion of the form attached hereto as Exhibit B shall be a condition precedent to Franchisee's rights under this Agreement. Should Franchisee certify, pursuant to Exhibit B, that, in the performance of the work under this Agreement, it shall not employ any person in any manner so as to become subject to the workers' compensation laws of California, Franchisee shall nonetheless maintain responsibility for requiring that any subcontractors performing work under this Agreement have and maintain workers' compensation insurance, as required by Section 3700 of the Labor Code, for the work performed under this Agreement.

14.6.4 Environmental Pollution Control Insurance. Franchisee shall maintain either an endorsement to its general liability policy, or a separate policy of insurance covering environmental pollution and contamination that names the City and City Personnel as an additional insured. Said coverage shall be in the amount of not less than One Million Dollars ($1,000,000) per occurrence, and Two Million Dollars ($2,000,000) in the aggregate, and shall substantially comply with all other provisions set forth in Section 14.6.1.

14.6.5 Endorsements. A statement on an insurance certificate will not be accepted in lieu of the actual endorsement. Insurance policies shall not be in compliance if they include any limiting provision or endorsement that has not been submitted to City for approval.

Additional Insured Endorsements shall not:

(1) Be limited to "Ongoing Operations"

(2) Exclude "Contractual Liability"

(3) Restrict coverage to the "Sole" liability of Franchisee

(4) Contain any other exclusion contrary to the Agreement.

Any Deductible and/or Self-Insured Retentions must be disclosed to City.

14.6.6 Acceptability of Insurers. Each policy shall be from a company with current A.M. Best's rating of A VII or higher and authorized to do business in the State of California, or otherwise allowed to place insurance through surplus lines brokers under applicable

provisions of the California Insurance Code or any federal law. Any other rating must be approved in writing by the City.

14.6.7 Insurance of Subcontractors. Franchisee shall be responsible for causing subcontractors to maintain the same types and limits of coverage in compliance with this Agreement, including naming the City and City Personnel as additional insureds to the subcontractor's policies.

14.6.8 Verification of Coverage. Franchisee shall furnish City with certificates of insurance and with original endorsements affecting coverage required by this Article. The certificates and endorsements for each insurance policy are to be signed by a person authorized by that insurer to bind coverage on its behalf. The certificates and endorsements are to be on forms provided by or acceptable to City and are to be received and approved by City before work commences.

14.6.9 Loss or Reduction in Insurance. In the event that Franchisee fails to retain or maintain insurance with the scope and amounts of coverage required hereunder, City shall have the right, but not the obligation, to either terminate this Agreement, or obtain insurance coverage as required herein on behalf of Franchisee and utilize funds from the Surety defined in this Section 14 to pay the cost of providing such coverage.

SECTION 15
CITY'S REMEDIES; DEFAULT AND TERMINATION

15.1 City's Right to Suspend or Terminate. The City shall have the right to suspend or terminate this Agreement, and the nonexclusive franchise granted herein, upon Franchisee's breach of any of its obligations hereunder.

15.2 Notice of Default. If the City Manager determines that Franchisee has defaulted in the performance of any obligation hereunder, or that Franchisee's performance pursuant to this Agreement with respect to such matters has not been in conformity with reasonable industry standards which are obtained in similar cities in Southern California, the provisions of this Agreement, the requirements of the Municipal Code, the requirements of CalRecycle, including, but not limited to, requirements for Source Reduction and Recycling or any other applicable federal, state, or local law or regulation, including but not limited to the laws governing transfer, storage, or disposal of Special Wastes, or Hazardous Substances (to the extent applicable to Franchisee, and/or Franchisee's activities under this Agreement), the City Manager may provide written notice to Franchisee of such default. The City Manager may, in such written notice, set a reasonable time within which correction of such default shall be made. Unless a longer or shorter time is otherwise specified by the City Manager, a reasonable time for correction shall be thirty (30) days from the date such written notice is given.

15.3 Termination Without Right to Cure. City shall have the right of suspension or termination as a result of Franchisee's failure to timely cure any deficiency as set forth above, which right is in addition to City's right to terminate this Agreement without affording Franchisee an opportunity to cure in circumstances where Franchisee is determined to have

materially breached this Agreement. Notwithstanding anything to the contrary in Section 15.2 above, City shall thus be afforded the right to terminate this Agreement without affording the right to cure in the event of any material breach hereof by Franchisee, including without limitation any action, inaction or circumstance defined herein as a material breach, and/or under any of the following circumstances which are hereby defined as material breaches:

(a) If Franchisee practices, or attempts to practice, any fraud upon City.

(b) If Franchisee becomes insolvent, unable, or unwilling to pay its debts, or upon listing of an order for relief in favor of Franchisee in a bankruptcy proceeding.

(c) If Franchisee willfully violates any orders or rulings of any regulatory body other than City having jurisdiction over Franchisee relative to this Agreement. So long as City's rights are not prejudiced during the pendency of any challenge to such orders or rulings by Franchisee, Franchisee may contest any such orders or rulings by appropriate proceedings conducted in good faith, in which case no material breach of this Agreement shall be deemed to have occurred until a final ruling has been rendered.

(d) If Franchisee fails to meet the Diversion requirements of this Agreement or pursuant to Applicable Laws.

(e) If Franchisee fails to materially comply with any insurance or indemnification requirement set forth in this Agreement; provided, however, that Franchisee shall have a reasonable opportunity to cure any default relating to the Franchisee's failure to provide the City with proof of insurance, so long as such insurance is in effect at all times.

(f) If City is required to pay any fine or penalty, which Franchisee is required by the terms hereof to pay, yet which Franchisee fails, refuses, neglects or is unable to timely pay.

(g) If Franchisee, or any management level employee of Franchisee is convicted of a "Criminal Matter" (as defined herein). For purposes of this Section the term "Criminal Matter" refers to any felony or misdemeanor offense having any relationship to either Solid Waste Handling Services or public corruption (including, without limitation, bribery, conflict of interest related allegations, vote selling, or any similar type charges).

15.4 Termination Procedure. The following procedure shall apply to either of the following:

(a) any action or inaction by Franchisee which is a material breach of this Agreement, not requiring that Franchisee be afforded the right to cure, or

(b) any circumstance in which Franchisee fails to correct, to the satisfaction of the City Manager, all deficiencies contained in a written notice of default within the specified time (or if it is not reasonably possible to correct such deficiencies within the specified time, and Franchisee fails to commence to correct or remedy such deficiencies within the specified time and diligently effect such correction or remedy thereafter).

In the event of either of the above, then the City Manager shall either refer the matter to the City Council for review, or review the matter himself or herself and upon completion of such review notify Franchisee of the City Manager's decision, in writing.

15.4.2 City Manager Review. If the City Manager reviews the matter and determines that Franchisee has failed to properly or adequately perform as set forth above, the City Manager, in the exercise of his or her sole discretion, may terminate this Agreement, or take such other action as he or she deems appropriate to pursue any remedy available to City. A decision or order of the City Manager shall be final and binding on Franchisee unless Franchisee files a "Notice of Appeal" with the City Clerk within five (5) days of the date the notice of the City Manager's decision is given. The City Manager shall schedule any appeal for consideration by the City Council at the earliest feasible Council Meeting following the date a Notice of Appeal is given to City.

15.4.3 City Council Review. In the event an appeal of a decision of the City Manager is filed, or if the City Manager refers the matter directly to the City Council upon Franchisee's failure to cure a default, the City Council shall set the matter for consideration as a regular agenda item, and the matter shall not require a public hearing. In reviewing the matter the City Council may consider any information reported by the City Manager regarding the deficiencies, and shall give Franchisee, or its representatives and any other interested person, a reasonable opportunity to be heard. The Council shall determine, in the exercise of its absolute and sole discretion, whether Franchisee has failed to properly or adequately perform as set forth above, and if so whether to terminate the Agreement, or take such other action as it deems appropriate to pursue any remedy available to City. The decision of the City Council shall be final.

15.4.4 Performance During Reviews. Franchisee's performance under this Agreement is not excused, nor shall its rights to operate hereunder be impacted, during any period of time when its performance is under review as set forth above, including at any time prior to a final decision as to whether such performance is deficient.

15.5 Franchisee's Obligations Upon Termination. In the event this Agreement is terminated pursuant to this Section 15 or the Term of this Agreement expires:

(a) Franchisee shall have no right or authority to engage in Solid Waste Handling Services within the City Limits under this Agreement.

(b) Franchisee shall remain liable to City for any and all fees that would otherwise be payable by Franchisee, including specifically amounts resulting from the late payment of Franchise Fees.

(c) Franchisee shall allow its Customers to arrange for Solid Waste Handling Services with a Solid Waste enterprise collector authorized to perform such services, without penalty or liability for breach of contract.

(d) Franchisee shall remove all of its Bins used in performance of Solid Waste Handling Services hereunder from the Premises of all Customers, and shall properly dispose of all Solid Waste in such Bins, within such time period as specified by the City Manager. If Franchisee fails to remove its Bins and dispose of all Solid Waste in such Bins as required pursuant to this

Section 15.5 within the time periods prescribed, City shall have the right to take any of such actions that have not been performed by Franchisee. Franchisee shall promptly reimburse City for all sums expended by City in taking such actions, along with a ten percent (10%) administrative fee.

15.6 City's Remedies Cumulative. The rights and remedies of City set forth in any Section herein shall be in addition to any and all other rights and privileges City may have, and shall not be deemed to limit any such other rights or privileges of City under this Agreement or by virtue of any law.

SECTION 16
FRANCHISEE'S REMEDIES; ADMINISTRATIVE HEARING

16.1 Administrative Hearing. Should Franchisee contend that City is in breach of any aspect of this Agreement, it shall give notice to the City Manager requesting an administrative hearing on the allegation. The hearing shall occur as soon as reasonably possible, or on such date as mutually agreed by the parties, and shall be held before an impartial hearing officer to be determined by the City Manager. The hearing officer shall make an advisory ruling on Franchisee's allegations, and suggest a remedy if a breach by City is determined to exist. The hearing officer's ruling and recommendations shall become final and binding if the Parties so agree in writing within 30 days of the date notice of the decision is given to the Parties. Otherwise, the hearing officer's ruling shall have no further force or effect.

16.2 Other Remedies; Claims. Franchisee shall be entitled to all available remedies in law or equity for City's breach of this Agreement; provided, however, Franchisee shall not file or otherwise commence any action against City, in law or equity, in any court, until after an administrative hearing as set forth above has been completed, and the above noted thirty (30) day period to accept the hearing officer's decision has passed, or either City or Franchisee has given timely written notice to the other that it will not accept the hearing officer's decision.

16.3 Actions for Damages. As a prerequisite to the filing and maintenance of any action for damages by Franchisee against City arising out of or relating to this Agreement, Franchisee shall present a claim to City, as required by Government Code section 910 et seq., within thirty (30) days of the date of the occurrence giving rise to the claim for damages.

SECTION 17
ASSIGNMENT, SUBLETTING, AND TRANSFER; REQUIREMENTS AND LIMITATIONS

This Agreement shall not be sold, hypothecated, sublet, assigned, or otherwise transferred, nor shall any of the rights or privileges herein be hypothecated, leased, assigned, sold, or otherwise transferred, either in whole or in part, nor shall title thereto, either legal or equitable, or any right, interest, or property therein, pass to or vest in any person, except Franchisee, either by action or inaction of Franchisee or by operation of law, without the prior written consent of City which may be withheld with or without cause. For purposes of permitting Franchisee to subcontract with other haulers to assist in providing services hereunder, and provided Franchisee will continue to provide services hereunder with its own employees, the written consent of the City Manager shall

suffice. Any other transfer, sale, subcontract, hypothecation, assignment or lease shall require the written consent of the City Council as expressed by a Resolution. Any attempt by Franchisee to hypothecate, subcontract, lease, assign, sell, or otherwise transfer any right or interest in this Agreement without the written consent of City shall be null and void and shall give rise to City's right, but not obligation, to terminate this Agreement.

SECTION 18
GENERAL PROVISIONS

18.1 Force Majeure. Franchisee shall not be in default under this Agreement in the event that its ability to provide Solid Waste Handling Services in compliance with its obligation to do so hereunder is temporarily interrupted or discontinued for any of the following reasons: riots, wars, sabotage, civil disturbances, insurrections, explosion, natural disasters such as floods, earthquakes, landslides, and fires, strikes, lockouts, and other labor disturbances or other catastrophic events which are beyond the reasonable control of Franchisee. The phrase "other catastrophic events" does not include the financial inability of Franchisee to perform or the failure of Franchisee to obtain any necessary permits or licenses from other governmental agencies or the right to use the facilities of any public utility where such failure is due in substantial part to the acts or omissions of Franchisee.

18.2 Property Damage. Any physical damage caused by the negligent or willful acts or omissions of employees, agents, or subcontractors of Franchisee to private or public property shall be promptly repaired or replaced.

18.3 City's Authorized Agent. Excepting amendments hereto and such actions set forth herein specifically calling for City Council action or approval, the City Manager is authorized to take any action with regard to any matter, or enforce any right, set forth herein requiring action by City.

18.4 Amendments. Except as otherwise expressly stated herein, no amendment of this Agreement shall be valid unless in writing duly executed by the Parties.

18.5 Independent Contractor. It is expressly understood and agreed that Franchisee shall perform all work and services described herein as an independent contractor and not as an officer, agent, servant or employee of City; that Franchisee shall have the exclusive control over the details of the services and work performed hereunder and all persons performing the same; that Franchisee shall be solely responsible for the acts and omissions of its officers, agents, employees, contractors and subcontractors, if any; and that nothing herein shall be construed as creating a partnership or joint venture between City and Franchisee. Neither Franchisee nor its officers, employees, agents or subcontractors shall obtain any rights to retirement benefits, workers' compensation benefits or any other benefits which accrue to City employees and Franchisee hereby expressly waives any claim it may have, or hereafter acquire, to such benefits.

18.6 Law to Govern; Venue. The laws of the State of California shall govern this Agreement. In the event of litigation between the parties, venue and jurisdiction shall lie exclusively in a state court of competent jurisdiction in Orange County, California. The

parties agree to waive any potential claim to diversity jurisdiction under Title 28 U.S.C. § 1332 or any other statute, law or judicial authority which actually or colorably provides for federal jurisdiction. In the event of any legal proceeding this Agreement shall be interpreted as if jointly drafted by the Parties.

18.7 Successors and Assigns. The terms, covenants and conditions of this Agreement shall inure to the benefit of and be binding upon the respective successors and assigns of the Parties.

18.8 Waiver. The waiver by either Party of any breach or violation of any term, covenant or condition of this Agreement shall not be deemed to be a waiver of any other term, covenant or condition or of any subsequent breach or violation of the same or of any other term, covenant or condition.

18.9 Notices. All notices, or other communications whatsoever which this Agreement contemplates or requires either Party to give to the other, shall, except as otherwise provided herein, be in writing and shall be personally delivered or sent by registered or certified mail, postage prepaid, return receipt requested, addressed to the respective party as follows:

To City: City of Irvine
City Hall
1 Civic Center Plaza
Irvine, California 92714
Attn: City Manager

To Franchisee: _____
_____
_____
_____

or to such other address as either Party may from time to time designate by notice to the other given in accordance with this Section. Notice shall be deemed given on the date served if served personally between the hours of 8:00 a.m. to 5:00 p.m. on any regular business day for City's business offices. If mailed, notice shall be deemed given three (3) business days from the date such notice is deposited in the United States mail in the manner proscribed above.

18.10 Severability. If any provision of this Agreement is determined by a court of competent jurisdiction to be invalid or unenforceable, the remaining provisions shall not be affected unless their enforcement under the circumstances would be unreasonable, inequitable or would otherwise frustrate the purposes of this Agreement.

18.11 Attorneys' Fees and Litigation Costs. In the event either party brings any action or proceeding to enforce or interpret the terms or provisions of this Agreement, the prevailing party in any such action or proceeding shall be entitled to recover its reasonable attorneys' fees and other litigation costs and expenses, including without limitation expert witness fees, consultant fees and costs, without regard to whether the matter proceeds to trial.

Without limiting its scope in any way, this provision is expressly intended to, and shall, apply to fees and costs incurred in any appeal.

18.12 Corporate Resolution. Concurrent with the execution of this Agreement, Franchisee shall provide City with a corporate resolution of its Board of Directors demonstrating the authority for the undersigned to enter and lawfully bind Franchisee to this Agreement, or in the event Franchisee is not a Corporation, with such evidence of authority as required by the City Manager.

18.13 Integration. This Agreement contains the entire integrated agreement and understanding concerning the subject matter herein and supersedes and replaces any prior negotiations, promises, proposals, and agreements between the Parties, whether written or oral. The Parties acknowledge this document has been executed with the consent and upon the advice of counsel. Each of the Parties acknowledges that no party or agent or attorney of any other party has made any promise, representation, or warranty, express or implied, not contained in this Agreement, to induce the other party to execute this instrument.

IN WITNESS WHEREOF, the parties hereto have executed this agreement on the dates indicated below.

CITY OF IRVINE
a California municipal corporation

APPROVED AS TO FORM:

_____
City Attorney

Date:_____ By: _____
City Manager

ATTEST:

Date:_____ By: _____
City Clerk

Franchisee _____

Date:_____ By: _____

Title: _____

EXHIBIT A

Village Commercial Premises Map

EXHIBIT B

Workers' Compensation Insurance Certification

Contract Services Description:_____

WORKERS' COMPENSATION DECLARATION

I hereby affirm under penalty of perjury one of the following declarations:

(CHECK ONE APPLICABLE BOX BELOW)

☐ **I have and will maintain workers' compensation insurance**, as required by Section 3700 of the Labor Code, for the performance of the work to be performed under this Agreement and shall submit insurance certificates evidencing such coverage as set forth herein.

☐ I certify that, in the performance of the work under this Agreement, **I shall not employ any person** in any manner so as to become subject to the workers' compensation laws of California, and I hereby agree to indemnify, defend, and hold harmless the City of Irvine and all of its officials, employees, and agents from and against any and all claims, liabilities, and losses relating to personal injury or death, economic losses, and property damage arising out of my failure to provide such worker's compensation insurance. I further agree that, **if I should become subject to the workers' compensation provisions of Section 3700 of the Labor Code, I shall forthwith comply with those provisions and immediately furnish insurance certificates** evidencing such coverage as set forth herein.

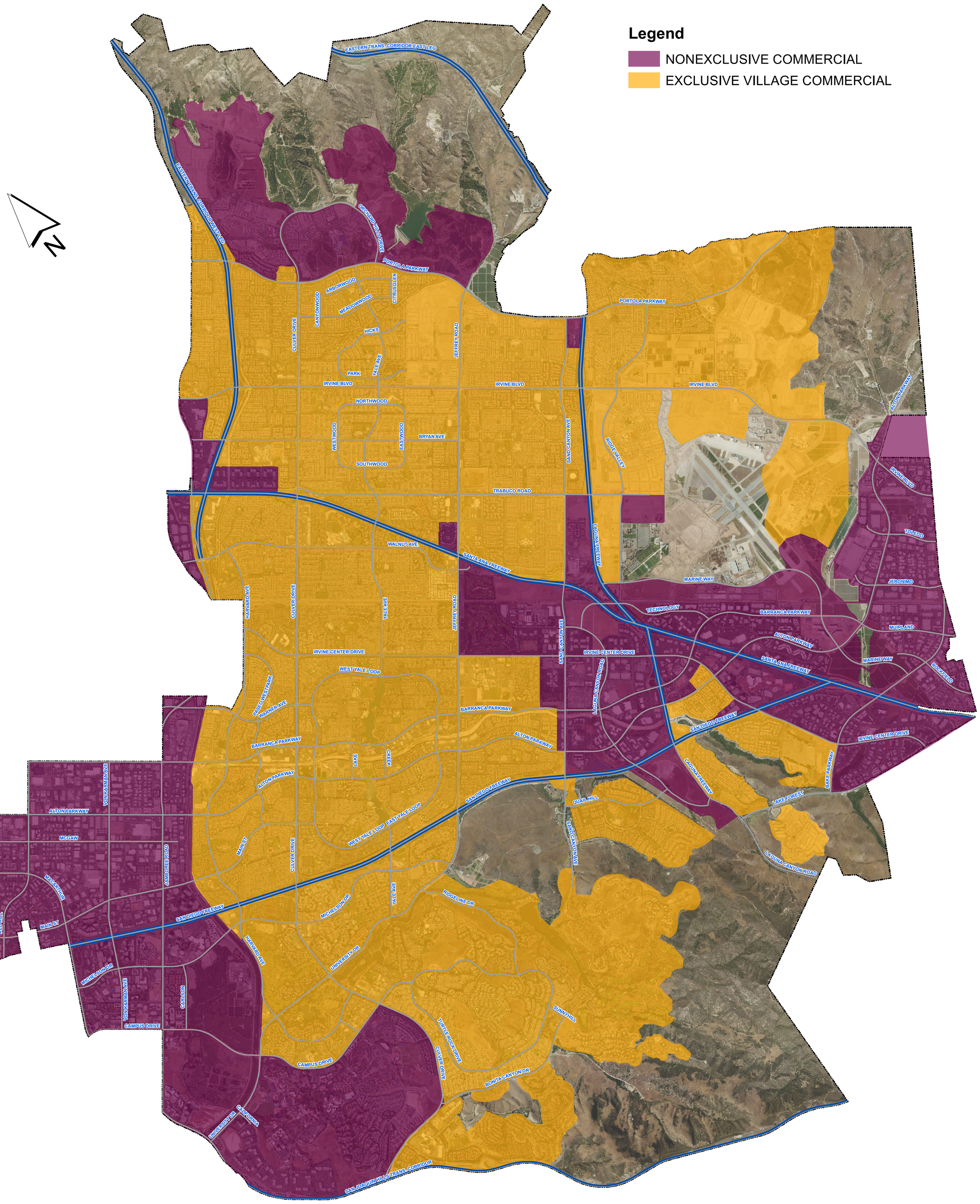
WARNING: FAILURE TO SECURE WORKERS' COMPENSATION COVERAGE IS UNLAWFUL, AND SHALL SUBJECT AN EMPLOYER TO CRIMINAL PENALTIES AND CIVIL FINES UP TO ONE HUNDRED THOUSAND DOLLARS ($100,000), IN ADDITION TO THE COST OF COMPENSATION, DAMAGES AS PROVIDED FOR IN SECTION 3706 OF THE LABOR CODE, INTEREST, AND ATTORNEY'S FEES.

Dated:	
Contracting Firm:	
Signature:	
Title:	
Address:	

DRAFT as of May 3, 2017

CITY OF IRVINE

PROPOSED
COMMERCIAL SOLID WASTE COLLECTION SERVICE AREAS



NOTE: Pursuant to California Public Resources Code Section 49520, et seq., some solid waste haulers may have legal rights to provide waste services to certain areas in the City regardless of the area designations on this map. All franchised haulers are eligible to provide collection of Construction and Demolition Debris and Temporary Bin Service, as defined in the Nonexclusive Franchise Agreement, to any premises within the City on an as needed and temporary basis. The terms and limitations of this agreement shall not apply to waste services provided at the facilities or properties of public agencies within the City limits that are not subject to the legal jurisdiction of the City of Irvine, including but not limited to public schools and colleges, and services to State, County and other governmental agencies.

Date: 4/13/2017 Document Path: \\coi-file05\CommDev\B & S\GIS\projects\PublicWorks\Bridgeford_R_WasteMap_20170321_vn\WasteHaulers_20170405.mxd

CITY COUNCIL RESOLUTION NO. 17-xx

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE, CALIFORNIA, DECLARING ITS INTENT TO CONSIDER GRANTING NONEXCLUSIVE FRANCHISE AGREEMENTS FOR COMMERCIAL WASTE COLLECTION AND RECYCLING SERVICES AND SETTING FORTH THE PROPOSED TERMS AND CONDITIONS OF SAID FRANCHISE

WHEREAS, in the interest of public health and safety, and to facilitate compliance with state recycling mandates, the City of Irvine enables solid waste and recycling collection through a nonexclusive franchise agreement with qualified waste haulers;

WHEREAS, the City's existing nonexclusive franchise agreement for the collection of commercial solid waste (the "Existing Agreement") is due to expire on June 30, 2017;

WHEREAS, as part of the process to replace the expiring Existing Agreement, a contract plan has been developed by the City in cooperation with the City's waste haulers and other stakeholders;

WHEREAS, based on the contract plan, City staff is finalizing the provisions of a nonexclusive franchise agreement with the City's waste haulers for commercial solid waste handling services (the "Proposed Agreement") and will be prepared to introduce an ordinance approving the Proposed Agreement to the City Council at its meeting on May 23, 2017;

WHEREAS, if the ordinance is approved, a second reading of the ordinance will occur on June 13, 2017, and if approved, the ordinance will become effective on July 13, 2017;

WHEREAS, to ensure that all commercial solid waste continues to be collected and handled in a manner that best protects the City and ensures that the City will comply with all state-mandated requirements with respect to the collection and handling of commercial solid waste, the City Council desires to extend the Existing Agreement;

WHEREAS, the City Council has authority pursuant to Section 4.3 of the Existing Agreement to extend the term of the Existing Agreement for up to six months;

WHEREAS, the City of Irvine's charter requires that prior to the grant of a new franchise the City Council adopt a resolution declaring its intention to grant such a franchise, which also sets a day, time, and place for interested persons to be heard regarding the Council's decision to grant or deny the grant of a franchise.

NOW, THEREFORE, the City Council of the City of Irvine does hereby resolve as follows:

Section 1. The City Council of the City of Irvine hereby declares its intention to consider granting nonexclusive solid waste handling franchises to any hauler that successfully demonstrates and affirms its qualifications and capabilities to comply with the City's nonexclusive solid waste handling franchise agreement through a City provided application process administered by the City. The nonexclusive solid waste handling franchise is proposed to be granted pursuant to the following terms and conditions:

A. The franchise shall be nonexclusive with respect to 1) solid waste handling services occurring on a regular schedule (such as weekly service) at commercial premises (other than those designated as village commercial), and (2) temporary bin services, at any premises in the City (including residential and village commercial premises).

B. The franchise shall have a fixed term, which term shall commence from the day the agreement is signed and entered into by the City and the franchisee, and end at midnight on August 31, 2026, unless the agreement is extended or terminated at an earlier date pursuant to the terms of the agreement.

C. The franchise will require franchisees to ensure the City meets its obligations pursuant to AB 939, AB341, AB1826, and Public Resources Code 40000, et al., by committing a good faith effort to divert waste from landfills, with a goal of a minimum of 50% waste diversion, and indemnify the City from any potential fines and penalties that may be associated with a franchisee's failure to perform under the terms of the Agreement.

D. The franchise will require haulers to indemnify the City for claims based upon hazardous material liability.

E. The franchise will require the payment of franchise fees on "gross receipts" of franchisees, through an incentivized fee structure that encourages hauler waste diversion practices.

F. The franchise will require franchisees to assist the City in providing public education programs as mandated by AB 939, AB341, AB1826, and Public Resources Code 40000, et al.

G. The franchise will include audits pertaining to franchisee performance of the terms of the Agreement.

Section 2. A public hearing shall occur on May 23, 2017, at 4:00 pm, or as soon thereafter as addressed by the City Council, at which time any person having an interest in or objecting to the grant of the franchise may appear before the City Council and be heard thereon.

Section 3. The City Council of the City of Irvine hereby extends the term of the Existing Agreement until the earlier of, (i) December 31, 2017, or (ii) the date that the Proposed Agreement, or if the Proposed Agreement is not approved by the City Council, any other nonexclusive franchise agreement for the collection of commercial solid waste, has been approved by the City Council and becomes effective.

Section 4. The City Clerk is directed to publish this resolution at least once, not less than ten days prior to the above noted public hearing.

PASSED AND ADOPTED by the City Council of the City of Irvine at a regular meeting held on the 9th day of May 2017.

_____
MAYOR OF THE CITY OF IRVINE

ATTEST:

_____
CLERK OF THE CITY OF IRVINE

STATE OF CALIFORNIA)
COUNTY OF ORANGE) SS
CITY OF IRVINE)

I, MOLLY MCLAUGHLIN, City Clerk of the City of Irvine, HEREBY DO CERTIFY that the foregoing resolution was duly adopted at a regular meeting of the City Council of the City of Irvine held on the 9th day of May 2017.

AYES: COUNCILMEMBERS:

NOES: COUNCILMEMBERS:

ABSENT: COUNCILMEMBERS:

ABSTAIN: COUNCILMEMBERS:

_____
CITY CLERK OF THE CITY OF IRVINE

4.4

RECEIVED
CITY OF IRVINE
CITY CLERK'S OFFICE
2017 MAY -2 PM 2:02

RECEIVED
MAY 02 2017
CITY OF IRVINE
CITY MANAGER'S OFFICE

Memo

To: Sean Joyce, City Manager

From: Melissa Fox, Councilmember

Date: May 2, 2017

Re: **Allocation of funding to support the efforts of the Orange County Task Force for Drowning Prevention**

Please place on the May 9, 2017 City Council agenda an item asking the City Council to consider allocating $50,000 to support the efforts of the Orange County Task Force for Drowning Prevention.

Drowning consistently remains the leading cause of death for children 1-4 years of age and remains among the five leading causes of death for those under the age of 18 in Orange County. In 2016, there were 75 drowning incidents and 31 fatalities and in 2015, there were 113 drowning incidents and 45 fatalities in Orange County.

The Orange County Task Force for Drowning Prevention was created in August 2015 to explore ways to heighten public awareness in order to decrease drownings. At that time the Task Force, aided by a marketing firm, developed and implemented a media campaign to include public service announcements and collateral material promoting water safety. Just as the City Council approved funding a similar effort in 2016, I believe it is important that Irvine make a significant contribution to this regional water safety awareness campaign. We have been challenged to double last year's commitment of $25,000 and I hope that you will support me in this. It is the most preventable of deaths and Irvine residents have succumbed too many times.

I cannot think of a more worthwhile effort than this opportunity to support the Orange County Task Force for Drowning Prevention, to develop a comprehensive outreach program to prevent adults and children from drowning.