

FINAL

# Serrano Summit Area Plan 2009-01 and Tentative Tract Map No. 17331 ENVIRONMENTAL IMPACT REPORT

JANUARY 2012



Prepared for:  
**City of Lake Forest**

Prepared by:  
**RBF Consulting**



**FINAL  
ENVIRONMENTAL IMPACT REPORT**

**Serrano Summit Area Plan 2009-01  
and Tentative Tract Map No. 17331**

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**SCH NO. 2011051009**

Lead Agency:



**CITY OF LAKE FOREST**  
25550 Commercentre Drive  
Lake Forest, California 92630  
**Contact: Ms. Carrie Tai, AICP**  
**Senior Planner**  
**949.461.3466**

Prepared by:



**RBF CONSULTING**  
14725 Alton Parkway  
Irvine, California 92618-2027  
**Contact:**  
**Mr. Edward Torres, INCE**  
**949.472.3505**

**January 26, 2012**

JN 10-107199





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## 1.0 Introduction

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## 1.0 INTRODUCTION

In accordance with the *California Environmental Quality Act Guidelines* (CEQA Guidelines) Section 15088, the City of Lake Forest, as the lead agency, has evaluated the comments received on the Serrano Summit Area Plan 2009-01 and Tentative Tract Map No. 17331 Draft Environmental Impact Report (Draft EIR).

The Draft EIR for the proposed Serrano Summit Area Plan 2009-01 and Tentative Tract Map No. 17331 (herein referenced as the project) was distributed to potential responsible and trustee agencies, interested groups, and organizations. The Draft EIR was made available for public review and comment for a period of 45 days. The public review period for the DEIR established by the CEQA Guidelines commenced on August 10, 2011 and ended September 23, 2011. A scoping meeting for the EIR was held on May 18, 2011 at City Hall (located at 25550 Commercentre Drive, Suite 100, Lake Forest) in order to gather information on concerns and issues that the general public may have regarding the project and the EIR.

The Final EIR consists of this section as well as the following two components:

- Section 2 – Responses to Comments on the Draft EIR
- Section 3 – Errata
- Section 4 – Mitigation Monitoring and Reporting Program

Because of its length, the text of the Draft EIR is not included with this document; however, it is included by reference in this Final EIR. None of the corrections or clarifications to the Draft EIR identified in this document constitutes “significant new information” pursuant to Section 15088.5 of the CEQA Guidelines. As a result, a recirculation of the Draft EIR is not required.



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## 2.0 Response to Comments

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## 2.0 RESPONSE TO COMMENTS

In accordance with the *California Environmental Quality Act Guidelines* (CEQA Guidelines) Section 15088, the City of Lake Forest, as the lead agency, evaluated the written comments received on the Draft EIR (State Clearinghouse No. 2011051009) for the Serrano Summit Area Plan 2009-01 and Tentative Tract Map No. 17331 (herein referenced as the project) and has prepared the following responses to the comments received. This Response to Comments document becomes part of the Final EIR for the project in accordance with CEQA Guidelines Section 15132.

A list of public agencies, organizations, and individuals that provided comments on the Draft EIR is presented below. Each comment has been assigned a letter number. Individual comments within each communication have been numbered so comments can be cross-referenced with responses. Following this list, the text of the communication is reprinted and followed by the corresponding response.

<b>Commenter</b>	<b>Letter Number</b>
<u>Agencies/Organizations</u>	
State Clearinghouse – Scott Morgan, Director (dated September 26, 2011)	1
California Department of Transportation – Christopher Herre (dated September 2, 2011)	2
Orange County Fire Authority – Michele Hernandez (dated August 15, 2011)	3
California Cultural Resource Preservation Alliance, Inc. – Patricia Martz (dated August 30, 2011)	4
City of Irvine Community Development Department – David Law (dated September 7, 2011)	5
California Department of Toxic Substances Control – Al Shami (dated September 20, 2011)	6
South Coast Air Quality Management District – Ian MacMillan (dated September 22, 2011)	7
Regional Water Quality Control Board – Mark G. Adelson (dated September 23, 2011)	8
Orange County Public Works – Mark Balsamo (dated October 5, 2010)	9



Edmund G. Brown Jr.  
Governor

STATE OF CALIFORNIA  
Governor's Office of Planning and Research  
State Clearinghouse and Planning Unit



Kon Alex  
Director

September 26, 2011

Carrie Tai  
City of Lake Forest  
25550 Commercentre Drive, Suite 100  
Lake Forest, CA 92630

Subject: Serrano Summit Area Plan and Tentative Tract Map  
SCH#: 2011051009

Dear Carrie Tai:

The State Clearinghouse submitted the above named Draft EIR to selected state agencies for review. On the enclosed Document Details Report please note that the Clearinghouse has listed the state agencies that reviewed your document. The review period closed on September 23, 2011, and the comments from the responding agency (ies) is (are) enclosed. If this comment package is not in order, please notify the State Clearinghouse immediately. Please refer to the project's ten-digit State Clearinghouse number in future correspondence so that we may respond promptly.

Please note that Section 21104(c) of the California Public Resources Code states that:

"A responsible or other public agency shall only make substantive comments regarding those activities involved in a project which are within an area of expertise of the agency or which are required to be carried out or approved by the agency. Those comments shall be supported by specific documentation."

These comments are forwarded for use in preparing your final environmental document. Should you need more information or clarification of the enclosed comments, we recommend that you contact the commenting agency directly.

This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act. Please contact the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process.

Sincerely,

Scott Morgan  
Director, State Clearinghouse

Enclosures  
cc: Resources Agency

1-1

**State Clearinghouse Data Base**

**SCH#** 2011051009  
**Project Title** Serrano Summit Area Plan and Tentative Tract Map  
**Lead Agency** Lake Forest, City of

**Type** EIR Draft EIR

**Description** The proposed Serrano Summit Area Plan 2009-01 and Tentative Tract Map No. 17331 encompass ~98.9 acres, generally situated to the east of Bake Parkway, south of Commercentre Drive, and west of Serrano Creek, in the City of Lake Forest, California. The proposed project would allow for the development of residential, and park and recreation uses, a Civic Center, and existing and future Irvine Ranch Water District public facilities. The project alternative that is analyzed would exclude the Civic Center, allowing in its place the development of additional residential uses.

**Lead Agency Contact**

**Name** Carrie Tai  
**Agency** City of Lake Forest  
**Phone** (949) 461-3466 **Fax**  
**email**  
**Address** 25550 Commercentre Drive, Suite 100  
**City** Lake Forest **State** CA **Zip** 92630

**Project Location**

**County** Orange  
**City** Lake Forest  
**Region**  
**Lat / Long** 33° 39' 35.4" N / 117° 40' 52.2" W  
**Cross Streets** Commercentre Drive & Biscayne Bay Drive  
**Parcel No.** 104-132-36,-65,-84  
**Township** 6S **Range** 8W **Section** **Base** SBB&M

**Proximity to:**

**Highways** I-5, I-405  
**Airports**  
**Railways**  
**Waterways** Serrano Creek  
**Schools** Fulbright Montessori Academy  
**Land Use** GPLUD: Medium Density Residential (MDR) with Public Facilities Overlay and Public Facility. The present ZD: Multi-Family Dwelling with a Planned Development Combining District (R2-PD).

**Project Issues** Aesthetic/Visual; Agricultural Land; Air Quality; Archaeologic-Historic; Biological Resources; Drainage/Absorption; Flood Plain/Flooding; Forest Land/Fire Hazard; Geologic/Seismic; Minerals; Noise; Population/Housing Balance; Public Services; Recreation/Parks; Schools/Universities; Septic System; Sewer Capacity; Soil Erosion/Compaction/Grading; Solid Waste; Toxic/Hazardous; Traffic/Circulation; Vegetation; Water Quality; Water Supply; Wetland/Riparian; Wildlife; Growth Inducing; Landuse; Cumulative Effects; Other Issues

**Reviewing Agencies** Resources Agency; Department of Fish and Game, Region 5; Office of Historic Preservation; Department of Parks and Recreation; Department of Water Resources; California Highway Patrol; Caltrans, District 12; CA Department of Public Health; State Water Resources Control Board, Division of Financial Assistance; State Water Resources Control Board, Division of Water Rights; Regional Water Quality Control Board, Region 8; Department of Toxic Substances Control; Native American Heritage Commission

**Date Received** 08/10/2011 **Start of Review** 08/10/2011 **End of Review** 09/23/2011

Note: Blanks in data fields result from insufficient information provided by lead agency.



**1. RESPONSES TO COMMENTS FROM STATE OF CALIFORNIA OFFICE OF PLANNING AND RESEARCH, STATE CLEARINGHOUSE, SEPTEMBER 26, 2011.**

- 1-1 This comment indicates that the State Clearinghouse submitted the Draft EIR to selected State agencies for review and that the comment period for the Draft EIR concluded on September 23, 2011. The comment indicates that the lead agency complied with the review requirements for draft environmental documents pursuant to CEQA. As such, the letter does not provide specific comments regarding information presented in the Draft EIR, and no response is required.



## DEPARTMENT OF TRANSPORTATION

District 12  
 3347 Michelson Drive, Suite 100  
 Irvine, CA 92612-8894  
 Tel: (949) 724-2241  
 Fax: (949) 724-2592



*Flex your power!  
 Be energy efficient!*

## FAX &amp; MAIL

September 2, 2011

Carrie Tai  
 City of Lake Forest  
 25550 Commercentre Drive, Suite 100  
 Lake Forest, California 92630

File: IGR/CEQA  
 SCH#: 2011051009  
 Log #: 2705A  
 I-5, SR-241

**Subject: Serrano Summit Area Plan and Tentative Tract Map**

Dear Ms. Tai,

Thank you for the opportunity to review and comment on the **Draft Environmental Impact Report (DEIR) for the Serrano Summit Area Plan and Tentative Tract Map**. The proposed project would allow for the development of up to 833 residential units, and park and recreation uses, a Civic Center, existing and future Irvine Ranch Water District public facilities. The project site is located to the north of the Serrano Highlands residential neighborhood, south of Commercentre Drive, east of Bake Parkway, and west of Serrano Creek in the City of Lake Forest. The nearest State routes to the project site are SR-241, I-5 and I-405.

**The Department of Transportation (Department) is a responsible agency on this project and we have the following comments:**

1. The Department submitted comments on the Notice of Preparation for the Serrano Summit Area Plan and Tentative Tract Map on 6/1/11. Unfortunately, our comments were not addressed in this Draft Environmental Impact Report. Please note that those comments are still standing and will need to be addressed. Let us know if we can assist you in resolving these outstanding issues before the close of the public review period on 9/23/11.
2. The Serrano Summit All-Residential Project Alternative Analysis (Traffic Study 2011) was listed as being located in Appendix G of the DEIR; however, Appendix G only contains the Serrano Summit (IRWD Site) Traffic Study, dated April 8, 2010. Please provide the latest Traffic Study as part of the Environmental Impact Report (EIR).

Section 21003.1 (b) of the California Environmental Quality Act (CEQA) states, "Information relevant to the significant effects of a project, alternatives, and mitigation measures which substantially reduce the effects shall be made available as soon as possible by lead agencies, other public agencies, and interested persons and organizations."

Again, the Department would like to request the latest version of the Traffic Study, which was not included in the DEIR or on the City's website. Failure to do so would be considered a violation of the aforementioned CEQA statute.

2-1

2-2

3. The Traffic Study 2010 (TIS) located in Appendix G of the DEIR does not include an analysis of Interstate 5 and 405. The Department's Traffic Operations Branch requests an analysis of I-5/I-405 on and off-ramps using the method outlined in the latest version of the Highway Capacity Manual (HCM) when analyzing traffic impacts on State Transportation Facilities. The use of HCM is preferred by the Department because it is an operational analysis as opposed to the Intersection Capacity Utilization (ICU) method, which is a planning analysis. In the case of projects that have direct impacts on State Facilities, the Department recommends that the traffic impact analysis be based on HCM method. Should the project require an encroachment permit, Traffic Operations may find the Traffic Impact Study based on ICU methodology inadequate resulting in possible delay or denial of a permit by the Department. All input sheets, assumptions and volumes on State Facilities including ramps and intersection analysis should be submitted to the Department for review and approval. The analysis should include appropriate mitigation measures to offset any potential impacts. The traffic impact on the state transportation system should be evaluated based on the Department's Guide for the Preparation of Traffic Impact Studies., which is available at: <http://www.dot.ca.gov/hq/traffops/developserv/operationalsystems/reports/tisguide.pdf>.

Section 21081.2 (e) of CEQA states, "Nothing in this section relieves a city or county from the requirement to analyze the project's effects on traffic at intersections, or on streets, highways, or freeways, from making a determination that the project may have a significant effect on traffic."

**2-3**

Section 21092.4 (a) states, "As used in this section, "transportation facilities" includes major local arterials and public transit within five miles of the project site and freeways, highways and rail transit service within 10 miles of the project site."

The IRWD Site Traffic Study, dated April 8, 2010 and located in Appendix G of the DEIR, analyzes State Route 241, and no other highway. According to the aforementioned statute, Interstate 5 should be analyzed as part of the Traffic Study, since it is within five miles of the project site, and the Department believes the proposed project may potentially have a significant impact on the highway. Failure to analyze all relevant transportation facilities would be considered a violation of the aforementioned CEQA statute.

4. The TIS failed to analyze the ramp intersections of I-5 and I-405 at Bake Parkway, and I-5 at Lake Forest Drive. These intersections should be analyzed as part of the latest Traffic Study to properly determine the impact of the project on these intersections for present and future conditions.
5. A queuing analysis should also be provided in the TIS for I-5/I-405 at Bake Parkway and I-5 at Lake Forest Drive ramps to ensure that adequate storage capacity is provided for any additional traffic generated by this project.
6. The TIS did not address the project's potential for biking and/or pedestrian traffic. The Department supports the recreational use of the bicycle and pedestrian trails. Furthermore, the use of bicycles as an alternative travel mode for transportation is strongly recommended. Wherever possible, we encourage the implementation of Class II bike lanes or at the minimum Class III bike lanes.
7. The Department supports developments that foster efficient land-use patterns that (a) support improved mobility and reduced dependency on single-occupant vehicle trips, (b) accommodates an adequate supply of housing for all incomes, (c) reduce impacts on valuable

**2-4**

**2-5**

**2-6**


**2-7**

- habitat, productive farmland, and air quality, (d) increase resource use efficiency, and (e) result in safe and vibrant neighborhoods. The Department recognizes that non-motorized travel is a vital element of the transportation system and therefore, encourages communities to make pedestrian and bicycle activity possible, thus expanding transportation options, and creating a streetscape that better serves a range of users: pedestrians, bicyclists, transit riders, and automobiles. **2-7**
8. The “Future” year used on the TIS is 2030, which is uncommon for projects of this magnitude. Please submit an analysis for the buildout impacts for Year 2035 or 2040 to the Department for review and comment. This analysis will help to determine what future impacts will be long after the project is completed. **2-8**
9. The Department believes this project will impact I-5 mainline and the Lake Forest Drive/Bake Parkway interchanges, ramps and intersections. Impacts of development causing operating conditions to deteriorate to deficient levels of service, or impacts adding to an existing deficient level of service condition require mitigation.
- On Page 8-89 of the DEIR, it is concluded that freeway ramps and mainline segments are not forecast to be significantly impacted by the proposed project in either of the alternatives. However, no evidence or documentation was provided in the DEIR or Appendix to justify this conclusion. **2-9**
- As mentioned earlier, the Department would like to request the latest version of the Traffic Study, which was not included in the DEIR or on the City’s website. Failure to do so would be considered a violation of CEQA statute 21003.1 (b).
10. The Department has interest in working cooperatively to establish a Traffic Impact Fee (TIF) program to mitigate such impacts on a “fair share” basis. Local development project applicants would pay their “fair share” to an established fund for future transportation improvements on the state highway system. If there is an existing transportation mitigation program, it can be amended to include mitigation for the state highway system or a new TIF program may be considered. The Department requests the opportunity to participate in the TIF for state highway improvements development process. **2-10**
11. The Department requests to participate in the process to establish and implement “fair share” mitigation for the aforementioned project impacts. The Department has an established methodology standard used to properly calculate equitable project share contribution. This can be found in Appendix B of the Department’s Guide for the Preparation of Traffic Impact Studies which is available at: <http://www.dot.ca.gov/hq/traffops/developserv/operationalsystems/reports/tisguide.pdf>. **2-11**
12. The Department, in accordance with Section 130 of the California Streets and Highways Code, may enter into a contract with the lead agency to provide the mitigation measures listed in the EIR. This may include construction of the mitigation measures, the advancement of funds (proportional to the fair-share cost) to pay for mitigation measures, or the acquisition of rights-of-way needed for future improvements to the state highway system. **2-12**
13. For CEQA purposes, the Department does not consider the Congestion Management Plan (CMP) significance threshold of an increase in v/c more than 1% ramps or 3% for mainline appropriate. For analysis of intersections connecting to State facilities, ramps and freeway **2-13**

mainline, we recommend early coordination occur to discuss level of significance thresholds related to traffic and circulation.

Please continue to keep us informed of this project and any future developments, which could potentially impact the State Transportation Facilities. If you have any questions or need to contact us, please do not hesitate to call Marlon Regisford at (949) 724-2241.

Sincerely,



Christopher Herre, Branch Chief  
Local Development/Intergovernmental Review

C: Terry Roberts, Office of Planning and Research



## 2. RESPONSES TO COMMENTS FROM STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION, SEPTEMBER 2, 2011.

2-1 Comment noted. Refer to Response to Comments 2-2 through 2-13. Additionally, refer to Section 1.0, *Introduction and Purpose*, of the Draft EIR, Subsection 1.4, *EIR Scoping Process*, which identifies the responses to the Caltrans comment letter dated June 11, 2011. Specifically, pages 1-6 and 1-7 of the Draft EIR annotates the comments noted in Caltrans June 11, 2011 letter and points the reader to where the comment has been responded to in the Draft EIR (i.e., directing the reader to Appendix G, *Traffic Study* of Appendix 12.1 or to specific subsections of Section 8.13, *Transportation/Traffic*).

2-2 Draft EIR Appendix 12.1, *Initial Study and Notice of Preparation*, contains Appendix G, *Traffic Study*. Within Appendix G is the *Draft Lake Forest Serrano Summit (IRWD Site) Traffic Study*, prepared by Austin-Foust Associates, Inc., dated April 8, 2010, followed by the *Lake Forest Serrano Summit All-Residential Project Alternative Analysis*, prepared by Austin-Foust Associates, Inc., dated April 13, 2011. Therefore, the latest version of the Traffic Study has been included in the Draft EIR; refer to Appendix G of Appendix 12.1.

2-3 As stated in Draft EIR Section 1.0, *Introduction and Purpose*, the Draft EIR tiers off of the Opportunities Study Area Program EIR (OSA PEIR). Under CEQA, the OSA PEIR is considered a first tier document and this Draft EIR for the proposed project is considered a second tier document. While a second tier analysis can rely on a first tier analysis, it has the obligation to discuss any changed circumstances or new information that might alter the first tier analysis. Accordingly, the Draft EIR focuses its analysis on the changes to the project or the surrounding circumstances that may have occurred since the City certified the OSA PEIR.

The proposed project is within the average daily trip (ADT) limit set forth in the OSA PEIR. Therefore, the Draft EIR did not include an analysis of Interstate 5 (I-5) or Interstate 405 (I-405) as circumstances would remain the same since the City certified the OSA PEIR. As stated on Page 8-89 and 8-90 of the Draft EIR, the OSA PEIR concluded that the OSA (inclusive of the proposed project) and cumulative development would cause five segments (I-5 north of El Toro Road [a.m. and p.m. peak hour], I-5 north of Alicia Parkway [a.m. and p.m. peak hour], and SR-241 north of Los Alisos Boulevard [a.m. peak hour] to operate below standards. However, no freeway mainline segments are forecast to be significantly impacted by the OSA (inclusive of the proposed project) under the year 2030 conditions compared to the 2030 General Plan Scenario.<sup>1</sup> Thus, the OSA PEIR concluded that a less than significant impact would result in this regard. As the proposed project is consistent with that analyzed under the OSA PEIR, impacts to freeway mainlines are less than significant, and are not required to be further analyzed as part of the Draft EIR.

Additionally, the study area considered in the Traffic Studies (Appendix G of Appendix 12.1) was determined by where an intersection location was no longer deficient (i.e., Level of Service [LOS] "D" or better). The difference in the proposed condition intersection capacity utilization (ICU) value compared to the no project (for surrounding intersections, including

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<sup>1</sup> Refer to page 3.14-54, Table 3.14-17, *2030 Proposed Project Freeway/Tollway Mainline LOS Summary*, of the OSA PEIR.



- those at I-5 or I-405) is 0.02 or less. Thus, as these intersections would operate at a LOS D or better, these intersections were not included within the project's analysis.
- 2-4 The Draft EIR tiers off of the OSA PEIR, as discussed above. The proposed project is within the ADT limit set forth in the OSA PEIR. Therefore, the Draft EIR did not include an analysis of I-5 or I-405 ramp intersections as circumstances would remain unchanged since the City's certification of the OSA PEIR. As stated on Page 8-89 and 8-90 of the Draft EIR, the OSA PEIR concluded that, based on the peak-hour ramp performance criteria and impact thresholds, no freeway ramps are forecast to be significantly impacted by the OSA (inclusive of the proposed project) when compared to either existing conditions or to the General Plan Scenario.<sup>2</sup> Given that the proposed project is consistent with that analyzed under the OSA PEIR, impacts in this regard are less than significant.
- 2-5 Refer to Response to Comments 2-3 and 2-4. Year 2030 with-project A.M. and P.M. peak-hour ramp volumes and volume to capacity (V/C) ratios were summarized in Table 3.14-16, 2030 Proposed Project Freeway/Tollway Ramp LOS Summary, of the OSA PEIR. Based on the peak-hour ramp performance criteria and impact thresholds discussed within the OSA PEIR, no freeway ramps or queuing are forecast to be significantly impacted by the development envisioned under the Opportunities Study Area based on year 2030 conditions when compared to either existing conditions or to the General Plan Scenario. In fact, implementation of the Opportunities Study Area (of which the Serrano Summit Project is a component of) would eliminate impacts to five ramps which would occur under the 2030 General Plan Scenario.
- 2-6 Bicycle and pedestrian modes of transportation would be expanded inherently with project implementation. The project would be considered infill, and upon implementation would provide for pedestrian (sidewalks, parkways, and paseos) and bicycle connections to uses to the north of the site near Commercentre Drive and to the existing Serrano Creek Trail to the east (refer to Serrano Summit Area Plan Exhibit 4-2, *Master Plan of Parks, Trails & Open Space*). Bicycle usage is permitted on all public and private streets, upon implementation of Tentative Tract Map No. 17331.
- 2-7 Comment noted. Refer to Response to Comment 2-6 regarding proposed bicycle and pedestrian modes of transportation.
- 2-8 The Traffic Impact Analyses contained in Appendix G of Appendix 12.1 utilizes the buildout year of 2030 for consistency purposes with the OSA PEIR in which the project was originally analyzed and of which this environmental document is tiering from. Additionally, 2030 was originally utilized as this is the City's General Plan buildout year, and 2030 is the latest year of available model data at this time for a future timeframe year.
- 2-9 Refer to Response to Comments 2-2 through 2-4.

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<sup>2</sup> Refer to page 3.14-53, Table 3.14-16, *2030 Proposed Project Freeway/Tollway Ramp LOS Summary*, of the OSA PEIR.



- 2-10 The OSA PEIR, which the project tiers from, includes a discussion of the Lake Forest Traffic Mitigation (LFTM) Program. The LFTM Program is a set of citywide transportation improvements designed to maintain adequate levels of service on the City's arterial street system. According to OSA PEIR page 3.14-25, the OSA included the adoption of the LFTM Program. Therefore, as the proposed project is consistent with the OSA, it is also consistent with the LFTM Program. The LFTM Program does not include highways. However, as the proposed project is not forecast to adversely impact the State highway system, no fair share contribution can be established.
- 2-11 Comment noted. Refer to Response to Comment 2-10.
- 2-12 Comment noted. Refer to Response to Comment 2-10.
- 2-13 Comment noted. The Draft EIR tiers from the OSA PEIR. The methodology utilized in the OSA PEIR (included on OSA PEIR page 3.14-21) applies to the proposed project, as the proposed project was included within the OSA PEIR. Thus, project impacts at the freeway ramps and mainlines were previously analyzed as part of the OSA PEIR.



**ORANGE COUNTY FIRE AUTHORITY**  
P.O. Box 57115, Irvine, CA 92619-7115 • 1 Fire Authority Rd., Irvine, CA 92602  

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Keith Richter, Fire Chief (714) 573-6000

August 15, 2011

City of Lake Forest  
25550 Commercecentre Dr #100  
Lake Forest, CA 92630  
Attn: Carrie Tai, Sr Planner

SUBJECT: Serrano Summit DEIR

Dear Ms. Tai,

Thank you for the opportunity to review the subject document. OCFA has no further comments for the DEIR.

As a reminder, all standard conditions with regard to development, including water supply, emergency access, road grades and width, access, and the like will be applied to this project through the plan check process. Please contact me at 714-573-6199 if you need further information on this matter.

Sincerely,

Michele Hernandez  
Management Analyst  
Strategic Services

3-1





**3. RESPONSES TO COMMENTS FROM ORANGE COUNTY FIRE AUTHORITY,  
AUGUST 15, 2011.**

- 3-1 The Commenter states that all standard Orange County Fire Authority (OCFA) conditions with regards to development will be applied to the project during the plan check process. This comment is noted. No further response is required.



California Cultural Resource Preservation Alliance, Inc.

P.O. Box 54132  
Irvine, CA 92619-4132

An alliance of American Indian and scientific communities working for  
the preservation of archaeological sites and other cultural resources.

August 30, 2011

Ms. Carrie Tai, Senior Planner  
City of Lake Forest  
25550 Commercentre Drive  
Suite 100  
Lake Forest, CA 92630

RECEIVED

SEP 01 2011

CITY OF LAKE FOREST  
DEVELOPMENT SERVICES DEPT

Re: Draft Environmental Impact Report (DEIR) for the Serrano Summit Area Plan and Tentative Tract Map

Dear Ms. Tai,

The determination that the proposed project will have less than significant impacts on cultural resources with the proposed mitigation is cause for deep concern. As stated in the cultural resources section of the DEIR, the project site is located within an area of potential archaeological resources, with 12 archaeological sites within the OSA. According to CEQA guidelines, California Public Resources code 21083.2 and California Code of Regulations 15064.5, when archaeological resources are involved, avoidance, or preservation in an undisturbed state is the preferable course of action. To adequately evaluate the potential impacts to significant archaeological resources, an archaeological survey by a professional archaeologist should be conducted, as well as subsurface testing of discovered sites. Early involvement in the planning process by an archaeologist is crucial if options for avoidance or preservation in place are at all feasible.

4-1

The mitigation measures as stated in CUL-1 provide for an "archaeologist to be present at the pre-grading conference to establish procedures for archaeological resource surveillance. The procedures "include provisions for temporarily halting or redirecting work to permit sampling, identification, and evaluation of resources deemed by the archaeologist to potentially be historical resources or unique archaeological resources under CEQA." Deferring the identification of potentially significant archaeological resources until ground-disturbing construction activities have exposed them precludes any opportunities for avoidance preservation and leaves salvage archaeology as the only mitigation option.

4-2

The cultural resource sections of most EIRs make the assumption that the completion of a data recovery excavation constitutes the reduction of "potentially significant" impacts of archaeological sites that will be impacted by the proposed project. The implementing regulations for Section 106 of the National Historic preservation Act (36 CFR 800.5(a)(2)(iii) along with 800.5(a)(2)(I) as amended May 1999, acknowledge the reality that destruction of an archaeological site and recovery of some information and artifacts is adverse and no long consider data recovery as sufficient mitigation to reduce the impacts to a level of insignificance.

4-3

Archaeological data recovery mitigation is time consuming and expensive and construction stoppages are costly. This possibility can be avoided and opportunities for avoidance and preservation can be retained, if a systematic archaeological survey is conducted and, if archaeological resources are discovered, an archaeological testing program is conducted prior to the issuance of a grading permit.

4-3

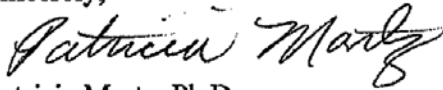
We also question the application of §21083.2 of CEQA that requires the archaeologist to determine whether the discovered materials are unique archaeological resources. The criteria for this determination are very subjective and most agencies use the criteria for listing in the California Register of Historical Resources to determine the significance for archaeological resources as they are more vetted and real. (See also California Code of regulations 15064.5).

4-4

We realize that the City is not bound by the National historic Preservation Act (NHPA), but CEQA was patterned after the National Environmental Policy Act and incorporates many of the stipulations of NHPA. Archaeological investigations are time consuming and expensive and preservation through planning construction to avoid archaeological sites, capping or covering sites with a layer of soil, and planning parks, or other open space to incorporate archaeological sites could be cost saving as well as meeting the spirit of these laws. Please give serious consideration to preservation over "mitigation".

We hope that our input has been helpful and that our concerns will be taken into consideration.

Sincerely,



Patricia Martz, Ph.D.  
President



**4. RESPONSES TO COMMENTS FROM CALIFORNIA CULTURAL RESOURCE PRESERVATION ALLIANCE, INC., AUGUST 30, 2011.**

- 4-1 As discussed on page 8-20, 1<sup>st</sup> paragraph, of the Draft EIR, a Sacred Lands File (SLF) search was conducted by the Native American Heritage Commission (NAHC), in response to the IS/NOP. The SLF search concluded that Native American cultural resources were not identified within the project's area of potential effects (APE). However, there are Native American cultural resources in close proximity to the APE. Any archaeological resources discovered at the project site could potentially be considered a unique archaeological resource. It should be noted that approximately  $\frac{3}{4}$  the project site consists of previously disturbed land, by the existing IRWD facility, the now-vacant administration building and grounds, and now-fallowed land from historical on-site agricultural operations. The remaining areas currently consist of an unnamed ephemeral drainage and an associated tributary, associated riparian vegetation, and multiple areas of coastal sage scrub which serve as habitat for the California gnatcatcher. It would not be possible for the City to conduct the type of archeological surveys requested by commenter at this time due to the potential presence of sensitive wildlife species and regulatory permitting requirements associated with the on-site stream. Additionally, it is possible that several years could lapse before grading activities are actually pursued and undertaken on this site. The intent of the Mitigation Measure CUL-1 is to enforce site surveys prior to site grading, but after implementation of biological surveys and regulatory permitting approvals, with the overall goal of avoiding unnecessary disturbance to the site as much as possible.

Implementation of the recommended Mitigation Measure CUL-1 would require (prior to issuance of a grading permit) a qualified archaeologist to be retained to provide professional archaeological services. The archaeologist would be required to identify and evaluate whether or not any resources on-site are potentially historical resources or unique archaeological resources under CEQA. If, before grading, any portions of the property subject to the grading permit have been identified as sites, which may have such resources present and may be impacted by development, the archaeologist would be required to conduct a site survey and records search and such further examination as may be needed to assess the significance of the resources. If the archaeological resource is determined to be a unique archaeological resource, options for avoidance or preservation in place would be required to be evaluated and implemented, if feasible. In the event that avoidance or preservation in place is infeasible and the archaeologist determines that the potential for significant impacts to such resources exists, a data recovery program would be expeditiously conducted. The archaeologist also would conduct on-site archaeological monitoring for the grading operation. Should historical resources or unique archaeological resources be discovered during the grading operation, grading activities would be required to be modified to allow expeditious and proper analysis and/or salvage of the resources.

With implementation of the recommended Mitigation Measure CUL-1 development of the project site would not result in a substantial adverse change in the significance of an archaeological resource. As concluded in the Draft EIR, impacts would be reduced to a less than significant level.



- 4-2 As discussed in Response to Comment 4-1, implementation of the recommended Mitigation Measure CUL-1 would result in identification and evaluation of potential on-site resources prior to issuance of a grading permit. If any potential sites are identified, additional site survey and records search may be needed to assess the significance of the resources. Further, if the archaeological resource, if identified, is determined to be a unique archaeological resource, options for avoidance or preservation in place would be required to be evaluated and implemented, if feasible. The City of Lake Forest is committed to consulting the CCRPA on any cultural resources identified on the site. In the event that avoidance or preservation in place is infeasible and the archaeologist determines that the potential for significant impacts to such resources exists, a data recovery program would be expeditiously conducted.
- 4-3 The project is not subject to the requirements of Section 106 of the National Historic Preservation Act. It is understood that the intent of the cultural resources analysis, as required by CEQA, is to minimize and/or avoid, to the extent feasible, any potentially significant impacts to an archaeological resource. Thus, as discussed in Response to Comments 4-1 and 4-2, the recommended Mitigation Measure CUL-1 would require the qualified archaeologist to identify and evaluate potential resources prior to grading activities. Additionally, the qualified archaeologist would be required to conduct archaeological monitoring on-site during grading activities. In the event that the proposed site disturbance activities encounter unknown archeological resources, grading activities would be required to be modified to allow expeditious and proper analysis and/or salvage of the resources.

Mitigation Measures CUL-2 through CUL-4 would require the qualified archaeologist to prepare monthly progress reports to be filed with the site developer(s) and the City of Lake Forest. Artifacts recovered would be required to be prepared, identified, and cataloged before donation to the accredited repository designated by the City of Lake Forest. State of California Guidelines for the Curation of Archaeological Collections would be consulted regarding the treatment of recovered artifacts. Any artifacts determined to be insignificant would be offered to local schools for use in educational programs. The qualified archaeologist would be required to prepare a final report to be filed with the site developer(s), the City of Lake Forest, and the South Central Coastal Information Center. The report would include a list of specimens recovered, documentation of each locality, interpretation of artifacts recovered, and would include all specialists' reports as appendices.

Implementation of the recommended Mitigation Measure CUL-1 would ensure that avoidance or preservation in place of any historical resources or unique archaeological resources, if present, are considered prior to grading activities. However, in the event that unknown archeological resources are encountered during grading activities, the site grading would be modified to allow expeditious and proper analysis and/or salvage of the resources. Mitigation Measures CUL-2 through CUL-4 would further ensure that any resources discovered would be properly documented with the appropriate agencies. Thus, as concluded in the Draft EIR, implementation of the recommended Mitigation Measures CUL-1 through CUL-4 would reduce potential impacts to archeological resources to less than significant levels.



4-4 Mitigation Measure CUL-1 (Source: OSA PEIR Mitigation Measure MM 3.5-1) is phrased to be consistent with CEQA Public Resources Code (PRC) Section 21083.2 regarding the treatment of a unique archeological resource. A unique archeological resource is defined in PRC Section 21083.2(g) as follows:

(g) As used in this section, “unique archaeological resource” means an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

- (1) Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.
- (2) Has a special and particular quality such as being the oldest of its type or the best available example of its type.
- (3) Is directly associated with a scientifically recognized important prehistoric or historic event or person.
- (4) As used in this section, “nonunique archaeological resource” means an archaeological artifact, object, or site which does not meet the criteria in subdivision (g). A nonunique archaeological resource need be given no further consideration, other than the simple recording of its existence by the lead agency if it so elects.

The definitional threshold for a unique archeological resource is thus a lower definitional threshold than the requirements for listing in the California Register, as is clear from the wording of CEQA Guidelines Section 15064.2(c)(3). The recommended mitigation measures would also therefore apply to archeological resources eligible for listing in the California Register. It is expected that as part of the evaluation of any site and the determination of the appropriate treatment for any resources contained therein the archeologist would make the determination as to whether the resource, if present, is California Register eligible, a unique archeological resource, or neither.

Refer to Response to Comment 4-1 regarding avoidance or preservation in place prior to mitigation during construction. Refer to Response to Comment 4-3 regarding the applicability of the National Environmental Protection Act (via Section 106 of the National Historic Preservation Act) to the project, respectively.



Community Development

www.cityofirvine.org

City of Irvine, One Civic Center Plaza, P.O. Box 19575, Irvine, California 92623-9575

(949) 724-6000

September 7, 2011

Ms. Carrie Tai, AICP  
Senior Planner  
City of Lake Forest  
Development Services Department  
25550 Commercentre Drive, Suite 100  
Lake Forest, CA 92630

RECEIVED  
SEP 12 2011  
CITY OF LAKE FOREST  
DEVELOPMENT SERVICES DEPT

**Subject: Draft Environmental Impact Report (DEIR) for Serrano Summit Area Plan 2009-01 and Tentative Tract Map No. 17331**

Dear Ms. Tai:

Thank you for the opportunity to comment on the DEIR for the proposed Serrano Summit Area Plan 2009-01 and Tentative Tract Map No. 17331, which the City of Irvine received on August 10, 2011. The proposed project encompasses approximately 98.9 acres, generally situated to the east of Bake Parkway, south of Commercentre Drive, and west of Serrano Creek, in the City of Lake Forest, California. The proposed project would allow for the development of residential, and park and recreation facilities, a Civic Center, and existing and future Irvine Ranch Water District public facilities. The City of Irvine has reviewed the DEIR and has the following comment:

- A project impact has been identified at the intersection of Bake Parkway/Irvine Boulevard/Trabuco Road in the 2030 condition. Recommended mitigation includes the following: addition of a second north bound left-turn lane, conversion of the third westbound through and westbound right-turn lane to a shared fourth westbound through/right, and restriping of the third eastbound through to shared 3<sup>rd</sup> eastbound through/second eastbound right. These improvements are identified as fully funded in the Lake Forest Transportation Mitigation (LFTM) Program, and a reference is made to potentially utilizing funds from the City of Irvine's North Irvine Transportation Mitigation (NITM) Program. Please ensure that coordination occurs between Lake Forest and Irvine staff related to these improvements and the use of NITM Program funds.

5-1

Ms. Carrie Tai  
September 7, 2011  
Page 2 of 2

If you have any questions, please contact me at (949) 724-6314 or by e-mail at [dlaw@cityofirvine.org](mailto:dlaw@cityofirvine.org).

5-1

Sincerely,



DAVID R. LAW, AICP  
Senior Planner

cc: Barry Curtis, Manager of Planning Services  
Bill Jacobs, Principal Planner  
Kerwin Lau, Project Development Administrator  
Sun-Sun Murillo, Supervising Transportation Analyst  
Lisa Thai, Senior Transportation Analyst





**5. RESPONSES TO COMMENTS FROM CITY OF IRVINE, SEPTEMBER 7, 2011.**

- 5-1 This comment is acknowledged. It is understood that coordination should occur between the cities of Lake Forest and Irvine regarding traffic improvements and the use of North Irvine Transportation Mitigation Program (NITMP) funds. No environmental issues are raised by the Commenter, so no further response is necessary.



## Department of Toxic Substances Control



*Matthew Rodriguez*  
Secretary for  
Environmental Protection

Deborah O. Raphael, Director  
5796 Corporate Avenue  
Cypress, California 90630

*Edmund G. Brown Jr.*  
Governor

September 20, 2011

Ms. Carrie Tai, AICP  
City of Lake Forest  
25550 Commercentre Drive  
Lake Forest, California 92630



### NOTICE OF COMPLETION & ENVIRONMENTAL IMPACT REPORT (EIR) FOR SERRANO SUMMIT AREA PLAN AND TENTATIVE TRACT MAP (SCH# 2011051009)

Dear Ms. Tai:

The Department of Toxic Substances Control (DTSC) has received your submitted Notice of Preparation of the Environmental Impact Report for the above-mentioned project. The following project description is stated in your document: "The project proposes the adoption of the Serrano Summit Area Plan 2009-01 (Area Plan1) and Tentative Tract Map No. 17731 (Tentative Tract Map). The proposed project is located in the City of Lake Forest, California. The 98.9-acre project site is located to the north of the Serrano Highlands residential neighborhood, south of Commercentre Drive, east of Bake Parkway, and west of Serrano Creek. The proposed Area Plan provides for the development of residential neighborhoods, a Civic Center, parks and recreation facilities, and existing and future public facilities. The Area Plan would establish both regulations and guidelines, which would govern development of the project site. The Area Plan is designed to serve as a "blueprint" for development within the project area by establishing the distribution of land use and the criteria for development of each land use. The Area Plan would also establish the development requirements and guidelines to be applied to each phase of development within the project area".

Based on the review of the submitted document DTSC has the following comments:

- 1) The EIR should evaluate whether conditions within the project area may pose a threat to human health or the environment. Following are the databases of some of the regulatory agencies:
  - National Priorities List (NPL): A list maintained by the United States Environmental Protection Agency (U.S.EPA).

Ms. Carrie Tai  
September 20, 2011  
Page 2

- Envirostor (formerly CalSites): A Database primarily used by the California Department of Toxic Substances Control, accessible through DTSC's website (see below).
- Resource Conservation and Recovery Information System (RCRIS): A database of RCRA facilities that is maintained by U.S. EPA.
- Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS): A database of CERCLA sites that is maintained by U.S.EPA.
- Solid Waste Information System (SWIS): A database provided by the California Integrated Waste Management Board which consists of both open as well as closed and inactive solid waste disposal facilities and transfer stations.
- GeoTracker: A List that is maintained by Regional Water Quality Control Boards.
- Local Counties and Cities maintain lists for hazardous substances cleanup sites and leaking underground storage tanks.
- The United States Army Corps of Engineers, 911 Wilshire Boulevard, Los Angeles, California, 90017, (213) 452-3908, maintains a list of Formerly Used Defense Sites (FUDS).

6-1

2) The EIR should identify the mechanism to initiate any required investigation and/or remediation for any site that may be contaminated, and the government agency to provide appropriate regulatory oversight. If necessary, DTSC would require an oversight agreement in order to review such documents.

6-2

3) Any environmental investigations, sampling and/or remediation for a site should be conducted under a Workplan approved and overseen by a regulatory agency that has jurisdiction to oversee hazardous substance cleanup. The findings of any investigations, including any Phase I or II Environmental Site Assessment Investigations should be summarized in the document. All sampling results in which hazardous substances were found above regulatory standards should be clearly summarized in a table. All closure, certification or remediation approval reports by regulatory agencies should be included in the EIR.

6-3

4) If buildings, other structures, asphalt or concrete-paved surface areas are being planned to be demolished, an investigation should also be conducted for the presence of other hazardous chemicals, mercury, and asbestos containing

6-4

Ms. Carrie Tai  
 September 20, 2011  
 Page 3

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|---|-------------------|
| <p>materials (ACMs). If other hazardous chemicals, lead-based paints (LPB) or products, mercury or ACMs are identified, proper precautions should be taken during demolition activities. Additionally, the contaminants should be remediated in compliance with California environmental regulations and policies.</p>  | <p><b>6-4</b></p> |
| <p>5) Future project construction may require soil excavation or filling in certain areas. Sampling may be required. If soil is contaminated, it must be properly disposed and not simply placed in another location onsite. Land Disposal Restrictions (LDRs) may be applicable to such soils. Also, if the project proposes to import soil to backfill the areas excavated, sampling should be conducted to ensure that the imported soil is free of contamination.</p>   | <p><b>6-5</b></p> |
| <p>6) Human health and the environment of sensitive receptors should be protected during any construction or demolition activities. If necessary, a health risk assessment overseen and approved by the appropriate government agency should be conducted by a qualified health risk assessor to determine if there are, have been, or will be, any releases of hazardous materials that may pose a risk to human health or the environment.</p>  | <p><b>6-6</b></p> |
| <p>7) If it is determined that hazardous wastes are, or will be, generated by the proposed operations, the wastes must be managed in accordance with the California Hazardous Waste Control Law (California Health and Safety Code, Division 20, Chapter 6.5) and the Hazardous Waste Control Regulations (California Code of Regulations, Title 22, Division 4.5). If it is determined that hazardous wastes will be generated, the facility should also obtain a United States Environmental Protection Agency Identification Number by contacting (800) 618-6942. Certain hazardous waste treatment processes or hazardous materials, handling, storage or uses may require authorization from the local Certified Unified Program Agency (CUPA). Information about the requirement for authorization can be obtained by contacting your local CUPA.</p> | <p><b>6-7</b></p> |
| <p>8) DTSC can provide cleanup oversight through an Environmental Oversight Agreement (EOA) for government agencies that are not responsible parties, or a Voluntary Cleanup Agreement (VCA) for private parties. For additional information on the EOA or VCA, please see <a href="http://www.dtsc.ca.gov/SiteCleanup/Brownfields">www.dtsc.ca.gov/SiteCleanup/Brownfields</a>, or contact Ms. Maryam Tasnif-Abbasi, DTSC's Voluntary Cleanup Coordinator, at (714) 484-5489.</p>  | <p><b>6-8</b></p> |

Ms. Carrie Tai  
September 20, 2011  
Page 4

If you have any questions regarding this letter, please contact me at [ashami@dtsc.ca.gov](mailto:ashami@dtsc.ca.gov),  
or by phone at (714) 484-5472.

6-8

Sincerely,



Al Shami  
Project Manager  
Brownfields and Environmental Restoration Program

cc: Governor's Office of Planning and Research  
State Clearinghouse  
P.O. Box 3044  
Sacramento, California 95812-3044  
[state.clearinghouse@opr.ca.gov](mailto:state.clearinghouse@opr.ca.gov)

CEQA Tracking Center  
Department of Toxic Substances Control  
Office of Environmental Planning and Analysis  
P.O. Box 806  
Sacramento, California 95812  
[nritter@dtsc.ca.gov](mailto:nritter@dtsc.ca.gov)

CEQA # 3321



**6. RESPONSES TO COMMENTS FROM STATE OF CALIFORNIA DEPARTMENT OF TOXIC SUBSTANCES CONTROL, SEPTEMBER 20, 2011.**

6-1 The *Phase I Environmental Site Assessment (Phase I ESA)*, prepared by Leighton and Associates, Inc., dated April 23, 2008, for the project site (Appendix D, *Phase I Environmental Site Assessment*, of Appendix 12.1, *Initial Study and Notice of Preparation*, of the Draft EIR), included a regulatory database search. The regulatory database search was conducted by Environmental Database Resources, Inc. (EDR) and included, but was not limited to, a review of the databases noted by the Commenter:

- National Priorities List;
- EnviroStor;
- Resource Conservation and Recovery Information System;
- Comprehensive Environmental Response Compensation and Liability Information System;
- Solid Waste Information System;
- GeoTracker;
- Local Counties and Cities applicable regulatory databases; and
- United States Army Corps of Engineers Formerly Used Defense Sites.

As the Draft EIR provided the data requested by the Department of Toxic Substances Control (DTSC), no further response is required.

6-2 As discussed in Section 8.5(b) of the Draft EIR, existing on-site structures may include hazardous materials (i.e., asbestos-containing materials and/or lead-based paints) and historical on-site agricultural activities could have resulted in the contamination of soils on-site. Implementation of the recommended Mitigation Measures HAZ-1 through HAZ-3 would initiate any required investigation and/or remediation for these potential hazardous materials.

HAZ-1 Prior to demolition activities, an asbestos survey shall be conducted by a qualified environmental professional to determine the presence or absence of asbestos. If present, asbestos removal shall be performed by a State-certified asbestos containment contractor in accordance with the Toxic Substance Control Act (TSCA), (15 U.S.C. Section 2601 et. seq.) Title 2 – Asbestos Hazard Emergency Response for handling asbestos. (Source: OSA PEIR, Legal Requirements for Hazards and Hazardous Materials)

HAZ-2 If during demolition of the structures, paint is separated from the building material (e.g., chemically or physically), the paint waste shall be evaluated independently from the building material by a qualified environmental professional to determine its proper management. According to the Department of Toxic Substances Control, if paint is not removed from the building material during demolition (and is not chipping or peeling), the material may be disposed of as construction debris (a non-hazardous waste). The landfill operator shall be contacted in advance to determine any specific requirements they may have regarding the disposal of lead-based paint



materials, if necessary. (Source: OSA PEIR, Legal Requirements for Hazards and Hazardous Materials)

- HAZ-3 Prior to issuance of a grading permit, soil sampling shall occur within the portions of the project site that have historically been utilized for agricultural purposes and may contain pesticide residues in the soil, as determined by a qualified Phase II specialist. The sampling shall determine if pesticide concentrations exceed established regulatory requirements and shall identify further site characterization and remedial activities, if necessary. (Source: OSA PEIR, Legal Requirements for Hazards and Hazardous Materials)

Compliance with Federal and State hazardous materials laws and regulations minimizes the potential risks to the public and the environment presented by potential hazardous materials, which include, but are not limited to, the following:

- Resources Conservation and Recovery Act (RCRA) – Hazardous waste management;
- Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) – Cleanup of contamination;
- Superfund Amendment and Reauthorization Act (SARA) – Cleanup of contamination; and
- Hazardous Materials Transportation Act (HMTA) – Safe transport of hazardous materials.

These laws provide the “cradle to grave” regulation of hazardous wastes. The primary responsibility for implementing RCRA is assigned to the EPA, although individual states are encouraged to seek authorization to implement some or all RCRA provisions. California hazardous materials management laws include, but are not limited to, the following:

- Hazardous Materials Management Act – Business plan reporting;
- Hazardous Substance Act – Cleanup of contamination;
- Hazardous Waste Control Act – Hazardous waste management; and
- Safe Drinking Water and Toxic Enforcement Act of 1986 – Releases of and exposure to carcinogenic chemicals.

The responsibility for implementation of RCRA was given to DTSC in August 1992. The DTSC is also responsible for implementing and enforcing California’s own hazardous waste laws, which are known collectively as the Hazardous Waste Control Law. Although similar to RCRA, the California Hazardous Waste Control Law and its associated regulations define hazardous waste more broadly and regulate a larger number of chemicals.



As discussed above, hazardous materials (e.g., structural demolition materials, residual pesticides in soils) may be located within the project site. Implementation of the recommended Mitigation Measures HAZ-1 through HAZ-3 would determine whether or not hazardous materials above regulatory thresholds exist at the project site. Should hazardous materials be discovered, the property owner would be required to comply with all federal, state, and local laws and regulations pertaining to hazardous materials. If regulatory oversight is required by the DTSC for hazardous materials discovered at the project site, it is understood that the property owner would be required by law to comply with the DTSC's requirements pertaining to an oversight agreement.

- 6-3 The Commenter notes that any environmental investigations, sampling, and/or remediation for a site should be conducted under a Workplan approved and overseen by a regulatory agency (which would be determined based upon the type of potential contamination) that has jurisdiction to oversee hazardous substance cleanup. The findings of any investigations, including any Phase I or II Environmental Site Assessment Investigations should be summarized in the document.

Three underground storage tanks were reported at 21082 Wisteria, the Irvine Ranch Water District (IRWD) (former Baker Filtration Plant) maintenance area. These tanks are expected to have a low probability to adversely affect soils and groundwater at the project site. A leaking underground storage tank was reported at the former on-site Los Alisos Water District (LAWD) facility (located approximately 500 feet south of the proposed residential development). A release was discovered on August 30, 1989 during tank closure activities and was reportedly diesel fuel oil and additives that affected soil only. The case was closed per the Regional Water Quality Control Board (RWQCB) on February 28, 1990. Based on the conclusions presented in the Phase I ESA, these reported listings associated with the IRWD facility are considered to have a low potential to currently impact soils or groundwater at the project site.

The results of the *Phase I ESA*, prepared by Leighton and Associates, Inc., dated April 23, 2008, have been provided in Appendix D, Phase I Environmental Site Assessment, of Appendix 12.1, Initial Study and Notice of Preparation, of the Draft EIR. The *Phase I ESA* has also appended all the publicly available regulatory agency correspondence for the project site. No hazardous substances above regulatory standards have been detected on-site.

- 6-4 Refer to Response to Comment 6-2.
- 6-5 Implementation of the proposed project would not result in any soil import to the project site. Thus, no impacts resulting from contaminated soil import would result. Hazardous materials anticipated to be potentially located within soils at the project site are associated with areas of historic agricultural use. With implementation of the recommended Mitigation Measure HAZ-3, soil sampling would occur within the portions of the project site that have historically been utilized for agricultural purposes, as determined by a qualified Phase II specialist. The sampling would determine if pesticide concentrations exceed established regulatory requirements and would identify further site characterization and remedial activities, if necessary. With implementation of the recommended Mitigation Measure HAZ-3, the project is not anticipated to result in the fill of soils containing hazardous materials, above regulatory thresholds, within the project site.





- 6-6 As discussed on page 8-31 of the Draft EIR, hazardous materials are not anticipated to be encountered during construction, except for potential asbestos-containing materials and/or lead-based paints during demolition of existing on-site structures as well as potentially contaminated soils in areas of historical agricultural practices. With implementation of the recommended Mitigation Measures HAZ-1 and HAZ-2, potential impacts from disturbance to existing structures would be reduced to less than significant levels. With implementation of HAZ-3, potential impacts from soil disturbance would also be reduced to less than significant levels.

Overall, with implementation of Mitigation Measures HAZ-1 through HAZ-3, the project would not 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. Thus, as impacts to human health and the environment would be minimized upon implementation of the recommended mitigation measures, a health risk assessment is not required.

- 6-7 As discussed on pages 8-28 and 8-29 of the Draft EIR, the IRWD currently operates a water treatment facility on-site. Upon project implementation, the IRWD water utility operations would remain on-site, with expansion of the facilities in the future (The Irvine Ranch Water District has prepared a separate Environmental Impact Report, with associated technical studies, evaluating a future expansion of the water operation facility, referenced as the Baker Water Treatment Plant). Hazardous materials anticipated to be used on-site at a future date would be similar to the existing hazardous materials maintained, used, and/or transported at the site. The IRWD is (and would continue to be) required to comply with applicable Federal, State, and local laws regulating the generation, handling, transportation, and disposal of hazardous materials and waste. The Hazardous Materials Management Act (HMMA) requires that any business that handles hazardous materials greater than specified threshold quantities (500 pounds of a solid material, 55 gallons of a liquid, or 200 cubic feet of a compressed gas stored at any one point in time) must prepare a "Business Plan." Specific requirements for implementation are codified primarily in Title 26 of the CCR and Chapter 6.95 of the California Health and Safety Code. Additional regulations that apply to workplace safety are contained in CCR Title 8. The haulers and users of hazardous materials are listed with the Orange County Fire Authority (OCFA) and are regulated and monitored under the auspices of the County of Orange.

Although, hazardous materials are not typically associated with residential or civic center uses, limited amounts of some hazardous materials could be used in the operation of the project. Minor cleaning and other maintenance products (used in the maintenance of buildings, pumps, pipes and equipment) would be utilized. Additionally, the limited application of pesticides and herbicides associated with landscaping around new developments would occur. The routine transport, use, and disposal of these materials would be subject to a wide range of laws and regulations, including those listed above, that are intended to minimize potential health risks associated with their use or the accidental release of such substances.

With implementation of the existing Federal, State, and local laws and regulations pertaining to hazardous materials, the project's impacts pertaining to the routine transport, use, or disposal of hazardous materials would be less than significant.



- 6-8 The Commenter notes that the DTSC can provide cleanup oversight through an Environmental Oversight Agreement (EOA) for government agencies that are not responsible parties, or a Voluntary Cleanup Agreement (VCA) for private parties. No response is required.



South Coast  
Air Quality Management District

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(909) 396-2000 • www.aqmd.gov

E-MAILED: SEPTEMBER 22, 2011

September 22, 2011

Ms. Carrie Tai, Senior Planner, [ctai@lakeforestca.gov](mailto:ctai@lakeforestca.gov)  
Development Services Department  
City of Lake Forest  
25550 Commercentre Drive  
Lake Forest, CA 92630

**Draft Environmental Impact Report (Draft EIR) for the Proposed Serrano Summit  
Area Plan 2009-01 and Tentative Tract Map No. 17331**

The South Coast Air Quality Management District (AQMD) appreciates the opportunity to comment on the above-mentioned document. The following comments are meant as guidance for the Lead Agency and should be incorporated into the Final CEQA document.

In the project description, the lead agency proposes the subdivision of a 98.9-acre site into 37 lots including 19 lots for residential, public facilities, and parks and recreation. The proposed project would construct up to 833 dwelling units and include earthwork of approximately 1.72 million cubic yards of cut and fill, which would be balanced on-site. Surrounding uses include light industrial uses to the north and residences to the east, south, and west. Within these uses, there are two warehouse-type buildings that total approximately 300,000 total square feet in size and have multiple truck loading docks.

7-1

The AQMD staff is concerned about potential health risk impacts to future sensitive receptors (i.e., residences) within the project boundaries from diesel fueled trucks operating at the industrial site. In Figure 2 (Master Land Use Plan), the lead agency has indicated that medium-density residential uses are planned in the project area including the north-east portion of the project boundaries. These future residences would be located, at some points, less than 400 feet from the nearest loading dock at the adjacent industrial park. Given the potentially significant number of diesel fueled trucks operating adjacent to the project site<sup>1</sup> and that the California Air Resources Board has determined that diesel particulate matter is carcinogenic, the AQMD staff recommends that the lead agency conduct a health risk assessment to determine potential health impacts to the proposed residential uses near those industrial sources. The SCAQMD has

<sup>1</sup> 300,000 ft<sup>2</sup> of warehouse space would generate approximately 777 daily truck trips.

developed a methodology for estimating cancer risks from mobile sources in a document entitled Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Emissions.<sup>2</sup>

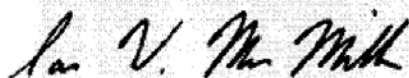
7-1

In addition, the AQMD staff recommends that lead agency clarify in the Final EIR how construction air quality impacts from the estimated 1.72 million cubic yards of cut and fill were quantified in the Draft EIR. Upon review of the air quality analysis, the lead agency estimated air quality impacts using both URBEMIS2007 CalEEMod computer models. In both cases, the lead agency seemed to estimate emissions from soil disturbance using the default settings rather than greater level of detail to account for the substantial cut and fill activities in the case of the URBEMIS2007 model or modifying the amount and types of equipment using the CalEEMod model. The AQMD staff therefore recommends that the lead agency clarify how the cut and fill impacts were quantified and include those air quality impacts and supporting documentation (e.g., methodologies, equations, emission factors, etc.) in the Final CEQA document. Otherwise, total short-term air quality impacts could be substantially underestimated. Should the lead agency conclude after its analyses that air quality impacts exceed the AQMD daily significance thresholds, staff has compiled mitigation measures in addition to those measures listed starting on page 5.1-15 of the Draft EIR that can be implemented if the air quality impacts are determined to be significant.<sup>3</sup>

7-2

Pursuant to Public Resources Code Section 21092.5, please provide the AQMD with written responses to all comments contained herein prior to the adoption of the Final EIR. The AQMD staff is available to work with the Lead Agency to address these issues and any other air quality questions that may arise. Please contact Gordon Mize, Air Quality Specialist – CEQA Section, at (909) 396-3302, if you have any questions regarding these comments.

Sincerely,



Ian MacMillan  
Program Supervisor, Inter-Governmental Review  
Planning, Rule Development & Area Sources

IM:GM

ORC110810-14  
Control Number

<sup>2</sup> [http://www.aqmd.gov/ceqa/handbook/mobile\\_toxic/diesel\\_analysis.doc](http://www.aqmd.gov/ceqa/handbook/mobile_toxic/diesel_analysis.doc) .

<sup>3</sup> [http://www.aqmd.gov/ceqa/handbook/mitigation/MM\\_intro.html](http://www.aqmd.gov/ceqa/handbook/mitigation/MM_intro.html)



**7. RESPONSES TO COMMENTS FROM SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT, SEPTEMBER 22, 2011.**

- 7-1 The existing uses located to the north of the project site consist primarily of business park and light manufacturing uses, which do not have a significant number of truck trips associated with them. Site reconnaissance conducted during analysis for the DEIR found that the existing light manufacturing uses consisted of die cutting for arts and crafts products and die casting for decorative components. These uses do not include warehousing, distribution, or other activities that require a significant amount of diesel truck trips. Additionally, activities associated with the loading dock areas for these uses consist mostly of trailer storage and there is little truck activity. Providing a Health Risk Assessment for potential future users of the business park and light manufacturing uses would be speculative as the nature and type of the activities associated with the end user would be unknown. Furthermore, these uses are designated as “Light Industrial” by the City’s General Plan which has the following characteristics per the City’s Land Use Element:

*The Light Industrial designation provides for a variety of light industrial uses that are non polluting and which can co exist with surrounding land uses and which do not in their maintenance, assembly, manufacturing or operations create smoke, gas, dust, sound, vibration, soot or glare to any degree which might be obnoxious or offensive to persons residing or conducting business in the City.*

Therefore, there would not be a significant number of diesel fueled trucks operating adjacent to the project site.

- 7-2 The inputs for the air quality emissions modeling were based on project specific details including the grading of 98.9 total acres over six construction phases and over seven years. The model used 30 pieces of equipment for the emissions modeling for grading activities alone (118 pieces of equipment overall). The grading and construction equipment used by CalEEMod were reviewed to determine whether the selected construction fleet was appropriate for the level of work in each phase. It should be noted that cut and fill activities would occur incrementally in each construction phase, and not all at once. The duration of each grading phase was also established based on the amount of earthwork needed for the proposed project. Additionally, earthwork for the proposed project would be balanced and soil hauling (import and export) would not be needed and the project would not have emissions associated with truck import and export trips or truck loading.

The comment also requests that written responses are provided to all comments prior to the adoption of the Final EIR. The City of Lake Forest is fully complying with the requirements of the California Environmental Quality Act (CEQA) Section 21092.5, and will be preparing written responses to environmental comments provided to the City during the 45-day public review period. In compliance with CEQA, all public agencies will be provided written responses to their comments 10-days prior to certification of the Final EIR. The City Council will receive the “Comments and Responses” section of the Final EIR for their review and consideration prior to taking any action on the Final EIR.



**California Regional Water Quality Control Board**  
**Santa Ana Region**



**Matthew Rodriguez**  
 Secretary for  
 Environmental Protection

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**Edmund G. Brown Jr.**  
 Governor

September 23, 2011

Carrie Tai, Senior Planner  
 City of Lake Forest  
 25550 Commercentre Drive, Suite 100  
 Lake Forest, CA 92630

**DRAFT ENVIRONMENTAL IMPACT REPORT, SERRANO SUMMIT AREA PLAN,  
 TENTATIVE TRACT MAP NO. 17331 – CITY OF LAKE FOREST, SCH# 2011051009**

Dear Ms. Tai:

Staff of the California Regional Water Quality Control Board, Santa Ana Region (RWQCB) has reviewed the City of Lake Forest's (City) Draft Environmental Impact Report (DEIR) for the Serrano Summit Area Plan (Project). We are resubmitting our June 10, 2011 Notice of Preparation (NOP) comments as an attachment to this letter. Our DEIR comments numerically correspond to those NOP comments, noting the DEIR's extent of incorporating the earlier comments:

1. Proposed impacts to waters of the state and the United States

Section 7.0 (Alternatives) should consider a footprint alternative that avoids the discharge of fill the drainages to the east. The DEIR's text and exhibits have only oblique reference to the fact that all construction alternatives will extend the site farther east, by filling the ravine containing Drainage and Tributary A1. The drainage and its tributary are waters of the state, and of the U.S., and impacts to them should be avoided to extent possible. Our NOP Comment 1.a. requested that one Project alternative evaluate avoidance of these waters. Still, DEIR Sections 7.0 and 6.0 (Other CEQA Considerations) do not acknowledge the proposed destruction of the drainages or clearly indicate how a reduced Project might avoid the drainages and loss of their beneficial uses. In particular, Section 6.0 (p.6.6) says that the Project would not encroach into an adjacent area of open space, when in fact the graded area presently proposed would be extended into jurisdictional waters and an open space resource (all within the Project footprint).

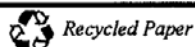
8-1

2. Water quality permitting and mitigation

The EIR itself should generally propose mitigation options for the project's proposed impacts to riparian resources. Our NOP Comments 1.b. and 2.a. called for in-kind compensatory mitigation for impacts to the water quality standards of jurisdictional waters of the U.S. and state. However, DEIR Mitigation Measure BIO-3 (Executive Summary) defers discussion of mitigation to the future when the project applies for

8-2

*California Environmental Protection Agency*



permits such as the Regional Board's Clean Water Act Section 401 Water Quality Standards Certification.

8-2

3. TMDLs and Hydraulic Conditions of Concern (HCOC)

An overview of the satisfactory Hydrology Report appendix should be included within the main EIR text. The EIR should also summarize the measures incorporated into the proposed project to meet applicable Total Maximum Daily Loads and reduce HCOCs.

8-3

If you have any questions, please contact Glenn Robertson at (951) 782-3259, [grobertson@waterboards.ca.gov](mailto:grobertson@waterboards.ca.gov), or me at (951) 782-3234, or [madelson@waterboards.ca.gov](mailto:madelson@waterboards.ca.gov)

Sincerely,



Mark G. Adelson, Chief  
Regional Planning Programs Section

Attachment: June 10, 2011 NOP Letter to the City of Lake Forest, including our enclosed February 19, 2008 letter to the City of Lake Forest

Cc w/ attach: State Clearinghouse

X:Groberts on Magnolia/Data/CEQA/CEQA Responses/ IS/ City of Lake Forest – Serrano Summit Area Plan NOP, Revised For Draft EIR.doc



**California Regional Water Quality Control Board**  
**Santa Ana Region**



**Linda S. Adams**  
*Acting Secretary for*  
*Environmental Protection*

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**Edmund G. Brown Jr.**  
*Governor*

June 10, 2011

Carrie Tai, Senior Planner  
 City of Lake Forest  
 25550 Commercentre Drive, Suite 100  
 Lake Forest, CA 92630

**INITIAL STUDY AND NOTICE OF PREPARATION FOR DRAFT ENVIRONMENTAL  
 IMPACT REPORT, SERRANO SUMMIT AREA PLAN, TENTATIVE TRACT MAP NO.  
 17331 – CITY OF LAKE FOREST, SCH# 2011051009**

Dear Ms. Tai:

Staff of the California Regional Water Quality Control Board, Santa Ana Region (RWQCB) has reviewed the City of Lake Forest's (City) Initial Study (IS) for the Serrano Summit Area Plan (Project), for which a Draft Environmental Impact Report (DEIR) will be prepared. In accordance with the California Environmental Quality Act (CEQA), the project EIR will tier off the 2008 Opportunities Study (OS) Programmatic EIR adopted by the City. This Project is the first of seven projects within the 838 acre OS EIR project area.

The Project would subdivide a partially graded, 98.9-acre hillside into 37 lots, all located south of Commercentre Drive and the termini of Biscayne Bay and Indian Ocean Drives. A civic center and various residential uses are proposed, with open space dedicated around existing Irvine Ranch Water District facilities and along a portion of Serrano Creek. The eastern border of the tract ("parcel boundary", Exhibit 4.4-1) runs parallel to, and within, the Serrano creekbed.

We request that the following comments be considered when preparing the DEIR, so that the Project protects water quality standards (water quality objectives and beneficial uses) identified in the Water Quality Control Plan for the Santa Ana River Basin, 1995, as amended (Region 8 Basin Plan):

1. Proposed impacts to waters of the state and the United States

It is apparent from IS Exhibits 4.1-6 and -7 (Viewpoints 5 and 6), a comparison of Exhibit 4.4-1 (Jurisdictional Features) and Exhibit 2-8 (Proposed Conceptual Landscape Master Plan), and the text of pages 89-93 (Jurisdictional Waters of the U.S., etc.) that emplaced fill will extend the to the regional trail located upon a dike west of Serrano Creek. The fill would bury Drainage A, a natural perennial seep-fed brook, and its ephemeral Tributary A1, both located between the existing hillside and the dike.

- a. At least one Project alternative should evaluate avoidance of Drainage A and Tributary A-1.

8-4



b. We understand the combined proposed impact to Drainages A and Tributary A1 will be a total of 1.909 acres of California Department of Fish and Game (CDFG) jurisdictional streambed, including 0.206 acre of "ACOE/RWQCB jurisdictional wetlands." This 0.206 acre area of jurisdictional waters of the U.S. and of the state comprises 0.077 acre of "jurisdictional waters of the U.S./waters of the state" and 0.129 acre of "bordering vegetated wetlands" (p.91; p.89 Table 4.4-4). These are the areas for which in-kind water quality standards compensatory mitigation will be needed to obtain RWQCB approvals

8-4

## 2. Water quality permitting and mitigation

a. IS pg. 91-2, including Mitigation Measure BIO-4, should more directly emphasize that the proposed "disturbance" to Drainages A and Tributary A1 would likely require issuance of a Clean Water Act (CWA) Section 401 Water Quality Standards Certification (Certification) from the Regional Board, rather than waste discharge requirements (WDRs) (p.131-2). Certifications are prerequisite to CWA Section 404 Permits issued by the U.S. Army Corps of Engineers. Certifications and WDRs require in-kind mitigation measures for compensatory mitigation for impacts to water quality standards.

b. If construction of new drainage outlets takes place in areas of ACOE jurisdiction, they may constitute a further "discharge of fill to waters of the U.S." that will be subject to RWQCB CWA Section 401 Certification.

8-5

c. The IS states that the acquisition of permits will reduce potential water quality impacts below significant levels and such water quality topics will not be further analyzed in the EIR. We strongly disagree. Merely obtaining permits does not reduce or mitigate water quality impacts. The EIR needs to analyze and indentify specific measures that will be taken to reduce impacts, such as avoidance, and/or provide compensatory mitigation for the Project's permanent impacts to water quality standards.

d. EIR analysis and discussions concerning permanent impacts to water quality standards should address compensatory mitigation for all unavoidable impacts. Compensatory mitigation could include the restoration of impaired beneficial uses, such as improving riparian and streambed habitat and function, and implementing measures that correct past hydromodification of Serrano Creek.

## 3. TMDLs and Hydraulic Conditions of Concern (HCOC)

The Project will include two detention basins to treat site runoff and moderate post-construction runoff flows, although most runoff flow volume will be directed east from the site toward Serrano Creek (IS p.25). Three existing drains that now connect Drainage A to Serrano Creek through an existing levee will be revised into two new outlets directly discharging to the Creek. The second of these outlets will require energy dissipation (IS p.128) to address HCOC.

8-6

Excessive discharges of sediment in the watershed that includes the project site have led to development of sediment total maximum daily loads (TMDLs). This Project must be conducted in such away as to contribute to compliance with these TMDLs. We note that that development of the project will result in an increase of sheetflow runoff into Serrano Creek, and possible HCOC. The project's EIR should include an analysis of the potential

HCOC arising from the proposed increase in discharge from Outlet B and from discharges of sheetflow runoff and if necessary, and thoroughly discuss how any HCOC will addressed.

8-6

If you have any questions, please contact Glenn Robertson at (951) 782-3259, [grobertson@waterboards.ca.gov](mailto:grobertson@waterboards.ca.gov), or me at (951) 782-3234, or [madelson@waterboards.ca.gov](mailto:madelson@waterboards.ca.gov)

Sincerely,



Mark G. Adelson, Chief  
Regional Planning Programs Section

Enclosure: February 19, 2008 RWQCB letter to the City of Lake Forest

Cc w/ encl: State Clearinghouse  
U.S. Army Corps of Engineers, Los Angeles –Veronica Chan  
California Department of Fish and Game, Los Alamitos – Leslie McNair  
Orange County RDMD, Flood Control, Santa Ana - Andy Ngo  
Orange County Resources and Development Management Dept., Watersheds - Mary Ann Skorpanich

X:Groberts on Magnolia/Data/CEQA/CEQA Responses/ DEIR/ City of Buena Park - General Plan-MJA.doc



**California Regional Water Quality Control Board  
Santa Ana Region**



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**Arnold Schwarzenegger**  
Governor

February 19, 2008

Cheryl Kuta, Senior Planner  
City of Lake Forest  
Development Services Department  
25550 Commercentre Drive, Suite 100  
Lake Forest, CA 92630

**Chapter 7 and Recirculated Sections of the Draft Program Environmental Impact Report, City of Lake Forest Opportunities Study General Plan Amendment and Zone Change, Orange County, State Clearinghouse No. 2004071039**

Dear Ms. Kuta:

Staff of the California Regional Water Quality Control Board, Santa Ana Region (RWQCB) has considered new Chapter 7 and the recirculated portions of the City of Lake Forest (City) Draft Environmental Impact Report (the Recirculated DEIR) for the Opportunities Study Program (Program). Please consider the following comments before finalizing the Recirculated DEIR:

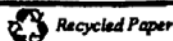
Hydromodification

We do not agree with the Recirculated DEIR's discussion regarding runoff to Borrego Canyon Wash, Serrano Creek, in the Santa Ana Region, and Aliso Creek, in the San Diego Region. As noted in our prior comments, rapid and improperly mitigated urbanization in areas tributary to Serrano Creek and Borrego Canyon Wash has increased the volume and velocity of stormwater runoff to those drainages, resulting in dramatic channel instability, including bed scour, downcutting and bank collapse. This erosion has is causing and threatens to cause loss of beneficial uses of these drainages and violations of their water quality standards, identified in the Water Quality Control Plan for the Santa Ana River Basin (Basin Plan). This erosions leads to the discharge of substantial sediment and contaminant loads that eventually reach Upper Newport Bay, interfering with Upper Newport Bay's beneficial uses and water quality standards. The correction and reduction of this hydromodification is a priority of the RWQCB. Furthermore, we note that this hydromodification also threatens private property and public health and safety.

The Recirculated DEIR still does not adequately analyze the baseline hydrological condition for any of the three watersheds. In our prior comments, we requested that the DEIR adequately discuss the history of development along these three drainages and in their watersheds, and adequately describe the existing condition of the three watersheds. This critical information, necessary to fully understand and evaluate the

8-7

*California Environmental Protection Agency*



Program's potential impacts on hydrology and water quality, and other environmental factors, is absent from the Recirculated DEIR. The Recirculated DEIR does not include any new discussion of the baseline condition of any of the three drainages. Both the Orange County Flood Control District and the RWQCB, among other agencies, have extensive information and literature on the history of these three drainages.

The Recirculated DEIR still does not contain an adequate cumulative impacts analysis. As noted in our prior comments, both Serrano Creek and Borrego Canyon Wash are currently unstable. Any change in the volume, velocity and/or timing of release of stormwater flows from the subject project sites is likely to have a cumulatively significant impact, and the potential to exacerbate the current undesirable conditions in these drainages. The Recirculated DEIR appears to side step engaging in a cumulative impacts analysis by imposing a mitigation measure that each individual project will be required to demonstrate no net increase in peak stormflow rates. However, the Recirculated DEIR does not support this mitigation measure with any analysis discussing how implementing the measure will avoid further significant impacts to these drainages. There is no analysis showing how this mitigation measure will cumulatively effect the hydromodification of the drainages. There is no discussion of the magnitude or duration of peak storm events. There is no discussion of the feasibility of building storm water runoff retention or detention facilities sized to retain peak storm flows on the various parcels that are the subject of the DEIR. There is no discussion of the volume, velocity, timing, duration or other management of the release of the retained /detained storm flows. There is no modeling of the cumulative impacts of the various facilities on the total flows in any of the three drainages.

8-7

#### Total Maximum Daily Loads (TMDLs)

Under section 303(d) of the Clean Water Act, the California Water Code, and related authorities, the RWQCB has adopted TMDLs into the Basin Plan for a number of contaminants for impaired water bodies into which Serrano Creek and Borrego Canyon Wash are tributary, including Lower Newport Bay, Upper Newport Bay, San Diego Creek Reach 1 and San Diego Creek Reach 2. TMDLs adopted by the RWQCB have the force of law. Implementation of the sediment TMDL requires that all dischargers in the watersheds of these impaired waters reduce sediment discharges. Under the TMDL program, the City has significant obligations to reduce excessive sediment discharges from Serrano Creek and Borrego Canyon Wash.

The Recirculated DEIR does not discuss any of the TMDLs, and there is no analysis as to whether the various mitigation measures proposed in the Program are consistent with achieving the TMDLs.

#### Urban Storm Water Runoff NPDES Permit

Under section 402(p) of the Clean Water Act, the California Water Code, and related authorities, the RWQCB adopted Order No. R8-2002-0010 (NPDES No. CAS618030), Waste Discharge Requirements for the County of Orange, Orange County Flood

February 19, 2008

Control District and The Incorporated Cities of Orange County Within the Santa Ana Region - Areawide Urban Storm Water Runoff (Orange County), a consolidated a municipal separate storm sewer system (MS4) permit. This MS4 permit expired in 2007 and it has been administratively extended, pending its renewal.

In discussions with City staff on the pending MS4 permit renewal, RWQCB staff has expressed substantial concerns about the effects of urban runoff, municipal storm water flows and other flows covered by the MS4 permit on Serrano Creek and Borrego Canyon Wash.

The Recirculated DEIR fails to discuss the existing MS4 permit, fails to discuss what the likely outcome of the renewed MS4 permit will be with respect to the City's obligations under the MS4 permit, and fails to analyze whether approving the DEIR is consistent with the City's current and likely future MS4 permit obligations.

#### Conclusion

8-7

RWQCB staff believes that a comprehensive plan for the long-term protection and restoration of Serrano Creek and Borrego Canyon Wash (and Aliso Creek) must precede the Program. The Program can provide an opportunity to implement restoration measures identified in such a plan. The City should exercise extreme caution when making major changes in planned land uses within its boundaries, without first developing an understanding of the roles the various parcels might play in contributing to correction of the major water quality problems that are plaguing in the drainages that pass through the City.

The RWQCB looks forward to receiving an extensively revised draft EIR incorporating both these comments and our prior comments, and requests that the revised draft be recirculated for public comment before the City decides whether to certify the EIR for the project. Please contact me at 951-782-3234 or [madelson@waterboards.ca.gov](mailto:madelson@waterboards.ca.gov) , or Glenn S. Robertson of this office, at 951- 782-3259 or [grobertson@waterboards.ca.gov](mailto:grobertson@waterboards.ca.gov) with any questions.

Sincerely,



Mark G. Adelson, Chief  
Regional Planning Program Section

cc: State Clearinghouse – Scott Morgan  
County of Orange Watersheds Program – Mary Anne Skorpanich

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*California Environmental Protection Agency*





## 8. RESPONSES TO COMMENTS FROM REGIONAL WATER QUALITY CONTROL BOARD, SEPTEMBER 23, 2011.

8-1 The Commenter states that at least one project alternative should consider a footprint that avoids the ravine containing Drainage and Tributary A1 in the eastern portion of the project site. The Draft EIR did not include additional build alternatives that would avoid the ravine containing Drainage and Tributary A1 in the eastern portion of the project site, as this would be inconsistent with the General Plan and Area Plan. As stated on Draft EIR Page 3-1, pursuant to the City's General Plan Land Use Map, the project site is designated "Medium Density Residential" and "Public Facility", and is zoned "Multi-Family Dwelling with a Planned Development Combining District" and "Public Facilities". Exhibit 3-5, Proposed Master Land Use Plan, of the Draft EIR, shows the proposed land uses as permitted by the Serrano Summit Area Plan. As seen on Exhibit 3-5, the area and Tributary A1 in the eastern portion of the project site is designated as "Medium Density Residential with Public Facilities Overlay". Additionally, alternatives to a proposed project are only required to analyze significant effects of the project identified in the impact analysis. Specifically, *CEQA Guidelines* Section 15126.6(a) and (b) state that "an EIR shall 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 of the significant effects of the project." Therefore, as impacts to Drainage and Tributary A1 were determined to be less than significant in Section 5.3, Biological Resources and Section 8.6, Hydrology and Water Quality of the Draft EIR, a project alternative avoiding Drainage and Tributary A1 is not required.

It should be noted that Section 7.0, Alternatives to the Proposed Project, considers the No Project/No Build Alternative, which would retain the project site in its current condition and would, therefore, avoid the ravine containing Drainage and Tributary A1. This Alternative would not attain most of the project's basic objectives. The entire community would also not benefit from the provision of public open space (public parks and trail connections to existing regional trails) and the dedication of a site for a future Civic Center, which is one of the land use options planned for the area referenced above. The other land use option planned for the area referenced above is residential. A reduced residential alternative would result conflict with another project objective, by creating a reduction in funding for public facilities, which would be made available through the payment of fees required by a Development Agreement for development of the project's proposed residential uses.

The comment also states that the project's footprint would encroach into an adjacent area of open space. However, based upon a review of the City's General Plan Land Use Map and Zoning Map, the project site is not located within an area designated as open space (OS). Therefore, the project's footprint would not extend into any area designated as open space. The project's footprint would avoid disturbing the on-site designated open space associated with Serrano Creek, located within the eastern portion of the project site.

8-2 Impact Statement BIO-3 of the Draft EIR addresses the impacts of the proposed project to jurisdictional wetlands and other waters and associated riparian habitat. Mitigation Measure BIO-4 requires the project to prepare and submit the appropriate ACOE, CDFG, and/or RWQCB permits prior to the approval of grading plans. At this time, specific mitigation requirements pertaining to water quality impacts would be required by each applicable



regulatory agency. Therefore, as required per the OSA PEIR, Mitigation Measures BIO-2 through BIO-4 are included to ensure that the appropriate permits are obtained and biological communities (including riparian habitat) are appropriately mitigated. It should be noted that the CEQA threshold specifically pertains to federally protected wetlands. No jurisdictional wetlands are located within the project site.

- 8-3 Refer to the analyses within Section 8.6, *Hydrology and Water Quality* of the Draft EIR which have been formulated utilizing the findings and conclusions of the project's Hydrology Report and Preliminary Water Quality Management Plan.
- 8-4 Refer to Response to Comment 8-1.
- 8-5 The Commenter suggests Mitigation Measure BIO-4 should emphasize the issuance of Clean Water Act Section 401 permit from the RWQCB. Although Mitigation Measure BIO-4 does not specify which specific permits would be required for the project, it is specified that "The Applicant shall also consider any other permits from the ACOE, CDFG, RWQCB, or any other applicable regulatory agency that may be necessary". Specific permit types have not been listed, as circumstances could change from adoption of the environmental document to submittal of the grading plans that may require any of the above listed regulatory agencies to change which permit type is required. Therefore, should a Clean Water Act Section 401 permit, waste discharge requirements, and/or Clean Water Act Section 404 permits be required for the project, this requirement has been covered under Mitigation Measure BIO-4.

As stated in Section 8.6(b) of the Draft EIR, with implementation of the *2003 Drainage Area Management Plan* (DAMP) requirements, best management practices (BMPs) would be developed for the project site. Typical operational BMPs include, but are not necessarily limited to, controlling roadway and parking lot contaminants by installing oil and grease separators at storm drain inlets, cleaning parking lots on a regular basis, incorporating peak-flow reduction and infiltration features (such as grass swales and rain gardens) into landscaping, and implementing educational programs. With implementation of the required Drainage Development Standards proposed by the Area Plan, the project would be required to prepare a Water Quality Management Plan (WQMP) in accordance with the requirements of the NPDES standards. The project would also be required to be consistent with both the City and County requirements for the design of a drainage system. The project would involve similar landscaping requirements as those described for Alternative 7 of the OSA PEIR. The OSA PEIR recommended Mitigation Measures MM 3.8-2 through 3.8-4 (refer to Mitigation Measures HYD-1 through HYD-3 of the Draft EIR), which require a landscape design plan, coordination with the Nitrogen and Selenium Working Group, and implementation of BMPs (such as a nutrient management program) to reduce the amount of nutrients enter the watershed. It should be noted that a Preliminary Water Quality Plan (P-WQMP) has already been prepared for the Serrano Summit Project and was included in the Draft EIR; refer to Appendix E, *Hydrology Report and Water Quality Management Plan* of Appendix 12.1. The P-WQMP identifies a variety of source control BMP's that would be implemented by the project, subject to verification through Mitigation Measure HYD-3.



The OSA PEIR concluded that impacts to water quality would be reduced to less than significant levels with the exception of increased pesticide use. Project implementation would not result in greater impacts to water quality (as a result of pesticide use) compared to those analyzed in the OSA PEIR. With implementation of the WQMP and adherence to the NPDES and SWPPP requirements, as well as compliance with the recommended Mitigation Measures HYD-1 through HYD-3, project operations would not substantially impair the water quality of receiving waters. Thus, no significant and unavoidable impacts would result upon implementation of the proposed project.

- 8-6 The project site ultimately drains into Serrano Creek within the larger San Diego Creek watershed. Based on the Preliminary WQMP, Serrano Creek is not listed as impaired. However, Reach 2 of the San Diego Creek is 303(d) listed as impaired for metals, and Reach 1 is impaired for fecal coliform, selenium, and toxaphene. San Diego Creek has Total Maximum Daily Loads (TMDL) established for nutrients (nitrogen and phosphorous), sediment, and toxics (pesticides and metals in water and sediment). The OSA PEIR concluded that water quality impacts related to pesticide use would be significant and unavoidable with development of the projects considered as part of the *Opportunities Study* (which included the proposed project site).

Although the project would not result in direct discharges to San Diego Creek, the project would discharge to Serrano Creek, which is tributary to San Diego Creek and listed as impaired. With implementation of the DAMP requirements, BMPs would be developed for the project site. Typical operational BMPs include, but are not necessarily limited to, controlling roadway and parking lot contaminants by installing oil and grease separators at storm drain inlets, cleaning parking lots on a regular basis, incorporating peak-flow reduction and infiltration features (such as grass swales and rain gardens) into landscaping, and implementing educational programs. The project would be required to be consistent with both the City and County requirements for the design of a drainage system. The potential for localized sediment and scour arising from Outlet B would be addressed by meeting the commonly accepted outlet standards for energy dissipation. Regional hydraulic concerns have been addressed by runoff controls being implemented on-site to reduce two-year and 100-year discharges. The primary goal of the stormwater management system is to prevent flooding and protect property by providing safe, effective site drainage. With implementation of the required Drainage Development Standards proposed by the Area Plan, the project would be required to prepare a WQMP in accordance with the requirements of the NPDES standards.

As stated in Response to Comment 8-5, the OSA PEIR concluded that impacts to water quality would be reduced to less than significant levels with the exception of increased pesticide use. Project implementation would not result in greater impacts to water quality (as a result of pesticide use) compared to those analyzed in the OSA PEIR. Thus, impacts in this regard are less than significant with implementation of the WQMP and Mitigation Measures HYD-1 through HYD-3. With adherence to the NPDES permit and SWPPP requirements, and compliance with the recommended Mitigation Measures HYD-1 through HYD-3, project operations would not substantially impair the water quality of receiving waters. Thus, no significant and unavoidable impacts would result upon implementation of the proposed project.





- 8-7 The RWQCB's comment letter on the Recirculated sections of the Draft OSA PEIR (submitted on February 19, 2008 to the City of Lake Forest) has been attached to the RWQCB's September 23, 2011 comment letter on the project's Draft EIR. The comments submitted in the February 19, 2008 comment letter were responded to by the City of Lake Forest in the Chapter 9 of the Final OSA PEIR (certified in June 2008). Therefore, these comments from the February 19, 2008 are not required to be further addressed as part of the proposed project's Final EIR.



*Jess A. Carbajal, Director*  
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P.O. Box 4048  
Santa Ana, CA 92702-4048  
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Fax: (714) 834-5188

**RECEIVED**

OCT 12 2011

NCL 11-034

**CITY OF LAKE FOREST**  
DEVELOPMENT SERVICES DEPT

October 5, 2011

Ms. Carrie Tai, AICP, Senior Planner  
City of Lake Forest  
25550 Commercecentre Drive, Suite 100  
Lake Forest, California 92630

**SUBJECT: Notice of Availability of Draft Environmental Impact Report (DEIR) for Serrano Summit Area Plan and Tentative Tract Map**

Dear Ms. Tai:

The County of Orange has reviewed the Notice of Availability of Draft Environmental Impact Report (DEIR) for Serrano Summit Area Plan and Tentative Tract Map and offers the following comments:

Flood Programs:

In response to your request dated June 21, 2011, Hydrology Subunit reviewed the subject document and offers the following comments:

1. Findings of the sediment transport and erosion issues in the Draft EIR are based on 2008 Fluvial Study done by Dr. Chang. We would like to mention that the study considers only the existing condition of Serrano Creek (F19) and does not take into account the impervious area of a development such as Serrano Summit. We understand that the hydrology study shows the discharge after implementation of the project will be less than pre-development but the reduction of the sediment supply into the Serrano Creek from the development area may further impact the stability of the creek. At the design phase, we recommend the project component shows that the post-project condition stability of Serrano Creek will be intact.

If you have any questions regarding these comments, please contact Aram Eftekhari at (714) 647-3987.

Carrie Tai, AICP, Senior Planner  
City of Lake Forest  
October 5, 2011  
Page 2

Sincerely,

A handwritten signature in black ink, appearing to read "M. Balsamo". The signature is fluid and cursive, with the first letter "M" being particularly large and stylized.

Michael Balsamo  
Manager, OC Community Development  
OC Public Works/OC Planning  
300 North Flower Street  
Santa Ana, California 92702-4048  
[Michael.Balsamo@ocpw.ocgov.com](mailto:Michael.Balsamo@ocpw.ocgov.com)

MB/mmc

cc: Mehdi Sobhani, Flood Programs  
Chris Crompton, Environmental Resources



**9. RESPONSES TO COMMENTS FROM ORANGE COUNTY PUBLIC WORKS,  
OCTOBER 5, 2011.**

- 9-1 This comment is acknowledged. As a Condition of Approval, the City of Lake Forest will require that at the design phase, the Project Applicant shall demonstrate that the post-project condition stability of Serrano Creek shall remain intact.



## 3.0 Errata

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## 3.0 ERRATA

Changes to the Draft Environmental Impact Report (Draft EIR) are noted below. A double-underline indicates additions to the text; strikeout indicates deletions to the text. The changes to the Draft EIR do not affect the overall conclusions of the environmental document. Changes are listed by page and, where appropriate, by paragraph.

### **NOTE TO REVIEWER:**

These errata address the technical comments on the Draft EIR, which circulated from August 10, 2011 through September 23, 2011. These clarifications and modifications are not considered to result in any new or substantially greater significant impacts as compared to those identified in the Draft EIR. Any changes referenced to mitigation measures contained in the Draft EIR text also apply to Section 2.0, *Executive Summary* and Section 9.0, *Inventory of Mitigation Measures* of the Draft EIR. All mitigation measure modifications have been reflected in Section 4.0, *Mitigation Monitoring and Reporting Program* of the Final EIR.

### **SECTION 5.3 BIOLOGICAL RESOURCES**

#### **Page 5.3-53, Mitigation Measures**

BIO-2 Prior to the issuance of a grading permit, the Applicant shall, in an area where a species or habitat is not covered by the Natural Community Conservation Plan/Habitat Conservation Plan (NCCP/HCP) has been identified, comply with the requirements of the Federal Endangered Species Act (FESA) or California Endangered Species Act (CESA), if applicable. If the species or habitat is not protected under FESA or CESA, but is otherwise protected through the Migratory Bird Treaty Act or other similar regulatory act requirement, the Applicant shall provide suitable replacement habitat at a minimum of 1:1, and shall prepare and submit a mitigation plan for City approval that demonstrates that the replacement habitat is protected in perpetuity and that appropriate long-term habitat management is provided. The mitigation plan shall be prepared in consultation with and receive the approval of the agency regulating the species or habitat (i.e., USFWS, CDFG, and the NCCP Non-Profit Corporation (i.e., Nature Reserve of Orange County (NROC) the City)). The mitigation plan shall include the following, at minimum: detailed habitat impacts; mitigation acreage (1:1 ratio); mitigation location (i.e., where the proposed conservation or restoration will occur); the acreage of conservation or restoration that will be conducted; and how many trees/plants will be planted or translocated (when mitigating impacts to trees or rare plants); a planting plan and seed mixes; five-year maintenance and monitoring plans; source(s) of long-term site funding; conservation easements (if any); biological monitoring during grading activities; and fencing of any habitat area that would not be disturbed by construction. (Source: OSA PEIR Mitigation Measure MM 3.4-3)



BIO-3 Prior to the issuance of a grading permit, the Applicant shall conform and comply with the applicable requirements of the Natural Community Conservation Plan and Habitat Conservation Plan (NCCP/HCP) for the County of Orange Central and Coastal Subregion, including the payment of the appropriate in-lieu fee, or existing IRWD non-reserve banked acreage as applicable, to mitigate for the loss of coastal sage scrub and any other NCCP/HCP covered habitat and species observed on the project site.

For impacts to a Conditionally Covered Species (i.e., Southwestern willow flycatcher (*Empidonas traillii extimus*)), the Applicant shall prepare a mitigation plan. The mitigation plan shall be developed in coordination with USFWS, CDFG, and the NCCP Non-Profit Corporation (i.e., i.e., Nature Reserve of Orange County (NROC) ~~the City~~), and approved by the USFWS. The mitigation plan shall, at minimum:

- Address design modifications and other onsite measures that are consistent with the project's purposes, minimize impacts, and provide appropriate feasible protections;
- Provide for compensatory habitat restoration/enhancement activities at an appropriate location (which may include land in the Reserve system or other open space) and which may include planting of riparian trees and shrubs and/or cowbird trapping;
- Provide for monitoring and Adaptive Management of habitat, within the Reserve system including cowbird trapping, consistent with Chapter 5 of the NCCP/HCP.

The Applicant shall also demonstrate to the satisfaction of the Director of Development Service compliance with the following NCCP/HCP construction impact avoidance measures or such measure in effect at the time of construction:

1. To the maximum extent practicable, no grading of coastal sage scrub habitat that is occupied by nesting gnatcatchers shall occur during the breeding season (February 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 United States Fish and Wildlife Services/California Department of Fish and Game (USFWS/CDFG) with the maximum practicable notice (or such notice as is specified in the NCCP/HCP) to allow for capture of gnatcatchers, and any other coastal sage scrub Identified Species that are not otherwise flushed and shall carry out the following measures, to the extent practicable, in the context of the public health and safety considerations.





2. Prior to the commencement of grading operations or other activities involving significant soil disturbance, all areas of coastal sage scrub habitat to be avoided under the provisions of the NCCP/HCP, shall be identified with temporary fencing or other markers clearly visible to construction personnel. Additionally, prior to the commencement of grading operations or shall be conducted to locate gnatcatchers 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.
  3. A monitoring biologist, acceptable to USFWS/CDFG will be on site during any clearing of coastal sage scrub. The landowner or relevant public agency/utility will advise USFWS/CDFG at least seven (7) calendar days (and preferably 14 calendar days) prior to the clearing of any habitat occupied by Identified Species to allow USFWS/CDFG to work with the monitoring biologist in connection with bird flushing/ capture activities. The monitoring biologist shall flush identified Species (avian or other mobile Identified Species) from occupied habitat areas immediately prior to brush-clearing and earth-moving activities. If birds cannot be flushed, they shall 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 shall be the responsibility of the monitoring biologist to assure that Identified 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.
  4. Following the completion of initial grading/earth movement activities, all areas of coastal sage scrub habitat to be avoided by construction equipment and personnel shall be marked with temporary fencing or other appropriate markers clearly visible to construction personnel. No construction access, parking, or storage of equipment or materials shall be permitted within such marked areas.
  5. Coastal sage scrub identified in the 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. (Source: OSA PEIR Mitigation Measure MM 3.4-2)
- BIO-4 Prior to the approval of grading plans, the Applicant ~~shall~~ ~~would be required to~~ prepare an application for fill of waters subject to the Army Corps of Engineers (ACOE) jurisdiction. If appropriate, a streambed alteration agreement shall be obtained from California Department of Fish and Game (CDFG). The Applicant shall submit an application to the Regional Water Quality Control Board (RWQCB) for a waste discharge requirement or waiver of waste discharge requirement. The Applicant shall also consider any other permits from the ACOE, CDFG, RWQCB, or any other applicable regulatory agency that may be necessary. (Source: OSA PEIR Mitigation Measure MM 3.4-4)



Page 8.79 (Section 8.13 – Transportation/Traffic)

## METHODOLOGY

The existing average daily trips (ADT) and peak hour counts were conducted in 2008 and 2009, in order to prepare a project-level Traffic Study. Typically, traffic counts are considered accurate for two years in an area that is not rapidly developing. This is the case in the vicinity of the project site. Furthermore, the traffic engineer for the lead agency concurred that the traffic counts were the appropriate baseline to use in the project-level Traffic Study. The Traffic Study was completed in 2010, prior to the issuance of the Notice of Preparation (NOP) so that the lead agency could determine whether or not there would be significant impacts resulting from the project-level traffic, if this issue area was found not to be significant. Prior to the issuance of the NOP, the lead agency confirmed that no changes had taken place within the study area that would have significantly changed the existing conditions from when the Traffic Study was prepared (April 2010) and when the NOP went out for public review (April 2011). As discussed in the EIR, the Transportation/Circulation Section determined that the proposed project would not result in significant impacts and no mitigation measures are required.

Forecast volumes used in the analysis are based on the City's Lake Forest Traffic Analysis Model (LFTAM). For the purposes of the Traffic Impact Analysis, the project is assumed to be completed in approximately year 2014 or thereafter, with the Alton Parkway extension between Towne Centre Drive and Irvine Boulevard being completed by that timeframe as well. Therefore, the Future Year Plus Project Condition was included in order to evaluate the project impacts in the context of the project opening year so as to have an idea of the potential impacts that would occur at that time.

For purposes of cumulative considerations (year 2030 scenarios), the General Plan is anticipated to be built out by year 2030. Assuming a linear growth of traffic and development between now and year 2030, a growth of 25 percent in the OSA is assumed for the year 2015 cumulative analysis. The proposed project is assumed to be built out under the "plus project" scenarios, in order to provide conservative analyses. Land use and trip generation buildout for the OSA sites under cumulative conditions are considered for the "with project" condition in the year 2030. Buildout of the General Plan and neighboring cities is assumed for the long-range analysis, and only committed network improvements are assumed to be built. Therefore, the Portola Parkway gap and I-5/Ridge Route Overcrossing are not assumed to be completed.

Page 8.84 (Section 8.13 – Transportation/Traffic)

### Existing Plus Project Conditions

The purpose of the existing plus project scenario is to comply with CEQA, specifically recent case law including *Sunnyvale West Neighborhood Association v. City of Sunnyvale City Council, Madera Oversight Coalition, Inc. v. County of Madera* ("Madera Oversight"), and *Pfeiffer v. Sunnyvale*. The *Sunnyvale* case and *Madera* case, which provides that the baseline for assessing environmental impacts is generally the existing conditions at the time that the ~~environmental document for~~ Notice of Preparation for the project is prepared. The information presented in this section shows the traffic volumes obtained by adding traffic from the worst-case proposed project (i.e., residential with civic center uses as analyzed in 2010) to existing traffic, irrespective of the proposed project's buildout timeframe. Any



comparative traffic analysis of full buildout of the proposed project versus existing traffic conditions has been prepared, despite the fact that ~~would be hypothetical because of~~ the actual buildout timeframe of the project ~~is (approximately year 2014 or later)~~. Hence the information provided here is intended to satisfy the CEQA requirements by showing the volume comparison arising from this ~~hypothetical~~ scenario.

#### *Existing Plus Project Traffic Forecasts*

The ADT forecasts were prepared for a scenario in which traffic generated by the proposed project is added to the existing present-day traffic conditions based on the project trip distribution from the LFTAM that are illustrated in Figure 1 of the Traffic Study 2011. The existing version of the LFTAM was used to determine the effect of the difference between the existing traffic model conditions and the proposed project on existing traffic conditions in the study area and to distribute the traffic associated with the proposed project onto the existing circulation system. Figures 2 and 3 of the Traffic Study 2011 illustrate the ADT volumes for existing and existing plus project conditions. This study area is consistent with that studied in the Traffic Study 2010.

#### *Existing Plus Project Evaluation Context*

~~As noted above, this An Existing Plus Project~~ evaluation of impacts has been prepared even though ~~is hypothetical because the proposed project is not a near-term construction project.~~ Occupancy of any portion of the project site is not anticipated to commence in year 2011, and buildout of the site is anticipated to occur around year 2014 or later.

~~Therefore, It should be noted~~ that the traffic generated by the proposed project would not be placed on the existing, present day roadway system and existing traffic conditions but would occur with phased improvements as part of project buildout. Also, the Existing Plus Project scenario does not account for future population and development growth in the City of Lake Forest and surrounding areas. These population and development growth projections would add traffic to the existing roadway system, with or without the proposed project, and must be accounted for in the evaluation of the proposed project's potential traffic impacts. In addition the circulation system is projected to change over time, with or without the proposed project, and these circulation system changes include new roadways and the improvement of existing roadways through established programs such as the Foothill Corridor Phasing Plan (FCPP), the North Irvine Transportation Mitigation (NIITM) Program in nearby City of Irvine, and the proposed LFTM Program. ~~For these reasons, the existing plus project scenario is informational in nature and has not been analyzed in the same manner as the 2015 plus project and 2030 plus project (i.e., the interim year and long range context) that were the subject of analysis in the Traffic Study 2010.~~

#### *Existing Plus Project Traffic Volumes*

Overall, when comparing the proposed project's ADT volumes, the ADT volumes under Existing Plus Project conditions are not much higher than existing counts for most of the City's arterial street system surrounding the project site.



*Existing Plus Project Intersection LOS*

The Existing Plus Project ICU values for the study area intersections illustrated in Figure 4 of the Traffic Study 2011 are summarized in Table 8.13-5, *Existing Plus Project Intersection LOS*. As indicated in Table 8.13-5, all study area intersections would operate at LOS “D” or better (i.e., ICU does not exceed .90) under Existing Plus Project conditions, and would result in a less than significant impact.

**Table 8.13-5  
Existing Plus Project Intersection LOS**

Intersection	Existing				Existing Plus Project				Difference	
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour			
	ICU	LOS	ICU	LOS	ICU	LOS	ICU	LOS	AM	PM
Alton Parkway and SR-241 Ramps	0.20	A	0.26	A	0.20	A	0.26	A	0.00	0.00
Bake Parkway and Commercentre Drive	0.54	A	0.74	C	0.31	A	0.38	A	0.00	0.00
Bake Parkway and Dimension Drive	0.55	A	0.68	B	0.48	A	0.46	A	0.00	0.01
Bake Prkwy and Irvine Blvd./Trabuco Rd	0.78	C	0.76	C	0.71	C	0.68	B	0.01	0.02
Bake Parkway and N. Rancho Parkway	0.70	B	0.66	B	0.40	A	0.47	A	0.00	0.00
Bake Parkway and S. Rancho Parkway	0.60	A	0.74	C	0.61	B	0.75	C	0.01	0.01
Biscayne Bay Dr. and Commercentre Dr.	0.20	A	0.26	A	0.61	B	0.80	C	0.07	0.06
Dimension Drive and Commercentre Drive	0.40	A	0.58	A	0.81	D	0.79	C	0.03	0.03
Indian Ocean Dr. and Commercentre Dr.	0.18	A	0.20	A	0.64	B	0.65	B	0.01	0.00
Lake Forest Drive and Dimension Drive	0.49	A	0.48	A	0.55	A	0.65	B	0.00	-0.02
Lake Forest Drive and Rancho Parkway	0.40	A	0.47	A	0.54	A	0.51	A	0.05	0.03
Lake Forest Drive and SR-241 NB	0.31	A	0.38	A	0.31	A	0.40	A	0.11	0.14
Lake Forest Drive and SR-241 SB	0.48	A	0.45	A	0.35	A	0.43	A	0.17	0.23
Lake Forest Drive and Trabuco Road	0.63	B	0.65	B	0.43	A	0.64	B	0.04	0.06
Notes: ICU – intersection capacity utilization; LOS – level of service; N,S – north, south; NB,SB – northbound, southbound LOS ranges: 0.00 – 0.60 A 0.61 – 0.70 B 0.71 – 0.80 C 0.81 – 0.90 D 0.91 – 1.00 E Above 1.00 F										
Source: Austin-Foust Associates, Inc., Serrano Summit AI-Residential Project Alternative [Traffic] Analysis, dated April 2011.										

Existing Plus Project Conditions

Existing Plus Project Traffic Volumes

The ADT volumes under Existing Plus Project conditions are presented in Figure 5 of the Traffic Study 2010.



Existing Plus Project Intersection LOS

The Existing Plus Project ICU values for the study area intersections are summarized in Table 8.13-5. As indicated in Table 8.13-5, all intersections are expected to operate at an acceptable LOS "D" or better under Existing Plus Project conditions.

As previously noted, for ICU greater than the acceptable LOS, mitigation for the project's contribution is required in order to bring the intersection back to an acceptable LOS or to no-project conditions (if project contribution is 0.02 or greater). Based on the performance criteria, no significant impacts would result from project implementation.



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## **4.0 Mitigation Monitoring and Reporting Program**







## 4.0 MITIGATION MONITORING AND REPORTING PROGRAM

The California Environmental Quality Act (CEQA) requires that when a public agency completes an environmental document which includes measures to mitigate or avoid significant environmental effects, the public agency must adopt a reporting or monitoring program. This requirement ensures that environmental impacts found to be significant will be mitigated. The reporting or monitoring program must be designed to ensure compliance during project implementation (Public Resources Code Section 21081.6).

In compliance with Public Resources Code Section 21081.6, Table 1, *Mitigation Monitoring and Reporting Checklist*, has been prepared for the City of Lake Forest Serrano Summit Area Plan 2009-01 and Tentative Tract Map No. 17331 (the project). This Mitigation Monitoring and Reporting Checklist is intended to provide verification that all applicable Conditions of Approval relative to significant environmental impacts are monitored and reported. Monitoring will include: 1) verification that each mitigation measure has been implemented; 2) recordation of the actions taken to implement each mitigation; and 3) retention of records in the City of Lake Forest Serrano Summit Area Plan 2009-01 and Tentative Tract Map No. 17331 project file.

This Mitigation Monitoring and Reporting Program delineates responsibilities for monitoring the project, but also allows the City flexibility and discretion in determining how best to monitor implementation. Monitoring procedures will vary according to the type of mitigation measure. Adequate monitoring consists of demonstrating that monitoring procedures took place and that mitigation measures were implemented. This includes the review of all monitoring reports, enforcement actions, and document disposition, unless otherwise noted in the Mitigation Monitoring and Reporting Checklist (Table 1). If an adopted mitigation measure is not being properly implemented, the designated monitoring personnel shall require corrective actions to ensure adequate implementation.

Reporting consists of establishing a record that a mitigation measure is being implemented, and generally involves the following steps:

- The City distributes reporting forms to the appropriate entities for verification of compliance.
- Departments/agencies with reporting responsibilities will review the Initial Study, which provides general background information on the reasons for including specified mitigation measures.
- Problems or exceptions to compliance will be addressed to the City as appropriate.
- Periodic meetings may be held during project implementation to report on compliance of mitigation measures.



- Responsible parties provide the City with verification that monitoring has been conducted and ensure, as applicable, that mitigation measures have been implemented. Monitoring compliance may be documented through existing review and approval programs such as field inspection reports and plan review.
- The City prepares a reporting form periodically during the construction phase and an annual report summarizing all project mitigation monitoring efforts.
- Appropriate mitigation measures will be included in construction documents and/or conditions of permits/approvals.

Minor changes to the Mitigation Monitoring and Reporting Program, if required, would be made in accordance with CEQA and would be permitted after further review and approval by the City. No change will be permitted unless the Mitigation Monitoring and Reporting Program continues to satisfy the requirements of Public Resources Code Section 21081.6.



**Table 1  
 MITIGATION MONITORING AND REPORTING CHECKLIST**

Mitigation Number	Mitigation Measure	Implementation Responsibility	Timing	Monitoring Responsibility	Timing	VERIFICATION OF COMPLIANCE		
						Initials	Date	Remarks
<b>AESTHETICS</b>								
AES-1	<p>Prior to issuance of a precise grading permit for the project, the applicant shall submit a photometric plan to the Development Services Department for review and approval. The plan shall specify the following:</p> <p>a. The lighting type and placement to ensure that the effects of security lighting are limited as a means of minimizing night lighting and the associated impacts to aesthetics. All light fixtures will use glare-control visors, arc tube suppression caps, and will use a photometric design that maintains 70 percent of the light intensity in the lower half of the light beam.</p> <p>b. All interior floodlights, lighting and advertising (including signage), and other security lighting shall be directed away from adjacent uses and towards the specific location intended for illumination. All lighting shall be shielded to minimize</p>	Applicant	Final Plans and Specifications	Director of Development Services	Site Development Permit; Prior to Issuance of Occupancy Permit; Plan Check			



Mitigation Number	Mitigation Measure	Implementation Responsibility	Timing	Monitoring Responsibility	Timing	VERIFICATION OF COMPLIANCE		
						Initials	Date	Remarks
	<p>the production of glare and light spill off-site. Landscape illumination and exterior sign lighting shall be accomplished with low-level unobtrusive fixtures.</p> <p>The plan shall include the types and appearance of proposed residential light standards. (Source: OSA PEIR Mitigation Measure MM 3.1-1 to 3.1-4)</p>							
<b>AIR QUALITY</b>								
AQ-1	<p>Prior to issuance of any Grading Permit, the City Engineer and the Chief Building Official shall confirm that the Grading Plan, Building Plans and specifications stipulate that, in compliance with South Coast Air Quality Management District Rule 403, excessive fugitive dust emissions shall be controlled by regular watering or other dust prevention measures, as specified in the South Coast Air Quality Management District's Rules and Regulations. In addition, South Coast Air Quality Management District Rule 402 requires implementation of dust suppression techniques to prevent fugitive dust from creating a nuisance off-site. The following measures shall be implemented to reduce short-term fugitive dust impacts on nearby sensitive receptors:</p>	Applicant and Contractor	Prior to Finalization of Grading Plans, Building Plans, and Specifications; During Construction	City Engineer and the Chief Building Official or Designee	Prior to Finalization of Grading Plans, Building Plans, and Specifications; Field Inspections During Construction			



Mitigation Number	Mitigation Measure	Implementation Responsibility	Timing	Monitoring Responsibility	Timing	VERIFICATION OF COMPLIANCE		
						Initials	Date	Remarks
	<ul style="list-style-type: none"> <li>• All material excavated or graded shall be sufficiently watered to prevent excessive amounts of dust; watering, with complete coverage, shall occur at least twice daily, preferably in the late morning and after work is done for the day;</li> <li>• Water trucks shall be utilized on the site and shall be available to be used throughout the day during site grading to keep the soil damp enough to minimize dust being raised by the construction operations;</li> <li>• Replace ground cover in disturbed areas as quickly as possible;</li> <li>• On-site vehicle speed shall be limited to 15 miles per hour;</li> <li>• All on-site roads shall be paved as soon as feasible or watered periodically or chemically stabilized;</li> <li>• All material transported off-site shall be sufficiently watered and securely covered to prevent excessive amounts of dust prior to departing the job site. All trucks hauling dirt, sand, soil, or other</li> </ul>							



Mitigation Number	Mitigation Measure	Implementation Responsibility	Timing	Monitoring Responsibility	Timing	VERIFICATION OF COMPLIANCE		
						Initials	Date	Remarks
	<p>loose materials are to be covered or should maintain at least two feet of freeboard (i.e., minimum vertical distance between top of the load and the top of the trailer), in accordance with Section 23114 of the California Vehicle Code;</p> <ul style="list-style-type: none"> <li>• Install wheel washers where vehicles enter and exit unpaved roads onto paved roads, or wash off trucks and any equipment leaving the site each trip on a gravel surface to prevent dirt and dust from impacting the surrounding areas;</li> <li>• All delivery truck tires shall be watered down and scraped down prior to departing the job site;</li> <li>• Visible dust beyond the property line which emanates from the project shall be minimized to the extent feasible;</li> <li>• Suspend all excavating and grading operations when wind speeds (as instantaneous gusts) exceed 25 miles per hour over a 30-minute period; and</li> <li>• Sweep streets at the end of the day.</li> </ul>							



Mitigation Number	Mitigation Measure	Implementation Responsibility	Timing	Monitoring Responsibility	Timing	VERIFICATION OF COMPLIANCE		
						Initials	Date	Remarks
AQ-2	<p>The following measures shall be implemented during construction to substantially reduce NO<sub>x</sub> related emissions. They shall be included in the Grading Plan, Building Plans, and contract specifications. Contract specification language shall be reviewed by the City prior to issuance of a grading permit. Reductions in particulate emissions shall also be realized from the implementation of these measures as well as Mitigation Measure AQ-1.</p> <ul style="list-style-type: none"> <li>• Off-road diesel equipment operators shall be required to shut down their engines rather than idle for more than five minutes, and shall ensure that all off-road equipment is compliant with the CARB in-use off-road diesel vehicle regulation and SCAQMD Rule 2449.</li> <li>• The following note shall be included on all grading plans: "During construction activity, the contractor shall utilize California Air Resources Board (CARB) Tier III certified equipment or better for all on-site construction equipment according to the following:               <ul style="list-style-type: none"> <li>- January 1, 2012 to December 31, 2014: All off-road diesel</li> </ul> </li> </ul>	Applicant and Contractor	Prior to Finalization of Grading Plans, Building Plans, and Specifications; During Construction	City Engineer and the Chief Building Official or Designee	Prior to Finalization of Grading Plans, Building Plans, and Specifications; Prior to Issuance of a Grading Permit Field Inspections During Construction			



Mitigation Number	Mitigation Measure	Implementation Responsibility	Timing	Monitoring Responsibility	Timing	VERIFICATION OF COMPLIANCE		
						Initials	Date	Remarks
	<p>powered construction equipment greater than 50 hp shall meet Tier 3 off-road emissions standards. In addition, all construction equipment shall be outfitted with the BACT devices certified by CARB. Any emissions control device used by the contractor shall achieve emissions reductions that are no less than what could be achieved by a Level 3 diesel emissions control strategy for a similarly sized engine as defined by CARB regulations.</p> <ul style="list-style-type: none"> <li>- Post-January 1, 2015: If applicable, all off-road diesel-powered construction equipment greater than 50 hp shall meet the Tier 4 emission standards where available and commercially feasible.</li> <li>- A copy of each unit's certified tier specification, BACT documentation, and CARB or SCAQMD operating permit shall be provided to the City at the time of mobilization of each applicable unit of equipment.</li> </ul>							





Mitigation Number	Mitigation Measure	Implementation Responsibility	Timing	Monitoring Responsibility	Timing	VERIFICATION OF COMPLIANCE		
						Initials	Date	Remarks
	<ul style="list-style-type: none"> <li>• The contractor and applicant, if the applicant's equipment is used, shall maintain construction equipment engines by keeping them tuned and regularly serviced to minimize exhaust emissions.</li> <li>• Use low sulfur fuel for stationary construction equipment. This is required by SCAQMD Rules 431.1 and 431.2.</li> <li>• Utilize existing power sources (i.e., power poles) when available. This measure would minimize the use of higher polluting gas or diesel generators.</li> <li>• Configure construction parking to minimize traffic interference.</li> <li>• Minimize obstruction of through-traffic lanes and provide temporary traffic controls such as a flag person during all phases of construction when needed to maintain smooth traffic flow. Construction shall be planned so that lane closures on existing streets are kept to a minimum.</li> <li>• Schedule construction operations affecting traffic for off-peak hours to the best extent when possible.</li> </ul>							



Mitigation Number	Mitigation Measure	Implementation Responsibility	Timing	Monitoring Responsibility	Timing	VERIFICATION OF COMPLIANCE		
						Initials	Date	Remarks
	<ul style="list-style-type: none"> <li>Develop a traffic plan to minimize traffic flow interference from construction activities (the plan may include advance public notice of routing, use of public transportation and satellite parking areas with a shuttle service.)</li> <li>Construction-related equipment, including heavy-duty equipment, motor vehicles, and portable equipment, shall be turned off when not in use for more than five minutes.</li> </ul>							
<b>BIOLOGICAL RESOURCES</b>								
BIO-1	Prior to the issuance of a grading permit, the Applicant shall conduct biological field surveys of the IRWD study area for Rayless raywort ( <i>Senecio aphanactis</i> ), a special status wildlife species that was not surveyed in the <i>Biological Reports</i> . Surveys shall be conducted in accordance with current California Department of Fish and Game (CDFG) or United States Fish and Wildlife Services (USFWS) survey protocols for the target species by a qualified biologist or botanist, in order to determine their presence or absence at the project site. (Source: OSA PEIR Mitigation Measure MM 3.4-1)	Applicant	Prior to Issuance of a Grading Permit	Director of Development Services	Prior to Issuance of a Grading Permit			



Mitigation Number	Mitigation Measure	Implementation Responsibility	Timing	Monitoring Responsibility	Timing	VERIFICATION OF COMPLIANCE		
						Initials	Date	Remarks
BIO-2	<p>Prior to the issuance of a grading permit, the Applicant shall, in an area where a species or habitat is not covered by the Natural Community Conservation Plan/Habitat Conservation Plan (NCCP/HCP) has been identified, comply with the requirements of the Federal Endangered Species Act (FESA) or California Endangered Species Act (CESA), if applicable. If the species or habitat is not protected under FESA or CESA, but is otherwise protected through the Migratory Bird Treaty Act or other similar regulatory act requirement, the Applicant shall provide suitable replacement habitat at a minimum of 1:1, and shall prepare and submit a mitigation plan for City approval that demonstrates that the replacement habitat is protected in perpetuity and that appropriate long-term habitat management is provided. The mitigation plan shall be prepared in consultation with and receive the approval of the agency regulating the species or habitat (i.e., USFWS, CDFG, and the NCCP Non-Profit Corporation (i.e., Nature Reserve of Orange County (NROC))). The mitigation plan shall include the following, at minimum: detailed habitat impacts; mitigation acreage (1:1 ratio); mitigation location (i.e., where the proposed conservation or restoration will occur); the acreage of</p>	Applicant	Prior to Issuance of a Grading Permit	Director of Development Services	Prior to Issuance of a Grading Permit			



Mitigation Number	Mitigation Measure	Implementation Responsibility	Timing	Monitoring Responsibility	Timing	VERIFICATION OF COMPLIANCE		
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	conservation or restoration that will be conducted; and how many trees/plants will be planted or translocated (when mitigating impacts to trees or rare plants); a planting plan and seed mixes; five-year maintenance and monitoring plans; source(s) of long-term site funding; conservation easements (if any); biological monitoring during grading activities; and fencing of any habitat area that would not be disturbed by construction. (Source: OSA PEIR Mitigation Measure MM 3.4-3)							
BIO-3	<p>Prior to the issuance of a grading permit, the Applicant shall conform and comply with the applicable requirements of the Natural Community Conservation Plan and Habitat Conservation Plan (NCCP/HCP) for the County of Orange Central and Coastal Subregion, including the payment of the appropriate in-lieu fee, or existing IRWD non-reserve banked acreage as applicable, to mitigate for the loss of coastal sage scrub and any other NCCP/HCP covered habitat and species observed on the project site.</p> <p>For impacts to a Conditionally Covered Species (i.e., Southwestern willow flycatcher (<i>Empidonas traillii extimus</i>)), the Applicant shall prepare a mitigation plan. The mitigation plan shall be developed in coordination with USFWS, CDFG, and</p>	Applicant	Prior to Issuance of a Grading Permit	Director of Development Services	Prior to Issuance of a Grading Permit			



Mitigation Number	Mitigation Measure	Implementation Responsibility	Timing	Monitoring Responsibility	Timing	VERIFICATION OF COMPLIANCE		
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	<p>the NCCP Non-Profit Corporation (i.e., Nature Reserve of Orange County (NROC)), and approved by the USFWS. The mitigation plan shall, at minimum:</p> <ul style="list-style-type: none"> <li>• Address design modifications and other onsite measures that are consistent with the project's purposes, minimize impacts, and provide appropriate feasible protections;</li> <li>• Provide for compensatory habitat restoration/enhancement activities at an appropriate location (which may include land in the Reserve system or other open space) and which may include planting of riparian trees and shrubs and/or cowbird trapping;</li> <li>• Provide for monitoring and Adaptive Management of habitat, within the Reserve system including cowbird trapping, consistent with Chapter 5 of the NCCP/HCP.</li> </ul> <p>The Applicant shall also demonstrate to the satisfaction of the Director of Development Service compliance with the following NCCP/HCP construction impact avoidance measures or such</p>							



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	<p>measure in effect at the time of construction:</p> <ol style="list-style-type: none"> <li>To the maximum extent practicable, no grading of coastal sage scrub habitat that is occupied by nesting gnatcatchers shall occur during the breeding season (February 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 United States Fish and Wildlife Services/California Department of Fish and Game (USFWS/CDFG) with the maximum practicable notice (or such notice as is specified in the NCCP/HCP) to allow for capture of gnatcatchers, and any other coastal sage scrub Identified Species that are not otherwise flushed and shall carry out the following measures, to the extent practicable, in the context of</li> </ol>							



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	<p>the public health and safety considerations.</p> <p>2. Prior to the commencement of grading operations or other activities involving significant soil disturbance, all areas of coastal sage scrub habitat to be avoided under the provisions of the NCCP/HCP, shall be identified with temporary fencing or other markers clearly visible to construction personnel. Additionally, prior to the commencement of grading operations or shall be conducted to locate gnatcatchers 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.</p> <p>3. A monitoring biologist, acceptable to USFWS/CDFG will be on site during any clearing of coastal sage scrub. The landowner or relevant public agency/utility will advise USFWS/CDFG at least seven (7) calendar days (and preferably 14 calendar days) prior to the clearing of any habitat occupied by Identified Species to allow USFWS/CDFG to work with the monitoring biologist</p>							



Mitigation Number	Mitigation Measure	Implementation Responsibility	Timing	Monitoring Responsibility	Timing	VERIFICATION OF COMPLIANCE		
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	<p>in connection with bird flushing/capture activities. The monitoring biologist shall flush identified Species (avian or other mobile Identified Species) from occupied habitat areas immediately prior to brush-clearing and earth-moving activities. If birds cannot be flushed, they shall 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 shall be the responsibility of the monitoring biologist to assure that Identified 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.</p> <p>4. Following the completion of initial grading/earth movement activities, all areas of coastal sage scrub habitat to be avoided by construction equipment and personnel shall be marked with temporary fencing or other appropriate markers clearly visible to construction personnel. No construction access, parking, or storage of equipment or materials shall be permitted within such marked areas.</p>							





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	5. Coastal sage scrub identified in the 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. (Source: OSA PEIR Mitigation Measure MM 3.4-2)							
BIO-4	Prior to the approval of grading plans, the Applicant shall prepare an application for fill of waters subject to the Army Corps of Engineers (ACOE) jurisdiction. If appropriate, a streambed alteration agreement shall be obtained from California Department of Fish and Game (CDFG). The Applicant shall submit an application to the Regional Water Quality Control Board (RWQCB) for a waste discharge requirement or waiver of waste discharge requirement. The Applicant shall also consider any other permits from the ACOE, CDFG, RWQCB, or any other applicable regulatory agency that may be necessary. (Source: OSA PEIR Mitigation Measure MM 3.4-4)	Applicant	Prior to Approval of Grading Plans	Director of Development Services	Prior to Approval of Grading Plans			
BIO-5	To the extent feasible, all vegetation removal activities shall be scheduled outside the nesting season (typically February 15 to August 15) to avoid potential impacts to nesting birds. However, if initial vegetation removal occurs during the nesting season, all	Applicant	Prior to Issuance of a Grading Permit	Director of Development Services	Prior to Issuance of a Grading Permit			



Mitigation Number	Mitigation Measure	Implementation Responsibility	Timing	Monitoring Responsibility	Timing	VERIFICATION OF COMPLIANCE		
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	suitable habitat shall be thoroughly surveyed for the presence of nesting birds by a qualified biologist prior to commencement of clearing. If any active nests are detected, a buffer of at least 100 feet (300 feet for raptors) shall be delineated, flagged, and avoided until the nesting cycle is complete as determined by the biological monitor to minimize impacts. (Source: OSA PEIR Mitigation Measure MM 3.4.2)							
<b>CULTURAL RESOURCES</b>								
CUL-1	Prior to the issuance of a grading permit for any site within the project area, a qualified archaeologist shall be retained by the applicant for that grading permit to provide professional archaeological services. The archaeologist shall be present at the pre-grading conference to establish procedures for archaeological resource surveillance. Those procedures shall include provisions for temporarily halting or redirecting work permit sampling, identification, and evaluation of resources deemed by the archaeologist to potentially be historical resources or unique archaeological resources under CEQA. If, before grading, any portions of the property subject to the grading permit have been identified as sites, which may have such resources present and may be impacted by development, the archaeologist shall conduct a site survey	Applicant	Prior to Issuance of a Grading Permit; During Grading	Director of Development Services	Prior to Issuance of a Grading Permit; During Grading			



Mitigation Number	Mitigation Measure	Implementation Responsibility	Timing	Monitoring Responsibility	Timing	VERIFICATION OF COMPLIANCE		
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	and records search and such further examination as may be needed to assess the significance of the resources. If the archaeological resource is determined to be a unique archaeological resource, options for avoidance or preservation in place shall be evaluated and implemented if feasible. In the event that avoidance or preservation in place is infeasible and the archaeologist determines that the potential for significant impacts to such resources exists, a data recovery program shall be expeditiously conducted. The archaeologist also shall conduct on-site archaeological monitoring for the grading operation. Should historical resources or unique archaeological resources be discovered during the grading operation, grading activities shall be modified to allow expeditious and proper analysis and/or salvage of the resources. Disposition of the resources shall be within the discretion of the City of Lake Forest. (Source: OSA PEIR Mitigation Measure MM 3.5-1)							
CUL-2	The qualified archaeologist retained shall prepare monthly progress reports to be filed with the site developer(s) and the City of Lake Forest. (Source: OSA PEIR Mitigation Measure MM 3.5-2)	Applicant	During Grading	Director of Development Services	During Grading			



Mitigation Number	Mitigation Measure	Implementation Responsibility	Timing	Monitoring Responsibility	Timing	VERIFICATION OF COMPLIANCE		
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CUL-3	Artifacts recovered shall be prepared, identified, and cataloged before donation to the accredited repository designated by the City of Lake Forest. State of California Guidelines for the Curation of Archaeological Collections shall be consulted regarding the treatment of recovered artifacts. Any artifacts determined to be insignificant shall be offered to local schools for use in educational programs. (Source: OSA PEIR Mitigation Measure MM 3.5-3)	Applicant	During Grading	Director of Development Services	During Grading			
CUL-4	The qualified archaeologist retained shall prepare a final report to be filed with the site developer(s) and the City of Lake Forest. The qualified archaeologist retained shall prepare a final report to be filed with the site developer(s), the City of Lake Forest, and the South Central Coastal Information Center. The report shall include a list of specimens recovered, documentation of each locality, interpretation of artifacts recovered, and shall include all specialists' reports as appendices. (Source: OSA PEIR Mitigation Measure MM 3.5-4)	Applicant	After Grading	Director of Development Services	Prior to Issuance of an Occupancy Permit			



Mitigation Number	Mitigation Measure	Implementation Responsibility	Timing	Monitoring Responsibility	Timing	VERIFICATION OF COMPLIANCE		
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CUL-5	Prior to issuance of a grading permit, a qualified paleontologist shall be retained by the site developer(s) to provide professional paleontological services. Specifically, during grading activities, the qualified paleontologist shall conduct on-site paleontological monitoring for the project site. Monitoring shall include inspection of exposed surfaces and microscopic examination of matrix to determine if fossils are present. The monitor shall have authority to divert grading away from exposed fossils temporarily in order to recover the fossil specimens. Cooperation and assistance from on-site personnel shall be provided to assist timely resumption of work in the area of the fossil discovery. (Source: OSA PEIR Mitigation Measure MM 3.5-5)	Applicant	Prior to Issuance of a Grading Permit; During Grading	Director of Development Services	Prior to Issuance of a Grading Permit; During Grading			
CUL-6	The qualified paleontologist retained shall prepare monthly progress reports to be filed with the site developer(s) and the City of Lake Forest. (Source: OSA PEIR Mitigation Measure MM 3.5-6)	Applicant	During Grading	Director of Development Services	During Grading			
CUL-7	Fossils recovered shall be prepared, identified, and cataloged before donation to the accredited repository designated by the City of Lake Forest. (Source: OSA PEIR Mitigation Measure MM 3.5-7)	Applicant	During Grading	Director of Development Services	During Grading			



Mitigation Number	Mitigation Measure	Implementation Responsibility	Timing	Monitoring Responsibility	Timing	VERIFICATION OF COMPLIANCE		
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CUL-8	The qualified paleontologist retained shall prepare a final report to be filed with the site developer(s) and the City of Lake Forest. The report shall include a list of specimens recovered, documentation of each locality, interpretation of fossils recovered, and shall include all specialists' reports as appendices. (Source: OSA PEIR Mitigation Measure MM 3.5-8)	Applicant	During Grading	Director of Development Services	During Grading			
<b>GEOLOGY AND SOILS</b>								
GEO-1	Prior to approval of grading plans, the project shall adhere to geotechnical recommendations outlined in Chapter 4.0, General Recommendations, of the <i>Geotechnical Exploration Report</i> , prepared by Leighton and Associates, Inc., dated January 11, 2010. Recommendations shall be noted on project grading plans and building specifications for the proposed Tentative Tract Map and any future projects proposed within the Area Plan. Grading plans and building specifications shall be reviewed and approved by the Building Official. (Source: OSA PEIR, Legal Requirements for Geology, Soils and Mineral Resources)	Applicant	Prior to Approval of Grading Plans	Building Official or Designee	Prior to Approval of Grading Plans; Building Specifications			
<b>GREENHOUSE GASES</b>								
GHG-1	The proposed project shall include, but not be limited to, the following list of potential design features. These features shall be incorporated into the project design to ensure consistency with adopted statewide plans and programs. The	Applicant	Prior to Issuance of Building or Occupancy Permits	City Director of Development Services or Designee	Prior to Issuance of Building or Occupancy Permits			



Mitigation Number	Mitigation Measure	Implementation Responsibility	Timing	Monitoring Responsibility	Timing	VERIFICATION OF COMPLIANCE		
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	<p>project applicant shall demonstrate the incorporation of the following project design features prior to the issuance of building or occupancy permits as applicable.</p> <p><i>Transportation</i></p> <ul style="list-style-type: none"> <li>• Provide pedestrian connections to the off-site circulation network (building permit).</li> <li>• Implement a trip reduction program, for which all employees shall be eligible to participate (occupancy permit). This measure is not applicable to residential uses.</li> <li>• Provide a ride sharing program, for which all employees shall be eligible to participate (occupancy permit). This measure is not applicable to residential uses.</li> </ul> <p><i>Energy Efficiency</i></p> <ul style="list-style-type: none"> <li>• Design buildings to be energy efficient, 15 percent above Title 24 requirements (building permit).</li> <li>• The landscape plan shall utilize strategically placed trees that shall shade building walls, particularly those containing the most windows (building permit).</li> </ul>							



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	<ul style="list-style-type: none"> <li>• Install high efficiency lighting, and energy efficient heating and cooling systems (building permit).</li> <li>• Reduce unnecessary outdoor lighting (building permit).</li> </ul> <p><i>Water Conservation and Efficiency</i></p> <ul style="list-style-type: none"> <li>• Install water-efficient irrigation systems (building permit).</li> <li>• Comply with the landscape sustainability measures in the Sustainability Development Regulations of the <i>Serrano Summit Area Plan</i> (building permit).</li> <li>• Install low-flow faucets and toilets (building permit).</li> </ul> <p><i>Solid Waste</i></p> <ul style="list-style-type: none"> <li>• Reuse and recycle construction waste (including, but not limited to, soil, vegetation, concrete, lumber, metal, and cardboard) (building permit).</li> <li>• Provide interior and exterior storage areas for recyclables and adequate recycling containers located in public areas (occupancy permit).</li> </ul>							





Mitigation Number	Mitigation Measure	Implementation Responsibility	Timing	Monitoring Responsibility	Timing	VERIFICATION OF COMPLIANCE		
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<b>HAZARDS AND HAZARDOUS MATERIALS</b>								
HAZ-1	Prior to demolition activities, an asbestos survey shall be conducted by a qualified environmental professional to determine the presence or absence of asbestos. If present, asbestos removal shall be performed by a State-certified asbestos containment contractor in accordance with the Toxic Substance Control Act (TSCA), (15 U.S.C. Section 2601 et. seq.) Title 2 – Asbestos Hazard Emergency Response for handling asbestos. (Source: OSA PEIR, Legal Requirements for Hazards and Hazardous Materials)	Applicant	Prior to Demolition Activities/Site Disturbance	City Director of Development Services or Designee	Prior to Demolition Activities/Site Disturbance			
HAZ-2	If during demolition of the structures, paint is separated from the building material (e.g., chemically or physically), the paint waste shall be evaluated independently from the building material by a qualified environmental professional to determine its proper management. According to the Department of Toxic Substances Control, if paint is not removed from the building material during demolition (and is not chipping or peeling), the material may be disposed of as construction debris (a non-hazardous waste). The landfill operator shall be contacted in advance to determine any specific requirements they may have regarding the disposal of lead-based paint materials, if necessary. (Source: OSA PEIR, Legal Requirements for Hazards and Hazardous Materials)	Applicant	During Site Disturbance	City Director of Development Services or Designee	During Site Disturbance			



Mitigation Number	Mitigation Measure	Implementation Responsibility	Timing	Monitoring Responsibility	Timing	VERIFICATION OF COMPLIANCE		
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HAZ-3	Prior to issuance of a grading permit, soil sampling shall occur within the portions of the project site that have historically been utilized for agricultural purposes and may contain pesticide residues in the soil, as determined by a qualified Phase II specialist. The sampling shall determine if pesticide concentrations exceed established regulatory requirements and shall identify further site characterization and remedial activities, if necessary. (Source: OSA PEIR, Legal Requirements for Hazards and Hazardous Materials)	Applicant	Prior to Issuance of a Grading Permit	City Director of Development Services or Designee	Prior to Issuance of a Grading Permit			
HAZ-4	At least three business days prior to any lane closure, the construction contractor shall notify the Orange County Sheriff's Department (OCSD) and Orange County Fire Authority (OCFA), along with the Development Services Department, of construction activities that would impede movement (such as road or lane closures) along roadways immediately adjacent to the development area, to allow for uninterrupted emergency access and maintenance of evacuation routes. (Source: OSA PEIR MM 3.7-3)	Contractor	Three Business Days Prior to Lane Closure	City Development Services Director or Designee; Orange County Sheriff's Department; Orange County Fire Authority	Three Business Days Prior to Lane Closure			
<b>HYDROLOGY AND WATER QUALITY</b>								
HYD-1	All City landscape contractors and project developers shall be required, as part of their contract, to submit to the City a landscape design plan include the following elements:	Applicant	Prior to Issuance of a Building Permit	City Development Services Director or Designee	Prior to Issuance of a Building Permit			



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	<ul style="list-style-type: none"> <li>• Maximized use of climate-appropriate plant species with minimum water and fertilizer requirements;</li> <li>• Watering shall be kept to the minimum necessary to maintain new landscaping;</li> <li>• Drip irrigation shall be used only until the California friendly landscaping is established; and</li> <li>• Minimal use of fertilizers and pesticides. (Source: OSA PEIR Mitigation Measure MM 3.8-2)</li> </ul>							
HYD-2	Prior to the issuance of a grading permit, the Applicant shall be required to coordinate with the Nitrogen and Selenium Working Group in order to establish eligibility for the <i>de minimus</i> permit implemented by the Santa Ana Regional Water Quality Control Board. (Source: OSA PEIR Mitigation Measure MM 3.8-3)	Applicant	Prior to Issuance of a Grading Permit	City Development Services Director or Designee	Prior to Issuance of a Grading Permit			
HYD-3	Prior to the issuance of a grading permit, the Applicant shall develop appropriate Best Management Practices, such as a nutrient management program, to reduce the amount of nutrients entering the watershed (see San Luis Rey Watershed Urban Runoff Management Program <a href="http://www.projectcleanwater.org/html/wurmp_sanluis_rey.html">http://www.projectcleanwater.org/html/wurmp_sanluis_rey.html</a> for an example of a management program that	Applicant	Prior to Issuance of a Grading Permit	City Public Works Director or Designee	Prior to Issuance of a Grading Permit			



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	addresses nutrients). In addition, a pesticide management program shall be developed to the satisfaction of the City to reduce the amounts of pesticides entering the watershed through minimizing the use of pesticides and emphasizing non-chemical controls (see the City of San Francisco's Integrated Pest Management Program for example at <a href="http://www.sfgov.org/site/frame.asp?u=http://www.sfwater.org/">http://www.sfgov.org/site/frame.asp?u=http://www.sfwater.org/</a> ). These plans shall be approved by the City prior to issuance of a grading permit. (Source: OSA PEIR Mitigation Measure MM 3.8-4)							
<b>NOISE</b>								
NOI-1	<p>Prior to grading permit issuance, the construction contractor shall demonstrate, to the satisfaction of the City of Lake Forest Development Services Department, the following:</p> <ul style="list-style-type: none"> <li>• Construction contracts shall specify that all construction equipment, fixed or mobile, shall be equipped with properly operating and maintained mufflers and other State required noise attenuation devices.</li> <li>• Construction noise reduction methods such as shutting off idling equipment, maximizing the distance between construction equipment</li> </ul>	Contractor	Prior to Issuance of a Grading Permit	City Director of Development Services or Designee; City Public Works Director or Designee	Prior to Issuance of a Grading Permit			



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	<p>staging areas and nearby occupied uses, and use of electric air compressors and similar power tools, rather than diesel equipment, shall be used where feasible.</p> <ul style="list-style-type: none"> <li>• During construction, stationary construction equipment shall be placed such that emitted noise is directed away from sensitive noise receptors.</li> <li>• The construction contractor shall submit a haul plan to the City, and the City shall ensure the planned haul truck routes avoid residential areas to the extent feasible.</li> <li>• All construction entrances shall clearly post construction hours, allowable workdays, and the phone number of the job superintendent. This will allow surrounding owners to contact the job superintendent with concerns. If the contractor receives a justifiable noise-related complaint, appropriate corrective actions shall be implemented and a report taken indicating the action with a copy of the report provided to the reporting party upon request.</li> </ul>							



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	<ul style="list-style-type: none"> <li>Construction activities shall be prohibited between 8:00 PM and 7:00 AM the following day from Monday through Saturday, and no construction shall be permitted on Sundays and Federal holidays. Construction noise during the allowed construction time periods shall be exempt from the noise level provisions in the Noise Control Ordinance.</li> </ul> <p>(Source: as modified from OSA PEIR Mitigation Measure MM 3.10-1)</p>							
NOI-2	<p>The project applicant shall require by contract specifications that construction staging areas and earthmoving equipment shall be located as far away from occupied vibration and noise sensitive sites as possible (i.e., residential uses). Should construction activities take place within 25 feet of an occupied structure, a project specific vibration impact analysis shall be conducted. The vibration impact analysis shall provide measures for minimizing vibration impacts that exceed 85 VdB. Contract specifications shall be included in the proposed project construction documents, which shall be reviewed by the City prior to issuance of a grading permit. (Source: as modified from OSA PEIR Mitigation Measure MM 3.10-1)</p>	Applicant; Contractor	Contract Specifications	City Director of Development Services or Designee	Prior to Issuance of a Grading Permit			



Mitigation Number	Mitigation Measure	Implementation Responsibility	Timing	Monitoring Responsibility	Timing	VERIFICATION OF COMPLIANCE		
						Initials	Date	Remarks
<b>PUBLIC SERVICES</b>								
PUB-1	Prior to issuance of a grading permit, the site developers shall enter into a Secured Fire Protection Agreement with OCFA that shall ensure an adequate level of service is maintained in the City. (Source: as modified from OSA PEIR Mitigation Measure MM 3.12-2)	Site Developers	Prior to Issuance of Grading Permit	Orange County Fire Authority	Secured Fire Protection Agreement Prior to Issuance of a Grading Permit			



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