RESOLUTION NO. 11187

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ORANGE (A) CERTIFYING THE ADEQUACY OF FINAL ENVIRONMENTAL IMPACT REPORT 1857-18 (SCH NO. 2017031020) (B) ADOPTING FINDINGS OF FACT, (C) ADOPTING A STATEMENT OF OVERRIDING CONSIDERATIONS, (D) ADOPTING A MITIGATION MONITORING AND REPORTING PROGRAM, AND (E) IMPOSING OTHER PROJECT RELATED CONDITIONS FOR RELATED PROJECT ENTITLEMENTS FOR THE CONSTRUCTION OF 128 NEW DETACHED SINGLE-FAMILY RESIDENCES AND APPROXIMATELY 68.5 ACRES OF OPEN SPACE ON A SITE COMMONLY REFERRED TO AS SULLY MILLER, LOCATED AT 6145 EAST SANTIAGO CANYON ROAD, PREVIOUSLY IDENTIFIED AS 6118 EAST SANTIAGO CANYON ROAD.

WHEREAS, the applicant has submitted a project in accordance with requirements of the Municipal Code of the City of Orange and is known as the Trails at Santiago Creek Project which consists of Final Environmental Impact Report 1857-18, General Plan Amendment No. 2018-0001, Zone Change No. 1286-18, Development Agreement No. 0005-18, and adoption of the Trails at Santiago Creek Specific Plan, all of which are collectively referred to herein as the "Project"; and

WHEREAS, the Project, which by necessity includes Environmental Impact Report 1857-18 (SCH No. 2017031020), was filed in accordance with the provisions of the City of Orange Municipal Code; and

WHEREAS, the environmental impacts of the Project have been analyzed through Recirculated Draft Environmental Impact Report No. 1857-18, changes and revisions (Errata) to Recirculated Draft Environmental Impact Report 1857-18, the Response to Comments, technical appendices, and the Mitigation Monitoring Program, pursuant to the provisions of the California Environmental Quality Act (CEQA), local CEQA Guidelines, and the State CEQA Guidelines, a copy of which is on file with the Community Development Department of the City of Orange; and

WHEREAS, Recirculated Draft Environmental Impact Report No. 1857-18 was circulated for public review and comment within a State mandated 45-day public review period as required by CEQA, with a recirculated comment period that occurred between November 14, 2018 and ended on December 31, 2018; and

WHEREAS, responses to the comments received on Recirculated Draft Environmental Impact Report No. 1857-18 have been prepared to the satisfaction of the City; and

WHEREAS, the Planning Commission conducted duly advertised public hearings on July 15, 2019, and August 5, 2019, and adopted Planning Commission Resolution No. PC 07-19 which contains a recommendation that the City Council certify Final Environmental Impact Report No. 1857-18; and

WHEREAS, the City Council has reviewed Final Environmental Impact Report No. 1857-18; and

WHEREAS, the City Council conducted duly advertised public hearings on September 24, 2019 and October 22, 2019, at which time interested persons had an opportunity to testify either in support of or opposition to the Project, including Final Environmental Impact Report No. 1857-18; and

WHEREAS, at said public hearing, upon hearing and considering all testimony and arguments, if any, of all persons desiring to be heard, the City Council considered all factors relating to the proposed Project, including potential environmental impacts addressed in Final Environmental Impact Report No. 1857-18.

NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of Orange finds and declares as follows:

1. Final Environmental Impact Report No. 1857-18 for the Project has been completed in compliance with the California Environmental Quality Act, local CEQA Guidelines, and State CEQA Guidelines; and

2. Final Environmental Impact Report No. 1857-18 reflects the independent judgment and analysis of the City of Orange; and

3. Based on the information contained in Final Environmental Impact Report No. 1857-18, the City Council finds that the environmental impact report provides an adequate assessment of the potentially significant environmental impacts of the proposed project and required discretionary permits; and

4. The City Council adopts the Findings of Fact (Attachment A), the Statement of Overriding Considerations (Attachment B), and Other Conditions (Attachment C) attached hereto and incorporated by this reference, which documents and supports the conclusion that even with the implementation of all feasible mitigation measures recommended in Final Environmental Impact Report No. 1857-18, it is infeasible to reduce the project's impacts on air quality and transportation to a level of insignificance, and which further sets forth the overriding benefits of the project which outweigh the unavoidable environmental impact of the project. Therefore, the City Council finds that the project's benefits outweigh the adverse impacts; and

5. The City Council adopts the Mitigation Monitoring and Reporting Program (included in Final Environmental Impact Report No. 1857-18 and incorporated by this reference) as the mitigation monitoring and reporting program for the Project; and

6. Finds that the proposed development is below greenhouse gas (GHG) thresholds established by the State; and

7. Based on the forgoing, the City Council certifies Final Environmental Impact Report No. 1857-18, and approves the project.

ADOPTED this 22nd day of October 2019.

Mark A. Murphy, Mayor, City of Orange

ATTEST:

Pamela Coleman, City Clerk, City of Orange

11/4/2019
Date

STATE OF CALIFORNIA)
COUNTY OF ORANGE)
CITY OF ORANGE)

I, PAMELA COLEMAN, City Clerk of the City of Orange, California, do hereby certify that the foregoing Resolution was duly and regularly adopted by the City Council of the City of Orange at an adjourned regular meeting thereof held on the 22nd day of October 2019, by the following vote:

AYES:	COUNCILMEMBERS:	Alvarez, Murphy, Nichols, Monaco
NOES:	COUNCILMEMBERS:	None
ABSENT:	COUNCILMEMBERS:	None
ABSTAIN:	COUNCILMEMBERS:	None

Pamela Coleman, City Clerk, City of Orange

ATTACHMENT A
TO THE CITY COUNCIL RESOLUTION OF APPROVAL ADOPTING FINDINGS PURSUANT TO THE CALIFORNIA ENVIRONMENTAL QUALITY ACT
FINDINGS PURSUANT TO CEQA SECTION 21081

Trails at Santiago Creek Project

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FINDINGS AND FACTS IN SUPPORT OF FINDINGS FOR THE TRAILS AT SANTIAGO CREEK PROJECT CITY OF ORANGE, CA STATE CLEARINGHOUSE NO. 2017031020

I. STATUTE AND GUIDELINES

The California Environmental Quality Act (CEQA), Public Resources Code Section 21081 and Section 15091 of Title 14 of the California Code of Regulations (CEQA Guidelines), provide that:

(a) No public agency shall approve or carry out a project for which an EIR has been certified which identifies one or more significant environmental effects of the project unless the public agency makes one or more written findings for each of those significant effects, accompanied by a brief explanation of the rationale for each finding. The possible findings are:

(1) Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR. (Finding 1)

(2) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (Finding 2)

(3) Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the Final EIR. (Finding 3)

(b) The findings required by subsection (a) shall be supported by substantial evidence in the record.

Section 15092 of the State CEQA Guidelines further stipulates that:

(c) A public agency shall not decide to approve or carry out a project for which an EIR was prepared unless either:

(1) The project as approved will not have a significant effect on the environment, or

(2) The agency has:

(A) Eliminated or substantially lessened all significant effects on the environment where feasible as shown in findings under Section 15091, and

(B) Determined that any remaining significant effects on the environment found to be unavoidable under Section 15091 are acceptable due to overriding concerns as described in Section 15093.

The City of Orange, as lead agency, prepared a Final Environmental Impact Report (EIR) for the Trails at Santiago Creek Project, State Clearinghouse No. 2017031020. The Project proposes the development of 128 single family residences and 68.5 acres of open space on an approximately 109.2 acre site, and is described in greater detail in Section III, Project Description, below.

The EIR for the Project has been prepared and certified as complete by the City of Orange. The EIR identifies certain significant effects that may occur as a result of the Trails at Santiago Creek Project alone or on a cumulative basis in conjunction with other past, present, and reasonably foreseeable future projects. These Findings are made pursuant to CEQA Section 21081 and CEQA Guidelines Section 15091.

II. RECORD OF PROCEEDINGS

The environmental review process for the Project is summarized below.

1. In accordance with CEQA, a Notice of Preparation (NOP) of a Draft EIR was issued on March 3, 2017 and received by the State Clearinghouse on March 7, 2017. The State Clearinghouse assigned State Clearinghouse Number 2017031020.

2. The NOP was distributed to the State Clearinghouse, responsible agencies, and other interested parties for a 30-day public review in accordance with CEQA Guidelines Section 15082. The review period began on March 3, 2017 and ended on April 3, 2017.

3. The City of Orange distributed the NOP to all property owners within 300 feet of the Project site, which notified nearby property owners that would be most directly affected by implementation of the proposed Project, along with public agencies and interested organizations, that the City was preparing a Draft EIR.

4. In accordance with CEQA Guidelines Section 15083, the City of Orange sought early public consultation and held a scoping meeting to solicit comments from interested parties on preparation of the Draft EIR. The scoping meeting was held on March 16, 2017.

5. A Draft EIR was prepared on February 23, 2018.

6. In accordance with CEQA Guidelines Section 15085, a Notice of Completion (NOC) of the Draft EIR was filed with the State Clearinghouse in February 2018.

7. In accordance with CEQA Guidelines Section 15087, a Notice of Availability (NOA) was published by the City for an NOA comment period between November 14, 2018 and December 31, 2018. The Draft EIR was distributed to agencies,

interested organizations, and individuals by the City of Orange. The distribution list is available at the City of Orange Community Development Department Planning Counter. As required by CEQA Guidelines Section 15087, the NOA was mailed to the last known name and address of all organizations and individuals who previously requested such notice in writing; and notice was also given by the following procedure: newspaper publishing and mail.

8. A forty-five (45) day public review period for the Draft EIR was established pursuant to State law, which commenced on February 23, 2018 and ended on April 9, 2018.

9. A Recirculated Draft EIR was prepared on November 14, 2018.

10. In accordance with CEQA Guidelines Section 15085, a Notice of Completion (NOC) of the Recirculated Draft EIR was filed with the State Clearinghouse on November 9, 2018.

11. In accordance with CEQA Guidelines Section 15087, a Notice of Availability (NOA) was published by the City on November 14, 2018. The Recirculated Draft EIR was distributed to agencies, interested organizations, and individuals by the City of Orange. The distribution list is available at the City of Orange Community Development Department Planning Counter. As required by CEQA Guidelines Section 15087, the NOA was mailed to the last known name and address of all organizations and individuals who previously requested such notice in writing; and notice was also given by the following procedure: newspaper publishing and mail.

12. A forty-five (45) day public review period for the Recirculated Draft EIR was established pursuant to State law, which commenced on November 14, 2018 and ended on December 31, 2018.

13. Comments received during the public review period for the Recirculated Draft EIR were responded to in a Response to Comments document and distributed to each public agency commenter at least 10 days prior to certification of the EIR by the Orange City Council pursuant to CEQA Guidelines Section 15088(b), and were provided to each organization and individual submitting written comments on the Recirculated Draft EIR. Pursuant to CEQA Guidelines Section 15088.5(f)(1), a summary of revisions made to the DEIR is included in the FEIR; also, pursuant to that Guideline, responses to comments are limited to comments received on the RDEIR, although comments on the DEIR will be part of the administrative record.

14. A Final EIR has been prepared for the Trails at Santiago Creek Project.

The following components comprise the Final EIR:

a) Draft EIR, February 23, 2018;
b) Comments received on the Draft EIR, April 9, 2018;
c) Recirculated Draft EIR, November 2018;

d) Comments received on the Recirculated Draft EIR and responses to those comments, June 2019; and

e) All attachments, incorporations, and references to the documents delineated in items "a." through "d." above.

15. The documents and other materials which constitute the administrative record for the City's actions related to the Project are located at the City of Orange, 300 East Chapman Avenue, Orange, California 92866. The City Community Development Department is the custodian of the administrative record for the Project.

The City of Orange is the Lead Agency with respect to the Project pursuant to State CEQA Guidelines Section 15367. As a Lead Agency, the City is required by CEQA to make findings with respect to each significant effect of the Project.

The City of Orange has reviewed the EIR. The following sections make detailed findings with respect to the potential significant environmental effects of the Trails at Santiago Creek Project and refer, where appropriate, to the mitigation measures set forth in the Final EIR.

The Final EIR and the administrative record concerning the Trails at Santiago Creek Project provide additional facts in support of the findings herein. The Final EIR (which includes, among other components, the Draft EIR, Recirculated Draft EIR, and the Response to Comments on the Recirculated Draft EIR) is hereby incorporated into these Findings in its entirety. Furthermore, the mitigation measures set forth in the Mitigation Monitoring and Reporting Program (MMRP) are incorporated by reference in these Findings. The Mitigation Monitoring and Reporting Program was developed in compliance with Public Resources Code Section 21081.6 and is contained in a separate document. Without limitation, these Findings of Fact are intended to elaborate on the scope and nature of mitigation measures, the basis for determining the significance of impacts, the comparative analysis of alternatives, and the reasons for approving the Trails at Santiago Creek Project in spite of associated significant unavoidable adverse impacts.

III. PROJECT DESCRIPTION

The site is approximately 109.2 acres and is located north of the intersection of Santiago Canyon Road and Nicky Way in the City of Orange. The site contains disturbed land that supports a grandfathered sand and gravel operation, as well as undeveloped land. The project site is comprised of 12 parcels and is bisected by Santiago Creek in an east-west direction. The site contains gently sloping terrain, with an overall change in elevation from 456 feet above mean sea level in the northeast corner to 344 feet above mean sea level in the southwest corner. An approximately 10-acre, semi-oval-shaped raised pad is located in the eastern portion of the site. The pad sits roughly 15 feet higher than the former mining area to the west.

Approximately 40 acres between Santiago Creek and East Santiago Canyon Road contains remnants of the mining operation and is the location of the ongoing sand and gravel operation. This area is characterized by soil piles, berms, and unpaved roads. Adjacent to

East Santiago Canyon Road is an approximately 5-acre area that supports a materials recycling operation that included apparatus for the crushing of boulders, bricks, rocks, and similar materials for recycling. Materials used for these operations originated primarily from off-site sources, and the materials generated by these operations have historically been used both on-site and transported off-site. Ancillary uses included administration and maintenance buildings, caretaker residence, material testing laboratory, driver's shack, rock crushing facilities, several aboveground and belowground fuel storage tanks, and two hot-mix asphalt plants.

Milan REI X LLC (Applicant) proposes 128 single-family residences on 40.7 acres on the southern portion of the site and open space on 68.5 acres of the site. The single-family homes would be detached and would range in size from 8,000 square feet to greater than 10,000 square feet.

The majority of the project site (62.7 percent) is intended for the enhancement and preservation of the natural greenway/open space and Santiago Creek environs, as well as re-establishing open grasslands in areas that have been denuded by the project site's history of commercial operations, totaling approximately 68.5 acres. Recreational trails will provide public access to the enhanced revegetated interior of the site.

IV. ADOPTION OF FINDINGS

In this action, the City is certifying Final EIR SCH No. 2017031020. Having received, reviewed and considered the Final EIR and other information in the administrative record, the City adopts the Findings and Statement of Overriding Considerations below in compliance with CEQA, the CEQA Guidelines, and the City's procedures for implementing CEQA. The City certifies that its Findings are based on full appraisal of all viewpoints, including all comments received up to the date of adoption of these Findings, concerning the environmental impacts identified and analyzed in the Final EIR, and are supported by substantial evidence. The City adopts these Findings and Statement of Overriding Considerations in conjunction with its approval of the Project.

V. DISCRETIONARY APPROVALS

Final EIR SCH No. 2017031020 for the Trails at Santiago Creek Project identified (1) impacts that will have no impact or a less than significant impact on the environment; (2) potentially significant impacts that will be reduced to less than significant through implementation of project design features; (3) impacts that are potentially significant prior to mitigation that will be mitigated to a less than significant level; and (4) significant environmental impacts after implementation of mitigation that will occur as a result of implementing the Project. Thus, in accordance with the provisions of CEQA, the Orange City Council hereby adopts these findings as part of its action to certify Final EIR SCH No. 2017031020 and approve the Trails at Santiago Creek Project.

The Project addressed in the Final EIR is defined to include the "whole of an action, which has a potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment," and includes

discretionary approvals by governmental agencies required to implement the Trails at Santiago Creek Project. The following are the discretionary approvals that will be considered by the City:

1. General Plan Amendment No. 2018-0001;
2. Zone Change 1286-18, Trails at Santiago Creek Specific Plan;
3. Development Agreement No. 0005-18;
4. Environmental Impact Report 1857-18.

VI. FINDINGS REGARDING IMPACTS

A. ENVIRONMENTAL IMPACTS DETERMINED TO HAVE NO IMPACT OR A LESS THAN SIGNIFICANT IMPACT

1. Aesthetics

Impact Thresholds:

Threshold AES-1: Would the project have a substantial adverse effect on scenic vista?

Threshold AES-2: Would the project substantially degrade the existing visual character or quality of the site and its surroundings?

Finding: The discussion and analysis provided in the EIR concluded that the Project would have a Less Than Significant Impact on both short-term and long-term aesthetic impacts described under Threshold AES-1 and Threshold AES-2 that were addressed in the EIR, and that no Project Design Features, Standard Conditions of approval, or mitigation measures were required or recommended.

Facts in Support of the Finding: No potential impacts would result from short-term construction activities or long-term operational activities. The only portion of the site that could be considered a scenic vista would be the Santiago Creek Trail along the north bank of Santiago Creek. A greenway would be established along the creek corridor and the undeveloped land along the north bank of the creek would be permanently protected as open space. Thus, scenic views from the Santiago Creek Trail would not be affected by the Project.

While development of the residences onsite would change the character of approximately 40.7 acres of the project site to residential uses, and the remaining acreage to open space and recreation, these uses would be compatible with surrounding uses and City policies.

The project's impacts would be less than significant.

As noted in Section 7 of the EIR, Effects Found Not To Be Significant, the nearest officially designated State Scenic Highway to the site is approximately 5 miles to the north and no impacts would occur regarding scenic resources within view of a State Scenic Highway.

2. Agricultural and Forest Resources

Impact Thresholds:

Threshold AFR-1: Would the project convert Important Farmland to non-agricultural use?

Threshold AFR-2: Would the project conflict with an existing agricultural zoning, agricultural use or with land subject to a Williamson Act contract?

Threshold AFR-3: Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Govt. Code section 51104(g))?

Threshold AFR-4: Would the project result in the loss of forest land or conversion of forest land to non-forest use?

Threshold AFR-5: Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of agricultural land to non-agricultural use or forest land to non-forest use?

Finding: The discussion and analysis provided in the Final EIR conducted for the proposed Project indicated that impacts to agricultural or forest resources would be less than significant. No comments were received in response to the NOP or the Recirculated Draft EIR that would modify this finding.

Facts in Support of Finding: The project site is mapped as containing "Other Land" by the California Department of Conservation Farmland Mapping and Monitoring Program, which is a non-agricultural land use designation. The project site does not support agricultural land use activities and is not eligible for a Williamson Act contract. The zoning for the site is a non-agricultural zoning district. The project would rezone the property to Specific Plan, which would not accommodate agriculture. The project site is not currently zoned for forest land, timberland, or timberland production.

There are 323 trees on the project site; however, the trees do not meet the Public Resources Code criteria for "timberland" or "forest land." Tree removal would not result in conversion of timberland to non-timber use or forest land to non-forest use. Neither the project site nor surrounding land uses support agricultural land or timberland. Impacts would be less than significant.

3. Air Quality

Impact Thresholds:

Threshold AIR-5: Would the project create objectionable odors affecting a substantial number of people?

Finding: The discussion and analysis provided in the EIR concluded that the Project would have a Less Than Significant Impact on odors as described in Thresholds AIR-5 that were addressed in the EIR, and that no Project Design Features, Standard Conditions of approval, or mitigation measures were required or recommended.

Facts in Support of the Finding: During construction, various diesel-powered vehicles and equipment onsite would create localized odors. These odors would be temporary and would unlikely be noticeable beyond the site's boundaries. Impacts during construction would be less than significant. During project operation, odors would primarily consist of vehicles traveling to the urban linear park and equipment for landscaping and maintenance. These occurrences would not produce a significant amount of odors; therefore, impacts would be less than significant.

4. Biological Resources

Impact Thresholds:

Threshold BIO-5 *Would the project interfere with fish or wildlife movement?*

Threshold BIO-6 *Would the project conflict with local biological ordinances or policies?*

Threshold BIO-7: *Would the project conflict with any applicable habitat conservation plan or natural communities conservation plan?*

Finding: The discussion and analysis provided in the EIR concluded that the Project would have a Less Than Significant Impact on biological resource impacts described under Thresholds BIO-5, BIO-6, and BIO-7 that were addressed in the EIR, and that no Standard Conditions of approval or mitigation measures were required or recommended. Design features that are part of the project are listed below.

Facts in Support of the Finding: Santiago Creek does not support fish passage because of downstream obstructions including the presence of Santiago Creek Recharge Basin. The project is not anticipated to contribute to avian mortality due to bird strikes resulting from structures because there is already residential development surrounding the creek in all directions and the project does not include high-rise urban buildings.

The project site contains 204 trees. Of those trees, nine are within the fuel modification beyond the limits of grading and subject to thinning but will be left in place. Two trees are within the storm drain outlet footprint and one is within the temporary construction buffer. The City's Tree Preservation Ordinance requires the Applicant to identify the location of trees and for City staff to impose conditions. Removed trees would be conditioned on replacement at a minimum of 1:1 ratio. Impacts would be less than significant.

The site is within the boundaries of the Orange County Central and Coastal Subregion NCCP/HCP. The Santiago Creek corridor and upland areas north of the creek contain riparian habitat; however, these areas are proposed to be preserved. The surface mining

areas onsite do not contain significant biological habitat and would not cause conflicts with the NCCP/HCP. Impacts would be less than significant.

5. Geology and Soils

Impact Thresholds:

Threshold GEO-3: *Would the proposed project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the proposed project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?*

Threshold GEO-4: *Would the proposed project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?*

Finding: The discussion and analysis provided in the EIR concluded that the Project would have a Less Than Significant Impact on short-term and long-term geology and soils impacts described under Thresholds GEO-3 and GEO-4 that were addressed in the EIR, and that no Project Design Features, Standard Conditions of approval, or mitigation measures were required or recommended.

Facts in Support of the Finding: The project site is underlain by terraces and alluvial fans near Santiago Creek, which are considered stable. The project would be required to comply with mandatory building code standards to ensure that there is no risk of failure due to unstable geologic units or soils. Impacts would be less than significant.

The project site is underlain by soils with low clay content. These soils do not retain water such that there would be substantial shrink-swell potential. Building code compliance with reduce any risks. Impacts would be less than significant.

As noted in Section 7 of the EIR, Effects Found Not To Be Significant, the project would be served by sanitary sewer provided by Orange County Sanitation District; no septic or alternative wastewater disposal system would be used and no impacts would occur.

6. Greenhouse Gas Emissions

Impact Thresholds

Threshold GHG-1 *Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?*

Threshold GHG-2: *Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?*

Finding: The discussion and analysis provided in the EIR concluded that the Project would have a Less Than Significant Impact on short-term and long-term impacts under Threshold GHG-1 and GHG-22, and that no Project Design Features, Standard Conditions of approval, or mitigation measures were required or recommended.

Facts in Support of Finding: The project would generate a total of 469 MT CO2e during construction (amortized over 30 years) and a total of 1,921 MT CO2e per year during operation of the project, primarily due to energy and mobile source emissions. The applicable SCAQMD threshold is 3,500 MT CO2e per year. The project's emissions would not exceed the threshold. Impacts would be less than significant.

The Project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions. The proposed Project would utilize equipment compliant with state and federal emissions requirements, such as equipment with Tier 4 engines, and adhere to AB 32 Scoping Plan control measures adopted by the State of California during construction and operation. The proposed Project would also be consistent with the RTP/SCS because the Project is consistent with existing general plan and zoning designations for the Project site and consistent with General Plan policies. Consistency with SCAQMD GHG policies would also be met through consistency with the City General Plan and through Project emission levels below the 3,500 MT CO2e/year SCAQMD threshold. Therefore, a less than significant impact would occur and no mitigation is required. The proposed Project would be consistent with the GHG reduction goals of AB32 as described in the statewide GHG emissions reduction strategy outlined in the Scoping Plan. In addition, GHG emissions would be reduced through the integration of green building practices, the use of renewable energy, reducing per capita water use, adoption of a new low carbon fuel standard and through increased fuel efficiency as mandated in AB 32 and related programs adopted by the State of California.

7. Hazards and Hazardous Materials

Impact Thresholds

Threshold HAZ-1: *Would the project create a significant hazard to the public or the environment through the routine transport, use or disposal of hazardous materials?*

Threshold HAZ-3: *Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?*

Finding: The discussion and analysis provided in the EIR concluded that the Project would have a Less Than Significant Impact under Thresholds HAZ-1 and HAZ-3, and that no Project Design Features, Standard Conditions of approval, or mitigation measures were required or recommended.

Facts in Support of Finding: Removal and disposal of hazardous materials from the site would be conducted by a licensed contractor in compliance with all applicable laws, policies, and programs. During operation of the project, hazardous materials would be

limited to materials used for daily residential maintenance and operational activities. Impacts would be less than significant.

The project site is located within 0.25 miles of Salem Lutheran Church and School. None of the proposed uses would involve the routine use of hazardous materials near the school. Moreover, the proposed use would not involve activities that routinely emit toxic air contaminants. Impacts would be less than significant.

As noted in Section 7 of the EIR, Effects Found Not To Be Significant, no impacts to airports or private airstrips would occur because the site is 10 miles from the nearest airport and there are no private airstrips in the vicinity.

8. Hydrology and Water Quality

Impact Thresholds:-

Threshold HYD-2: Would the project contribute to groundwater overdraft or impair groundwater recharge?

Threshold HYD-3: Would the project contribute runoff to downstream storm drainage facilities that would result in the potential for flooding?

Threshold HYD-4: Would the project place housing or structures within a 100-year flood hazard area?

Finding: The discussion and analysis provided in the EIR concluded that the Project would have a Less Than Significant Impact under Thresholds HYD-2 through HYD-4 that no Project Design Features, Standard Conditions of approval, or mitigation measures were required or recommended.

Facts in Support of Finding: The Project's water demand would represent a very small percent of total groundwater supply and due to OCWD's groundwater management efforts, impacts on groundwater resources would be less than significant. No infiltration for groundwater recharge will be promoted onsite and incidental infiltration will occur on landscaped areas. The project will not interfere with groundwater recharge efforts.

The project's storm drainage system would slow, reduce, and meter the volume of runoff leaving the site. Downstream facilities would not be inundated with project-related stormwater. The project would not affect two unnamed storm drains in the northwestern portion of the site. Impacts would be less than significant.

The majority of the residential uses will be outside the 100-year flood hazard areas. The onsite areas mapped within 500-year flood hazard areas are mostly open space areas; however, 15 acres of the residential area is within the 500-year flood hazard area. Only "critical facilities" are required to be above the 500-year flood elevation; residential uses are permitted in the 500-year flood elevation. Impacts would be less than significant and no mitigation is required.

As noted in Section 7 of the EIR, Effects Found Not To Be Significant, there are no large inland bodies of water near the site and the site is not susceptible to seiche inundation or tsunami inundation. The site does not contain any steep slopes that may be susceptible to mudflows. No impact regarding these potential hydrological hazards would occur.

9. Land Use

Impact Thresholds:

Threshold LUP-1: *Would the project conflict with any of the applicable provisions of the City of Orange General Plan?*

Threshold LUP-2: *Would the project conflict with any applicable provisions of the Orange Municipal Code?*

Threshold LUP-3: *Would the project conflict with any applicable habitat conservation plan or natural community conservation plan?*

Finding: The discussion and analysis provided in the EIR concluded that the Project would have a Less Than Significant Impact on the three land use impacts that were addressed in the EIR, and that no Project Design Features, Standard Conditions of approval, or mitigation measures were required or recommended.

Facts in Support of the Finding: The project would involve a General Plan Amendment and Zone Change. The proposed General Plan and zoning designations are consistent with the surrounding neighborhood. The project is consistent with General Plan policies and goals.

The project proposes development of 128 dwelling units on approximately 40.7 acres of the approximately 109.2 acre site, with varying lot sizes, including 82 lots of approximately 8,000 square feet, 17 lots of approximately 9,200 square feet, and 29 lots of approximately 10,000 square feet. Thus, the overall density of development on the site would be less than 1.2 dwelling units per acre. Considering only the residential portion of the project site, the density would be 3.1 dwelling units per acre. When considering the acreage of the residential area only, the density of the project (3.1 dwelling units per acre) would be on the low end of the General Plan's allowable density for the "low-density residential" designation, which is 2.1 to 6.0 units per acre. Although the General Plan provides a density range of 2.1-6.0 dwelling units per acre, it notes that the "expected" density for the low-density residential designation is 5.0 dwelling units per acre, which is substantially higher density than the proposed project's density.

The project proposes a zoning designation of single-family residential 8,000 square feet (referring to minimum lot area). The single-family neighborhood to the north of the site is similarly zoned low-density residential 8,000 square feet. The single-family neighborhood that forms the eastern boundary of the site ("The Reserve") is zoned estate low-density residential 40,000 square feet and has typical lot sizes of 20,000–44,000 square feet. Surrounding residential uses to the east have typical lot sizes less than 10,000 square feet. The neighborhoods south of the project site are zoned estate low density residential 40,000

square feet and estate low density residential 20,000 square feet. South of the project site, the Jamestown neighborhood has a typical lot size of 8,000–11,000 square feet, the Orange Park Acres neighborhood has a typical lot size of 50,000 square feet to 1 acre plus, the Eichler Homes neighborhood has a typical lot size of 7,600–12,000 square feet, and The Colony-South neighborhood has a typical lot size of 7,000–10,000 square feet. Refer to RDEIR Section 2, Project Description, Figures 2-5a through 2-5g for the existing lot sizes in surrounding neighborhoods.

The estate low-density residential designations have a density range of 0 to 2.0 dwelling units per acre. While the estate low-density residential neighborhoods have slightly lower densities than the project site, the project's density of 3.1 dwelling units per acre would be substantially similar to the density range of the estate low-density neighborhoods near the project site. In addition, the project would contain a substantial amount of open space, which would counterbalance the density of the residential component of the project. As noted above, while the density of the residential clustered component would be 3.1 dwelling units per acre, the overall density of the project would be less than 1.2 dwelling units per acre when considering the entire site (128 dwelling units on a 109.2-acre site).

The project site is currently designated "Resource Area," "Low Density Residential," and "Open Space" by the City of Orange General Plan. In accordance with the proposed project, the portion of the site north of Santiago Creek, currently designated as "Low Density Residential," is proposed to be re-designated as "Open Space" and the portion of the site currently designated as "Resource Area" is proposed to be re-designated to "Low Density Residential," and "Open Space." The "Resource Area" land use designation reflects the surface mining activities that occurred on the south side of Santiago Creek. General Plan Land Use Element, page LU-23, notes that the "Resource Area designation provides for the continued use of areas for mining and agriculture." The description for the Resource Area designation (General Plan Land Use Element, page LU-16) states that the designation "[a]llows for agricultural uses and continued use of stream and river channels for aggregate mining. Passive and active recreational uses are also permitted. May serve as a holding zone for future uses compatible with established and planned land uses in surrounding areas."

The project is also consistent with the East Orange General Plan and the Orange Park Acres Specific Plan, which will both be amended as part of the Project.

As the RDEIR concluded, the project is consistent with the OPA Plan and East Orange Plan. This consistency is discussed in RDEIR Section 3.10, Land Use, Table 3.10-3, showing the project would be consistent with the East Orange General Plan, and RDEIR Table 3.10-4, showing the project would be consistent with the OPA Plan.

The East Orange General Plan encompasses approximately 1,900 acres. Approximately 37 acres of the project site are located within the boundaries of the East Orange General Plan. While the East Orange General Plan does not outline goals and policies similar to contemporary general plans, the project is consistent with concepts identified in the East Orange General Plan. For example, the East Orange General Plan contains a concept that where possible, new development should be compatible with existing residential densities

and should maintain continuity with architectural style, house size, and price range. The project's residential area would have a density that is similar to or less dense than most nearby residential areas, including the Jamestown neighborhood, which is within the East Orange General Plan area. The East Orange General Plan envisions an "assortment of open space categories." Approximately 37 acres of the project site are located within the boundaries of the East Orange General Plan and are designated "Regional Park." While the project would amend the 37 acres that are within the East Orange General Plan, the 37 acres are approximately 2 percent of the East Orange General Plan area. Additionally, the proposed project includes 68.5 acres of open park space, split into 40.2 acres of Greenway Open Space/Santiago Creek Riparian Corridor and 28.3 acres of Grasslands Open Space. Therefore, the proposed project would include 68.5 acres of open space/park uses adjacent to, and partially within, the East Orange General Plan; creating more open space in the vicinity than the 37 acres of the project site that are within the East Orange General Plan.

The East Orange General Plan references design of the Santiago Creek Greenbelt in the project site area. The project would be consistent with the reference to the Greenbelt because it includes a 40.2-acre Greenway Open Space/Santiago Creek Riparian Corridor. The East Orange General Plan emphasizes pedestrian and equestrian movements between neighborhoods. The project would include a multitude of trails to connect the proposed project and existing community to existing and future trails and bike lanes. The project would also provide a sidewalk for pedestrians along the frontage of East Santiago Canyon Road where one does not currently exist. Lastly, the East Orange General Plan envisions a trail system to include equestrian/hiking trails and bike trails. As mentioned above, the project would include a multitude of trails to connect the project and existing community to existing and future trails and bicycle lanes for recreation and commuting purposes.

The OPA Plan encompasses approximately 1,794 acres, of which 39 acres are located on the project site. The project is consistent with the OPA Plan objectives and policies. For example, the OPA Plan contains an objective to provide a wholesome rural atmosphere emphasizing a quiet seclusion close to nature. The project would retain a wholesome rural atmosphere by separating the residential component of the project from adjacent residential developments by open space, emphasizing a quiet seclusion and closeness to nature and open space. The rural character of the site would also be maintained by inclusion of an equestrian trail system.

An objective of the OPA Plan is to foster compatible residential development within the area both visually and functionally. The project would comply because its residential area has a similar density to nearby residential neighborhoods, including the following neighborhoods located in the OPA Plan area: Broadmoor Homes, Leadership Housing Specific Plan, Pacesetter Homes, and a small portion of the Jamestown neighborhood. The OPA Plan envisions various areas to be linked through a system of trails and streetscape landscaping. Additionally, the project includes a sidewalk for pedestrians along the frontage on East Santiago Canyon Road where a sidewalk does not currently exist.

The OPA Plan promotes a "lifestyle" that allows for diversity of activities. The project would include residential uses, a multitude of trails, bicycle lanes, sidewalks, and equestrian trails. The project would serve a diversity of activities, from walking to

horseback riding. The OPA Plan seeks to preserve positive features of major drainage courses and bodies of water to utilize them for recreational purposes. The project proposes a 40.2 acre Greenway Open Space/Santiago Creek Riparian Corridor, and preserves the Handy Creek drainage area as greenspace. Approximately 39 acres of the project site are located within the boundaries of the OPA Plan and are designated as "Open Space." While the project would amend the approximately 39 acres that are within the OPA Plan, the 39 acres are approximately 3 percent of the OPA Plan total area, and are on the fringe of the OPA Plan area. Additionally, the project would include 68.5 acres of open park space, split into 40.2 acres of Greenway Open Space/Santiago Creek Riparian Corridor and 28.3 acres of Grasslands Open Space. Therefore, the project would include 68.5 acres of open space/park uses adjacent to, and partially within, the OPA Plan, thus creating more open space in the vicinity than the 39 acres of the project site that are within the OPA Plan area.

A policy of the OPA Plan is to provide for continuous trail linkages to connect trails to major land use elements and natural features. Another OPA Plan policy is to preserve Santiago Creek as a balanced ecological system and allow for light recreational use. The project would include a multitude of trails that would connect the proposed residential uses with existing and future trails and bicycle lanes. The project would promote light recreational use. In addition, the project would involve a 40.2 acre greenway along Santiago Creek and preservation of the Handy Creek drainage areas as greenspace. One of the OPA Plan policies is to phase out gravel pit operations to restore natural amenities. The project proposes residential and open space/recreational uses in place of the former mining operations.

A prominent policy of the OPA Plan in its residential designations is the concept of "clustering." The OPA Plan envisions "single-family attached and detached clusters referred to as "rural clusters" within a greenbelt or open space context" for medium-low density residential areas. The proposed project area encompasses approximately 109.2 acres, 68.5 acres of which would be dedicated to open space, and approximately 40.7 acres of which would contain a residential "cluster" of homes. The proposed site design would align with the OPA Plan concept of "clustering" and retaining open space areas near residential "clusters." Although the residential units are "clustered" on approximately 40 acres, each lot is being subdivided to meet the City's R-1-8 standards.

Lastly, one OPA Plan policy is to provide for landscaping, greenbelt, or open space buffers between housing types. The project would encompass approximately 109.2 acres, 68.5 acres of which would be dedicated open space. The project's residential area would be clustered as envisioned by the OPA Plan, and the density of the residential component would be similar to the density of nearby residential neighborhoods, including Jamestown, Mabury Ranch, Broadmoor Homes, Leadership Housing Specific Plan, and Pacesetter Homes. The separation of the project's residential area from existing residential development adjacent to the project site, achieved the by the proposed open space, would provide a quiet seclusion and closeness to nature, as envisioned by the OPA Plan. The rural aspect envisioned by the OPA Plan would be maintained, in part, by inclusion of an equestrian trail system. A list of the OPA Plan's goals, objectives, and policies, which the project is consistent with, is included in RDEIR Section 3.10, Land Use, as Table 3.10-4 (page 3.10-26 through page 3.10-28).

In fact, the Orange Park Acres Association previously supported a more intensive development on the project site in a letter dated May 28, 2003 and found it to be compatible with the OPA Plan. Orange Park Acres Association specifically found the more intensely developed project to be consistent with the clustering concept envisioned by the OPA Plan. Orange Park Acres Association has consistently supported a clustered residential concept. This earlier project included the development of a gated residential community with a maximum of 189 single-family homes on lots ranging from 8,000 to 22,000 square feet. The residential development was spread across most of the project site, including both the north and south sides of Santiago Creek encompassing approximately 83 acres. The remaining portion of the site consisted of approximately 26 acres of open space (approximately 31 percent of the site), which did not include a greenway aspect, unlike the proposed Trails of Santiago project. The current project includes less development and sets aside a larger area for open space.

The project site is within the boundaries of the Orange County Central and Coastal Subregion NCCP/HCP. The Santiago Creek corridor riparian habitat and the upland areas north of the creek contain Coastal Sage Scrub habitat, which will be preserved as open space. No conflicts with the NCCP/HCP would occur. Therefore, impacts to land use would be less than significant with Project implementation.

As noted in Section 7 of the EIR, Effects Found Not To Be Significant, the project site contains undeveloped land, remnants of past mining surface operations, and Santiago Creek. There are no dwelling units on the project site. This condition precludes the possibility of division of an established community.

10. Mineral Resources

Impact Thresholds:

Threshold MIN-1: *Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State?*

Threshold MIN-2 *Would the project result in the loss of availability of a local-important mineral resource recovery site delineated on a local general plan, specific plan, or other local land use plan?*

Finding: The discussion and analysis provided in the EIR concluded that the Project would have a Less Than Significant Impact on impacts for threshold MIN-1 and MIN-2 that were addressed in the EIR, and that no Project Design Features, Standard Conditions of approval, or mitigation measures were required or recommended.

Facts in Support of the Finding: The Project would not result in the loss of availability of a known mineral resource that would be of value to the region of the residents of the State. A permit pursuant to SMARA is not required because the mining operations ceased on the project site prior to January 1, 1976. The General Plan Amendment and Rezone would move the City designations associated with mining ("Resource Area" in the General Plan

and "Sand and Gravel Extraction" in the Zoning Ordinance). Impacts would be less than significant and no mitigation is required.

11. Noise

Impact Thresholds:

Threshold NOI-2: *Would the project expose persons to or generate excessive groundborne vibration or groundborne noise levels?*

Threshold NOI-3: *A substantial permanent increase in ambient noise levels in the project vicinity?*

Finding: The discussion and analysis provided in the EIR concluded that the Project would have a Less Than Significant Impact on impacts for Threshold NO1-2 and NOI-3 that were addressed in the EIR, and that no Project Design Features, Standard Conditions of approval, or mitigation measures were required or recommended.

Facts in Support of the Finding: The Project's construction would generate vibration, primarily during grading. However, vibration levels would be below the FTA threshold and impacts during construction would not be significant.

During operation, vibration levels would be slightly above the level of perception for a person sitting or lying down; however, vibration would be below FTA thresholds. Therefore, operational vibration would be less than significant.

Roadway noise impacts would increase noise in the vicinity of the site; however, no roadways would exceed the 75 dBA CNEL maximum noise exposure level and no roadways would exceed the City's residential or school noise standard of 65 dBA CNEL. Stationary noise levels would not case an increase above applicable standards. Impacts would be less than significant and no mitigation is required.

As noted in Section 7 of the EIR, Effects Found Not To Be Significant, the project site is 10 miles from the closest airport and persons would not be exposed to aviation noise. No impact would occur.

12. Population and Housing

Impact Thresholds:

Threshold POP-1: *Would the project induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?*

Finding: The discussion and analysis provided in the EIR concluded that the Project would have a Less Than Significant Impact on POP-1 addressed in the EIR, and that no Project

Design Features, Standard Conditions of approval, or mitigation measures were required or recommended.

Facts in Support of the Finding: The Project would develop 128 dwelling units, which would increase the City's population by 393 persons. This would represent less than a 1% increase relative to the City's 2016 population. Further, the project site is designated for residential use. This indicates the project site has been contemplated to support future population growth. Therefore, impacts would be less than significant with Project implementation.

As noted in Section 7 of the EIR, Effects Found Not To Be Significant, there are no dwelling units on the project site and no persons or housing would be displaced. No impacts would occur.

13. Public Services

Impact Thresholds:

Threshold PS-2: *Would the project result in a need for new or expanded police protection facilities?*

Threshold PS-3: *Would the project result in a need for new or expanded school facilities?*

Threshold PS-4: *Would the project result in a need for new or expanded park facilities?*

Threshold PS-5: *Would the project result in a need for new or expanded public facilities such as libraries?*

Finding: The discussion and analysis provided in the EIR concluded that the Project would have a Less Than Significant Impact on Thresholds PS-2 through PS-5 and no Project Design Features, Standard Conditions of approval, or mitigation measures were required or recommended.

Facts in Support of the Finding: The project would add 393 new residents to the City's population, which would result in a minor increase in calls for law enforcement services. The project site is approximately 4.6 miles from the Police Department headquarters. The Police Department provided written comments on the project indicating that payment of the Police Facility Development Fee required by the City's Municipal Code would offset the increase in police services attributable to the project. The City's Code requires design standards to be incorporated into new projects. The project would be required to comply with the City's Code and impacts would be less than significant.

The new residential population would add 64 new students to the School District. The school district assesses development fees to fund capital improvements to school facilities. Payment of fees is full and complete mitigation for impacts to school facilities. Impacts to schools would be less than significant.

The project would increase the demand for parks; however, it would also provide 68.5 acres of open space and recreational uses, which would offset the increased demand for parks because residents would be expected to use the open space and recreational facilities. Impacts would be less than significant.

The increase in population associated with the project would nominally increase demand for local libraries. However, such a nominal increase would not require construction or expansion of library facilities. Impacts would be less than significant.

14. Recreation

Impact Thresholds:

Threshold REC-1: *Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?*

Threshold REC-2: *Would the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?*

Finding: The discussion and analysis provided in the EIR concluded that the Project would have a Less Than Significant Impact on Thresholds REC-1 and REC-2, and no Project Design Features, Standard Conditions of approval, or mitigation measures were required or recommended.

Facts in Support of the Finding: Approval of the proposed Project would result in the construction of 128 dwelling units, which would increase demand for recreational facilities. The project would provide 68.5 acres of open space and recreational uses, including active use facilities and passive use areas. This provision would be expected to offset the increased demand for park facilities because future residents would be expected to use facilities closest to where they live. The project would not result in off-site construction of new or expanded existing park facilities. Impacts associated with construction of recreational facilities have been evaluated throughout the RDEIR. Therefore, impacts would be less than significant and no mitigation is required.

15. Transportation and Traffic

Impact Thresholds:

Threshold TRANS-1: *Would the project conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system under Existing With Project Traffic Conditions?*

Threshold TRANS-3: *Would the project conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system under Year 2040 Traffic Conditions?*

Threshold TRANS-4: Would the project conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?

Threshold TRANS-6: Would the project result in inadequate emergency access?

Threshold TRANS-7: Would the project conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

Finding: The discussion and analysis provided in the EIR concluded that the Project would have a Less Than Significant Impact on impacts for Threshold TRANS-1, TRANS-3, TRANS-4, TRANS-6, and TRANS-7 that were addressed in the EIR, and that no Project Design Features, Standard Conditions of approval, or mitigation measures were required or recommended.

Facts in Support of the Finding: The Project proposes construction of 128 single-family homes. Two traffic scenarios were analyzed: With Sand and Gravel traffic conditions and Without Sand and Gravel traffic conditions.

Traffic Without Sand and Gravel Credit will not significant impact any of the 10 key study area intersections. With Sand and Gravel Credit, the project will not significantly impact any of the 10 key study intersections. For roadway segments, traffic associated with the proposed project "Without Sand and Gravel Credit" will not significantly impact any of the 17 key roadway segments. Traffic associated with the project "With Sand and Gravel Credit" will not significantly impact any of the 17 key roadway segments.

In Year 2040 buildout conditions, traffic associated with the project "Without Sand and Gravel Credit" will not significantly impact any of the key 10 study area intersections when compared to standards and impact criteria. Likewise, in the 2040 scenario "With Sand and Gravel Credit," traffic will not exceed any LOS standards or significant impact criteria. In 2040, roadways would not be significantly impacted under either scenario.

East Santiago Canyon Road is identified in the Orange County Congestion Management Program; however, the project would mitigate all impacts associated with deficient traffic conditions on East Santiago Canyon Road. Therefore, no conflicts with the Congestion Management Plan would occur. Impacts would be less than significant.

The project would take vehicular access from East Santiago Canyon Road via a signalized driveway aligned with Nicky Way. All interior roadways would comply with applicable Fire Code requirements, including for large emergency vehicles. Impacts to emergency access would be less than significant and no mitigation is required.

The closest bus stop is 2 miles from the site and there are no plans to introduce bus service closer to the project site. The project will not preclude or impede bus service. The project would provide a network of trails that link existing trails and street frontages. It would

close a gap in the regional bicycle and pedestrian network. Class II bicycle lanes will be maintained along Santiago Canyon Road and Cannon Street. Impacts would be less than significant and no mitigation is required.

As noted in Section 7 of the EIR, Effects Found Not To Be Significant, the project site is 10 miles from the closest airport and no alterations to air traffic patterns would be required. No impacts would occur.

16. Tribal Cultural Resources

Impact Thresholds:

Threshold TCR-1: *Would the project cause a substantial adverse change in the significance of a tribal cultural resource listed or eligible for listing in the California Register of Historic Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?*

Threshold TCR-2: *Would the project cause a substantial adverse change in the significance of a tribal cultural resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision ©of Public Resources Code Section 5024.1?*

Finding: The discussion and analysis provided in the EIR concluded that the Project would have a Less Than Significant Impact on the two thresholds for tribal cultural resources that were addressed in the EIR and that no Project Design Features, Standard Conditions of approval, or mitigation measures were required or recommended.

Facts in Support of the Finding: The project site is not listed on any national, state, or local registers of historic places (including those for tribal cultural resources). No tribal cultural resources were observed during the field survey. The City has not received a tribal consultation request from any of the tribes that were sent notification of the project. Impacts would be less than significant and mitigation is not required.

17. Utilities

Impact Thresholds

Threshold USS-1: *Would the project be served with adequate water supplies and not require additional entitlements or the construction or expansion of water facilities?*

Threshold USS-2: *Would the project be served by a wastewater treatment plant with adequate capacity and not require the construction of new or expanded facilities?*

Threshold USS-3: *Would the project create a need for new or expanded downstream storm drainage facilities?*

Threshold USS-4: *Would the project be served with adequate landfill capacity and comply with federal, state, and local statutes and regulations related to solid waste?*

Threshold USS-5: *Would the project result in the inefficient, unnecessary, or wasteful use of energy?*

Finding: The discussion and analysis provided in the EIR concluded that the Project would have a Less Than Significant Impact on the five utility thresholds that were addressed in the EIR and that no Project Design Features, Standard Conditions of approval, or mitigation measures were required or recommended.

Facts in Support of the Finding: The project would be served with potable water provided by the City of Orange. There are two existing water mains within East Santiago Canyon Road. The project would install a network of water lines within the site that would connect to the existing City water mains. The project's water demand is captured in full demand projections set forth in the City's 2015 Urban Water Management Plan and can be met under all scenarios. The City would not need to secure additional water supplies to serve the project. Impacts would be less than significant and no mitigation would be required.

Wastewater for the project would be served and treated by OCSD. There is an existing trunks sewer main in East Santiago Canyon Road and the project would install a network of underground sewer piping on the project site that would connect to the sewer main. The project's wastewater generation would be accommodated by OCSD and OCSD's plants have sufficient capacity to treat the project's wastewater. Impacts would be less than significant and no mitigation is required.

The project would increase the amount of impervious surfaces on the site and would create potential for increased runoff leaving the site. The project would install a system of storm drainage facilities that would be designed to detain flows from a 100-year storm event. The project would result in a net reduction in the 2-year and 100-year storm event discharges into Handy Creek storm drain. The system would slow, reduce, and meter the volume of runoff leaving the site. Impacts would be less than significant and no mitigation would be required.

The project's solid waste would represent a small amount of the total waste going to area landfills during construction and operation of the project. The estimated waste would be accommodated by existing landfills and impacts would be less than significant.

SCE would provide electrical service and SoCalGas would provide natural gas service to the project site. A network of underground electrical lines would be installed within the site and connect to existing SCE facilities along E. Santiago Canyon Road. The project would demand approximately 805,632 kWh of electricity of 4.5 million cubic feet of natural gas at buildout annually. The project would not result in wasteful, unnecessary, or

inefficient use of energy. Impacts would be less than significant and no mitigation would be required.

B. POTENTIALLY SIGNIFICANT ENVIRONMENTAL IMPACTS REDUCED TO LESS THAN SIGNIFICANT THROUGH IMPLEMENTATION OF PROJECT DESIGN FEATURES

1. Biological Resources

Impact Thresholds:

Threshold BIO-1 *Would the project have a substantial adverse effect on special status plant species?*

Description of the Impact: Implementation of the project would result in the direct removal of existing vegetation to develop tails. Two sensitive plant species were observed within the site during surveys: the Southern California black walnut and southern tarplant.

Finding: The City determines that this potential impact is Less Than Significant as a result of compliance with the Standard Conditions described below.

Facts in Support of Finding: Impacts to the number of southern tarplants onsite are not expected to threaten regional populations of the species. Moreover, a conservation measure was implemented to preserve southern tarplant by salvaging seeds during backfilling operations. Impacts to southern tarplant are less than significant. One walnut may be potentially impacted by the project; however, the loss of one walnut tree out of 70 in the population is not considered significant. To avoid or minimize trail impacts to sensitive biological resources, the following design features will be incorporated prior to final design of the trails. With implementation of recommended design features, impacts will be less than significant.

1. Trail D should be designed to avoid or minimize impacts to coastal sage scrub and other native habitats, and should be designed to traverse through vegetation communities that already exhibit disturbance. This trail should be a seasonal trail that is closed, or partially closed, adjacent to habitat that may support special-status birds during breeding season. Trail C and Trail E should utilize existing trail alignments and/or areas that already exhibit disturbance to the extent possible.

2. Educational kiosks are recommended to inform the public about the ecology, biological resources, and special-status species of the area, as well as emphasizing the importance of staying on designated trails, respecting seasonal trail closures, and the community's responsibility in protecting the natural resources.

3. Future environmental analysis will be needed at the time trail design is completed and trail implementation is proposed.

The Santiago Creek corridor supports live-in and movement habitat for species. The project was designed to avoid Santiago Creek and associated native habitat that is best

suited to support local and regional wildlife movement along the creek to the maximum extent feasible through the following design features:

1. The proposed project will permanently retain approximately 38 acres of open space located on both sides of Santiago Creek and bordered on the north by Mabury Avenue.

2. The majority of the southern cottonwood-willow riparian forest within the project site will be avoided (i.e., 12.60 acres), with the exception of 0.10 acre of permanent impacts will occur to an isolated patch of southern cottonwood-willow riparian forest on-site, and 0.04 acre of permanent impact and 0.05 acre of temporary impact from the installation of an on-site storm drain outlet.

3. The proposed project will avoid the majority of Santiago Creek and its associated native riparian and upland habitats. Approximately 38 acres of the project site will be avoided, including 14.06 acres of sensitive plant communities, which includes 0.57 acre of coastal sage scrub and 12.60 acres of southern cottonwood-willow riparian forest, within and/or adjacent to Santiago Creek. A total of 0.04 acre of permanent impacts on-site and 0.05 acre of temporary impacts, which will be restored to pre-project conditions, will occur to southern cottonwood-willow riparian forest for the installation of a storm drain outlet.

4. The proposed project will provide a 150-foot limited use (landscaping and fuel modification) time sensitive (breeding season March 15 through September 15) setback area adjacent to the southern cottonwood-willow riparian forest within Santiago Creek, which provides habitat for the least Bell's vireo.

5. The proposed project will provide select landscaping, including native species, within the 150- foot limited use setback area (to the south of Santiago Creek) that is compatible with the adjacent open space area, its habitat, and is considerate of the fire protection (fuel modification) zone (refer to Exhibit 3.4-8).

6. The proposed project establishes development standards in the Specific Plan to reduce sensory stimuli (e.g., noise, light), unnatural predators (e.g., domestic cats and other nonnative animals), and competitors (e.g., exotic plants, non-native animals).

7. Prior to building permit issuance, the proposed project will remove the existing fence on Orange County Flood Control District property.

8. The proposed project will restrict grading and/or construction activities within the 150-foot limited use setback area during the least Bell's vireo breeding season; refer to Exhibit 3.4-8.

9. The proposed project will limit uses within the 150-foot limited use setback area to those as uses identified in the Specific Plan.

With implementation of these design features, impacts would be less than significant.

C. POTENTIAL ENVIRONMENTAL IMPACTS DETERMINED TO BE MITIGATED TO BELOW A LEVEL OF SIGNIFICANCE

1. Aesthetics

Impact Threshold:

Threshold AES-3: *Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?*

Description of the Impacts: The project may create a new source of light and glare through construction materials, solar panels, and window glazing that would adversely affect day or nighttime views in the area.

Finding: The City makes Finding 1 that changes or alterations have been required in, or incorporated into the Project which avoid or substantially lessen the potentially significant environmental effect described above and identified in the Final EIR.

Facts in Support of Finding: City of Orange Municipal Code Section 17.12.030 regulates the installation of new exterior lighting fixtures and requires that they be directed, controlled, screened or shaded in such a manner as not to shine directly on surrounding premises. Further, lighting on any residential property must be controlled so as to prevent glare or direct illumination of any public sidewalk or thoroughfare. Nonetheless, the proposed project has the potential to use construction materials, solar panels and window glazing that have potential to increase light and glare in the project vicinity. Mitigation Measure AES-3 is required to reduce impacts to a less than significant level.

MM AES-3: Prior to issuance of building permits, the project applicant shall prepare and submit lighting plans to the City of Orange for review and approval. The plans shall demonstrate that all exterior lighting fixtures comply with Orange Municipal Code Chapter 17.12.030, which requires that new light fixtures be directed, controlled, screened or shaded in such a manner as not to shine directly on surrounding premises. Additionally, lighting on any residential property must be controlled so as to prevent glare or direct illumination of any public sidewalk or thoroughfares.

With implementation of Mitigation Measure AES-3, impacts would be reduced to a less than significant level.

2. Air Quality

Impact Threshold

Threshold AIR-4 *Would the project expose sensitive receptors to substantial pollutant concentrations?*

Description of the Impacts: During construction of the project, exhaust emissions would be generated and emissions are projected to exceed the cancer risk significance threshold.

Finding. The City makes Finding 1 that changes or alterations have been required in, or incorporated into the Project which avoid or substantially lessen the significant environmental effect described above and identified in the Final EIR.

Facts in Support of Finding. Implementation of the project would result in construction and operational emissions. Nearby sensitive receptors are located in the residential areas within 25 meters of the east edge of the project site. Unmitigated on-site emissions during construction would not exceed Localized Significance Thresholds ("LST"); therefore, the project would not expose receptors to substantial criteria pollutant concentrations from construction activities. For informational purposes, Table 3.3-14 of Section 3.3 of the Recirculated EIR includes emissions with implementation of Mitigation Measures AIR-1a through AIR-1g. With implementation of Mitigation Measures AIR-1a through AIR-1g, LSTs would not be exceeded.

During operation of the project, emissions would not exceed applicable operational LSTs. The project would not expose receptors to substantial criteria pollutant concentrations from operational-related activities.

Carbon monoxide ("CO") "hot spots" are caused by vehicular emissions. Based on the traffic study prepared for the project, operation of the project would not generate a CO hot spot that would exceed CO ambient air quality standards.

Air dispersion modeling was used to assess the project's potential health risks. The project's construction emissions would not exceed non-cancer hazard thresholds. However, construction emissions would exceed the cancer risk significance threshold. However, with implementation of Tier IV Final mitigation, which is required by Mitigation Measures AIR-1a through AIR-1g, the project's construction emissions would be reduced to below the cancer risk threshold.

3. Biological Resources

Impact Threshold

Threshold BIO-2: *Would the project have a substantial adverse effect on special status wildlife species?*

Threshold BIO-3: *Would the project impact sensitive natural communities?*

Threshold BIO-4: *Would the project impact federally protected wetlands?*

Description of the Impacts: Implementation of the project would result in the direct removal of existing habitat for wildlife species. Biological surveys for the project site indicated that sensitive wildlife species were observed or have at least moderate potential to occur on the project site.

Implementation of the project would result in impacts to coast live oak woodland, mule fat scrub, open water, ornamental, eucalyptus woodland, non-native grassland/non-native herbaceous cover, non-native grassland/disturbed, non-native herbaceous cover, non-

native herbaceous cover/black willow scrub, non-native herbaceous cover/mule fat scrub, non-native herbaceous cover/disturbed, disturbed, disturbed/arroyo willow scrub, disturbed/black willow scrub, disturbed/mule fat scrub, disturbed/non-native herbaceous cover, and developed.

The project would result in impacts to approximately 170 linear feet and 0.01 acre of USACE/RWQCB "waters of the United States"/"waters of the State," of which less than 0.01 acre is wetland and 0.07 acre is CDFW jurisdictional streambed and associated riparian habitat. In addition, preliminary trails are conceptual in nature and final design will be undertaken at a later date, at which time trail implementation may impact wetland features.

Finding: The City makes Finding 1 that changes or alterations have been required in, or incorporated into the Project which avoid or substantially lessen the significant environmental effect described above and identified in the Final EIR.

Facts in Support of Finding: The Project site contains suitable habitat within Santiago Creek and the northern portion of the project site that has potential to support special-status species. However, the majority of the areas with special status-species will be avoided. The loss of individuals as a result of the project would not be expected to reduce regional population numbers and impacts to special-status wildlife species are less than significant. However, some conditionally covered species in the NCCP/HCP were observed onsite and/or have habitat that support the conditionally covered species onsite, including the least Bell's vireo.

The following nine project design features serve to avoid or minimize impacts on the least Bell's vireo:

DF-BIO-1: The proposed project will permanently retain approximately 38 acres of open space located on both sides of Santiago Creek and bordered on the north by Mabury Avenue.

DF-BIO-2: The majority of the southern cottonwood-willow riparian forest within the project site will be avoided (12.60 acres), with the exception of 0.10 acre of permanent impacts that will occur to an isolated patch of southern cottonwood-willow riparian forest on-site, 0.04 acre of permanent impact, and 0.05 acre of temporary impact from the installation of an on-site storm drain outlet.

DF-BIO-3: The proposed project will avoid the majority of Santiago Creek and its associated native riparian and upland habitats. Approximately 38 acres of the project site will be avoided, including 14.06 acres of sensitive plant communities, which includes 0.57 acre of coastal sage scrub, and 12.60 acres of southern cottonwood-willow riparian forest within and/or adjacent to Santiago Creek.

DF-BIO-4: The proposed project will provide a 150-foot limited use (landscaping and fuel modification) time sensitive (breeding season March 15 through

September 15) setback area adjacent to the southern cottonwood-willow riparian forest within Santiago Creek, which provides habitat for the least Bell's vireo.

DF-BIO-5: The proposed project will provide select landscaping, including native species, within the 150- foot limited use setback area (to the south of Santiago Creek) that is compatible with the adjacent open space area, its habitat, and is considerate of the fire protection (fuel modification) zone (refer to Exhibit 3.4-8).

DF-BIO-6: The proposed project establishes development standards in the Specific Plan to reduce sensory stimuli (e.g., noise, light), unnatural predators (e.g., domestic cats and other non- native animals), and competitors (e.g., exotic plants, non-native animals).

DF-BIO-7: Prior to building permit issuance, the proposed project will remove the existing fence on Orange County Flood Control District property.

DF-BIO-8: The proposed project will restrict grading and/or construction activities within the 150-foot limited use setback area during the least Bell's vireo breeding season; refer to Exhibit 3.4-8.

DF-BIO-9: The proposed project will limit uses within the 150-foot limited use setback area to those as uses identified in the Specific Plan.

With implementation of the design features above, impacts would remain potentially significant.

Mitigation Measures BIO-2a through BIO-2c are required to reduce impacts to the least Bell's vireo, raptors and songbirds to a less than significant level.

MM BIO-2a: Prior to the issuance of any grading permit for areas supporting least Bell's vireo habitat (such as southern cottonwood-willow riparian forest), the project Applicant shall obtain federal and state take authorizations via regulatory permits (such as a CWA Section 404 permit issued by the USACE), which will require that the USFWS be consulted as provided for by Section 7 of the FESA (for the federally listed least Bell's vireo). The federal regulatory permits (such as CWA Section 404 permit issued by the USACE) provide a "federal nexus" by which Section 7 consultation can occur. This statute imposes the obligation on federal agencies to ensure that their actions (such as issuing federal CWA permits for this project) are not likely to jeopardize the continued existence of a listed species or destroy or adversely modify its designated critical habitat. This obligation is enforced through the procedural requirement that agencies such as the United States Army Corps of Engineers initiate consultation with the USFWS on any actions that may affect a threatened or endangered species. During the FESA Section 7 consultation anticipated for this project, the USFWS will gather all relevant information concerning the proposed project and the

potential project-related impacts on the least Bell's vireo (i.e., the project Applicant will submit a species-specific Biological Assessment), prepare its opinion with respect to whether the project is likely to jeopardize the continued existence of the species (i.e., the USFWS will issue a Biological Opinion), and recommend mitigation/conservation measures where appropriate. Additionally, the need for State regulatory permits (i.e., Fish and Game Code Section 1602 Streambed Alteration Agreement issued by the CDFW) will require a Consistency Determination from the CDFW for the State-listed least Bell's vireo under CESA.

In addition, the following BMPs will ensure that indirect impacts will not occur to the least Bell's vireo within 300 feet of occupied habitat as monitored by a certified biologist:

1. Construction limits in and around least Bell's vireo potential habitat shall be delineated with flags and fencing prior to the initiation of any grading or construction activities.

2. Prior to grading and construction a training program shall be developed and implemented to inform all workers on the project about listed species, sensitive habitats, and the importance of complying with avoidance and minimization measures.

3. All construction work shall occur during the daylight hours. The construction contractor shall limit all construction-related activities that would result in high noise levels according to the construction hours determined by the City of Orange.

4. During all excavation and grading on-site, the construction contractors shall equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers, consistent with manufacturers' standards to reduce construction equipment noise to the maximum extent possible. The construction contractor shall place all stationary construction equipment so that emitted noise is directed away from sensitive receptors (i.e., least Bell's vireo territory within Santiago Creek) nearest the project site.

5. The construction contractor shall stage equipment in areas that will create the greatest distance between construction-related noise sources and noise sensitive receptors nearest the project site during all project construction.

6. Noise from construction activities shall be limited to the extent possible through the maximum use of technology available to reduce construction equipment noise. Project-generated noise, both during construction and after the development has been completed, shall be in compliance with the requirements outlined in the City of Orange General

Plan Noise Element to ensure that noise levels to which the riparian area is exposed do not exceed noise standards for residential areas.

7. The project shall be designed to minimize exterior night lighting while remaining compliant with City of Orange ordinances related to street lighting. Any necessary lighting (e.g., to light up equipment for security measures), both during construction and after the development has been completed, will be shielded or directed away from Santiago Creek and are not to exceed 0.5 foot-candles. Monitoring by a qualified lighting engineer (attained by the project Applicant and subject to spot checking by City Staff) shall be conducted as needed to verify light levels are below 0.5 foot-candles required within identified, occupied least Bell's vireo territories, both during construction and at the onset of operations. If the 0.5 foot-candles requirement is exceeded, the lighting engineer shall make operational changes or install a barrier to alleviate light levels during the breeding season.

8. Two brown-headed cowbird traps shall be installed and maintained within the general vicinity of the habitat for five years. If equestrian trails are proposed within the project site, which may result in increased horse manure and the potential for increased foraging resources for brown-headed cowbirds, an ongoing manure management receptacle/maintenance plan shall be prepared and implemented.

MM BIO-2b: The following shall be incorporated into the Biological Assessment as proposed mitigation for potential impacts to least Bell's vireo, subject to USFWS and CDFW approval:

On- or off-site restoration or enhancement of least Bell's vireo habitat at a ratio no less than 3:1 for permanent grading impacts.

MM BIO-2c: All construction, grading, and fuel modification activities (i.e., thinning) shall take place outside of the least Bell's vireo breeding season (March 15 to September 15) to the greatest extent feasible. If any construction, grading, and fuel modification activities are required during the breeding season within 300 feet of potential least Bell's vireo habitat, and pre-construction surveys determine least Bell's vireo are present, activities may continue in the presence of a biological monitor who will confirm that no work will occur within a 300-foot buffer of least Bell's vireo, and that any least Bell's vireo are not being disturbed by project activities. If any disturbance to the least Bell's vireo is detected by the biological monitor, the buffer will be increased, other disturbance minimizing measures may be implemented (e.g., visual and/or noise barrier), and/or work will cease as recommended by the monitor.

Additional measures to be taken for all construction activities within 300 feet of potential least Bell's vireo habitat during the breeding season (March 15 to September 15):

1. Pre-construction surveys shall be conducted within 1 week prior to initiation of construction activities and all results forwarded to the USFWS and CDFW. Focused surveys shall be conducted for least Bell's vireo during construction activities.

2. If at any time least Bell's vireo are found to occur within 300 feet of construction areas, the monitoring biologist shall inform the appropriate construction supervisor to cease such work and shall consult with the USFWS and CDFW to determine if work shall commence or proceed during the breeding season and, if work may proceed, what specific measures shall be taken to ensure least Bell's vireos are not affected.

3. Installation of any noise barriers and any other corrective actions taken to mitigate noise during the construction period shall be communicated to the USFWS and CDFW.

MM BIO-2d: Prior to the issuance of any grading permit that would remove habitats containing raptor and songbird nests, the project Applicant shall demonstrate to the satisfaction of the City that either of the following have been or will be accomplished.

1. Vegetation removal activities shall be scheduled outside the nesting season (September 1 to February 14 for songbirds; September 1 to January 14 for raptors) to avoid potential impacts to nesting birds.

2. Any construction activities that occur during the nesting season (February 15 to August 31 for songbirds; January 15 to August 31 for raptors) will require that all suitable habitat be thoroughly surveyed for the presence of nesting birds by a qualified biologist before commencement of clearing. If any active nests are detected, a buffer of at least 300 feet (500 feet for raptors) will be delineated, flagged, and avoided until the nesting cycle is complete, or as determined appropriate by the biological monitor, to minimize impacts.

With implementation of the design features and mitigation measures identified above, impacts would be less than significant.

Implementation of the project would potentially impact sensitive natural communities. The project site supports 0.76 acres of coastal sage scrub; however, the project would avoid impacts to coastal sage scrub and no impacts to coastal sage scrub would occur. Nonetheless, sensitive communities that are considered high priority for conservation would potentially be affected by the project, including southern cottonwood-willow riparian forest. Implementation of mitigation measure BIO-3 would reduce impacts to a less than significant level.

MM BIO-3 Prior to the issuance of any grading permit in the areas designated as sensitive riparian communities (e.g., southern cottonwood-willow riparian forest or black willow scrub/ruderal), the project Applicant shall demonstrate to the satisfaction of the City that either of the following have been or will be accomplished:

On- or off-site restoration or enhancement of sensitive riparian communities (e.g., southern cottonwood-willow riparian forest) at a ratio no less than 1:1 for permanent impacts. Temporary impacts will be restored to pre-project conditions (i.e., pre-project contours and revegetate with native species, where appropriate). Off-site restoration or enhancement at a ratio no less than 1:1 may include the purchase of mitigation credits at an agency-approved off-site mitigation bank (e.g., Soquel Canyon Mitigation Bank).

If mitigation is to occur on-site and/or off-site (i.e., not an in-lieu fee program), a mitigation and monitoring plan shall be prepared. The plan shall focus on the creation of equivalent habitats within disturbed habitat areas of the project site and/or off-site. In addition, the plan shall provide details as to the implementation of the plan, maintenance, and future monitoring. Mitigation for impacts to sensitive riparian communities shall be accomplished by on- or off-site restoration and/or enhancement (e.g., transplantation, seeding, and/or planting/staking of sensitive riparian species; salvage/dispersal of duff and seed bank; removal of large stands of giant reed within riparian areas).

The final design of trails will be completed prior to the 60th Certificate of Occupancy. In order to minimize trail impacts to sensitive biological resources, DF-BIO-1 through DF-BIO-9 above would be required. With implementation of DF-BIO-1 through DF-BIO-9 above, impacts to biological resources as a result of trail implementation would be less than significant.

The project will result in impacts to approximately 170 linear feat and 0.01 acre of USACE/RWQCB waters of the United States/waters of the State. Potential impacts to jurisdictional waters will be reduced to a less than significant level with implementation of mitigation measure BIO-4.

MM BIO-4: With implementation of the design features above, trail development will not impact sensitive biological resources. Impacts will be less than significant. Prior to the issuance of any grading permit for permanent impacts in the areas designated as jurisdictional features, the project Applicant shall obtain a CWA Section 404 permit from the USACE, a CWA Section 401 permit from the RWQCB, and Streambed Alteration Agreement permit under Section 1602 of the California Fish and Game Code from the CDFW. The following would be incorporated into the permitting, subject to approval by the regulatory agencies:

1. On- or off-site restoration or replacement of USACE/RWQCB jurisdictional waters of the United States/waters of the State at a ratio no less than 2:1 for permanent impacts, and for temporary impacts, restore impact area to pre-project conditions (i.e., pre-project contours and revegetate with native species, where appropriate). Off-site restoration or enhancement at a ratio no less than 2:1 may include the purchase of mitigation credits at an agency-approved off-site mitigation bank or in-lieu fee program (e.g., Soquel Canyon Mitigation Bank).

2. On- or off-site restoration or enhancement of CDFW jurisdictional streambed and associated riparian habitat at a ratio no less than 2:1 for permanent impacts, and for temporary impacts, restore impact area to pre-project conditions (i.e., pre-project contours and revegetate with native species, where appropriate). Off-site restoration or enhancement at a ratio no less than 2:1 may include the purchase of mitigation credits at an agency-approved off-site mitigation bank (e.g., Soquel Canyon Mitigation Bank).

With implementation of Mitigation Measure BIO-4, impacts would be less than significant.

4. Cultural Resources

Impact Threshold

Threshold CUL-1: *Would subsurface construction activities associated with the proposed project damage or destroy previously undiscovered historic resources?*

Threshold CUL-2: *Would subsurface construction activities associated with the proposed project damage or destroy previously undiscovered archaeological resources?*

Threshold CUL-3: *Would subsurface construction activities associated with the proposed project damage or destroy previously undiscovered paleontological resources?*

Threshold CUL-4: *Would subsurface construction activities associated with the proposed project may damage or destroy previously undiscovered human burial sites?*

Description of the Impact: The archaeological records search identified one previously recorded resources within the project boundary. Additionally, portions of the concrete and asphalt lot may be of historic age.

Records indicate that portions of Santiago Creek drainage have surficial deposits of older Quaternary alluvium. It is possible that significant paleontological resources may be adversely impacted by development-related ground disturbance.

Project construction has the potential to disturb existing or known formal cemeteries within or adjacent to the project site.

Finding: The City makes Finding 1 that changes or alterations have been required in, or incorporated into the Project which avoid or substantially lessen the significant environmental effect described above and identified in the Final EIR.

Facts in Support of Finding: The project site contains four structures along Santiago Canyon Road along the southern project area boundary. Four additional structures are depicted in the southeastern corner of the project area; however, with the exception of one potentially historic-age foundation and an adjacent concrete and asphalt lot, no evidence of these structures were detected during a pedestrian survey. During the survey, no prehistoric-age resources and one potentially historic-age foundation and an adjacent asphalt and concrete lot were detected. Portions of the concrete and asphalt lot may be of historic age and were recorded in conjunction with the foundation as "Site 001." This resource does not appear to be significant and is not considered historical or archaeological. It could not be relocated during present surveys or previous surveys, presumably due to the negligible surface visibility at the mapped location and collection of some or all of the surface artifacts during a subsurface testing program. Minimal impacts to the remnants of the site would occur, as its location would be avoided by development.

There is a high probability that significant, intact subsurface deposits could be uncovered during development. Therefore, Mitigation Measure CUL-1 is required.

MM CUL-1: In the event that buried cultural resources are discovered during construction, operations shall stop within a 50-foot radius of the find and a qualified archaeologist shall be consulted to determine whether the resource requires further study. The qualified archaeologist and shall make recommendations to the Lead Agency on the measures that shall be implemented to protect the discovered resources, including but not limited to excavation of the finds and evaluation of the finds in accordance with Section 15064.5 of the CEQA Guidelines. Potentially significant cultural resources consist of but are not limited to stone, bone, fossils, wood, or shell artifacts or features, including hearths, structural remains, or historic dumpsites. Any previously undiscovered resources found during construction within the project area should be recorded on appropriate Department of Parks and Recreation (DPR) forms and evaluated for significance in terms of CEQA criteria.

If the resources are determined to be unique historic resources as defined under Section 15064.5 of the CEQA Guidelines, mitigation measures shall be identified by the monitor in accordance with Public Resource Code Section 21083.1 and CEQA Guidelines Section 15126.4 and recommended to the Lead Agency. Appropriate mitigation measures for significant resources could include avoidance or capping, incorporation of the site in green space, parks, or open space, or data recovery excavations of the finds.

No further grading shall occur in the area of the discovery until the Lead Agency approves the measures to protect these resources. Any archaeological artifacts recovered as a result of mitigation shall be donated to a qualified scientific institution approved by the Lead Agency where they would be afforded long-term preservation to allow future scientific study.

The 2011 Addendum to the archaeological report prepared by BCR Consulting indicated that archaeological monitoring is required during ground disturbing activities in the areas depicted on Exhibit 3.5-1 in the Final EIR. Mitigation Measure CUL-2 is required within this area during ground disturbing activities.

MM CUL-2: During the ground disturbing activities in the areas depicted in Exhibit 3.5-1, a qualified archaeological and paleontological monitor shall be present on-site to observe earthwork activities. In the event of a discovery of an archaeological or paleontological resource, the monitor shall have the discretion to halt all ground disturbing activities within 50 feet of the find until it has been evaluated for significance. If the find is determined to have archaeological or paleontological significance, the procedures in Mitigation Measure CUL-1 or Mitigation Measure CUL-3 shall be implemented. Monitoring may cease once all of the areas depicted in Exhibit 3.5-1 have been thoroughly disturbed.

With implementation of Mitigation Measure CUL-2, impacts would be less than significant.

Records indicate that it is possible that significant paleontological resources along the Santiago Creek drainage may be adversely impacted by development-related ground disturbance. The project area has varied paleontological sensitivity ranging from low to high. Implementation of Mitigation Measure CUL-3 would reduce potential impacts to a less than significant level.

MM CUL-3 If the subsurface excavations for this project are proposed to exceed depths of 15 feet below surface, a qualified paleontological monitor should be retained to observe such excavations, which may breach the older Quaternary Alluvium deposits. In this situation, a detailed Mitigation Monitoring Plan (MMP) or Paleontological Resource Impact Management Plan (PRIMP) should be prepared in order to set forth the observation, collection, and reporting duties of the paleontological monitor. Additional mitigation measures and procedures will be outlined in the MMP or PRIMP as needed.

In the event that fossils or fossil-bearing deposits are discovered during construction activities that are shallower than 10 feet in depth, excavations within a 50-foot radius of the find shall be temporarily halted or diverted. The project contractor shall notify a qualified paleontologist to examine the discovery. The paleontologist shall document the discovery as needed (in accordance with Society of Vertebrate Paleontology standards), evaluate

the potential resource, and assess the significance of the find under the criteria set forth in CEQA Guidelines Section 15064.5.

The paleontologist shall notify the appropriate agencies to determine procedures that would be followed before construction activities are allowed to resume at the location of the find. If the Applicant determines that avoidance is not feasible, the paleontologist shall prepare an excavation plan for mitigating the effect of construction activities on the discovery. The plan shall be submitted to the Lead Agency for review and approval prior to implementation, and the Applicant shall adhere to the recommendations in the plan.

With implementation of Mitigation Measure CUL-3, impacts would be less than significant.

Ground disturbing activities during construction could possibly uncover previously unknown buried human remains. Mitigation Measure CUL-4 is required to reduce potential impacts.

MM CUL-4: In the event of an accidental discovery or recognition of any human remains, Public Resource Code (PRC) Section 5097.98 must be followed. In this instance, once project-related earthmoving begins and if there is accidental discovery or recognition of any human remains, the following steps shall be taken:

1. There shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until the County Coroner is contacted to determine if the remains are Native American and if an investigation of the cause of death is required. If the coroner determines the remains to be Native American, the coroner shall contact the NAHC within 24 hours, and the Native American Heritage Commission (NAHC) shall identify the person or persons it believes to be the "most likely descendant" of the deceased Native American. The most likely descendant may make recommendations to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in PRC Section 5097.98, or

2. Where the following conditions occur, the landowner or his/her authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity either in accordance with the recommendations of the most likely descendent or on the project area in a location not subject to further subsurface disturbance:

- The NAHC is unable to identify a most likely descendent or the most likely descendent failed to make a recommendation within 48 hours after being notified by the commission;

- The descendent identified fails to make a recommendation; or
- The landowner or his authorized representative rejects the recommendation of the descendent, and the mediation by the NAHC fails to provide measures acceptable to the landowner.

With implementation of Mitigation Measure CUL-4, impacts would be less than significant.

5. Geology and Soils

Impact Threshold

Threshold GEO-1: Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury or death involving seismic hazard?

Threshold GEO-2: Would the project result in substantial soil erosion of the loss of topsoil?

Description of the Impacts: Southern California is seismically active and the project site would be subject to moderately strong to strong seismic ground shaking. The potential for liquefaction is considered low to moderate. Project development would involve vegetation removal, grading, and other activities that have the potential to result in erosion.

Findings: The City makes Finding 1 that changes or alterations have been required in, or incorporated into the Project which avoid or substantially lessen the significant environmental effect described above and identified in the Final EIR.

Facts in Support of Findings: The El Modeno and Peralta Hills faults are located less than 0.5 miles from the project site. However, a fault investigation concluded that the El Modeno Fault does not cross the project site. Further, the Peralta Hills Fault is not sufficiently active. For these reasons, fault rupture hazards would not be significant. However, Southern California is seismically active and the site will experience moderately strong to strong ground shaking. In addition, the potential for liquefaction is considered low to moderate. Mitigation Measure GEO-1 is required to mitigate potential impacts. The project would involve development of 40.7 acres of residential development and 68.5 acres of open space. Development would involve vegetation removal, grading, soil engineering, and other activities with the potential to result in erosion. Mitigation Measures GEO-1 and HYD-1a would be required.

MM GEO-1: Prior to the issuance of building permits, the project applicant shall submit a design-level Geotechnical Investigation to City of Orange for review and approval. The investigation shall be prepared by a qualified engineer and identify grading and building practices necessary to achieve compliance with the latest adopted edition of the California Building Standards Code's geologic, soils, and seismic requirements. The measures identified in the approved report shall be incorporated into the Project plans.

MM HYD-1a: Prior to the issuance of grading permits, the project applicant shall file a Notice of Intent with and obtain a facility identification number from the State Water Resources Control Board. The project applicant shall also submit an SWPPP to the California State Water Resources Control Board/Santa Ana Regional Water Quality Control Board. The SWPPP that identifies specific actions and BMPs to prevent stormwater pollution during construction activities. The SWPPP shall identify a practical sequence for BMP implementation, site restoration, contingency measures, responsible parties, and agency contacts. The SWPPP shall include but not be limited to the following elements:

- Comply with the requirements of the State of California's most current Construction Stormwater Permit.
- Temporary erosion control measures shall be implemented on all disturbed areas.
- Sediment shall be retained on-site by a system of sediment basins, traps, or other BMPs.
- The construction contractor shall prepare Standard Operating Procedures for the handling of hazardous materials on the construction site to eliminate discharge of materials to storm drains.
- BMP performance and effectiveness shall be determined either by visual means where applicable (e.g., observation of above-normal sediment release), or by actual water sampling in cases where verification of contaminant reduction or elimination (such as inadvertent petroleum release) is required by the Santa Ana Regional Water Quality Control Board to determine adequacy of the measure.
- In the event of significant construction delays or delays in final landscape installation, native grasses or other appropriate vegetative cover shall be established on the construction site as soon as possible after disturbance, as an interim erosion control measure throughout the wet season.

The project site is not located in the vicinity of large hills or steep mountainsides; therefore, landslide impacts are not anticipated.

With implementation of Mitigation Measure GEO-1 and HYD-1a, impacts would be less than significant.

6. Hazards and Hazardous Materials:

Impact Thresholds:

Threshold HAZ-2: *Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment?*

Threshold HAZ-4: *Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?*

Threshold HAZ-5: *Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?*

Threshold HAZ-6: *Would the project expose persons or property to wildland fire hazards?*

Description of the Impacts: The project site previously supported agricultural and mining activities and is adjacent to the closed Villa Park landfill. There is potential that development and operation of the project could expose persons to hazards as a result of these uses.

The Fire Department noted that the project would be required to provide two points of emergency access to comply with Fire Code requirements.

The eastern portion of the site abuts Santiago Oaks Regional Park and contains the wooded Santiago Creek Corridor. The project may expose persons or property to wildland fire hazards.

Findings: The City makes Finding 1 that changes or alterations have been required in, or incorporated into the Project which avoid or substantially lessen the significant environmental effect described above and identified in the Final EIR.

Facts in Support of Findings: A Phase II Environmental Site Assessment was conducted for the project site. The Phase II determined that there was potential for vapor intrusion of TCE and methane into future dwelling units and elevated levels of Total Petroleum Hydrocarbons in soil. Mitigation Measures HAZ-1a through HAZ-2c are required to reduce impacts related to these hazards.

MM HAZ-2a A supplemental Phase II Environmental Site Assessment shall be conducted to further delineate the vertical and lateral extent of the contamination. The proposed enclosed structures shall be situated strategically, using supplemental Phase II Environmental Site Assessment data and DTSC's review thereof, so that structures will not interfere with future remediation of any potential landfill gas migration; this shall be demonstrated in connection with approval of any tentative maps for the project. Prior to issuance of building permits for dwelling units in areas of the project site where vapor intrusion has the potential to occur, the applicant shall prepare

and submit plans to the City of Orange, DTSC, or the Local Enforcement Agency (which is the County of Orange Environmental Health Division) identifying vapor intrusion abatement measures for trichloroethylene (TCE) and methane. Areas where vapor intrusion has the potential to occur are those identified in the Phase II Environmental Site Assessment.

The Phase II Environmental Site Assessment shall be conducted in substantial compliance with applicable guidance documents, including but not limited to the DTSC Advisory—Active Soil Gas Investigation and Final Guidance for Evaluation and Mitigation of Subsurface Vapor Intrusion to Indoor Air. The Phase II Environmental Site Assessment shall use current DTSC HHRA Note 3 and Regional Screening Levels established by the U.S. Environmental Protection Agency. Following preparation of the Phase II Environmental Site Assessment, a soil risk management plan shall be prepared to address any discovery of previously unknown contamination and shall be submitted to DTSC. These reports shall be conducted pursuant to applicable DTSC advisories, and abatement shall be implemented as directed by DTSC. Such abatement measures may include but are not limited to vapor barriers or passive/active venting systems, as determined by the appropriate regulatory agency, unless determined not to be necessary by the City in consultation with the Local Enforcement Agency. All occupied structures within a 1,000 foot radius of the landfill shall include the following structural controls to limit the potential for landfill gas accumulation (unless such controls are determined not to be necessary by the City in consultation with the Local Enforcement Agency): (1) a geomembrane between the slab and the subgrade; (2) a permeable layer with venting pipe between the geomembrane; and (3) automatic methane gas sensors with audible alarms in the permeable layer and inside the structures. The soil risk management plan shall include, among other provisions, worker safety practices and procedures for discoveries of hazardous materials, including those already identified at the site. If DTSC concludes that additional mitigation is needed, the applicant shall work with DTSC and the City to jointly develop additional mitigation measures that meet residential standards.

The approved abatement measures shall be incorporated into project building plans. Design plans for: 1) any occupied structures within 1,000 feet of the landfill boundary; and/or 2) structural systems to prevent gas-related hazards are required to be reviewed and approved by the Local Enforcement Agency (which is the County of Orange Environmental Health Division).

MM HAZ-2b Prior to issuance of grading permit for construction of the residential portion of the project, the project applicant shall retain a qualified hazardous materials contractor to remove all soil containing Total Petroleum Hydrocarbons in excess of residential development standards set forth by the California Department of Toxic Substances Control (DTSC) or other

applicable regulatory agency. Soil removal and disposal shall occur in accordance with DTSC (or other applicable agency) guidelines. Additional groundwater sampling shall be conducted under the guidance of DTSC, focused on the area within 1,000 feet of the Villa Park landfill, to assess whether TPH, methane, and/or VOCs have impacted groundwater at levels that generate either significant human health or ecological risk, which was encountered at depths of 20 to 50 feet bgs. If the groundwater is affected, a multi-media risk assessment shall be conducted under the guidance of DTSC, and abatement measures as required by DTSC shall be implemented, subject to final confirmation by the City.

The applicant shall submit documentation to the City of Orange in the form of confirmatory soil and groundwater sampling results verifying that this mitigation measure was successfully implemented as part of the grading permit application for this property. All environmental investigations, sampling and/or remediation for the project site shall be conducted under a workplan approved and overseen by a regulatory agency with jurisdiction to oversee hazardous substance cleanup, such as DTSC and/or the Regional Water Quality Control Board (RWQCB). As part of proper construction operations and maintenance, any construction areas that are found to contain contaminated soils shall be excluded using a security fence. All contaminated soils shall then be excavated and disposed of off-site in accordance with the rules and regulations of: US Department of Transportation (USDOT), USEPA, CalEPA, CalOSHA, and any local regulatory agencies. All retention and detention features used during construction would be lined to prevent infiltration through contaminated soils. Post-construction retention features shall be lined to prevent infiltration of groundwater.

MM HAZ-2c: Prior to commencement of any construction activities that would impact existing landfill or related gas monitoring equipment, the project applicant shall contact the City Engineer to consult with and obtain approval from the Orange County Integrated Waste Management Department for the relocation of any monitoring wells or probes that would be impacted by development on the project site.

With implementation of Mitigation Measures HAZ-2a through HAZ-2c, impacts related to potentially hazardous materials affecting property or persons would be less than significant.

The project would take vehicular access from E. Santiago Canyon Road via a signalized driveway aligned with Nicky Way. The Fire Department noted that the project would be required to provide two points of emergency access. Mitigation Measure HAZ-5 is therefore required.

MM HAZ-5: Prior to issuance of the first building permit, the applicant shall prepare and submit plans to the City of Orange for review and approval demonstrating

> compliance with all applicable emergency access provisions of the Fire Code. The approved plan shall be incorporated into the proposed project.

With implementation of mitigation measure HAZ-5, impacts related to emergency access would be less than significant.

The eastern portion of the project site abuts Santiago Oak Regional Park and contains the wooded Santiago Creek Corridor. The project site is located at the wildlife/urban interface. As discussed in RDEIR Section 3.8, Hazards and Hazardous Materials, page 3.8-16, the project proposes to strategically place approximately 68.5 acres of open space/grasslands and greenway with managed vegetation within the western, northern, and eastern portions of the project site in order to provide sufficient protection from wildland fires and alleviate related impacts. The project's open space areas will constitute a buffer against the spread of fire. Planning Area B, the Grassland area south of Santiago Creek, includes a managed vegetation/fuel modification zone north of and east of Planning Area C that would act as a vegetative buffer between the open space and residential neighborhood. The buffer zone would be 130 feet wide and would include plantings responsive to fuel management policies. In addition, the project proposes a 20-foot wet zone within the rear yard of the residential lots to support fuel management policies. The managed vegetation/fuel modification zones comply with fuel modification requirements in Section 320 of the Orange County Fire Code (as required by City of Orange Municipal Code Section 15.32.020). Upon dedication of the open space in Planning Areas A and B to the City of Orange, County of Orange, or another entity, the applicant/developer will retain an easement for fuel modification zone maintenance.

Orange General Plan, Public Safety Element, page PS-4, notes that "keeping neighborhoods buffered from both urban and wildland fire hazards reduces incidents requiring response, and minimizes damage to property when fires to occur." Orange General Plan, Public Safety Element, page PS-19, states that development within or adjacent to an identified wildland fire area ". . . must prepare and implement a comprehensive fuel modification program in accordance with City regulations. The City will review new developments and fire services to ensure adequate emergency services and facilities to residents and businesses."

Orange General Plan, Public Safety Element, Goal 3.0 on page PS-4, is to "[p]rotect lives and property of Orange residents and businesses from urban and wildland fire hazards."

Orange General Plan, Public Safety Element, Policy 3.3 states:

> Require planting and maintenance of fire-resistant slope cover to reduce the risk of brush fires within the wildland-urban interface areas located in the northern and eastern portions of the City and in areas adjacent to canyons, and develop and implement stringent site design and maintenance standards for all areas with high wild land fire potential. To the extent possible, native, non-invasive plant materials are encouraged.

The General Plan Public Safety Element goal and policy above would be advanced by incorporating open space and a vegetative buffer as part of the project. The vegetative buffer would include plantings responsive to fuel management policies and all City fuel management standards would be met.

The proposed project would include a robust fire protection system as required by the California Building Code. Fire sprinkler systems and ignition resistant structures have a very high success rate for confining fires or extinguishing them. Additionally, there are two fire stations within 2 miles of the project site: Orange Fire Department Station No. 8, which is 1.75 miles from the project site, and Orange County Fire Authority Station No. 23, which is 0.64 mile from the project site. Emergency response times from the City of Orange Fire Department would be approximately 3 minutes and 45 seconds. Fire stations near the project site would increase the likelihood of successful initial attacks to limit the spread of wildfires. The fire protection system on-site would provide protection from on-site fires spreading to off-site vegetation through the required fuel modification zone. Accidental fires within the landscape or structures in the project area would have limited ability to spread. Landscaping throughout the project site and on its perimeter would be highly maintained, and much of it would be irrigated, which would further reduce its ignition potential.

In addition, RDEIR Section 3.8, Hazards and Hazardous Materials, Mitigation Measure HAZ-6 will be implemented to require the applicant to prepare a Fuel Modification Plan for submission to the City of Orange for review and approval prior to the issuance of building permits, consistent with the Fire Department's recommendation that the project meet the City's fuel modification requirements.

As identified in the RDEIR, with implementation of project features, incorporation of open space areas and vegetative buffers as part of the project, compliance with City requirements for fuel modification, and Mitigation Measure HAZ-6, impacts would be less than significant.

MM HAZ-6: Prior to issuance of the first building permit, the applicant shall retain a qualified fire safety consultant to prepare a Fuel Modification Plan for the proposed project. The plan shall identify defensible space around dwelling units in accordance with City requirements. The plan shall be submitted to the City of Orange for review and approval. The approved plan shall be incorporated into the proposed project.

With implementation of Mitigation Measure HAZ-6, impacts would be less than significant.

7. Hydrology and Water Quality

Impact Thresholds

Threshold HYD-1: Would construction or operational activities associated with the proposed project potentially degrade water quality in downstream water bodies?

Threshold HYD-5: Would the project be susceptible to inundation from dam failure?

Description of the Impacts: Construction and operational activities associated with the project may potentially degrade water quality downstream due to construction and operation of residential and open space uses. The project may be susceptible to inundation from dam failure because Santiago Dam is located 1.3 miles upstream of the project site and Villa Park Dam is located 1.5 miles upstream of the project site.

Finding: The City makes Finding 1 that changes or alterations have been required in, or incorporated into the Project which avoid or substantially lessen the significant environmental effect described above and identified in the Final EIR.

Facts in Support of Finding: Project implementation would require grading, building construction, and paving activities. During construction, there is a potential for surface water to carry sediment into local waterways. Mitigation Measure HYD-1a would be required to require the Applicant to implement a Stormwater Pollution Prevention Plan (SWPPP) during construction to minimize pollutants.

MM HYD-1a: Prior to the issuance of grading permits, the project applicant shall file a Notice of Intent with and obtain a facility identification number from the State Water Resources Control Board. The project applicant shall also submit an SWPPP to the California State Water Resources Control Board/Santa Ana Regional Water Quality Control Board. The SWPPP that identifies specific actions and BMPs to prevent stormwater pollution during construction activities. The SWPPP shall identify a practical sequence for BMP implementation, site restoration, contingency measures, responsible parties, and agency contacts. The SWPPP shall include but not be limited to the following elements:

- Comply with the requirements of the State of California's most current Construction Stormwater Permit.
- Temporary erosion control measures shall be implemented on all disturbed areas.
- Sediment shall be retained on-site by a system of sediment basins, traps, or other BMPs.
- The construction contractor shall prepare Standard Operating Procedures for the handling of hazardous materials on the construction site to eliminate discharge of materials to storm drains.
- BMP performance and effectiveness shall be determined either by visual means where applicable (e.g., observation of above-normal sediment release), or by actual water sampling in cases where verification of contaminant reduction or elimination (such as inadvertent petroleum release) is required by the Santa Ana

Regional Water Quality Control Board to determine adequacy of the measure.

- In the event of significant construction delays or delays in final landscape installation, native grasses or other appropriate vegetative cover shall be established on the construction site as soon as possible after disturbance, as an interim erosion control measure throughout the wet season.

Implementation of Mitigation Measure HYD-1a would reduce impacts during construction to a less than significant level.

During operation of the project, pollutants such as sediment, trash and debris, bacteria, oil and grease, pesticides, and metals would potentially enter local waterways. To ensure stormwater quality measures are implemented during operation of the project, Mitigation Measure HYD-1b would be required.

MM HYD-1b: Prior to the issuance of building permits, the project applicant shall submit a WQMP to the City of Orange for review and approval. The plan shall be developed using the Orange County Model Water Quality Management Plan and Technical Guidance Document. The WQMP shall identify pollution prevention measures, low impact development features, and BMPs necessary to control stormwater pollution from operational activities and facilities, identify hydromodification flow controls, and provide for appropriate maintenance over time. The WQMP shall include design concepts and BMPs that are intended to address the Design Capture Volume, more commonly referred to as the "first flush," and remove pollutants from the design system event before entering the MS4. In accordance with the Regional MS4 Permit and City of Orange WQMP requirements, the use of low impact development features will be consistent with the prescribed hierarchy of treatment provided in the Permit: including techniques to infiltrate, filter, store, evaporate, or retain runoff close to the source of runoff. For those areas of the project where infiltration is not recommended or acceptable and harvest/reuse demands are insufficient, biofiltration features will be designed to treat runoff and discharge controlled effluent flows to downstream receiving waters. The project WQMP shall also include an operations and maintenance plan for the prescribed Low Impact Development (LID) features, structural BMPs, and any hydromodification controls to ensure their long-term performance. A funding mechanism for operations and maintenance shall also be prescribed.

With implementation of Mitigation Measure HYD-1b, impacts during operation would be less than significant.

Santiago Creek Dam was last inspected on May 3, 2018, according to the United States Army Corps of Engineers (USACE) National Inventory of Dams. Its condition assessment

rating is "satisfactory" and its hazard potential rating is "extremely high." Likewise, Villa Park Dam's condition assessment rating is "satisfactory" and its hazard potential rating is "extremely high." It was last inspected on February 21, 2018, according to the USACE website. According to the California Division of Safety of Dams (DSOD) website, a "satisfactory" condition assessment indicates that no existing or potential dam safety deficiencies are recognized. Acceptable performance is expected under all loading conditions (static, hydrologic, and seismic) in accordance with applicable regulatory criteria or tolerable risk guidelines. Hazard classifications are based on the size of the reservoir and the number of people who live downstream of a dam, not the actual conditions of the dam or its critical structures. Therefore, the condition assessment is a better indicator of potential dam deficiencies with the potential to cause downstream flooding.

Pursuant to the California Water Code, dam inspections at Santiago Creek Dam and Villa Park Dam are conducted by the DSOD at least once per year pursuant to laws, regulations, and practices of DSOD to ensure the dam is safe, performing as intended, and is not developing problems. DSOD also reviews the stability of dams and their major appurtenances in light of improved design approaches and requirements, as well as new findings regarding earthquake hazards and hydrologic estimates in California.

The DSOD evaluation program is an ongoing screening process of spillways and other appurtenances at dams throughout the State. Subsequent to the assessment, DSOD works with dam owners to expedite development of required assessments and restore known areas of deficiency. Roughly, a third of DSOD inspections result in in-depth instrumentation reviews. In 2017, the Santiago Creek Dam required an extra spillway assessment in addition to its standard yearly inspection. The evaluation required by DSOD includes assessment of:

- The spillway's design and construction and geologic attributes while concurrently reviewing the dam owner's maintenance and inspection program;
- The spillway's historical performance;
- Any previous spillway repairs.

To conduct the spillway assessment required by DSOD, the owners of Santiago Dam, the Irvine Ranch Water District (IRWD) and Serrano Water District, submitted a workplan to DSOD in 2017. The assessment is in-progress.

In addition to the DSOD inspections, IRWD and Serrano Water District inspect the Santiago Creek Dam and spillway quarterly with a dam safety consultant and bi-annually with the DSOD. In addition, IRWD staff visually inspects the dam daily and has caretakers that live on-site and observe the dam daily. Measurements of drain flows, monitoring wells, and piezometers are taken monthly. Piezometers are used to measure groundwater and other fluid pressure levels. Dam crest survey markers give IRWD the ability to measure horizontal or vertical movement of the dam, which are measured by a licensed surveyor annually to evaluate any adverse trends. With the above safety precautions in place and given the condition rating of both dams as "satisfactory," dam failure is not anticipated.

In terms of City policy, the General Plan identifies areas downstream of the Santiago Creek and Villa Park dams for potential flooding in the event of a catastrophic dam failure (General Plan, page PS-4). The General Plan characterizes such an event as "unlikely" (page PS-4) and does not prohibit or limit development in these areas.

Maps compiled for potential dam failures are created, in part, in order to implement emergency procedures required under Section 8589.5 of the California Government Code. The Orange County Operational Area Emergency Action Plan Dams/Reservoir Failure Annex indicates that it would take a dam failure flood wave 105 minutes to reach the project site from Villa Park Dam and 255 minutes from Santiago Dam. Emergency procedures that the County and the City have established to protect lives and property in the event of a dam failure would allow persons to be evacuated in the event of a failure of Santiago Creek Dam or Villa Park Dam. Emergency response times for the City of Orange Police Department vary on average from 4 to 7 minutes and emergency response times for the City of Orange Fire Department are, on average, 3 minutes, 45 seconds; therefore flood flows would move at rates which would allow emergency procedures to be implemented and persons to be evacuated. Staff members at both dams are trained in operation of the facilities and would be able to identify and respond to indications of adverse conditions; therefore, initial alerting of a dam failure would occur quickly. Furthermore, the Orange County Sheriff's Department oversees the County's Emergency Operations Center and has modeled dam failure scenarios for both Villa Park Dam and Santiago Dam based on Federal Emergency Management Agency (FEMA) Flood Maps (RDEIR Section 3.9, Hydrology and Water Quality, Exhibit 3.9-4). The Sheriff's Department has developed plans to provide timely notification to affected parties and implement an orderly evacuation in the event dam failure indications are observed, such as the AlertOC mass notification system that provides time-sensitive messages to residents from the City or County in which they live or work. Every method known to warn the public of an impending dam failure, including the following systems, would be utilized by the City and County in the event of a dam failure at Villa Park Dam or Santiago Dam:

- Emergency Alerting System (EAS) on the AM/FM radio
- AlertOC (Service is available to residents and non-residents to receive time-sensitive information in the event of a natural disaster or emergency. Residents should register for this service)
- Police and Fire sirens
- Police helicopter loudspeakers
- Door-to-door canvassing[1]

Moreover, the General Plan requires that appropriate flood control measures be implemented along Santiago Creek and throughout the planning area to reduce the risks

[1] Enjoy Orange County, Dams in Orange County. Website: https://enjoyorangecounty.com/dams-in-orange-countySite accessed March 6, 2019.

from localized flooding and the General Plan EIR implements the following two mitigation measures specific to flooding that would reduce potential impacts throughout the City:

General Plan EIR Section 5.8, Hydrology and Water Quality, Mitigation Measure 5.8-1 Support efforts by the OCFCD to regularly maintain flood control channels and structures owned by the OCFCD, and to complete necessary repairs in a timely manner. Work with the OCFCD and USACE to identify new flood control improvements and establish installation programs for improvements as needed. Work with the OCFCD to identify opportunities to enhance the natural qualities of Santiago Creek to protect habitat and reintroduce native plants, animals, and fish. (Implementation Program V-11; Responsible Party—Community Development Department, Community Services Department, Public Works Development; Timeframe—Ongoing) (General Plan EIR, page 5.8-25–5.8-26).

General Plan EIR Section 5.8, Hydrology and Water Quality, Mitigation Measure 5.8-2 Continue to inspect storm drains, remove debris from catch basins as needed, and evaluate and monitor water storage facilities to determine if they pose a water inundation hazard. (Implementation Program I-32; Responsible Party—Public Works Development; Timeframe—Ongoing) (General Plan EIR, page 5.8-25.)

As discussed in the City's General Plan EIR, Citywide flood prevention methods, such as provision of detention basins and on-site stormwater drainage, reduce runoff into the City's drainage facilities and provide adequate drainage for new developments. The City minimizes flood-related risks and hazards in the event of dam or reservoir failure by encouraging the County's Flood Control District to continue proper inspection of storm drains, ensuring maintenance of the flood control facilities, and preventing earthquake damage. In addition, the City monitors water storage facilities to determine potential inundation hazards to surrounding properties (General Plan, page PS-19.).

In addition to the emergency procedures, General Plan policies, and mitigation measures listed above, RDEIR Section 3.9, Hydrology and Water Quality, Mitigation Measure HYD-5, requires the applicant to prepare and implement an Emergency Evacuation Plan, which would identify specific procedures for the safe and orderly evacuation of the project. The plan would specifically require the streets to be identified with clear and visible signage and, if necessary, wayfinding signage to identify exit points.

MM HYD-5: Prior to issuance of the first certificate of occupancy, the applicant shall retain a qualified consultant to prepare and implement an Emergency Evacuation Plan. The plan shall identify the various types of emergency that could affect the proposed project (e.g., dam failure, earthquake, flooding, etc.) and identify procedures for the safe and orderly evacuation of the project. The plan shall require that streets be identified with clear and visible signage and, if necessary, wayfinding signage be provided to identify exit points.

Given the fact that the (1) Villa Park Dam and the Santiago Creek Dam are listed as having "satisfactory" conditions, (2) the project is consistent with applicable General Plan policies related to flood prevention, (3) time durations associated with potential dam failures would

provide sufficient response times and resources to evacuate the project site in the event of a dam failure, and (4) Mitigation Measure HYD-5 would be required to reduce impacts related to flooding, impacts associated with dam failure are properly considered less than significant.

8. Noise

Impact Thresholds:

Threshold NOI-1: *Would the project result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.*

Threshold NOI-4: *Would the project result in a substantial temporary increase in ambient noise levels in the project vicinity?*

Description of the Impacts: The project would take up to 12 months to construct. Construction could potentially generate noise that would affect nearby sensitive receptors.

Finding: The City makes Finding 1 that changes or alterations have been required in, or incorporated into the Project which avoid or substantially lessen the significant environmental effect described above and identified in the Final EIR.

Facts in Support of Finding: The highest construction-related noise levels would be generated during ground clearing, excavation, and grading. Noise levels would be up to 90 dBA at a distance of 50 feet. The closest sensitive receptors would be exposed to noise levels of up to 84 dBA intermittently during construction. The City's Noise Ordinance requires construction to be between the hours of 7:00 AM and 8:00 PM Monday through Saturday; construction is prohibited on Sundays and federal holidays. Nonetheless, impacts related to construction noise are potentially significant and Mitigation Measure NOI-1a would be required.

With incorporation of MM NOI-1a, short term construction noise impacts would be less than significant.

Traffic noise levels were analyzed for five intersections near the site. In year 2022, noise from traffic at nearby sensitive receptors would be 0.1 dBA CNEL. No sensitive receptors would be exposed to the City's residential or school noise standard of 65 dBA CNEL. In 2040, noise levels at sensitive receptors would range up to 0.1 dBA CNEL. No analyzed sensitive receptors would be exposed to noise in excess of 65 dBA CNEL.

For the majority of future residents, traffic noise levels would attenuate to below 60 dBA CNEL and therefore, interior noise levels would be reduced below the interior residential living space standard of 45 dBA CNEL. For homes closer than 164 feet from the centerline of East Santiago Canyon Road, interior noise standards could exceed 45 dBA. Noise levels from off-site stationary equipment would not exceed the City's standard of 55 dBA Leq and 70 dBA Lmax between 7:00 AM and 10:00 PM or exceed 50 dBA Leq or 65 dBA Lmax between 10:00 PM and 7:00 AM at the exterior façade of nearby sensitive receptors.

Likewise, noise levels from community center activities would not exceed City standards and noise levels from parking lot activities would not exceed City standards.

MM NOI-1a To reduce potential construction noise impacts, the following multi-part mitigation measure shall be implemented for the proposed project:

- The construction contractor shall ensure that all equipment driven by internal combustion engines shall be equipped with mufflers, which are in good condition and appropriate for the equipment.
- The construction contractor shall locate stationary noise-generating equipment as far as possible from sensitive receptors when sensitive receptors adjoin or are near a construction project area. In addition, the project contractor shall place such stationary construction equipment so that emitted noise is directed away from sensitive receptors nearest the project site.
- The construction contractor shall ensure that unnecessary idling of internal combustion engines (i.e., idling in excess of 5 minutes) is prohibited.
- The construction contractor shall utilize "quiet" models of air compressors and other stationary noise sources where technology exists.
- The construction contractor shall, to the maximum extent practical, locate on-site equipment staging areas to maximize the distance between construction-related noise sources and noise-sensitive receptors nearest the project site during all project construction.
- The construction contractor shall ensure that the construction staging areas shall be located to create the greatest feasible distance between the staging area and noise-sensitive receptors nearest the project site.
- The construction contractor shall designate a noise disturbance coordinator who would be responsible for responding to any local complaints about construction noise. The disturbance coordinator would determine the cause of the noise complaints (starting too early, bad muffler, etc.) and establishment reasonable measures necessary to correct the problem. The construction contractor shall visibly post a telephone number for the disturbance coordinator at the construction site.
- All on-site construction activities, including deliveries and engine warm-up, shall be restricted to the hours between 7:00 a.m. and 8:00 p.m. Monday through Saturday. Construction, except emergency work, shall not be permitted on Sunday or federal holidays.

MM NOI-1b: To reduce potential future on-site exterior traffic noise impacts at on-site receptors adjacent to East Santiago Canyon Road, the following multi-part mitigation measure shall be implemented for the proposed project:

- Based on SoundPlan model runs, a 6-foot high noise barrier, relative to the receptor elevation, is required to comply with the City's exterior noise standard for proposed residential uses located adjacent to Santiago Canyon Road. The calculated noise contours are shown in Exhibit 3.12-7. In order to meet the City's exterior noise standard for community uses, a 4-foot high berm would be required along Santiago Canyon Road; or

- A minimum setback distance of 164 feet from the centerline of East Santiago Canyon Road shall be incorporated into the design feature. The first row of residential uses constructed 164 feet from the centerline will also have front yards facing East Santiago Canyon Road.

MM NOI-1c: To reduce potential future on-site interior traffic noise impacts at on-site receptors adjacent to East Santiago Canyon Road, the following multi-part mitigation measure shall be implemented for the proposed project:

- All proposed residential units located within 560 feet of the centerline of East Santiago Canyon Road shall include an alternate form of ventilation, such as an air conditioning system, in order to ensure that windows can remain closed for a prolonged period of time. The building plans approved by the County shall reflect this requirement.

- All second story habitable rooms of proposed residential units located within 164 feet of the centerline of East Santiago Canyon Road shall include STC 30 rated windows in facades that would be parallel and perpendicular to East Santiago Canyon Road; or

- Upon completion of the architectural plans, a detailed acoustical study shall be prepared by a qualified noise analyst that analyzes the interior noise levels of the proposed residential units and provides design features to reduce the interior noise levels to within the 45 dBA CNEL standard.

With implementation of mitigation, impacts would be less than significant.

9. Public Services

Impact Threshold

Threshold PS-1: *Would the project result in a need for new or expanded fire protection facilities?*

Description of the Impacts: The project would add 393 new residents to the City's population. The project would cause a substantial increase in calls for service compared to the existing use of the site.

Finding: The City makes Finding 1 that changes or alterations have been required in, or incorporated into the Project which avoid or substantially lessen the significant environmental effect described above and identified in the Final EIR

Facts in Support of Finding: The project would generate approximately 393 new residents in the City. The closest fire station is 1.75 miles from the project site. The response time would be approximately 4 minutes, 12 seconds, compared to the average response time of 3 minutes, 45 seconds. The project would take vehicular access from E. Santiago Canyon Road via a driveway aligned with Nicky Way. Mitigation measure HAZ-5 requires the Applicant to demonstrate compliance with all Fire Code emergency access requirements prior to issuance of building permits. Mitigation measure HAZ-6 would require the applicant to prepare a Fuel Modification Plan and submit it to the City to review and approval prior to issuance of building permits. With implementation of mitigation, impacts would be less than significant. The project would not directly create a need to construct new or expanded fire protection or emergency medical service facilities.

D. ENVIRONMENTAL IMPACTS DETERMINED TO BE SIGNIFICANT AND UNAVOIDABLE AFTER MITIGATION

1. Air Quality

Impact Thresholds

Threshold AIR-1: *Would the project conflict with or obstruct implementation of the applicable air quality plan?*

Threshold AIR-2: *Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation?*

Threshold AIR-3: *Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or State ambient air quality standard?*

Description of the Impact: The project would have a significant impact on air quality under CEQA.

Finding: The City makes a finding that changes or alterations have been required in, or incorporated into the Project which avoid or substantially lessen the significant environmental effect described above and identified in the Final EIR. However, the City has determined that while the above-described impacts can be partially mitigated by the mitigation measures described below, these impacts cannot be mitigated to a less than significant level. There are no other feasible mitigation measures or alternatives that would reduce this impact to an acceptable level. Therefore, the City hereby also makes a finding

which will require the adoption of a Statement of Overriding Considerations as a condition for Project approval.

Facts in Support of Finding: There are two key indicators for whether or not a project conflicts with, or obstructs implementation of an applicable air quality plan: (1) whether the project will not result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations, or delay timely attainment of air quality standards or the interim emission reductions specified in the AQMP; and (2) According to Chapter 12 of the *SCAQMD CEQA Air Quality Handbook*, the purpose of the General Plan consistency findings is to determine whether a project is inconsistent with the growth assumptions incorporated into the air quality plan, and thus, whether it would interfere with the region's ability to comply with federal and California air quality standards.

According to SCAQMD, the project is consistent with the AQMP if the project would not result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations, or delay timely attainment of air quality standards. Construction related activities associated with the project would result in emissions of NOx that exceed SCAQMD's thresholds. Therefore, construction would result in potentially significant impacts. The project would not exceed thresholds for any other criteria pollutant (VOC, CO, Sox, or particulate matter).

According to Chapter 12 of the *SCAQMD CEQA Air Quality Handbook*, the purpose of the General Plan consistency finding is to determine whether a project is inconsistent with the growth assumptions incorporated into the air quality plan and thus, whether it would interfere with the region's ability to comply with federal and California air quality standards.

The City of Orange designates the project site "Low Density Residential," "Resource Area" and "Open Space." The City of Orange Zoning Ordinance zones the project site "S-G (Sand and Gravel Extraction)" and "R-1-8 (Single-Family Residential 8,000 square-feet)."

The proposed project involves the development of up to 128 dwelling units on approximately 40.7 acres within the area designated "Resource Area" and the preservation of the remaining 68.5 acres (which overlap with the "Resource Area" and "Low Density Residential" designations) as open space and recreation uses. Accordingly, the applicant is proposing to change the "Resource Area" designation to a combination of "Low Density Residential," and "Open Space," and the "Low Density Residential" designation to "Open Space."

The development of the Air Quality Management Plan (AQMP) is based in part on the land use general plan determinations of the various cities and counties that constitute the SoCAB. A project that is consistent with the general plan is considered to be accounted for in the AQMP. Since the proposed project entitlements would include a General Plan Amendment that would amend both the East Orange General Plan and Orange Park Acres Plan to incorporate the Trails at Santiago Creek Specific Plan, the proposed project would not be consistent with the growth assumptions within the current AQMP. The project would be potentially significant regarding growth assumptions within the current AQMP.

The proposed project would comply with all applicable rules and regulations of the AQMP. Because of the nature of the proposed project, which includes earthmoving activity, SCAQMD Rule 403 applies. Rule 403 governs emissions of fugitive dust during construction and operation activities. The rule requires that fugitive dust be controlled with best available control measures so that the presence of such dust does not remain visible in the atmosphere beyond the property line of the emission source. In addition, SCAQMD Rule 403 requires implementation of dust suppression techniques to prevent fugitive dust from creating a nuisance off-site. Compliance with this rule is achieved through application of standard Best Management Practices (BMPs). These BMPs include application of water or chemical stabilizers to disturbed soils; covering haul vehicles; restricting vehicle speeds on unpaved roads to 15 miles per hour; sweeping loose dirt from paved site access roadways; cessation of construction activity when winds exceed 25 miles per hour; and establishing a permanent ground cover on finished sites. The project's compliance with SCAQMD Rule 403 would result in consistency with the applicable AQMP control measures. As such, emissions from fugitive dust during construction would be reduced to less than significant levels.

Because emissions of NOx would exceed thresholds, Mitigation Measure AIR-1a through AIR-1g would be required to reduce construction emissions.

MM AIR-1a During construction, all equipment shall be maintained in good operating condition so as to reduce emissions. The construction contractor shall ensure that all construction equipment is properly serviced and maintained in accordance with the manufacturer's specifications. Maintenance records shall be available at the construction site for City verification.

MM AIR-1b All paints and coatings shall meet or exceed performance standards noted in SCAQMD Rule 1113. To ensure compliance with SCAQMD Rule 1113, the following volatile organic compound (VOC) control measures shall be implemented during architectural coating activities:

a) Use paints with a VOC content of no more than 50 grams per liter for both interior and exterior coatings.

b) Keep lids closed on all paint containers when not in use to prevent VOC emissions and excessive odors.

c) Use compliant low VOC cleaning solvents to clean paint application equipment.

d) Keep all paint and solvent laden rags in sealed containers to prevent VOC emissions.

MM AIR-1c Prior to the issuance of grading permits for the project, the project applicant shall include a dust control plan as part of the construction contract standard specifications. The dust control plan shall include measures to meet the requirements of SCAQMD Rules 402 and 403. Such basic measures may include but are not limited to the following:

a) All haul trucks shall be covered prior to leaving the site to prevent dust from impacting the surrounding areas.

b) Moisten soil each day prior to commencing grading to depth of soil cut.

c) Water exposed surfaces at least three times a day under calm conditions, and as often as needed on windy days or during very dry weather in order to maintain a surface crust and minimize the release of visible emissions from the construction site.

d) Treat any area that will be exposed for extended periods with a soil conditioner to stabilize soil or temporarily plant with vegetation.

e) Use street sweepers that comply with SCAQMD Rules 1186 and 1186.1.

f) All contractors shall turn off all construction equipment and delivery vehicles when not in use, or limit on-site idling to no more than 5 minutes in any one hour.

g) On-site electrical hook ups to a power grid shall be provided for electric construction tools including saws, drills, and compressors, where feasible, to reduce the need for diesel powered electric generators.

h) Traffic speeds on all unpaved roads to be reduced to 15 miles per hour or less.

i) Sweep streets at the end of the day if visible soil is carried onto adjacent public paved roads.

MM AIR-1d Prior to and during grading activities, the project applicant shall comply with South Coast Air Quality Management District Rule 403 as follows:

- The applicant shall submit a fully executed Large Operation Notification (Form 403 N) to the SCQAMD Executive Officer within 7 days of qualifying as a large operation. The form shall include the name(s), address(es), and phone number(s) of the person(s) responsible for the submittal, and a description of the operation(s), including a map depicting the location of the site.

- Maintain daily records to document the specific dust control actions taken, maintain such records for a period of not less than three years; and make such records available to the Executive Officer upon request

- Install and maintain project signage with project contact signage that meets the minimum standards of the Rule 403 Implementation Handbook, prior to initiating any earthmoving activities

- Identify a dust control supervisor that (1) is employed by or contracted with the property owner or developer; (2) is on the site or available on-site within 30 minutes during working hours; (3) has the authority to expeditiously employ sufficient dust mitigation measures to ensure compliance with all Rule requirements; (4) has completed the AQMD Fugitive Dust Control Class and has been issued a valid Certificate of Completion for the class; and (5) will notify the Executive Officer in writing within 30 days after the site no longer qualifies as a large operation.

MM AIR-1e Prior to and during grading activities, the project applicant shall implement the following dust control measures for large operations, as applicable, pursuant to South Coast Air Quality Management District Rule 403:

Earth Moving (except construction cutting and filling areas, and mining operations)

1a. Maintain soil moisture content at a minimum of 12 percent, as determined by ASTM method D-2216, or other equivalent method approved by the Executive Officer, the California Air Resources Board, and the U.S. EPA. Two soil moisture evaluations must be conducted during the first three hours of active operations during a calendar day, and two such evaluations each subsequent four-hour period of active operations; or

1a-1. For any earth-moving which is more than 100 feet from all property lines, conduct watering as necessary to prevent visible dust emissions from exceeding 100 feet in length in any direction.

Earth Moving-Construction Fill Areas

1b. Maintain soil moisture content at a minimum of 12 percent, as determined by ASTM method D-2216, or other equivalent method approved by the Executive Officer, the California Air Resources Board, and the U.S. EPA. For areas which have an optimum moisture content for compaction of less than 12 percent, as determined by ASTM Method 1557 or other equivalent method approved by the Executive Officer and the California Air Resources Board and the U.S. EPA, complete the compaction process as expeditiously as possible after achieving at least 70 percent of the optimum soil moisture content. Two soil moisture evaluations must be conducted during the first three hours of active operations during

a calendar day, and two such evaluations during each subsequent four-hour period of active operations.

Earth Moving—Construction Cut Areas and Mining Operations

1c. Conduct watering as necessary to prevent visible emissions from extending more than 100 feet beyond the active cut or mining area unless the area is inaccessible to watering vehicles due to slope conditions or other safety factors.

Disturbed Surface Areas—Completed Grading Areas

2a/b. Apply dust suppression in sufficient quantity and frequency to maintain a stabilized surface. Any areas which cannot be stabilized, as evidenced by wind driven fugitive dust must have an application of water at least twice per day to at least 80 percent of the unstabilized area.

2c. Apply chemical stabilizers within five working days of grading completion; OR

2d. Take actions (3a) or (3c) specified for inactive disturbed surface areas.

Inactive Disturbed Surface Areas

3a. Apply water to at least 80 percent of all inactive disturbed surface areas on a daily basis when there is evidence of wind driven fugitive dust, excluding any areas which are inaccessible to watering vehicles due to excessive slope or other safety conditions; or

3b. Apply dust suppressants in sufficient quantity and frequency to maintain a stabilized surface; or

3c. Establish a vegetative ground cover within 21 days after active operations have ceased. Ground cover must be of sufficient density to expose less than 30 percent of unstabilized ground within 90 days of planting, and at all times thereafter; OR

3d. Utilize any combination of control actions (3a), (3b), and (3c) such that, in total, these actions apply to all inactive disturbed surface areas.

Unpaved Roads

4a. Water all roads used for any vehicular traffic at least once per every two hours of active operations [3 times per normal 8-hour work day]; or

4b. Water all roads used for any vehicular traffic once daily and restrict vehicle speeds to 15 miles per hour; or

4c. Apply a chemical stabilizer to all unpaved road surfaces in sufficient quantity and frequency to maintain a stabilized surface.

Open Storage Piles

5a. Apply chemical stabilizers; or

5b. Apply water to at least 80 percent of the surface area of all open storage piles on a daily basis when there is evidence of wind driven fugitive dust; or

5c. Install temporary coverings; or

5d. Install a three-sided enclosure with walls with no more than 50 percent porosity which extend, at a minimum, to the top of the pile. This option may only be used at aggregate-related plants or at cement manufacturing facilities.

All Categories

6a. Any other control measures approved by the Executive Officer and the U.S. EPA as equivalent to the methods specified in this mitigation measure may be used.

MM AIR-1f Prior to and during grading activities, the project applicant shall implement the following contingency control measures for large operations, as applicable, pursuant to South Coast Air Quality Management District Rule 403:

Earth Moving

1A. Cease all active operations; or

2A. Apply water to soil not more than 15 minutes prior to moving such soil.

0B. On the last day of active operations prior to a weekend, holiday, or any other period when active operations will not occur for not more than four consecutive days: apply water with a mixture of chemical stabilizer diluted to not less than 1/20 of the concentration required to maintain a stabilized surface for a period of six months; OR

1B. Apply chemical stabilizers prior to wind event; or

2B. Apply water to all unstabilized disturbed areas 3 times per day. If there is any evidence of wind driven fugitive dust, watering frequency is increased to a minimum of four times per day; or

3B. Establish a vegetative ground cover within 21 days after active operations have ceased. Ground cover must be of sufficient density to expose less than 30 percent of unstabilized ground within 90 days of planting, and at all times thereafter; or

4B. Utilize any combination of control actions (1B), (2B), and (3B) such that, in total, these actions apply to all disturbed surface areas.

Unpaved Roads

1C. Apply chemical stabilizers prior to wind event; or

2C. Apply water twice per hour during active operation; or

3C. Stop all vehicular traffic.

Open Storage Piles

1D. Apply water twice per hour; or

2D. Install temporary coverings.

Paved Road Track Out

1E. Cover all haul vehicles; or

2E. Comply with the vehicle freeboard requirements of Section 23114 of the California Vehicle Code for both public and private roads.

All Categories

1F. Any other control measures approved by the Executive Officer and the U.S. EPA as equivalent to the methods specified in this mitigation measure may be used.

MM AIR-1g During construction activities, all off-road equipment with engines greater than 50 horsepower shall meet either EPA or ARB Tier IV Final off-road emission standards. The construction contractor shall maintain records concerning its efforts to comply with this requirement, including equipment lists. Off-road equipment descriptions and information may include but are not limited to equipment type, equipment manufacturer, equipment identification number, engine model year, engine certification (Tier rating), horsepower, and engine serial number.

If engines that comply with Tier IV Final off-road emission standards are not commercially available, then the construction contractor shall use the next cleanest piece of off-road equipment (e.g., Tier IV Interim) available. For purposes of this mitigation measure, "commercially available" shall mean the availability of Tier IV Final engines taking into consideration factors such as (i) critical-path timing of construction; and (ii) geographic proximity to the project site of equipment. The contractor can maintain records for equipment that is not commercially available by providing letters from at least two rental companies for each piece of off-road equipment where the Tier IV Final engine is not available.

With implementation of mitigation, construction emissions would continue to exceed SCAQMD's regional significance thresholds. There are no additional feasible mitigation measures available to reduce emissions. The project's regional emissions of NOx would continue to exceed applicable SCAQMD regional construction significance thresholds after implementation of mitigation. Construction would generate a maximum of 199.47 pounds of NOx per day after implementation of mitigation. This exceeds the threshold of 100 pounds per day. Impacts are significant and unavoidable and require a statement of overriding consideration.

The project's construction-related emissions would exceed the applicable SCAQMD significance threshold for NOX with implementation of all feasible mitigation measures. The thresholds of significance represent the allowable amount of emissions each project can generate without generating a cumulatively considerable contribution to regional air quality impacts. If an area is in non-attainment for a criteria pollutant, then the background concentration of that pollutant has historically exceeded the ambient air quality standard. It follows that if a project exceeds the regional thresholds for that non-attainment pollutant, then it would result in a cumulatively considerable net increase of that pollutant and result in a significant cumulative impact. As such, cumulative construction impacts (Impact AIR-3) are significant and unavoidable and require a statement of overriding consideration.

The region is non-attainment for the federal and state ozone standards, the state PM10 standards, and the federal and state PM2.5 standards. Therefore, a project that would not exceed the SCAQMD thresholds of significance on a project-level would also not result in a cumulatively considerable contribution to these regional air quality impacts. The impacts from the project would, therefore, be cumulatively less than significant during project operations and significant and unavoidable during project construction.

Operational emissions generated by area, energy, and mobile sources would result in the following emissions:

Category	Mass Daily Emissions (pounds per day)					
	VOC	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Area	6.15	0.12	10.66	0.00	0.06	0.06
Energy	0.10	0.84	0.36	0.01	0.07	0.07
Mobile	0.80	3.31	10.98	0.04	3.96	1.08
Total Emissions	7.05	4.27	21.99	0.05	4.08	1.20
SCAQMD Significance Thresholds (lbs/day)	55	55	550	150	150	55
Exceed Threshold?	No	No	No	No	No	No

Notes:
VOC = Volatile Organic Compounds NO_X = nitrogen oxides CO = carbon monoxide PM_{10} = particulate matter with an aerodynamic resistance diameter of 10 micrometers or less; $PM_{2.5}$ = particulate matter with an aerodynamic resistance diameter of 2.5 micrometers
Source: CalEEMod and FCS 2018, see Appendix F—For each source, the maximum emissions between summer and winter are shown.

As shown in the table, emissions would not exceed thresholds. Therefore, the project's operational emissions would result in less than significant impacts.

2. Transportation and Traffic

Impact Threshold:

Threshold TRANS-2 Would the project conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system under Year 2022 Traffic Conditions?

Description of the Impact: The project would have a significant impact on traffic under CEQA.

Finding: The City makes a finding that changes or alterations have been required in, or incorporated into the Project which avoid or substantially lessen the significant environmental effect described above and identified in the Final EIR. However, the City has determined that while the above-described impact can be partially mitigated by the mitigation measures described below, this impact cannot be mitigated to a less than significant level. There are no other feasible mitigation measures or alternatives that would reduce this impact to an acceptable level. Therefore, the City hereby also makes a finding

which will require the adoption of a Statement of Overriding Considerations as a condition for Project approval.

Facts in Support of Finding: Ten key study area intersections and 17 key roadway segments were analyzed under Year 2022 traffic conditions.

Intersection Year 2022 With Project Traffic Conditions

Year 2022 With Project Traffic Conditions (Without Sand and Gravel Credit)

Review of Columns (3) and (4) of Table 3.16-16 in the Final EIR indicates that traffic associated with the proposed project "Without Sand and Gravel Credit" will significantly impact one of the 10 key study intersections, when compared to the LOS standards and significant impact criteria specified in the TIA. Although the intersections of Cannon Street/Serrano Avenue and Cannon Street/Taft Avenue are forecast to operate at unacceptable LOS E or LOS F during the AM and/or PM peak-hours with the addition of project traffic, the proposed project "Without Sand and Gravel Credit" is expected to add less than 0.010 to the ICU value. The remaining seven key study intersections and the proposed project driveway are forecast to continue to operate at an acceptable LOS with the addition of project generated traffic in the Year 2022 "Without Sand and Gravel Credit." The location significantly impacted by the proposed project in the Year 2022 is as shown in Row 5 of Table 3.16-16 of the Final EIR. As shown in Column (5), the implementation of improvements at the impacted key study intersections completely offsets the impact of project traffic "Without Sand and Gravel Credit" and the key study intersection is forecast to operate at an acceptable LOS during the AM and PM peak-hours. *Appendix C and D* presents the Year 2022 With Project ICU/LOS calculations for the 10 key study intersections and the proposed project driveway "Without Sand and Gravel Credit."

Year 2022 With Project Traffic Conditions (With Sand and Gravel Credit)

Review of Columns (3) and (4) of Table 3.16-17 of the Final EIR indicates that traffic associated with the proposed project "With Sand and Gravel Credit" will significantly impact one of the 10 key study intersections, when compared to the LOS standards and significant impact criteria specified in the TIA. Although the intersections of Cannon Street/Serrano Avenue and Cannon Street/Taft Avenue are forecast to operate at unacceptable LOS E or LOS F during the AM and/or PM peak-hours with the addition of project traffic, the proposed project "With Sand and Gravel Credit" is expected to add less than 0.010 to the ICU value. The remaining seven key study intersections and the proposed project driveway are forecast to continue to operate at an acceptable LOS with the addition of project generated traffic in the Year 2022 "With Sand and Gravel Credit." The location significantly impacted by the proposed project in the Year 2022 is as shown in Row 5 of Table 3.16-17.

As shown in Column (5), the implementation of improvements at the impacted key study intersections completely offsets the impact of project traffic "With Sand and Gravel Credit" and the key study intersection is forecast to operate at an acceptable LOS during the AM

and PM peak-hours. *Appendix C and D* presents the Year 2022 With Project ICU/LOS calculations for the 10 key study intersections and the proposed project driveway "With Sand and Gravel Credit."

Roadway Segments Year 2022 Without Project Traffic Conditions

Year 2022 Without Project Traffic Conditions (Without Sand and Gravel Credit)

An analysis of future (Year 2022) cumulative traffic conditions "Without Sand and Gravel Credit" indicates that with the addition of ambient traffic growth and cumulative project traffic, two of the 17 key roadway segments are forecast to operate at unacceptable levels of service. Roadway Segment B (Cannon Street between Serrano Avenue and Taft Avenue) and Roadway Segment C (Cannon Street between Taft Avenue and East Santiago Canyon Road) are forecast to operate at unacceptable LOS E and/or LOS F on a daily basis in the Year 2022. The remaining 15 key roadway segments are forecast to continue to operate at acceptable levels of service on a daily basis with the addition of ambient traffic growth and cumulative project traffic "Without Sand and Gravel Credit."

Year 2022 Without Project Traffic Conditions (With Sand and Gravel Credit)

An analysis of future (Year 2022) cumulative traffic conditions "With Sand and Gravel Credit" indicates that with the addition of ambient traffic growth and cumulative project traffic, two of the 17 key roadway segments are forecast to operate at unacceptable levels of service. Roadway Segment B (Cannon Street between Serrano Avenue and Taft Avenue) and Roadway Segment C (Cannon Street between Taft Avenue and East Santiago Canyon Road) are forecast to operate at unacceptable LOS E and/or LOS F on a daily basis in the Year 2022. The remaining 15 key roadway segments are forecast to continue to operate at acceptable levels of service on a daily basis with the addition of ambient traffic growth and cumulative project traffic "With Sand and Gravel Credit."

Year 2022 With Project Traffic Conditions

Year 2022 With Project Traffic Conditions (Without Sand and Gravel Credit)

Review of Column (5) of Table 3.16-18 indicates that traffic associated with the proposed project "Without Sand and Gravel Credit" **will not** significantly impact any of the 17 key roadway segments, when compared to the LOS standards and significant impact criteria specified in the TIA. Although Roadway Segment B (Cannon Street between Serrano Avenue and Taft Avenue) is forecast to operate at unacceptable LOS F on a daily basis in the Year 2022 without project traffic, the level of service for this key roadway segment improves to LOS E with the proposed project "Without Sand and Gravel Credit" (with inclusion of the project-specific improvements). Although Roadway Segment C (Cannon Street between Taft Avenue and East Santiago Canyon Road) is forecast to operate at unacceptable LOS E on a daily basis in the Year 2022 without project traffic, this key roadway segment is forecast to operate at acceptable LOS C with the proposed project "Without Sand and Gravel Credit" (with inclusion of the project-specific improvements). The remaining 15 key roadway segments are forecast to continue to operate at an

acceptable service level on a daily basis with the addition of project generated traffic in the Year 2022 traffic condition "Without Sand and Gravel Credit."

Year 2022 With Project Traffic Conditions (With Sand and Gravel Credit)

Review of Column (5) of Table 3.16-19 indicates that traffic associated with the proposed project "With Sand and Gravel Credit" **will not** significantly impact any of the 17 key roadway segments, when compared to the LOS standards and significant impact criteria specified in the TIA. Although Roadway Segment B (Cannon Street between Serrano Avenue and Taft Avenue) is forecast to operate at unacceptable LOS F on a daily basis in the Year 2022 without project traffic, the level of service for this key roadway segment improves to LOS E with the proposed project "With Sand and Gravel Credit" (with inclusion of the project-specific improvements). Although Roadway Segment C (Cannon Street between Taft Avenue and East Santiago Canyon Road) is forecast to operate at unacceptable LOS E on a daily basis in the Year 2022 without project traffic, this key roadway segment is forecast to operate at acceptable LOS C with the proposed project "With Sand and Gravel Credit" (with inclusion of the project-specific improvements). The remaining 15 key roadway segments are forecast to continue to operate at an acceptable service level on a daily basis with the addition of project generated traffic in the Year 2022 traffic condition "With Sand and Gravel Credit."

As discussed above, the project would result in an impact at Orange Park Boulevard/East Santiago Canyon Road. To mitigate the proposed project's impacts at Orange Park Boulevard/East Santiago Canyon Road, Mitigation Measure TRANS-2 would require improvements to each intersection. The improvements are depicted in Exhibit 3.16-21. Because the project contributes to pre-existing deficient conditions, it is only required to mitigate for its fair share of the impact. The fair share calculations are summarized in Table 3.16-20.

Key Intersection	Impacted Time Period	(1) Project Only Volume	(2) Existing Volume	(3) Year 2022 With Project Volume	(4) Project Fair Share Responsibility
Orange Park Boulevard at East Santiago Canyon Road (Without Sand and Gravel Credit)	AM PM	— 68	— 3,436	— 3,810	— **18.2 percent**
Orange Park Boulevard at East Santiago Canyon Road (With Sand and Gravel Credit)	AM PM	— 51	— 3,447	— 3,805	— 14.2 percent
Notes: Net Project Percent Increase (4) = Column (1)/[Column (3)–Column (2)] **Bold Project Fair Share Responsibility** is based on worst-case scenario. Source: Linscott, Law & Greenspan, Engineers, 2017.					

MM TRANS-2: Prior to issuance of building permits, the project Applicant shall provide the City of Orange with fair share fees to restripe the northbound approach of Orange Park Boulevard at East Santiago Canyon Road to provide one exclusive left-turn lane and one shared left-turn/right-turn lane. The Applicant's fair share responsibility for these improvements is 18.2 percent.

Despite the fair share contribution provided through Mitigation Measure TRANS-2 mitigating the proposed project's impacts at Orange Park Boulevard/East Santiago Canyon Road, impacts would be significant and unavoidable as the Orange Park Boulevard/East Santiago Canyon Road intersection is not listed in the City of Orange MPAH, or any similar plans. There are no other feasible mitigation measures that would reduce the project's impacts to a less than significant level.

VII. FINDINGS REGARDING IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES

Implementation of the proposed Project would require the commitment of building materials such as lumber and other forest products, sand and gravel, photochemical construction materials, steel, copper, lead, and water for construction of the proposed 40 residential home development. Given the level of building materials necessary to sustain ongoing regional development, the commitment of such materials to the proposed Project is insignificant by comparison.

There would be an irretrievable commitment of energy resources such as gasoline and diesel fuel for the operation of construction equipment. Because these types of resources are available in sufficient quantities in this region and the proposed Project encompasses a very limited scope, these impacts would be temporary and are not considered significant. In addition, up to 90 percent of the demolished material would be reused on site, resulting in a significant reduction in fuel consumption that would otherwise be required for hauling large volumes of import material from offsite locations to the site and required for hauling large volumes of export material to an offsite recycling facility or landfill. In addition, multiple green building strategies would be implemented in order to reduce the amount resources committed. The project would be required to comply with Title 24 of the California Building Standards Code, which is referred to as the California Green Building Standards Code.

Based on, (1) the relatively small-scale of the Project and (2) the Project's obligation to meet current energy efficiency standards and requirements, the change in energy consumption resulting from Project implementation would be considered less than significant.

In addition, the proposed Project would not significantly alter the consumption of and/or demand for non-renewable resources over that anticipated by the City of Orange General Plan. Although Project implementation would result in an increased demand for some non-renewable resources, the demands are consistent with the long-range plans for the City of Orange. Demand and consumption of non-renewable resources would be within the limits

anticipated for residential development in the long-term. The proposed development of the Project site would not result in any adverse impacts related to the commitment of resources in the immediate or distant future.

VIII. FINDINGS REGARDING GROWTH INDUCING IMPACTS

The following four criteria were considered with regard to the Project's potential growth-inducing impacts:

- *Would the proposed Project result in the removal of an impediment to growth such as the establishment of an essential public service or the provision of new access to an area?*
- *Would the proposed Project result in economic expansion or growth such as changes in the revenue base or employment expansion?*
- *Would the proposed Project result in the establishment of a precedent setting action such as an innovation, a radical change in zoning or a General Plan amendment approval?*
- *Would the proposed Project result in development or encroachment in an isolated or adjacent area of open space, as opposed to an infill type of project in an area that is already largely developed?*

The analysis of growth-inducing impacts concludes that based on the four criteria analyzed in the EIR, the proposed Project would not result in any potentially significant growth-inducing impacts. Implementation of the proposed Project would be consistent with the City of Orange General Plan and Zoning Ordinance, thus meeting the long-range plans adopted by the City of Orange. Further, the proposed uses (i.e., single-family residential and open space) are not characterized by features that attract or facilitate new, unanticipated development that would ordinarily be considered growth-inducing. Conventionally, growth inducement is measured by the potential of a project or a project's secondary effects (i.e. provision of new infrastructure which supports housing or creation of jobs) to facilitate development of housing. Further, all of the infrastructure that exists in the Project area can provide an adequate level of service, including sewer and water; storm drainage improvements would be made as part of the Project. Circulation or other infrastructure improvements are not required as a result of project implementation.

Project implementation would not result in any significant direct or indirect additional residential development that would generate unanticipated new residents or employment that would be an "attractor" of residents to the area that are not already anticipated. The site is not located in an isolated area that is constrained by the absence of infrastructure where the provision of infrastructure would promote further development. None of the accepted standards that distinguish growth-inducing projects characterize the proposed Project; therefore, no significant growth-inducing impacts are anticipated as a result of project implementation.

IX. FINDINGS REGARDING CUMULATIVE IMPACTS

Cumulative impacts analysis requires consideration of the impacts of other projects in an area, in conjunction with the proposed Project, to assess the potential for significant cumulative impacts. For this EIR, the potential environmental effects of the proposed Project were considered in conjunction with the potential environmental effects of buildout anticipated for the project area. The project's cumulative impacts were considered in conjunction with other proposed and approved projects in the City, which are listed in Table 4-1 in the EIR.

Agriculture Resources and Forest Resources

There are no agricultural or forestry resources within the project site or on surrounding land uses. This condition precludes the possibility of the proposed project contributing to a cumulative impact in this regard. No impacts would occur.

Air Quality

The geographic scope of the cumulative greenhouse gas emissions analysis is the South Coast Air Basin, which encompasses Orange County, Los Angeles County (excluding the Antelope Valley), Ventura County, Riverside County (excluding the Coachella Valley and the desert region) and San Bernardino County (excluding the desert region). Air quality is impacted by topography, dominant air flows, atmospheric inversions, location, and season; therefore, using the Air Basin represents the area most likely to be impacted by air emissions.

All of the projects listed in Table 4-1 would result in new air emissions, during construction or operations (or both). The air basin is currently in non-attainment of the federal standards for ozone, PM10 and PM2.5, and is in nonattainment of the state standards for ozone and PM2.5. Therefore, there is an existing cumulatively significant air quality impact with respect to these pollutants.

The proposed project would emit construction and operational criteria pollutant emissions at levels that would exceed the South Coast Air Quality Management District (SCAQMD) thresholds. Mitigation is proposed requiring the implementation of criteria pollutant emissions (i.e., ozone precursors) reduction measures and would serve to reduce construction and operational emissions to below SCAQMD thresholds. Thus, the proposed project would not have a cumulatively considerable contribution to criterial pollutant emissions.

As discussed in Section 3.3, Air Quality, cumulative cancer, non-cancer chronic and acute health impacts, and PM2.5 concentrations were evaluated at the most impacted off-site sensitive receptor from all sources of toxic air contaminant (TAC) emissions located within 1,000 feet of the project site. The project's individual contribution to cancer risk for all phases is below the SCAQMD's 10 in a million threshold for individual project impacts; therefore, the project would not result in a cumulatively considerable contribution to the existing, cumulatively significant TAC cancer risk.

All other project-related air quality impacts were found to be less than significant and did not require mitigation. Other projects that result in similar impacts would be required to mitigate for their impacts. Because the proposed project can mitigate all of these remaining air quality impacts to a level of less than significant, it would not have a related cumulatively significant impact with respect to these impact areas.

Biological Resources

The geographic scope of the cumulative biological resources analysis is the region surrounding the project site. The project site is located in an area characterized by urban development and infrastructure; accordingly, habitats in these areas tend to be characterized as highly disturbed, and impacts would be localized. Recent development patterns and anticipated future growth in the Orange region is considered an existing cumulatively significant impact to biological resources due to the loss of potential habitat for rare species.

The proposed project has the potential to have a significant impact on the least Bell's vireo and nesting birds. Mitigation Measures BIO-2a through BIO-2d are proposed requiring pre-construction surveys for these species and implementation of protection measures if they are found to be present. Some of the other projects listed in Table 4-1 are located on sites with similar biological attributes and, therefore, would be required to mitigate for impacts on special-status wildlife species in a manner similar to the proposed project. The required mitigation would reduce the project's contribution to any significant cumulative impact on special-status wildlife species to less than cumulatively considerable.

The proposed project has the potential to have a significant impact on sensitive riparian communities and wetlands. Mitigation Measures BIO-3 and BIO-4 are proposed requiring restoration or replacement of disturbed features. Some of the other projects listed in Table 4-1 are located on sites with similar biological attributes and, therefore, would be required to mitigate for impacts on sensitive riparian communities and wetlands. The required mitigation would reduce the project's contribution to any significant cumulative impact on sensitive riparian communities and wetlands to less than cumulatively considerable.

All other project-related biological resource impacts (e.g., wildlife movement, conservation plans) were found to be less than significant and did not require mitigation. Other projects that result in similar impacts would be required to mitigate for their impacts. Because the proposed project's impact on all of these remaining biological resources is less than significant, it would not have a cumulatively considerable contribution to any existing significant cumulative impact.

Cultural Resources

The geographic scope of the cumulative cultural resources analysis is the project vicinity. Cultural resource impacts tend to be localized because the integrity of any given resource depends on what occurs only in the immediate vicinity around that resource, such as disruption of soils; therefore, in addition to the project site itself, the area near the project

site would be the area most affected by project activities (generally within a 500-foot radius).

Construction activities associated with development projects in the project vicinity may have the potential to encounter undiscovered cultural resources. These projects would be required to mitigate for impacts through compliance with applicable federal and state laws governing cultural resources. Even if a significant cumulative impact could be found, the proposed project would not make a cumulatively considerable impact with required mitigation. The likelihood of any significant cultural resources on the project site are very low given the developed nature of the site, previous disruptions to its ground and the lack of any known resource within its boundaries. Although there is the possibility that previously undiscovered resources could be encountered by subsurface earthwork activities, the implementation of standard construction mitigation measures would ensure that undiscovered cultural resources are not adversely affected by project-related construction activities, which would prevent the destruction or degradation of potentially significant cultural resources in the project vicinity. Given the low potential for disruption, and the comprehensiveness of mitigation measures that would apply to this project and those in the vicinity, the proposed project would not make a cumulatively considerable contribution to any potentially significant cumulative impact on cultural resources.

Therefore, the proposed project, in conjunction with other planned and approved projects, would not have a cumulatively significant impact related to cultural resources.

Geology and Soils

The geographic scope of the cumulative geology, soils, and seismicity analysis is the project vicinity. Adverse effects associated with geologic, soil, and seismic hazards tend to be localized, and the area near the project site would be the area most affected by project activities (generally within a 0.25-mile radius). Development in the project vicinity has not included any uses or activities which would result in geology, soils or seismicity impacts (such as mining or other extraction activities), and there is no existing cumulatively significant impact.

Development projects in the project vicinity may have the potential to be exposed to seismic hazards. However, there is a less than significant potential of the projects in combination to expose people or structure to substantial adverse effects, including the risk of loss, injury, or death in the event of a major earthquake; fault rupture; ground shaking; seismic-related ground failure; landslide; or liquefaction. Some or all of the other projects listed in Table 4-1 would be exposed to similar seismic hazards and, therefore, would be expected to implement similar regulatory requirements and mitigation measures. As such, the proposed project, in conjunction with other projects, would not have a cumulatively significant impact associated with seismic hazards.

Regarding soil erosion, development activities could lead to increased erosion rates on-site soils, which could cause unstable ground surfaces and increased sedimentation in nearby streams and drainage channels. Mitigation Measure HYD-1a requires implementation of standard stormwater pollution prevention measures to ensure that earthwork activities do

not result in substantial erosion off-site. This mitigation, in turn, would have to comply with the National Pollution Discharge Elimination System (NPDES) stormwater permitting program, which regulates water quality originating from construction sites. The NPDES program, which governs projects statewide (and nationwide), requires the preparation and implementation of Stormwater Pollution Prevention Programs for construction activities that disturb more than 1 acre, and the implementation of Best Management Practices that ensure the reduction of pollutants during stormwater discharges, as well as compliance with all applicable water quality requirements. Since the proposed project would have to comply with federal and state regulations and required mitigation measures that are designed to minimize impacts to projects on a wide geographic scale, the project's contribution to any significant cumulative erosion impact would be less than cumulatively considerable.

Finally, the project site contains fill soils that that may not be suitable to support urban development. Standard grading and soil engineering practices would abate these issues. Some or all of the other projects listed in Table 4-1 would be exposed to expansive soil hazards or unstable geologic units and, therefore, would be expected to implement similar grading and soil engineering practices to address those impacts. The proposed project would not contribute to any significant cumulative impact due to expansive soils or unstable soil units.

Therefore, the proposed project, in conjunction with other planned and approved projects, would not have a cumulatively significant impact related to geology, soils, and seismicity, assuming compliance with regulatory requirements.

Greenhouse Gas Emissions

The geographic scope of the cumulative greenhouse gas emissions analysis is the South Coast Air Basin, which encompasses Orange County, Los Angeles County (excluding the Antelope Valley), Ventura County, Riverside County (excluding the Coachella Valley and the desert region) and San Bernardino County (excluding the desert region). Air quality is impacted by topography, dominant air flows, atmospheric inversions, location, and season; therefore, using the Air Basin represents the area most likely to be impacted by air emissions.

Greenhouse gas emissions are inherently cumulative in nature, and the appropriate scope of analysis is the global climate. The proposed project and other projects would emit new greenhouse gas emissions. The proposed project's greenhouse gas emissions would not exceed the SCAQMD threshold of 3,500 metric tons of carbon dioxide equivalents after implementation of mitigation measures and project design features. Therefore, the project's contribution of greenhouse gas emissions would not be cumulatively significant.

Hazards and Hazardous Materials

The geographic scope of the cumulative hazards and hazardous materials analysis is the project area. Adverse effects of hazards and hazardous materials tend to be localized; therefore, the area near the project area would be most affected by project activities.

Hazards and hazardous materials are extensively regulated at the federal, state and local levels. There are no land uses in the project vicinity that are known to utilize large quantities of hazardous materials or involve hazardous activities, and there is no existing cumulatively significant impact.

The project site is adjacent to the closed Villa Park Landfill and previously supported uses that involved regular petroleum usage. Thus, the proposed would implement mitigation for vapor intrusion and remediation of petroleum-impacted soils. Other projects listed in Table 4-1 that have become contaminated from past uses or possess characteristics that involve the routine handling of large quantities of hazardous materials, would be required to mitigate for their impacts. Because hazards and hazardous materials exposure is generally localized and development activities associated with the other projects listed in Table 4-1 may not coincide with the proposed project, this effectively precludes the possibility of cumulative exposure.

The project site is adjacent to Santiago Oaks Regional Park and contains the wooded Santiago Creek Corridor. Thus, it is susceptible to wildland fires and would need to provide adequate emergency access. The proposed project would be required to prepare and implement a fuel modification plan and comply with all applicable Fire Code requirements for emergency access. Other projects listed in Table 4-1 that are susceptible to wildland fires would be required to implement similar mitigation. Because wildland fire exposure is dependent on location and development activities associated with the other projects listed in Table 4-1 may not occur in areas susceptible to such hazards, this effectively precludes the possibility of cumulative exposure.

Because the proposed project's impact due to hazards and hazardous materials is less than significant, it would not have a cumulatively considerable contribution to any significant cumulative impact.

Hydrology and Water Quality

The geographic scope of the cumulative hydrology and water quality analysis is the project vicinity, generally areas within 0.5 mile of the project site for stormwater impacts due to natural drainage patterns, drainage infrastructure, and impervious surfaces, which all contribute to limit the distance of stormwater flows. Hydrologic and water quality impacts tend to be localized; therefore, the area near the project site would be most affected by project activities. The nature and types of surrounding development, existing stormwater infrastructure and regulatory requirements have ensured that no cumulatively significant impacts related to water pollutants or flooding exist within the project vicinity.

The proposed project would involve short-term construction and long-term operational activities that would have the potential to degrade water quality in downstream water bodies. Mitigation Measures HYD-1a and HYD-1b are proposed that would require implementation of various construction and operational water quality control measures to prevent the release of pollutants into downstream waterways. Other projects that propose new development are required to implement similar mitigation measures in accordance

with adopted regulations. The required mitigation would reduce the project's contribution to any significant cumulative water quality impact to less than cumulatively considerable.

The project site is within the dam failure inundation area of Villa Park Dam and Santiago Dam. Mitigation Measure HYD-5 is proposed requiring the applicant to implement an Emergency Evacuation Plan that identifies procedures for an orderly evacuation of the project in the event indications of failure occur at either facility. Other projects that are within the dam failure inundation area would be required to comply with applicable emergency evacuation regulations. The required mitigation would reduce the project's contribution to any significant cumulative dam failure impact to less than cumulatively considerable.

All other project-related hydrology impacts (e.g., groundwater, drainage and 100-year flood hazards) were found to be less than significant and do not require mitigation. Because all project-related hydrology impacts are less than significant, the project would not have a cumulatively considerable contribution to any significant cumulative impact for these impacts.

Land Use and Planning

The geographic scope of the cumulative land use analysis is the Orange area. Land use decisions are made at the city level; therefore, the Orange area is an appropriate geographic scope. Development within Orange is governed by the City's General Plan and the Municipal Code, which ensure logical and orderly development and require discretionary review to ensure that projects do not result in land use impacts due to inconsistency with the General Plan and other regulations. As a result, there is no existing cumulatively significant land use impact.

The project site is currently designated for LDR, RA, and OS by the General Plan and zoned S-G and R-1-8. The proposed project involves the development of up to 128 dwelling units on 40.7 acres within the area designated RA and the preservation of the remaining 68.5 acres (which overlap with the RA and LDR designations) as open space and recreation uses. Accordingly, the applicant is proposing to change the RA designation to a combination of LDR and OS; and the LDR designation to OS. Thus, the proposed land use changes would serve to relocate the residential use and replace the resource use with open space use, which was found to be a less than significant impact.

Development projects in the Orange area would continue to be required to demonstrate consistency with all applicable City of Orange General Plan and Municipal Code requirements. This would ensure that these projects comply with applicable planning regulations. Those projects listed in Table 4-1 that have been previously approved have been deemed consistent with all applicable General Plan and Specific Plan requirements. For pending projects, the lead agency would be required to issue findings demonstrating consistency with the applicable General Plan and Municipal Code requirements if they are ultimately approved.

Therefore, the proposed project, in conjunction with other planned and approved projects, would not have a cumulatively significant impact related to land use.

Mineral Resources

The geographic scope of the cumulative mineral resource analysis is Orange County-Temescal Valley Region, which encompasses Orange County and western Riverside County. This region was defined by the California State Mining and Geology Board for the purposes of identifying mineral resource zones.

The Orange County-Temescal Valley Region was identified by the California Geological Survey as having only an 11 to 20 year supply of aggregate left in 2012. Thus, there an existing cumulative impact in terms of regional availability of aggregate resources.

The project site was surfaced mined for aggregate between 1919 and 1995. Following the cessation of mining activities, mined areas of the site have been backfilled, which effectively precludes the resumption of aggregate mining operations. Furthermore, the Geotechnical Investigation prepared for the project site indicates that it has been mined of economic aggregate deposits and the remaining deposits that are of potential economic value are infeasible to mine, due to limited volume of the localized deposits, expense of removing the overburden (pond deposits), and difficulty associated with excavation logistics. Thus, resuming aggregate mining operations on the project site would not be economically feasible and the resource is effectively depleted. Accordingly, the conversion of the project site to residential and open space/recreational use would not cumulatively contribute to the loss mineral resources of value to the State or region because the site has been depleted of all economically recoverable aggregate materials.

Noise

The geographic scope of the cumulative noise analysis is the project vicinity, including surrounding sensitive receptors. Noise impacts tend to be localized; therefore, the analysis in Section 3.12, Noise includes a cumulative analysis of existing, proposed, and anticipated future noise levels near the project site. Outdoor noise measurements taken at the project site indicate that the average ambient noise levels are within the "normally acceptable" or "conditionally acceptable" range for all land uses. Therefore, there is no existing cumulatively significant noise impact in the project vicinity.

The proposed project's construction noise levels may cause a temporary substantial increase in noise levels at nearby receptors. Mitigation is included that would require implementation of construction noise attenuation measures to reduce noise levels; however, construction noise levels may exceed adopted standards at certain nearby receptors and, therefore, is considered a significant unavoidable impact. Other projects listed in Table 4-1 would be required to implement similar mitigation and adhere to Municipal Code restrictions regarding construction noise. It is highly unlikely that a substantial number of the cumulative projects would be constructed simultaneously and close enough to one another for noise impacts to be compounded, given that the projects are at widely varying stages of approval and development. Therefore, it is reasonable to

conclude that construction noise from the proposed project would not combine with noise from other development projects to cause cumulatively significant noise impacts.

The proposed project's construction and operational vibration levels would not exceed annoyance thresholds, and impacts would be less than significant. Because vibration is a highly localized phenomenon, there would be no possibility for vibration associated with the project to combine with vibration from other projects because of their distances from the project site. Therefore, the proposed project would not contribute to a cumulatively significant vibration impact.

The proposed project's contribution to vehicular noise levels would not exceed the applicable thresholds of significance, which take into account existing noise levels as well as noise from trips associated with other planned or approved projects. Thus, the proposed project would not combine with other projects to cause a cumulatively considerable increase in ambient roadway noise.

Other projects listed in Table 4-1 would be required to evaluate noise and vibration impacts and implement mitigation, if necessary, to minimize noise impacts pursuant to local regulations. Therefore, the proposed project, in conjunction with other planned and approved projects, would not have a cumulatively significant impact related to noise.

Population and Housing

The geographic scope of the cumulative population and housing analysis is the City of Orange. Population growth is typically measured in relation to the size of the applicable jurisdiction and, thus, the City of Orange is appropriate geographical area. No existing cumulatively significant impacts have been identified for this topic.

The proposed project would develop 128 dwelling units, which would add 393 persons to the City of Orange's population, which represents an increase of 0.3 percent relative to the City's population of 141,420. The project site is currently designated for residential use by the City of Orange General Plan and Orange Zoning Ordinance and, thus, is contemplated to support population growth. Growth inducement impacts were found to be less than significant. Other development projects in the City of Orange would be reviewed for impacts on population growth and would be required to address any potential impacts with mitigation. Therefore, the proposed project, in conjunction with other future projects, would not have a cumulatively significant impact related to growth inducement.

Public Services

The geographic scope of the cumulative public services analysis is the service area of each of the providers serving the proposed project. Because of differences in the nature of the public service and utility topical areas, they are discussed separately. No existing cumulatively significant impacts have been identified for any of these areas, as all service providers are able to achieve the requisite level of service, capacity or response times.

Fire Protection and Emergency Medical Services

The geographic scope of the cumulative fire protection and emergency medical services analysis is the Orange Fire Department's service area, which consists of the Orange city limits.

The proposed project would develop 128 dwelling units on 40.7 acres of the project site and preserve the remaining acreage as open space. The proposed project is estimated to add 393 new residents to the City's population. The project site is located within 1.75 miles of the nearest fire station and is within an acceptable response time for fire protection. As such, the proposed project would not create a need for new or expanded fire protection facilities and would not result in a physical impact on the environment.

The project site is adjacent to Santiago Oaks Regional Park and contains the wooded Santiago Creek Corridor. Thus, it is susceptible to wildland fires and would need to provide adequate emergency access. The proposed project would be required to prepare and implement a fuel modification plan and comply with all applicable Fire Code requirements for emergency access. Other projects listed in Table 4-1 that are susceptible to wildland fires would be required to implement similar mitigation. Because wildland fire exposure is dependent on location and development activities associated with the other projects listed in Table 4-1 may not occur in areas susceptible to such hazards, this effectively precludes the possibility of cumulative exposure.

Other development projects in the Fire Department's service area would be reviewed for impacts on fire protection and emergency medical services and would be required to address any potential impacts with mitigation. According to the Fire Department, existing facilities are sufficient to serve the proposed project in conjunction with existing and cumulative projects. Therefore, the proposed project, in conjunction with other future projects, would not have a cumulatively significant impact related to fire protection and emergency medical services.

Police Protection

The geographic scope of the cumulative police protection analysis is the service area of the Orange Police Department, which consist of the Orange city limits.

The proposed project would develop 128 dwelling units on 40.7 acres of the project site and preserve the remaining acreage as open space. The proposed project is estimated to add 363 new residents to the City's population. The Police Department indicated that it could serve the proposed project without needing new or expanded police protection facilities. Other development projects within the Police Department service area would be reviewed for impacts on police protection and would be required to address any potential impacts with mitigation. According to the Police Department, existing facilities are sufficient to serve the proposed project in conjunction with existing and cumulative projects. Therefore, the proposed project, in conjunction with other future projects, would not have a cumulatively significant impact related to police protection.

Schools

The geographic scope of the cumulative school analysis is the Orange Unified School District (OUSD), which encompasses the City of Orange, and all or portions of Anaheim, Garden Grove, Santa Ana, and Villa Park.

The proposed project would develop 128 dwelling units on 40.7 acres of the project site and preserve the remaining acreage as open space. The proposed project is estimated to add 64 new students to OUSD. The proposed project would pay development fees to OUSD to fund capital improvements to school facilities. Other development projects within OUSD would be reviewed for impacts on schools and would be required to pay development fees. Therefore, the proposed project, in conjunction with other future projects, would not have a cumulatively significant impact related to schools.

Parks

The geographic scope of the cumulative park analysis is the Orange city limits. Within the city limits are neighborhood parks, community parks, regional parks, trails, community gardens, and historic sites.

The proposed project would develop 128 dwelling units on 40.7 acres of the project site and preserve the remaining acreage as open space. The proposed project is estimated to add 393 new residents to the City's population. The proposed project would provide a trail network and passive use areas (open space and greenway). The provision of these facilities would be expected to offset the increased demand for such facilities because project residents would be expected to use the facilities closest to where they live. Other development projects within the city limits would be reviewed for impacts on parks and would be required to dedicate new public facilities or pay development fees. Therefore, the proposed project, in conjunction with other future projects, would not have a cumulatively significant impact related to parks.

Recreation

The geographic scope of the cumulative recreation analysis is the Orange city limits. Within the city limits are neighborhood parks, community parks, regional parks, trails, community gardens, and historic sites.

The proposed project would develop 128 dwelling units on 40.7 acres of the project site and preserve the remaining acreage as open space. The proposed project is estimated to add 393 new residents to the City's population. The proposed project would provide a trail network and passive use areas (open space and greenway). The provision of these facilities would be expected to offset the increased demand for such facilities because project residents would be expected to use the facilities closest to where they live. Other development projects within the city limits would be reviewed for impacts on parks and would be required to dedicate new public facilities or pay development fees. Therefore, the proposed project, in conjunction with other future projects, would not have a cumulatively significant impact related to recreation.

Transportation and Traffic

The geographic scope of the cumulative transportation analysis is the roadway network within the eastern portion of the City of Orange. As discussed in the Transportation Section 3.16 of this EIR, study facilities consist of ten study intersections and 17 roadway segments.

All of the new development projects listed in Table 4-1 would generate new vehicle trips that may trigger or contribute to unacceptable intersection operations and freeway operations. All projects would be required to mitigate for their fair share of impacts. The proposed project would result in 542 net new daily trips, including 34 net new trips during the weekday morning peak hour, and 97 net new trips during the weekday afternoon peak hour. Project-related trips would not cause any facilities operating at deficient levels to significantly deteriorate further under With Trip Credit Existing Traffic Conditions, Existing Plus Project Traffic Conditions, and Cumulative (2040) conditions. Project-related trips would cause one facility operating at deficient levels to significantly deteriorate further under Year 2022 conditions. While the proposed project would have a significant and unavoidable impact due to the facility not being in a City of Orange plan, such as the MPAH, mitigation is proposed that would require the project applicant to contribute to planned improvements at this location that would restore operations to acceptable levels. Therefore, the proposed project, in conjunction with other projects, would not result in a cumulatively significant impact to unacceptable traffic operations.

For other transportation-related areas (roadway safety; emergency access; public transit, bicycles and pedestrians), the proposed project would have potentially significant impacts related to roadway hazards, but after the implementation of mitigation, these impacts would be reduced to a level of less than significant. Other projects that result in similar impacts would be required to mitigate for their impacts. Because the proposed project can mitigate all other transportation impacts to a level of less than significant, it would not have a related cumulatively significant impact with respect to these other topics.

Tribal Cultural Resources

The geographic scope of the cumulative registered historical resources analysis is the project vicinity. Registered historical resource impacts tend to be localized because the integrity of any given resource depends on what occurs only in the immediate vicinity around that resource, such as construction; therefore, in addition to the project site itself, the area near the project site would be the area most affected by project activities (generally within a 500-foot radius).

Construction activities associated with development projects in the project vicinity may have the potential to remove or damage registered historical resources. Given that neither the project site nor any other project site in the vicinity is listed on any national, state, or local registers of historic places (including those for tribal cultural resources), the proposed project would not make a cumulatively considerable contribution to any potentially significant cumulative impact or registered historical resources.

Therefore, the proposed project, in conjunction with other planned and approved projects, would not have a cumulatively significant impact related to registered historical resources.

The geographic scope of the cumulative tribal cultural resources analysis is the project vicinity. Tribal cultural resource impacts tend to be localized because the integrity of any given resource depends on what occurs only in the immediate vicinity around that resource, such as disruption of soils; therefore, in addition to the project site itself, the area near the project site would be the area most affected by project activities (generally within a 500-foot radius).

Construction activities associated with development projects in the project vicinity may have the potential to encounter undiscovered tribal cultural resources. These projects would be required to mitigate for impacts through compliance with applicable federal and state laws governing tribal cultural resources. Even if a significant cumulative impact could be found, the proposed project would not make a cumulatively considerable impact with required compliance. The likelihood of any significant tribal cultural resources on the project site are very low given the developed nature of the site, previous disruptions to its ground, and the lack of any known resource within its boundaries. Although there is the possibility that previously undiscovered resources could be encountered by subsurface earthwork activities, the implementation of standard construction mitigation measures would ensure that undiscovered tribal cultural resources are not adversely affected by project-related construction activities, which would prevent the destruction or degradation of potentially significant tribal cultural resources in the project vicinity. Given the low potential for disruption, and compliance with construction best management practices that would apply to this project and those in the vicinity, the proposed project would not make a cumulatively considerable contribution to any potentially significant cumulative impact on tribal cultural resources.

Therefore, the proposed project, in conjunction with other planned and approved projects, would not have a cumulatively significant impact related to tribal cultural resources.

Utilities and Service Systems

Water

The geographic scope of the cumulative potable water analysis is the City of Orange Water Division service area, which encompasses the Orange city limits and nearby unincorporated areas of Orange County. The City of Orange water service area has 36,347 customer accounts. Water supply impacts are analyzed in Section 3.17, Utilities and Service Systems of this EIR, which concluded that the City of Orange has adequate potable water supplies to serve the proposed project, as well as other existing and future users. Therefore, there is no existing cumulatively significant impact related to potable water supply.

The proposed project is estimated to demand 99.5 acre-feet per year of potable water. The City of Orange 2015 Urban Water Management Plan indicates that potable water supplies were estimated to be 28,000 acre-feet in 2020 and are expected to increase to 29,500 acre-feet in 2040. The City of Orange has two supply sources (groundwater and imported water) and thus does not rely on a single water source. The proposed project's increase in demand would represent less than 1 percent of potable water supplies under all scenarios between

2015 and 2035. Furthermore, the City of Orange 2015 Urban Water Management Plan assumed that 460 dwelling units and open space uses would be developed on the project site and, therefore, accounted for demand from the proposed project in its long-term demand projections.

It should be noted that not all of the projects listed in Table 4-1 are located within the City of Orange water service area. However, for those projects that are located with the City of Orange water service area, the 2015 Urban Water Management Plan anticipates adequate water supplies for all water year scenarios through 2040. These projects also would be required to demonstrate that they would be served with potable water service as a standard requirement of the development review process, and these projects may be required to implement water conservation measures to the extent they are required. Therefore, the proposed project, in conjunction with other planned and approved projects, would not have a cumulatively significant impact related to water supply.

Wastewater

The geographic scope of the cumulative wastewater analysis is the areas tributary to Orange County Sanitation District (OCSD) Plant No. 1 and Plant No. 2. The two plants treat all of the effluent generated with the OCSD service area, which covers 479 square miles of central and northwest Orange County.

All future projects would be required to demonstrate that sewer service is available to ensure that adequate sanitation can be provided. The proposed project is estimated to generate 74,400 gallons of wastewater on a daily basis (0.060 million gallons per day [mgd]). Plant No. 1 and Plant No. 2 have a combined treatment capacity of 366 mgd of primary treatment capacity and 200 mgd of secondary treatment capacity. The increase of 0.060 mgd attributable to the proposed project represents less than 1 percent of available primary or secondary treatment capacity at the two plants and, thus, would not exceed the capacity of either plant. As such, the plants would be expected to accept the proposed project's increase in effluent without needing to expand existing or construct new facilities, as the treatment capacity is sufficient to serve both the project and planned future development in the area. Therefore, the proposed project, in conjunction with other planned and approved projects, would not have a cumulatively significant impact related to wastewater.

Storm Drainage

The geographic scope of the cumulative storm drainage analysis is Santiago Creek, which currently receives runoff from the project site and would continue to do so in the future.

All future development projects in the project vicinity would be required to provide drainage facilities that collect and detain runoff such that off-site releases are controlled and do not create flooding. The proposed project would install a network of storm drainage facilities within the project site consisting of inlets, underground piping, and basins. This system would serve 72.58 acres of the site and direct runoff to a 3-acre on-site stormwater detention basin in the western portion of the site. A flow control structure will be installed

within the detention system to meter the outflow from the site to below predevelopment levels. Catch basins will be located at various points within the site to capture subarea flows. The system is designed to detain flows from a 100-year storm event as required by the Orange County Hydrology Manual. Two sub drainage areas will flow directly to Santiago Creek without detention. One of these areas is approximately 1.46 acres directly over the Handy Creek Channel. This flow will be directed to the Handy Creek Channel. The other area is the trail system adjacent to Santiago Creek and totals 6.20 acres. This flow will be picked up via a storm drain system, which will outlet at the same location as the detention basin outlet. The outlet structure from the detention basin to Santiago Creek will be protected by riprap and an energy dissipater. This would ensure that the proposed project would not contribute to downstream flooding conditions during peak storm events and would avoid cumulatively significant stormwater impacts to downstream waterways at times when capacity is most constrained. The proposed project would also implement pollution prevention measures during construction and operations to ensure that downstream water quality impacts are minimized to the greatest extent possible. Therefore, the proposed project, in conjunction with other planned and approved projects, would not have a cumulatively significant impact related to storm drainage.

Solid Waste

The geographic scope of the cumulative solid waste analysis is the areas served by the Frank Bowerman Sanitary Landfill, Olinda Alpha Sanitary Landfill, and the El Sobrante Landfill. The three landfills have a combined remaining capacity of 384.7 million cubic yards.

Future development projects would generate construction and operational solid waste and, depending on the volumes and end uses, would be required to implement recycling and waste reduction measures. The proposed project is anticipated to generate 1,380 cubic yards of solid waste during construction and a net increase of 142.1 cubic yards annually during operations. Both waste generation values represent less than 1 percent of the remaining capacity figure at the three landfills. As such, sufficient capacity is available to serve the proposed project as well as existing and planned land uses in the City of Orange for the foreseeable future. Accordingly, the proposed project, in conjunction with other future projects, would not have a cumulatively significant impact related to solid waste.

Energy

The geographic scope of the cumulative energy analysis is the Southern California Edison (SCE) service area (electricity) and the Southern California Gas Company service area (natural gas). SCE's electrical service area consists of approximately 50,000 square miles and 5 million metered customers. The Gas Company's natural gas service area encompasses the southern San Joaquin Valley, the Los Angeles Basin, the Inland Empire, and the Coachella Valley, and has approximately 5.9 million metered customers.

The proposed project would demand an estimated 805,632 million kilowatt-hours (kWh) of electricity and 4.5 million cubic-feet of natural gas on an annual basis. The proposed project's structures would be designed in accordance with Title 24, California's Energy

Efficiency Standards for Residential and Nonresidential Buildings. These standards include minimum energy efficiency requirements related to building envelope, mechanical systems (e.g., HVAC and water heating systems), indoor and outdoor lighting, and illuminated signs. The incorporation of the Title 24 standards into the project would ensure that the project would not result in the inefficient, unnecessary, or wasteful consumption of energy. Therefore, the proposed project, in conjunction with other future projects, would not have a cumulatively significant impact related to energy consumption.

X. FINDINGS REGARDING ALTERNATIVES TO THE PROPOSED PROJECT

CEQA requires that an EIR describe a range of reasonable alternatives to the project, or to the location of the project, which could feasibly attain most of the basic objectives of the project and to evaluate the comparative merits of the alternatives. Section 15126(d)(1) of the State CEQA Guidelines states that the ". . . discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly."

The proposed Project has been compared to four alternatives, including (1) Development within the Existing Land Use Designations Alternative, (2) No Project Alternative/Existing Land Use Activities Alternative; (3) Collaborative Group Alternative; and (4) 122-Unit Alternative.

The analysis contained within the EIR concludes that the proposed Project would result in long-term project-specific significant unavoidable adverse impacts to air quality and traffic that cannot be mitigated to a less than significant level. The following discussion summarizes the potential environmental consequences and highlights the comparative merits associated with each alternative identified as "potentially feasible" and analyzed in the EIR as well as the "No Project" alternative.

A. ALTERNATIVES

1. Development within the Existing Land Use Designations

Overview: CEQA Guidelines Section 15126.6(e) requires that an EIR evaluate a "No Project Alternative," which is intended to allow decision-makers to compare the impacts of approving the proposed project with the impacts of not approving the proposed project. In cases where the project constitutes a land development project, the No Project Alternative is the "circumstance under which the project does not proceed." For many projects, the No Project Alternative represents a "No Development" or an "Existing Conditions" scenario, in which the project site remains in its existing condition and no new development occurs for the foreseeable future. However, CEQA Guidelines Section 15126.6(e)(3)(B) establishes that "If disapproval of the project under consideration would result in predictable actions by others such as the proposal of some other project, this 'no project' consequence should be discussed."

In this case, the No Project Alternative consists of development and land use activities that would occur pursuant to the existing City of Orange General Plan land use designations of low-density residential, resource, and open space for the project site.

Residential uses would be developed on 15.4 acres north of Santiago Creek, with resource land use activities (sand, gravel, and materials recycling) occurring on 77.3 acres on both sides of the waterway. Consistent with the City of Orange General Plan's density range of 2.1 to 6.0 units per acre, there is an allowable range of 32 to 92 residential homes. The existing R-1-8 Zoning for the residential area would yield approximately 40 to 50 single-family dwelling units.[2] Vehicular access would be taken from two points on Mabury Drive.

Resource land use activities would be located on 77.3 acres on both sides of the waterway. These activities would consist of the continuation of the existing materials recycling and backfilling operation.

The Santiago Creek corridor would be designated for open space (16.5 acres). However, no community or recreational uses would be developed.

Summary of Major Environmental Effects: This alternative would have greater aesthetic, biological resources, cultural resources, geology and soils, and tribal cultural impacts than the project.

The alternative would result in fewer impacts to air quality, GHG, land use and planning, mineral resources, noise, population and housing, public services, recreation, transportation and utilities and service systems. Hazardous materials and hydrology impacts would be similar to the project.

Ability to Achieve Project Objectives: This alternative would advance some, but not all of the project objectives. This alternative would advance the objectives that concern clustering residential development in the most suitable areas of the project site; and promoting land use compatibility with surrounding land uses. However, none of these objectives would be advanced to the same degree as the proposed project because (1) fewer dwelling units would be developed; (2) the resource extraction land use activities would be retained; (3) less open space would be provided; and (4) no public recreational facilities would be provided.

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2 The Recirculated Draft EIR Alternatives Section erroneously noted that the total number of dwelling units that would be developed under Alternative 1 would be 90 units, 77 units, and 40 units. It also erroneously noted that Alternative 1 would require a General Plan Amendment to remove the project site from the East Orange General Plan and the Orange Park Acres Plan and noted that Alternative 1 would require improvements to East Santiago Canyon Road/Nicky Way. However, the analysis of Alternative 1 was conducted assuming 40-50 single-family residential units would be developed under Alternative 1. No General Plan Amendment would be required. In addition, no improvements to East Santiago Canyon Road/Nicky Way would be required. Therefore, the erroneous statements in the RDEIR have been revised in the Errata Section of the Final EIR to clarify that Alternative 1 would yield 40-50 single-family dwelling units, Alternative 1 would not require a General Plan Amendment, and Alternative 1 would not require improvements to East Santiago Canyon Road/Nicky Way.

Furthermore, this alternative would not advance the objectives that concern facilitating the redevelopment of an unsightly, underused resource extraction site; guiding the transition of an infill site with a Specific Plan; protecting Santiago Creek by abating the remnants of the resource extraction activities; strategically locating the adjoining Villa Park Landfill and the proposed residential uses; and developing a logical internal circulation system for pedestrians, bicyclists, equestrians, and motorists.

Elimination/Reduction of Significant Impacts: This alternative would reduce the project's significant impacts to air quality and traffic.

Comparative Merits: This alternative would not achieve all of the Project objectives, although it would reduce the project's significant impacts. This alternative would have greater environmental impacts in the areas of aesthetics, light, and glare; biological resources; cultural resources; geology and soils; tribal cultural resources; and hydrology and water quality.

Finding: The Development within the Existing Land Use Designations Alternative would reduce the Project's significant and unavoidable impacts to air quality and traffic. However, it would increase the severity of the proposed project's aesthetics, light, and glare; biological resources; cultural resources; geology and soils; tribal cultural resources; and hydrology and water quality. This alternative would also not achieve all of the Project objectives. For these reasons, the City rejects this alternative in favor of the proposed Project.

2. No Project Alternative/Existing Land Use Activities Alternative

Overview: The No Project Alternative/Existing Land Use Activities Alternative consists of the continuation of the existing sand and gravel operations on approximately 77.3 acres of the project site. Approximately 40 acres between Santiago Creek and East Santiago Canyon Road are characterized by soil piles and berms, unpaved roads. An approximately 5-acre area near East Santiago Canyon Road supports a materials recycling operation that includes apparatus for crushing boulders, bricks, rocks, and similar materials for recycling. Since 2015, backfilling operations have been limited to 15 consecutive business days in any 6-month period; this alternative would allow backfilling operations to resume year-round as allowed by the current grading permit. The project site would remain inaccessible to the public under this alternative.

Summary of Major Environmental Effects: The No Project Alternative/Existing Land Use Activities Alternative would increase the severity of the proposed project's aesthetics, light, and glare; biological resources; cultural resources; geology and soils; noise and utilities and service systems impacts. However, it would lessen the severity of the proposed project's air quality, GHGs, hydrology and water quality, mineral resources, population and housing, public services, recreation, and transportation and traffic impacts. This alternative would yield similar impacts for agricultural resources and hazards and hazardous materials.

The No Project Alternative/Existing Land Use Activities Alternative would advance some, but not all, of the project objectives. This alternative would advance the objectives that concern positively contributing to the local economy through ongoing mineral extraction. However, none of the objectives would be advanced to the same degree as the proposed project because (1) no dwelling units would be developed; (2) the resource extraction land use activities would be retained; (3) less open space would be provided; and (4) no public recreational facilities would be provided.

Furthermore, this alternative would not advance the objectives that concern facilitating the redevelopment of an unsightly, underused resource extraction site; guiding the transition of an infill site with a Specific Plan; protecting Santiago Creek by abating the remnants of the resource extraction activities; strategically locating the adjoining Villa Park Landfill and the proposed residential uses; and developing a logical internal circulation system for pedestrians, bicyclists, equestrians, and motorists.

Ability to Achieve Project Objectives: The No Project Alternative/Existing Land Use Activities Alternative would advance some, but not all, of the project objectives. This alternative would advance the objectives that concern positively contributing to the local economy through ongoing mineral extraction. However, none of the objectives would be advanced to the same degree as the proposed project because (1) no dwelling units would be developed; (2) the resource extraction land use activities would be retained; (3) less open space would be provided; and (4) no public recreational facilities would be provided.

Furthermore, this alternative would not advance the objectives that concern facilitating the redevelopment of an unsightly, underused resource extraction site; guiding the transition of an infill site with a Specific Plan; protecting Santiago Creek by abating the remnants of the resource extraction activities; strategically locating the adjoining Villa Park Landfill and the proposed residential uses; and developing a logical internal circulation system for pedestrians, bicyclists, equestrians, and motorists.

Comparative Merits: This alternative would partially achieve the Project objectives, but would increase the severity of the proposed project's aesthetics, light, and glare; biological resources; cultural resources; geology and soils; noise and utilities and service systems impacts. On balance, the merits of this alternative are similar to the project; however, it does not advance all of the project objectives.

Finding: The potential impacts identified for this alternative results in similar environmental effects due to the reduction in the Project's significant and unavoidable impacts. However, this alternative would increase the severity of some impacts and would not satisfy all Project objectives. Therefore, the City Council rejects this alternative in favor of the proposed Project.

3. Collaborative Group Alternative

Overview: The Collaborative Group Alternative was developed in response to meetings between the Applicant representatives and the Collaborative Group, consisting of representatives from Orange Park Acres, Mabury Ranch, and The Reserve.

The Collaborative Group Alternative consists of 47 lots and 47 dwelling units of varying sizes, on approximately 40 acres. The remaining 69.2 acres would be turned into Santiago Greenway Open Space area. Overall, the Collaborative Group Alternative would have 81 fewer dwellings and would develop the residential on approximately 0.7 less acres than the proposed project.

This alternative would not permit all items listed in the preface to the Recirculated Draft EIR, which are a part of the proposed project. These items include the following improvements and related considerations:

1. The Specific Plan and associated project accommodates a maximum number of 128 single-family detached lots located in the southerly portion of the property and will consist of housing types and lot sizes compatible with the surrounding neighborhoods as depicted in the Trails at Santiago Creek Specific Plan, Exhibits 3.1-3.4 and consistent with the development standards and guidelines set forth in the Specific Plan.

2. The implementation of the Specific Plan and associated project will fund up to $1,000,000.00 for traffic improvements to widen East Santiago Canyon Road and restripe Cannon Road prior to the issuance of the first Certificate of Occupancy of any housing units for the project. Please refer to the Trails at Santiago Creek Specific Plan, Exhibit 4.1, Areas of Traffic Congestion—Pre-Project, Exhibit 4.2, Area of Project Related Traffic Improvements, and Exhibit 4.3, Additional Project Related Traffic Improvements, and Section 4.2.3, Circulation Plan.

3. The implementation of the Specific Plan and associated project will fund approximately up to a maximum of $4,100,000.00 in landscape and other improvements for the Santiago Creek Greenway. Said Improvements are to be completed or funded prior to the issuance of the 60th Certificate of Occupancy for the Project. Please refer to the Trails at Santiago Creek Specific Plan, Section 4.2.4, Trails, Open Space and Recreation Plan, and Exhibit 4.14, Preliminary Greenway, Open Space and Trails Plan.

4. The implementation of the Specific Plan and associated project will fund $1,000,000.00 to be used for in local area-wide equestrian trail purposes prior to the issuance of the first Certificate of Occupancy for the project.

5. The implementation of the Specific Plan and associated project will finance and fund the City's acquisition of the Ridgeline Property, which will provide the community an additional 50 acres of public open space to the

issuance of the first Certificate of Occupancy for the Project. Please refer to the Trails at Santiago Creek Specific Plan, Exhibit 4.4, Sully Miller, Arena and Ridgeline Properties.

6. The implementation of the Specific Plan and associated project will provide $2,000,000.00 for equestrian and recreational purposes in the East Orange Area as determined by the City prior to the issuance of the first Certificate of Occupancy for the project.

This alternative would require the same discretionary permits as the proposed project.

Summary of Major Environmental Effects: The Collaborative Group Alternative would lessen the severity of the proposed project's air quality, GHG, population and housing, noise, public services, recreation, transportation, and utilities and service systems impacts. This alternative would yield similar impacts for all other topics.

The Collaborative Group Alternative would advance some, but not all of the project objectives. This alternative would advance the objectives that concern clustering residential development in the most suitable areas of the project site; and promoting land use compatibility with surrounding land uses.

This alternative would not advance the objectives that concern guiding the transition of an infill site with a Specific Plan; developing a logical internal circulation system for pedestrians, bicyclists, equestrians, and motorists; and would not include the Development Agreement benefits to the community.

Ability to Achieve Project Objectives: The Collaborative Group Alternative would advance some, but not all of the project objectives. This alternative would advance the objectives that concern clustering residential development in the most suitable areas of the project site; and promoting land use compatibility with surrounding land uses.

This alternative would not advance the objectives that concern guiding the transition of an infill site with a Specific Plan; developing a logical internal circulation system for pedestrians, bicyclists, equestrians, and motorists; and would not include the Development Agreement benefits to the community.

Comparative Merits: This alternative would partially achieve the Project objectives, but would not achieve all of the project objectives. On balance, the merits of this alternative are incrementally lower than the project; however, it does not advance all of the project objectives.

Finding: The potential impacts identified for this alternative results in slightly reduced environmental effects due to the reduction in the Project's significant and unavoidable impacts. However, this alternative would not satisfy all Project objectives. Therefore, the City Council rejects this alternative in favor of the proposed Project.

4. 122-Unit Alternative

Overview: The 122-Unit Alternative was developed in response to a series of meetings between the Applicant representatives and the Collaborative Group, consisting of representatives from Orange Park Acres, Mabury Ranch, and The Reserve.

The 122-Unit Alternative consists of 122 lots with an average lot size of 11,200-square-feet on 40.9 acres of the project site. The remaining 68.3 acres of the project site would be turned into 68.3 acres of open space consisting of 40.2 acres of Greenway Open Space, and 28.1 acres of Grasslands Open Space. This alternative differs from the proposed project in that it would develop ten 0.5-acre equestrian lots on the eastern border of the residential envelope and twenty-four 10,000-square-foot lots adjacent to East Santiago Canyon Road. Moreover, in response to input, the Applicant representatives received during meetings with the Collaborative Group, this alternative proposes larger lot sizes adjacent to The Preserve and portions of Orange Park Acres.

Overall, the 122-Unit Alternative would have six less dwellings than the proposed project, but would develop, approximately, an additional 0.2 acres of the project site for residential, reducing open space by approximately 0.2 acres in comparison to the proposed project.

Additionally, this alternative would have $1,000,000 less in local trail improvements from the Development Agreement.

This alternative would require the same discretionary permits as the proposed project.

Summary of Major Environmental Effects: The 122-Unit Alternative would yield similar impacts to the proposed project for all topics, and fewer impacts for Air Quality and GHG impacts.

Ability to Achieve Project Objectives: The 122-Unit Alternative would advance all of the project objectives, similar to the proposed project. This alternative would advance the objectives that concern guiding the transition of an infill site with a Specific Plan; developing a logical internal circulation system for pedestrians, bicyclists, equestrians, and motorists; clustering residential development in the most suitable areas of the project site; and promoting land use compatibility with surrounding land uses. However, this alternative would have $1,000,000 less in community benefits from the Development Agreement.

Comparative Merits: This alternative would achieve the Project objectives. However, this alternative would have $1,000,000 less in community benefits from the Development Agreement.

Finding: The potential impacts identified for this alternative results in $1,000,000 less in community benefits from the Development Agreement. Therefore, the City Council rejects this alternative in favor of the proposed Project.

ATTACHMENT B
TO THE CITY COUNCIL
RESOLUTION OF APPROVAL ADOPTING
FINDINGS PURSUANT TO THE
CALIFORNIA ENVIRONMENTAL
QUALITY ACT

STATEMENT OF OVERRIDING CONSIDERATIONS

Trails at Santiago Project

STATEMENT OF OVERRIDING CONSIDERATIONS FOR THE TRAILS AT SANTIAGO CREEK PROJECT ORANGE, CA

I. Introduction

The City of Orange is the Lead Agency under the California Environmental Quality Act (CEQA) for preparation, review and certification of the revised final Environmental Impact Report (EIR) for the Trails at Santiago Creek Project ("Project"). As the Lead Agency, the City is also responsible for determining the potential environmental impacts of the proposed action and which of those impacts are significant, and which can be mitigated through imposition of mitigation measures to avoid or minimize those impacts to a level of less than significant. CEQA then requires the Lead Agency to balance the benefits of a proposed action against its significant unavoidable adverse environmental impacts in determining whether or not to approve the proposed project.

If the lead agency determines that the Project will result in significant, unmitigable impacts, CEQA Guidelines Section 15093 requires the following:

a) CEQA requires the decision-making agency to balance, as applicable, the economic, legal, social, technological, or other benefits of a proposed project against its unavoidable environmental risks when determining whether to approve the project. If the specific economic, legal, social, technological, or other benefits of a proposed project outweigh the unavoidable adverse environmental effects, the adverse environmental effects may be considered "acceptable."

b) When the lead agency approves a project which will result in the occurrence of significant effects which are identified in the final EIR but are not avoided or substantially lessened, the agency shall state in writing the specific reasons to support its action based on the final EIR and/or other information in the record. The statement of overriding considerations shall be supported by substantial evidence in the record.

c) If an agency makes a statement of overriding considerations, the statement should be included in the record of the project approval and should be mentioned in the notice of determination. This statement does not substitute for, and shall be in addition to, findings required pursuant to Section 15091.

Public Resources Code Section 21081(b) requires that where a public agency finds that specific economic, legal, social, technological, or other considerations, including considerations for the provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or alternatives identified in an EIR and thereby leave significant unavoidable effects, the public agency must also find that overriding economic, legal, social, technological, or other benefits of the project outweigh the significant effects of the project.

Pursuant to Public Resources Code Section 21081(b) and the State CEQA Guidelines Section 15093, the City has balanced the benefits of the proposed Project against the

following unavoidable adverse impacts associated with the proposed Project and has adopted all feasible mitigation measures with respect to these impacts. The City also has examined alternatives to the proposed Project, none of which both meet the Project objectives and is environmentally preferable to the proposed Project for the reasons discussed in the Findings of Fact.

The Orange City Council, acting as Lead Agency, and having reviewed the Final EIR for the Trails at Santiago Creek Project, and reviewed all written materials within the City's public record and heard all oral testimony presented at public hearings, adopts this Statement of Overriding Considerations, which has balanced the benefits of the Project against its significant unavoidable adverse environmental impacts in reaching its decision to approve the Project.

II. Significant Unavoidable Adverse Environmental Impacts

Although most potential Project impacts have been substantially avoided or mitigated, as described in the Findings of Fact, complete mitigation is not feasible for Air Quality and Transportation and Traffic impacts. The City finds that the following impacts would have a significant impact under CEQA that cannot be reduced to a level of less than significant, despite implementation of design features and mitigation measures.

AIR-1: The project may conflict with or obstruct implementation of the applicable air quality plan.

AIR-2: The project may violate any air quality standard or contribute substantially to an existing or projected air quality violation.

AIR-3: The project may result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or State ambient air quality standard.

TRANS-2: The project may conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system under Year 2022 Traffic Conditions.

III. Overriding Considerations

The City, after balancing the specific economic, legal, social, technological, and other benefits of the proposed Trails at Santiago Creek Project, has determined that the unavoidable adverse environmental impact identified above may be considered acceptable due to the following specific considerations that outweigh the unavoidable, adverse environmental impact of the proposed Project, each of which standing alone is sufficient to support approval of the Project, in accordance with CEQA Section 21081(b) and CEQA Guideline Section 15093.

1. The Project provides 128 single-family housing units in the City of Orange which will assist the City in meeting its fair-share housing allocation imposed by the Southern California Association of Governments. The Project will locate

residential units on the southern portion of the site, thereby preserving the majority of the site for open space, recreation, and greenway uses.

2. The Project provides approximately 68.5 acres of open space and recreation, including open space improvements, which will increase recreational opportunities in the City. On the Property, 12.6 acres that are currently zoned low density residential will be rezoned to open space as part of the Project. The Project will enhance and protect the Santiago Creek corridor and will provide a network of interconnected trails that provide access to Santiago Creek and Santiago Oaks Regional Park. Trails will be preserved and will be open to the public. The Development Agreement specifies that the Applicant will contribute $4.1 million to construct greenway improvements for Santiago Creek, $1 million for trail improvements in East Orange, and $2 million for equestrian and recreational purposes.

3. The Project, pursuant to the Development Agreement, provides funding for the community's acquisition of the Ridgeline property, which will provide the community with an additional approximately 50 acres of open space.

4. The Project is consistent with the goals and policies of the City's General Plan, the Orange Park Acres Plan, and the East Orange Plan.

5. Project implementation would eliminate the sand and gravel operation on the property and abate potentially hazardous soil conditions on the Property.

6. Project implementation would provide a circulation system that minimizes adverse effects on local residential neighborhoods. Project implementation would improve local circulation by widening East Santiago Canyon Road and restriping Cannon Road.

7. Project implementation would generate revenue to the City of Orange as a result of property taxes and related fees from the proposed residential development. The revenue could be used by the City to provide public services and facilities, including fire and police protection and other amenities and services available to the residents of the City. Project implementation would result in school impact fees to the City to fund capital improvements to school facilities. Further, Project implementation will provide the City with fair share fees to restripe the northbound approach of Orange Park Boulevard at East Santiago Canyon Road to provide one exclusive left-turn lane and one shared left-turn/right-turn lane.

8. Project implementation would slow, reduce, and meter the volume of runoff leaving the site.

ATTACHMENT C

OTHER PROJECT RELATED CONDITIONS

Trails at Santiago Project

1. The applicant agrees to indemnify, hold harmless, and defend the City, its officers, agents and employees from any and all liability or claims that may be brought against the City arising out of its approval of this permit, save and except that caused by the City's active negligence. The City shall promptly notify the applicant of any such claim, action, or proceedings and shall cooperate fully in the defense.

2. The applicant shall comply with all federal, state, and local laws, including all City regulations. Violation of any of those laws in connection with the use may be cause for revocation of this permit.

3. Within two days of final approval of this project, the applicant shall deliver to the Planning Division a cashier's check payable to the Orange County Clerk in an amount required to fulfill the fee requirements of Fish and Game Code Section 711.4(d) (2) and the County administrative fee, to enable the City to file the Notice of Determination required under Public Resources Code 21152 14 Cal. Code Regulations 15075. If it is determined that there will be no impact upon wildlife resources, the fee shall be as required based on the current fee schedule.

4. Within two days of final approval of this project, the applicant shall submit a $3,000.00 deposit to the Planning Division for the Mitigation Monitoring and Reporting Program. Time spent by City staff to complete the project will be charged to the applicant. When more than 50% of the deposit has been credited toward hourly services provided, the applicant will be billed directly for actual time spent on the project. At the completion of the project, a final accounting of deposit posted and amounts charged toward the project will be calculated and any charges due to the City or refunds due to the applicant will be processed.

5. The project approval includes certain fees and/or other exactions. Pursuant to Government Code Section 66020, these conditions or requirements constitute written notice of the fees and/or exactions. The applicant is hereby notified that the ninety (90) day protest period commencing from the date of approval of the project has begun. If the applicant fails to file a protest regarding these conditions or requirements, the applicant is legally barred from later challenging such exactions per Government Code Section 66020.

6. Prior to issuance of building permits for each parcel, the applicant shall pay all applicable development fees, including but not limited to: City sewer connection, Orange County Sanitation District Connection Fee, Transportation System Improvement Program, Fire Facility, Police Facility, Park Acquisition, Sanitation District, and School District, as required.

7. Building permits shall be obtained for all construction work, as required by the City of Orange, Community Development Department's Building Division. Failure to obtain the required building permits may be cause for revocation of this entitlement.

8. All construction activities shall conform to the City's Noise Ordinance, OMC Section 8.24, and shall be limited to the hours between 7:00 a.m. and 8:00 p.m. Monday through Saturday. No construction activity will be permitted on Sundays and Federal holidays.

9. Prior to the issuance of any regulatory permits, the developer shall submit for review and approval a habitat mitigation and monitoring plan or ongoing maintenance plan for the open space areas associated with the long term stewardship of the Greenway Open Space, Santiago Creek, the Grassland, and trails to the City of Orange, Orange County Parks, the Department of Fish and Wildlife, and any other regulatory agency having jurisdiction over the affected open space area.

10. Prior to development plan submittal and approval, the developer shall coordinate with the Irvine Ranch Water District's Planning and Technical Services Division to develop a technical memorandum or Sub-Area Master Plan Addendum for the project.

11. Prior to development plan submittal and approval, the developer shall coordinate with the Metropolitan Water District to avoid potential conflicts with the Metropolitan Water District's rights-of-way by following Metropolitan Water District established requirements, including the submittal of design plans for any activity in the area of the Metropolitan Water District's pipelines or facilities.

12. Prior to issuance of any regulatory permits, the developer shall submit for review and approval signal modifications and lane configuration improvements to the City of Orange. In the case of Orange Park Boulevard and Santiago Canyon Road (project impacted intersection #5), the applicant shall also submit signal modifications and lane configuration improvements for review and approval to the County of Orange. The County of Orange will participate in the review and approval process of any mitigation design.

13. Prior to the approval of a tentative tract map, the applicant shall enter into a Pre-Development Memorandum of Understanding with the City of Orange, County of Orange, or any other agency/organization for the long term stewardship of the of the Greenway Open Space, Santiago Creek, the Grassland, and trails. The Pre-Development Memorandum of Understanding shall include, but not be limited to provisions for design requirements and standards, long-term maintenance, habitat protection, and establishment of an endowment or other funding mechanism for the management and maintenance of such facilities in perpetuity.

14. Prior to the issuance of grading permits, the developer shall submit to County of Orange Public Works and County of Orange Flood Control for review and comment on the adequacy/inadequacy of existing facilities to accept storm water and urban runoff flows to Santiago Creek.

15. All project Mitigation Measures shall be complied with and implemented as stated in the Mitigation Monitoring and Reporting Program.

16. Traffic control for any street closure, detour, or other disruption to traffic circulation.

17. Identify the routes that construction vehicles will utilize for the delivery of construction materials to access the site, traffic controls and detours, and proposed construction-phasing plan for the project. A targeted average of 75% of truck traffic related to hauling construction materials and the soils remediation, based upon the current project estimates in the RDEIR, will be prohibited from travelling westbound on Santiago Canyon Road/Villa Park Road through the City of Villa Park and City of Orange. At no time will the average truck traffic vary more than 10% above or below the target of 75%. The Developer will assist in monitoring usage by providing the City of Villa Park and City of Orange a log of actual truck hauling traffic on a quarterly basis.

18. Cooperate with the City of Villa Park related to monitoring and repair of construction-related wear and tear on Santiago Canyon Road/Villa Park Road caused by any direct damage resulting from the Projects construction activity.

19. Require the Applicant to keep all haul routes clean and free of debris, including but not limited to gravel and dirt as a result of its operations. The Applicant shall clean adjacent streets, as directed by the City Engineer (or representative of the City Engineer), of any material which may have been spilled, tracked, or blown onto adjacent streets or areas.

20. Oversized vehicles hauling or transporting material related to construction and/or soils remediation will be allowed between the hours of 9:00 AM and 4:00 PM only, Monday through Friday, unless approved otherwise by the City Engineer. No hauling or transport will be allowed during nighttime/early morning hours, weekends, or Federal holidays.

21. Use of local residential streets within the surrounding neighborhoods shall be prohibited.

22. All construction-related parking and staging of vehicles will be kept out of the adjacent public roadways and will occur on-site.

23. Providing a crossing guard at the intersection of Villa Park Road and Center Drive during construction periods during the school year.

24. Contributing $25,000 toward the reconditioning project for the greenbelt adjacent to Wanda Drive and Villa Park Road prior to issuance of the Grading Permit for the Project.