# SANTA ANGELINA SENIOR APARTMENT HOMES

## Initial Study and Mitigated Negative Declaration (IS/MND)

PLACENTIA
Rich Heritage, Bright Future

***CEQA Analysis Prepared for:***

**City of Placentia**
401 E. Chapman Avenue
Placentia, CA 92870

***Prepared by:***

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**October 2020**

Project No. 7038

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## PROJECT INFORMATION SHEET

| | |
|---|---|
| **1. Project Title** | Santa Angelina Senior Apartment Homes |
| **2. CEQA Lead Agency** | **City of Placentia**<br>401 E. Chapman Avenue<br>Placentia, CA 92870<br>Andrew Gonzales, Senior Planner<br>(714) 993-8218<br>agonzales@placentia.org |
| **3. Project Applicant** | Alexa Washburn<br>**National Community Renaissance of California**<br>9421 Haven Avenue<br>Rancho Cucamonga, CA 91730 |
| **4. Project Location** | 1314 North Angelina Drive<br>Placentia, CA 92870 |
| **5. Assessor's Parcel Numbers** | APN 340-273-25 |
| **6. Project Site General Plan Designation(s)** | Current: Low Density Residential<br>Proposed: High Density Residential |
| **7. Project Site Zoning Designation(s)** | Current: R-1 Single-Family Residential District<br>Proposed: R-3 High Density Multiple-Family District |
| **8. Surrounding Land Uses and Setting** | Single-family homes are located to the north, south, and east of the project site. To the west of the project site, across North Angelina Drive is a shopping center. The project site is bounded by North Angelina Drive to the west and Morse Avenue to the south. |
| **9. Description of Project** | The proposed project is located on an approximately 3.85-acre site. The site is developed with the Church of the Blessed Sacrament.<br><br>The project proposes the development of 65 senior apartment homes in two-story residential buildings (Building 1 and 2) and ground-level parking. Building 1 would be 24,631 square feet and Building 2 would be 30,316 square feet. 64 units are proposed as affordable housing units to households earning less than 60% of the Area Median Income. The remaining unit would be the manager's unit. |

Building 1 would have 28 one-bedroom units and four two-bedroom units. Building 2 would have 31 one-bedroom[1] units and 2 two-bedroom units. A 1,500-square-foot senior-oriented community center (for use by residents and guests) is proposed on the first floor of Building 2.

The existing parking for the Church is comprised of 85 parking spaces. The project proposes an additional 45 parking spaces for a total of 130 parking spaces on site.

A new parking lot is proposed along the northern project boundary, north of Building 1, with driveway access along North Angelina Drive. A new parking lot is proposed both east and west of Building 2 with driveway access along North Angelina Drive and Morse Avenue.

A community garden is proposed near the northeast corner of the project site. A new courtyard area and garden area are proposed west of Building 2.

The existing 3,472-square-foot Parish Hall would be demolished and replaced with a new Parish Hall that would be approximately 3,974 square feet and a 544-square-foot covered porch. A new children's picnic/lunch area is proposed adjacent to the existing children's play yard.

The project proposes improvements to Church facilities, including: a courtyard gathering space west of the Parish Hall, a gathering lawn with benches fronting North Angelina Drive, an outdoor terrace fronting North Angelina Drive, and a memorial garden with accent trees between the existing Church building and the proposed new Parish Hall. New seating is proposed north of the Church, adjacent to the proposed memorial garden. A new courtyard area is proposed west of the existing Church.

The project would require a General Plan Amendment to change the General Plan designation from Low Density Residential to High Density Residential and a zone change to change the zoning

1 This includes a junior one-bedroom unit

| | |
|---|---|
| | of the project site from R-1 Single-Family Residential District to R-3 High Density Multiple-Family District. Refer to **Section 3.0** of this document for additional information.<br><br>The project applicant is requesting the following discretionary actions, which are discussed in detail in **Section 3.0** of this document:<br>• General Plan Amendment (GPA 2020-01)<br>• Zone Change (ZC 2020-01)<br>• Development Plan Review approval (DPR 2020-01) and building permits. |
| **11. Selected Agencies whose Approval is Required** | City of Placentia |
| **12. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code § 21080.3.1? If so, has consultation begun?** | Letters were sent by the City of Placentia (the Lead Agency), to local Native American tribes asking if they wished to participate in AB 52 consultation concerning the Santa Angelina Senior Apartment Homes development in the City of Placentia. Tribes had up to 30 days in which to respond to notification of the project. For the proposed project, those tribe(s) that requested consultation were contacted by the City per Public Resources Code § 21074. One tribe responded with a question which was answered. The City has concluded the AB 52 consultation process. |
| **13. Other Public Agencies** | Agencies that will review the proposed project include the following:<br>• California Regional Water Quality Control Board – Santa Ana<br>• South Coast Air Quality Management District |

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## ACRONYMS AND ABBREVIATIONS

| Acronym/Abbreviation | Term |
|---|---|
| AAQS | ambient air quality standards |
| AB 32 | California Global Warming Solutions Act of 2006 (Assembly Bill 32) |
| AB 52 | Assembly Bill 52 |
| ACM(s) | Asbestos-Containing Material(s) |
| ADA | Americans with Disabilities Act |
| AFY | Acre-feet per year |
| AIA | Airport Influence Area |
| AMI | Area Median Income |
| amsl | above mean sea level |
| APE | Area of Potential Effect |
| APN | Assessor's Parcel Number |
| AQA | Air Quality Analysis |
| AQMP | Air Quality Management Plan |
| AR4 | Fourth Assessment Report |
| ARB | California Air Resources Board |
| BAU | business as usual |
| BIOS | Biogeographic Information and Observation System |
| BMPs | Best Management Practices |
| CAAQS | California Ambient Air Quality Standards |
| CalEEMod | California Emissions Estimator Model |
| CAL FIRE | California Department of Forestry and Fire Protection |
| CAL Green | California Green Building Standards |
| Caltrans | California Department of Transportation |
| CAO(s) | Cleanup and Abatement Order(s) |
| CAPCOA | California Air Pollution Control Officers Association |
| CASGEM | California Statewide Groundwater Elevation Monitoring |
| CAT | Climate Action Team |
| CBC | California Building Code |
| CCAA | California Clean Air Act |
| CCR | California Code of Regulations |
| CDO(s) | Cease and Desist Order(s) |
| CDFW | California Department of Fish and Wildlife |
| CEQA | California Environmental Quality Act |
| CERCLA | Comprehensive Environmental Response, Compensation, and Liability Act |
| CESA | California Endangered Species Act |
| CFGC | California Fish and Game Code |
| cfs | cubic feet per second |
| CGS | California Geological Survey |
| $CH_4$ | methane |
| CHRIS | California Historic Resources Inventory System |
| City | City of Placentia |
| CMP | Congestion Management Program |
| CMP | corrugated metal pipe |

| Acronym/Abbreviation | Term |
|---|---|
| CMPHS | CMP Highway System |
| CNEL | Community Noise Equivalent Level |
| CNPS | California Native Plant Society |
| CO | carbon monoxide |
| $CO_2$ | carbon dioxide |
| $CO_2e$ | carbon dioxide equivalent |
| CRC | California Residential Code |
| CWA | Clean Water Act |
| DAMP | Drainage Area Management Plan |
| dB | decibel |
| dBA | A-weighted decibel scale |
| DOC | California Department of Conservation |
| DOSH | California Division of Safety and Health |
| DTSC | Department of Toxic Substances Control |
| du/ac | Dwellling units per acre |
| DWR | Department of Water Resources |
| EIR | Environmental Impact Report |
| EMS | Emergency Medical Services |
| EO | Executive Order |
| EPA | Environmental Protection Agency |
| ESA | Endangered Species Act |
| ESA | Environmental Site Assessment |
| ESRL | Earth System Research Laboratory |
| EV | electric vehicle |
| EVCS | electric vehicle charging station |
| °F | degrees Fahrenheit |
| FEMA | Federal Emergency Management Agency |
| FHSZ | Fire Hazard Severity Zones |
| FMMP | Farmland Mapping and Monitoring Program |
| FTA | Federal Transit Administration |
| GHG | greenhouse gases |
| GIS | Geographic Information System |
| GPCD | gallons per capita per day |
| gpd | gallons per day |
| GSWC | Golden State Water Company |
| GWP | global warming potential |
| HABS | Historic American Building Survey |
| HCP | Habitat Conservation Plan |
| HFCs | hydroflourocarbons |
| HU | Hydrologic Unit |
| HVAC | heating, ventiliation and air conditioning |
| IPCC | Intergovernmental Panel on Climate Change |
| ISA | International Society of Arboriculture |
| IS/MND | Initial Study/Mitigated Negative Declaration |
| ITE | Institute of Transportation Engineers |
| $L_{90}$ | noise level that is exceeded 90% of the time |

| Acronym/Abbreviation | Term |
|---|---|
| $L_{eq}$ | equivalent noise level |
| LBP | Lead-Based Paint |
| LID | Low Impact Development |
| $L_{max}$ | root mean square maximum noise level |
| LOS | Level of Service |
| LRA | Local Responsibility Area |
| LSTs | Localized Significance Thresholds |
| LUST | Leaking Underground Storage Tank |
| MBTA | Migratory Bird Treaty Act |
| mgd | million gallons per day |
| MLD | Most Likely Descendant |
| MM(s) | mitigation measure(s) |
| MMRP | Mitigation Monitoring and Reporting Program |
| $MMTCO_2e$ | million metric tons of CO2e |
| MND | Mitigated Negative Declaration |
| MPAH | Master Plan of Arterial Highways |
| MRZ | Mineral Resource Zone |
| MS4 | Municiple Separate Storm Sewer permit |
| MT | Metric tons |
| $N_2O$ | nitrous oxide |
| NAAQS | National Ambient Air Quality Standards |
| NAHC | Native American Heritage Commission |
| National Core | National Community Renaissance of California |
| NASA | National Aeronautics and Space Administration |
| NCCP | Natural Communities Conservation Plan |
| ND | Negative Declaration |
| NO | nitric oxide |
| $NO_x$ | nitrogen oxides |
| $NO_2$ | nitrogen dioxide |
| NPDES | National Pollutant Discharge Elimination System |
| $O_3$ | Ozone |
| OCSD | Orange County Sanitation District |
| OCTA | Orange County Transportation Agency |
| OPR | Governor's Office of Planning and Research |
| OSHA | Occupational Safety and Health Administration |
| Pb | lead |
| PCB | polychlorinated biphenyl |
| PFCs | perfluorocarbons |
| PFLSD | Placentia Fire and Life Safety Department |
| PM | particulate matter |
| $PM_{10}$ | respirable particulate matter |
| $PM_{2.5}$ | fine particulate matter |
| POP | Placentia Operations Plan |
| PPD | Placentia Police Department |
| ppm | parts per million |
| PPV | peak particle velocity |

| Acronym/Abbreviation | Term |
|---|---|
| PYLUSD | Placentia-Yorba Linda Unified School District |
| R-1 | Single-Family Residential District |
| R-3 | High Density Multiple-Family District |
| RCRA | Resource Conservation and Recovery Act |
| RECs | Recognized Environmental Condition(s) |
| R-G | Medium Density Multiple-Family District |
| RHNA | Regional Housing Needs Allocation |
| RMS | root mean square |
| ROG | Reactive organic gases |
| ROW | Right-of-way |
| RPS | Renewables Portfolio Standard |
| RWQCB | Regional Water Quality Control Board |
| § | section |
| SB | Senate Bill |
| SCAB | South Coast Air Basin |
| SCAG | Southern California Association of Governments |
| SCAQMD | South Coast Air Quality Management District |
| SCCIC | South Central Coastal Information Center |
| SCE | Southern California Edison Company |
| $SF_6$ | sulfur hexafluoride |
| SIP | State Implementation Plan |
| SLF | Sacred Lands File |
| SMARA | Surface Mining and Reclamation Act |
| $SO_2$ | sulfur dioxide |
| SoCalGas | Southern California Gas Company |
| SR-55 | State Route 55 |
| SR-91 | State Route 91 |
| SRA | State Responsibility Area |
| SRAs | source receptor areas |
| SRRE | Source Reduction and Recycling Element |
| STIP | Statewide Transportation Improvement Program |
| SUSMP | Standard Urban Stormwater Mitigation Plan |
| SWPPP | Stormwater Pollution Prevention Plan |
| SWRCB | State Water Resources Control Board |
| TAPs | Transportation Assembly Points |
| T-C | Town Center District |
| TCRs | Tribal Cultural Resources |
| TMP | Traffic Management Plan |
| UFPO | Urban Forest Protection Ordinance |
| U.S. | United States |
| USDA | United States Department of Agriculture |
| USEPA | United States Environmental Protection Agency |
| VdB | vibration decibels |
| VCP | vitrified clay pipe |
| VHFHSZ(s) | very high fire hazard severity zone(s) |
| VMT | vehicle miles traveled |

| Acronym/Abbreviation | Term |
|---|---|
| VOC | volatile organic compound |
| WEG | wind erodibility group |
| WQMP | Water Quality Management Plan |
| WRI | World Resources Institute |
| ybp | years before present |
| YLWD | Yorba Linda Water District |

# 1.0 INTRODUCTION

## 1.1 Proposed Project

The City of Placentia (City) is processing a request to construct and operate the Santa Angelina Senior Apartment Homes project (hereby referred to as the "proposed project" or the "project"), a new affordable housing development with two residential buildings and a new Parish Hall on a previously developed site located at the northeast intersection of Morse Avenue and North Angelina Drive in Placentia, California (APN 340-273-25).

### 1.1.1 Project Components

The proposed project would consist of:

- Demolition of the existing 3,472-square-foot Parish Hall;
- Construction of a new approximately 3,974-square-foot Parish Hall with 544-square-foot covered portico;
- An outdoor terrace fronting North Angelina Drive;
- A courtyard gathering space is proposed west of the Parish Hall;
- A gathering lawn with benches fronting North Angelina Drive;
- A memorial garden with accent trees between the existing Church building and the proposed new Parish Hall;
- A new courtyard area is proposed west of the existing Church;
- Two residential buildings (Building 1 and Building 2);
- New seating is proposed north of the Church, adjacent to the proposed memorial garden.
- A community garden near the northeast corner of the project site;
- Bike racks are proposed north of Building 1 and west of Building 2;
- Trash enclosures located east of Building 1;
- North Parking Lot: A new parking lot is proposed along the northern project boundary, north of Building 1, with driveway access along North Angelina Drive;
- South Parking Lot: A new parking lot is proposed both east and west of Building 2 with driveway access along North Angelina Drive and Morse Avenue;
- The project would construct 64 units affordable to households earning less than 60 percent of the Area Median Income (AMI) and one manager's unit, for a total of 65 units;

- An approximately 1,500-square-foot senior-oriented community center is proposed on the ground floor of Building 2;
- A relocated shed will be located east of the existing classrooms;
- New children's picnic/lunch area with 9 picnic tables;
- The existing parking for the Church of the Blessed Sacrament is comprised of 85 parking spaces. The project proposes an additional 45 parking spaces for a total of 130 parking spaces on site. The Applicant is requesting a reduction in parking of 89 spaces based on the demographic of residents being seniors living alone or non-car owning households, access to existing bus routes, and the provision of alternative strategies to reduce vehicle trips including car sharing and van pooling.

### 1.1.2 Estimated Construction Schedule

Project construction is 16 months starting in winter (January) 2022. Refer to **Section 3.0** for details.

## 1.2 Lead Agencies – Environmental Review Implementation

The City of Placentia is the Lead Agency for the proposed project. Pursuant to the California Environmental Quality Act (CEQA) and its implementing regulations,[2] the Lead Agency has the principal responsibility for implementing and approving a project that may have a significant effect on the environment.

## 1.3 CEQA Overview

### 1.3.1 Purpose of CEQA

All discretionary projects within California are required to undergo environmental review under CEQA. A Project is defined in CEQA Guidelines § 15378 as the whole of the action having the potential to result in a direct physical change or a reasonably foreseeable indirect change to the environment and is any of the following:

- An activity directly undertaken by any public agency including but not limited to public works construction and related activities, clearing or grading of land, improvements to existing public structures, enactment and amendment of zoning ordinances, and the adoption and amendment of local General Plans or elements.
- An activity undertaken by a person which is supported in whole or in part through public agency contracts, grants, subsidies, loans, or other forms of assistance from one or more public agencies.
- An activity involving the issuance to a person of a lease, permit, license, certificate, or other entitlement for use by one or more public agencies.

CEQA Guidelines § 15002 lists the basic purposes of CEQA as follows:

- Inform governmental decision makers and the public about the potential, significant environmental effects of proposed activities.

2 Public Resources Code §§ 21000 - 21177 and California Code of Regulations Title 14, Division 6, Chapter 3.

- Identify the ways that environmental damage can be avoided or significantly reduced.
- Prevent significant, avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures (MMs) when the governmental agency finds the changes to be feasible.
- Disclose to the public the reasons why a governmental agency approved the project in the manner the agency chose if significant environmental effects are involved.

### 1.3.2 Authority to Mitigate under CEQA

CEQA establishes a duty for public agencies to avoid or minimize environmental damage where feasible. Under CEQA Guidelines § 15041 a Lead Agency for a project has authority to require feasible changes in any or all activities involved in the project in order to substantially lessen or avoid significant effects on the environment, consistent with applicable constitutional requirements such as the "nexus"[3] and "rough proportionality"[4] standards.

CEQA allows a Lead Agency to approve a project even though the project would cause a significant effect on the environment if the agency makes a fully informed and publicly disclosed decision that there is no feasible way to lessen or avoid the significant effect. In such cases, the Lead Agency must specifically identify expected benefits and other overriding considerations from the project that outweigh the policy of reducing or avoiding significant environmental impacts of the project.

## 1.4 Purpose of Initial Study

The CEQA process begins with a public agency making a determination as to whether the project is subject to CEQA at all. If the project is exempt, the process does not need to proceed any farther. If the project is not exempt, the Lead Agency takes the second step and conducts an Initial Study to determine whether the project may have a significant effect on the environment.

The purposes of an Initial Study as listed in § 15063(c) of the CEQA Guidelines are to:

- Provide the Lead Agency with information necessary to decide if an Environmental Impact Report (EIR), Negative Declaration (ND), or Mitigated Negative Declaration (MND) should be prepared.
- Enable a Lead Agency to modify a project to mitigate adverse impacts before an EIR is prepared, thereby enabling the project to qualify for a ND or MND.
- Assist in the preparation of an EIR, if required, by focusing the EIR on adverse effects determined to be significant, identifying the adverse effects determined not to be significant, explaining the reasons for determining that potentially significant adverse effects would not be significant, and identifying whether a program EIR, or other process, can be used to analyze adverse environmental effects of the project.
- Facilitate an environmental assessment early during project design.
- Provide documentation in the ND or MND that a project would not have a significant effect on the environment.
- Eliminate unnecessary EIRs.
- Determine if a previously prepared EIR could be used for the Project.

3 A nexus (i.e., connection) must be established between the mitigation measure and a legitimate governmental interest.
4 The mitigation measure must be "roughly proportional" to the impacts of the Project.

In cases where no potentially significant impacts are identified, the Lead Agency may issue a ND, and no MMs would be needed. Where potentially significant impacts are identified, the Lead Agency may determine that MMs would adequately reduce these impacts to less than significant levels. The Lead Agency would then prepare a MND for the proposed project. If the Lead Agency determines that individual or cumulative effects of the proposed project would cause a significant adverse environmental effect that cannot be mitigated to less than significant levels, then the Lead Agency would require an EIR to further analyze these impacts.

## 1.5 Review and Comment by Other Agencies

Other public agencies are provided the opportunity to review and comment on the IS/MND. Each of these agencies is described briefly below.

- A Responsible Agency (14 CCR § 15381) is a public agency, other than the Lead Agency, that has discretionary approval power over the Project, such as permit issuance or plan approval authority.
- A Trustee Agency[5] (14 CCR § 15386) is a state agency having jurisdiction by law over natural resources affected by a project that are held in trust for the people of the State of California.
- Agencies with Jurisdiction by Law (14 CCR § 15366) are any public agencies who have authority (1) to grant a permit or other entitlement for use; (2) to provide funding for the project in question; or (3) to exercise authority over resources which may be affected by the project. Furthermore, a city or county will have jurisdiction by law with respect to a project when the city or county having primary jurisdiction over the area involved is: (1) the site of the project; (2) the area in which the major environmental effects will occur; and/or (3) the area in which reside those citizens most directly concerned by any such environmental effects.

## 1.6 Impact Terminology

The following terminology is used to describe the level of significance of potential impacts:

- A finding of ***no impact*** is appropriate if the analysis concludes that the project would not affect the particular environmental threshold in any way.
- An impact is considered ***less than significant*** if the analysis concludes that the project would cause no substantial adverse change to the environment and requires no mitigation.
- An impact is considered ***less than significant with mitigation incorporated*** if the analysis concludes that the project would cause no substantial adverse change to the environment with the inclusion of environmental commitments, or other enforceable measures, that would be adopted by the lead agency.
- An impact is considered potentially significant if the analysis concludes that the project could have a substantial adverse effect on the environment.

An EIR is required if an impact is identified as ***potentially significant***.

5 The four Trustee Agencies in California listed in CEQA Guidelines § 15386 are California Department of Fish and Wildlife, State Lands Commission, State Department of Parks and Recreation, and University of California.

## 1.7 Organization of Initial Study

This document is organized to satisfy CEQA Guidelines § 15063(d), and includes the following sections:

- **Section 1.0 - Introduction**, which identifies the purpose and scope of the IS/MND.
- **Section 2.0 - Environmental Setting**, which describes location, existing site conditions, land uses, zoning designations, topography, and vegetation associated with the project site and surroundings.
- **Section 3.0 - Project Description**, which provides an overview of the project, a description of the proposed development, project phasing during construction, and discretionary actions for project approval.
- **Section 4.0 - Environmental Checklist**, which presents checklist responses for each resource topic to identify and assess impacts associated with the proposed project, and proposes MMs, as needed, to reduce potential environmental impacts to less than significant.
- **Section 5.0 - References**, which includes a list of documents cited in the IS/MND.
- **Section 6.0 - List of Preparers**, which identifies the primary authors and technical experts that prepared the IS/MND.

Technical studies and other documents, which include supporting information or analyses used to prepare the IS/MND, are included in the following appendices:

- Appendix A Project Plans
- Appendix B1 Criteria Pollutant Emissions Calculations
- Appendix B2 Greenhouse Gas Emissions Calculations
- Appendix C Arborist Report
- Appendix D1 Cultural Resources Report
- Appendix D2 Paleontological Records Search
- Appendix E Geotechnical Report
- Appendix F Methane report
- Appendix G Phase I Environmental Site Assessment
- Appendix H Percolation Test
- Appendix I1 Water Quality Management Plan
- Appendix I2 Preliminary Hydrology Report
- Appendix I3 Sewer Analysis Report
- Appendix J Ambient Noise Measurement Data
- Appendix K Reduced Parking Justification Memorandum
- Appendix L Information Request Letters
- Appendix M Transportation Assessment

## 1.8 Findings from the Initial Study

### 1.8.1 No Impact or Impacts Considered Less than Significant

Based on IS findings, the project would have no impact or a less than significant impact on the following environmental categories listed from Appendix G of the CEQA Guidelines.

- Agriculture and Forestry Resources

- Air Quality
- Energy
- Greenhouse Gas Emissions
- Hydrology and Water Quality
- Land Use and Planning
- Mineral Resources
- Population and Housing
- Recreation
- Transportation and Traffic
- Utilities and Service Systems
- Wildfire

### 1.8.2 Impacts Considered Less than Significant with Mitigation Measures

Based on IS findings, the project would have a less than significant impact on the following environmental categories listed in Appendix G of the CEQA Guidelines when proposed MMs are implemented.

- Aesthetics
- Biological Resources
- Cultural Resources
- Geology and Soils
- Hazards and Hazardous Materials
- Noise
- Public Services
- Tribal Cultural Resources
- Mandatory Findings of Significance

# 2.0 ENVIRONMENTAL SETTING

## 2.1 Project Location

The proposed Santa Angelina Senior Apartment Homes Project is located at 1314 North Angelina Drive at the northeast intersection of Morse Avenue and North Angelina Drive in Placentia, California, on a currently developed site covering an area of approximately 3.85 acres. Refer to **Figure 2.1-1**, which shows the project's location in a regional context. Local surface streets surrounding the site include North Angelina Drive to the west and Morse Avenue to the south. See **Figure 2.1-2**, which depicts an aerial photo of the project site and the surrounding land.

The project site is located on the United States Geological Survey, 7.5-Minute Series, Topographic Map, Yorba Linda Quadrangle, California within Section 30, Township 3 South and Range 3 West San Bernardino Base and Meridian, latitude: 33°53'08.58"N, longitude: 117°51'41.20"W.

## 2.2 Project Setting

The project site is comprised of one parcel, APN 340-273-25. The project site is developed with the Blessed Sacrament Episcopal Church. The Church operates out of two buildings, including the main Parish Hall and a separate structure with several classrooms. The northern and southeastern portions of the site are undeveloped and are landscaped with trees and grass. The southern portion of the project site contains a surface parking lot for visitors.

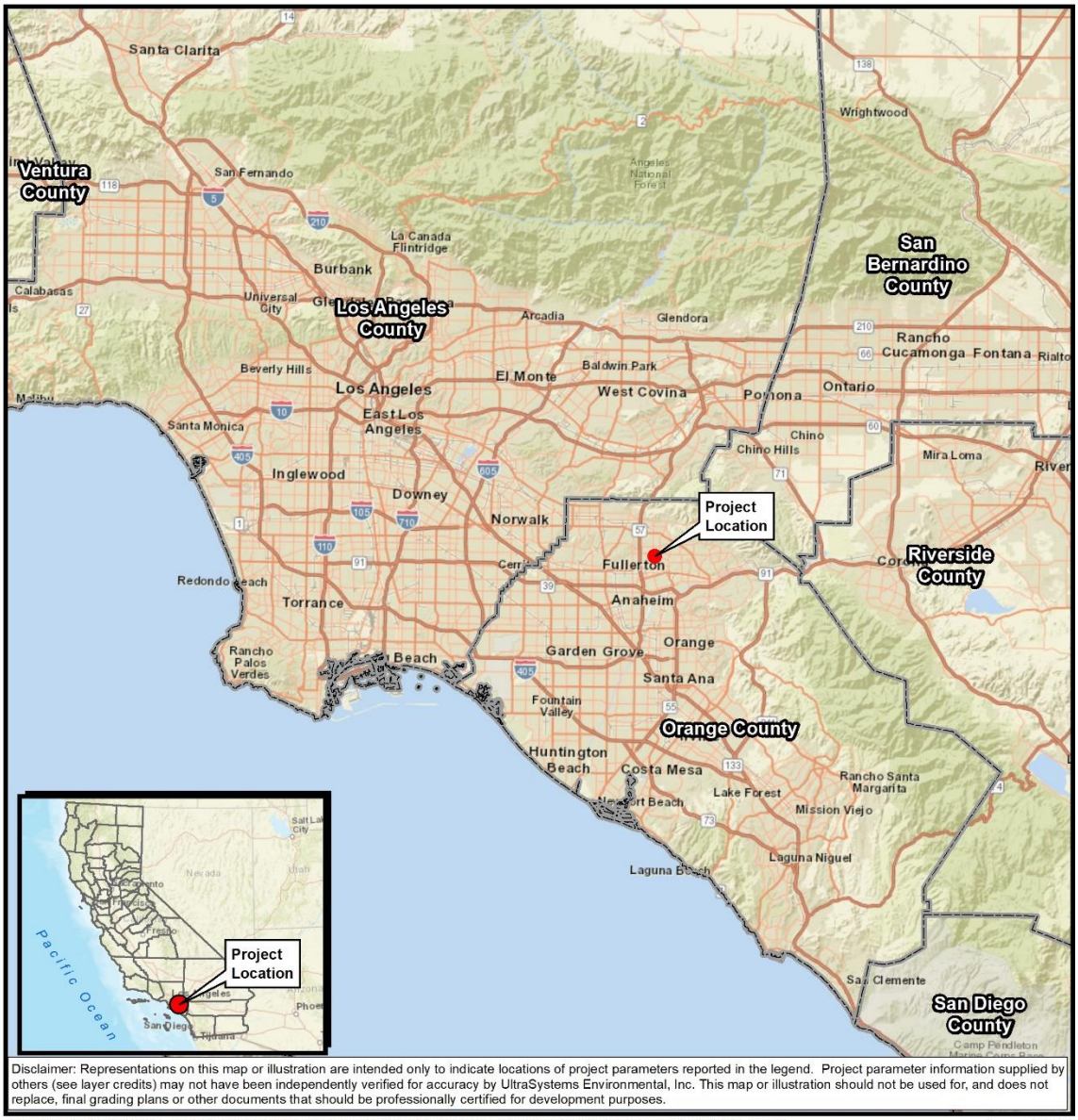
Immediately surrounding land uses include detached single-family homes to the north, west, and south across Morse Avenue. To the west across North Angelina Drive are commercial/retail land uses including a post office, bank, dentist office, bridal store, and spa/nail salon.

See **Figure 2.2-1**, which depicts the topography of the site, and surrounding area. Topography within the project site is relatively flat (Google Earth, 2019). Photographs depicting the project site are provided in **Figure 2.2-2**.

### 2.2.1 Land Use and Zoning

The land use designations and zoning of the project site and its immediate vicinity are listed in **Table 2.2-1**. The General Plan designation for the project site is Low Density Residential and zoned as R-1 Single-Family Residential. Upon full build-out the proposed project would have a density of approximately 16.7 dwelling units per acre. To develop the project site as currently envisioned, the Applicant is seeking a General Plan Amendment (GPA 2020-01) to change the General Plan land use designation of the project site from Low Density Residential to High Density Residential. The project also proposes a Zone Change (ZC 2020-01) from R-1 Single-Family Residential District to R-3 High-Density Multiple-Family District.

**Figure 2.1-1**
**REGIONAL LOCATION**

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Service Layer Credits: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community; UltraSystems Environmental, Inc., 2020

January 19, 2020

Scale: 1:633,600

N

0 5 10 Miles

0 5 10 Kilometers

**Legend**

- Project Location
- County Boundary

**Santa Angelina Senior Apartment Homes**

Regional Location

UltraSystems environmental • management • planning

**Figure 2.1-2**
**PROJECT LOCATION**


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Service Layer Credits: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community, Esri, HERE, Garmin, (c) OpenStreetMap contributors, Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community, Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community; County of Orange, 2018; UltraSystems Environmental, Inc., 2019

January 19, 2020

Scale: 1:4,200

N

0 175 350 Feet

0 40 80 Meters

**Legend**
Project Boundary
City Boundary

**Santa Angelina Senior Apartment Homes**
Project Location

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**Figure 2.2-1**
**TOPOGRAPHIC MAP**

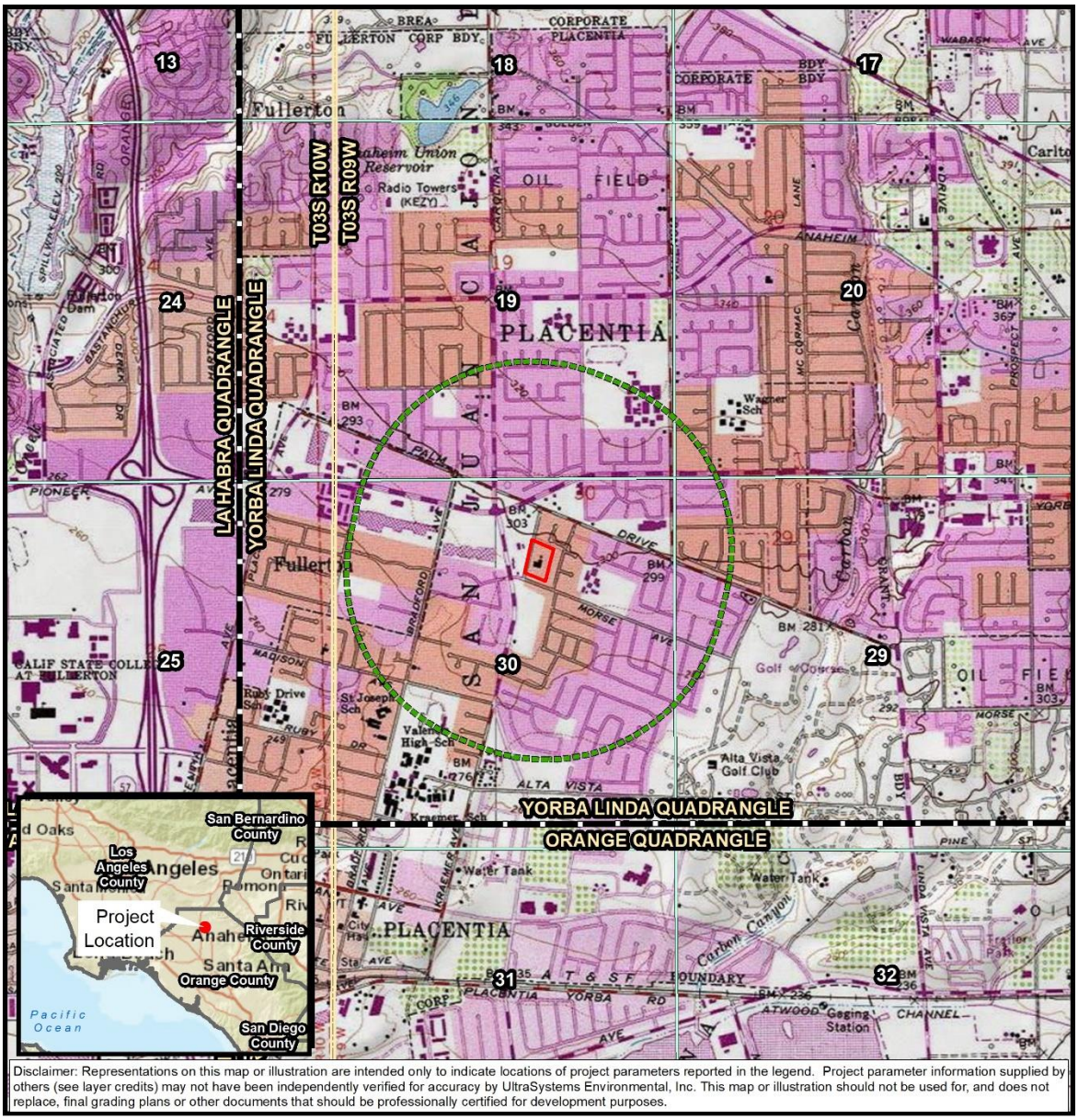

**Figure 2.2-2**
**PROJECT SITE PHOTOGRAPHS**

PHOTO 1: View of the northern portion of the project with undeveloped land and trees.

PHOTO 2: View of the southern portion of the project site with a surface parking lot.

PHOTO 3: View of the eastern portion of the project site with undeveloped land with ornamental vegetation and trees.

PHOTO 4: View of the western portion of the project site with church buildings and trees.

**Table 2.2-1**
**SUMMARY OF EXISTING LAND USE AND ZONING DESIGNATIONS**

| Location | General Plan | Zoning | Existing Use |
|---|---|---|---|
| Project Site | Low Density Residential | Single-Family Residential District | Developed with two church buildings and a large surface parking lot |
| **Surrounding Areas** | | | |
| North | Low Density Residential | Single-Family Residential District | Single family homes |
| East | Low Density Residential | Single-Family Residential District | Single family homes |
| West | Commercial | Town Center District | Commercial center and United States Post Office |
| South | Low Density Residential | Single-Family Residential District | Single family homes |

## 2.3 Existing Characteristics of the Site

### 2.3.1 Climate and Air Quality

The project site is located within the South Coast Air Basin (SCAB), a 6,600-square-mile area encompassing all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties. A persistent high-pressure area that commonly resides over the eastern Pacific Ocean largely dominates regional meteorology. The distinctive climate of this area is determined primarily by its terrain and geographic location. Local climate is characterized by warm summers, mild winters, infrequent rainfall, moderate daytime onshore breezes, and moderate humidity. Ozone ($O_3$) and pollutant concentrations tend to be lower along the coast, where the onshore breeze disperses pollutants toward the inland valley of the SCAB and adjacent deserts. However, as a whole, the SCAB fails to meet National Ambient Air Quality Standards (NAAQS) for $O_3$ and fine particulate matter ($PM_{2.5}$), and is classified as a "nonattainment area" for those pollutants.

### 2.3.2 Geology and Soils

The proposed project site straddles two geologic units:

- Young Alluvial Fan Deposits are unconsolidated to slightly consolidated, undissected to slightly dissected boulder, cobble, gravel, sand, and silt deposits issued from a confined canyon or body. These are surficial deposits, Holocene to Late Pleistocene in nature; and

- Very Old Alluvial Fan Deposits which are moderately to well-consolidated, highly dissected boulder, cobble, gravel, sand, and silt deposits issued from a confined valley or canyon. These are also surficial deposits, but are Middle to Early Pleistocene in age (Bedrossian et.al., 2012).

Topography within the project site is relatively flat. The project is approximately 298 feet above mean sea level (Google Earth Pro, 2019). The nearest known earthquake fault and nearest Alquist-Priolo Zone to the proposed project site are approximately one mile and three miles, respectively, from the project site. The highest groundwater level recorded at this well was 147.78 feet (ground surface to water surface, or GS to WS) recorded on June 5, 2013. The most recent measurement was recorded on November 13, 2013; on this date, depth to groundwater was

159.26 feet GS to WS (CASGEM, 2019). Additionally, the project site is not located within or adjacent to a liquefaction zone (Albus-Keefe & Associates 2020a, p. 11).

### 2.3.3 Hydrology

The project site consists of a rectangular-shaped property on approximately 3.85 acres of land. The site is relatively flat, with the topography sloping in a westerly and southwesterly direction toward the corner of North Angelina Drive and Morse Avenue, where there is an existing City of Placentia catch basin located on North Angelina Drive (Fuscoe, 2020, p. 3). Based on the existing topography on the project site, the drainage pattern is westerly and southwesterly, toward the intersection of North Angelina Drive and Morse Avenue, via surface flow, including a ribbon gutter within the at-grading parking lot, which conveys stormwater flows toward the southwest corner. (Fuscoe, 2020, p. 5). The project is within FEMA Map 06059C0063J (12/3/2009). The site is entirely within Zone X, which depicts area of minimal flood hazard (Fuscoe, 2020, p. 6).

Groundwater was not encountered to a depth of 51.5 feet below ground surface (bgs) during the geotechnical study. Additional review of the Department of Water Resources groundwater level indicates that groundwater for the area is below 150 feet. Albus-Keefe & Associates, Inc. (2020b, p.4) anticipates groundwater will remain below a depth of 100 feet during the next 50 years.

### 2.3.4 Biology

The project site is located in a highly-urbanized area, which provides low habitat value for special-status plant and wildlife species. The project site itself has a relatively flat topography and comprises several existing buildings, artificial turf grass, a parking lot and various other structures. Some of the buildings include an existing Church, Parish Hall, and classroom building. Several large and smaller trees distributed throughout a spacious ornamental turf lawn and other landscaped areas around buildings cover about one third of the project site. In addition, approximately one third of the project site consists of paved or impervious surfaces such as a school playground, parking lots, and walkways. Onsite shrub and forb species consisted of decorative species such as crossberry (*Grewia occidentalis*), myrtle-leaf milkwort (*Polygala myrtifolia*), juniper bush (*Juniperus chinensis*), tree mallow (*Lavatera maritima*), and chrysanthemum bush (*Dendranthema x grandiflora*).

During the February 10, 2020 habitat assessment survey, 10 wildlife species were observed. Other than a lizard, neither terrestrial wildlife nor their sign (including burrows) were observed in the proposed project site during the biological survey. Nine bird species, seven of which are native to California were observed visually, by vocalization, or by their sign. The native bird species include Cooper's hawk (*Accipiter cooperii*, WL, G5, S4) Accipitridae, Allen's hummingbird (*Selasphorus sasin*, BCC, G5, SNR/NR) Trochilidae, mourning dove (*Zenaida macroura*) Columbidae, American crow (*Corvus brachyrhynchos*) Corvidae, Mexican house finch (*Haemorhous mexicanus*) Fringillidae, band-tailed pigeon (*Patagioenas fasciata*) Columbidae, and black phoebe (*Sayornis nigricans*) Tyrannidae. Two non-native bird species were observed on the site: European Starling (*Sturnus vulgaris*) Sturnidae and a parrot (*Amazonia* sp.) Psittacidae. In addition, a western side-blotched lizard (*Uta stansburiana elegans*) Phrynosomatidae, was observed onsite.

Two of the native bird species observed on the project site, Allen's hummingbird and Cooper's hawk, are special-status species. Other special status wildlife species were not observed within the project site nor are they expected to occur due to lack of suitable habitat, and/or the site is outside of the known elevation, and/or general range of the target species.

### 2.3.5 Public Services

The City is served by a full range of public services and utilities. Fire Services for the City of Placentia are provided by the Placentia Fire and Life Safety Department (PFLSD), a community-based fire department, to increase fire safety and response (City of Placentia Fire Department, 2019). Two fire stations are strategically located throughout the City, providing primary response for fire suppression and emergency medical services. .

The Placentia Police Department (PPD) provides police services in the City of Placentia and would provide law enforcement services to the project site. In addition to the Office of the Chief of Police, the PPD is organized into two divisions: Administrative Services; and Operations (City of Placentia Police Department, 2019). The project is located within the boundaries of the Placentia-Yorba Linda Unified School District (PYLUSD), which serves a 24-square-mile area and has a total of 43 schools, including 23 elementary schools, seven intermediate schools, seven high schools, and six other alternative schools (Placentia Yorba Linda Unified School District, 2019).

### 2.3.6 Utilities

City of Placentia water service primarily comes from Golden State Water Company (GSWC), with a portion of the City served by Yorba Linda Water District. Three water systems serve the Golden State Water Placentia Customer Service Area. Water delivered to Placentia customers is a blend of groundwater pumped by six active GSWC-owned wells from the Orange County Groundwater Basin and imported water from the Colorado River Aqueduct and State Water Project (imported and distributed by Metropolitan Water District of Southern California).

Orange County Sanitation District (OCSD) owns and maintains the sewer system in the City of Placentia. The City's sewer collection system consists of approximately 84 miles of gravity sanitary sewer pipelines. The City's wastewater collection system conveys untreated wastewater to Orange County Sanitation District's (OCSD) trunk sewer system via 35 separate connections. All the OCSD sewers in the City collect and convey wastewater to the OCSD Treatment Plant Number 1 located just southwest of the City in Fountain Valley (RMC, 2016, p. ES-1). Under existing conditions, stormwater runoff generated on the project site would be captured by a series of roof and area drains in both the courtyard and the perimeter of the project site. No new catch basins or curb inlets would be installed within the public right-of-way. All runoff exiting the site will tie in to existing City storm drain infrastructure on Kraemer Boulevard. The project would not alter project site drainage patterns.

Solid waste disposal services in the City of Placentia are provided by Republic Services, a private company under contract with the City. Electrical service to the site is provided by Southern California Edison through a grid of transmission lines and related facilities. Natural gas is provided by Southern California Gas Company, which maintains a local system of transmission lines, distribution lines, and supply regulation stations (City of Placentia New Resident Guide, 2019).

# 3.0 PROJECT DESCRIPTION

## 3.1 Project Background

The City of Placentia (City) is processing a request to implement a series of discretionary actions that would ultimately allow for the development of an affordable multi-family residential project and new Church Parish Hall (project) at the northeast corner of the intersection of North Angelina Drive and Morse Avenue in the City of Placentia in Orange County California. The proposed project would provide a total of 65 units as follows: 64 units of affordable to households earning less than 60 percent of the Area Median Income (AMI) and one exempt manager's unit. The project is technically considered 100% affordable as the managers unit is exempt. The proposed project would require a General Plan amendment to High Density Residential and Zone Change to R-3 High Density Multiple-Family District. The City is the Lead Agency for the purposes of the CEQA.

The project site is approximately 3.85 acres and is developed with the Church of the Blessed Sacrament, an Episcopal Church. The Church was founded in 1956 and the Church, offices, and a small Parish Hall were constructed. In 1976 the larger Parish Hall and an expanded kitchen were built. In 1998 the Children's Learning Center was opened (Church of the Blessed Sacrament, 2019).

The Church currently operates out of two buildings, including the main Church/Parish Hall and a separate childcare facility with several classrooms. Surrounding land uses include detached single-family homes to the north and east, and south across Morse Avenue. To the west across North Angelina Drive are commercial land uses including a post office, bank, dentist office, bridal store, and spa/nail salon.

The City's General Plan Land Use Map designates the project site as Low Density Residential (City of Placentia, 2018). The project site is zoned R-1 Single-Family Residential District (City of Placentia Zoning Map, 2020). The current land use allows for a base density of up to 6.0 dwelling units per acre. The project proposes a density of approximately 16.7 dwelling units per acre. The Applicant is seeking approval of a General Plan Amendment to change the General Plan designation from Low Density Residential to High Density Residential and a zone change to change the zoning of the project site from R-1 Single-Family Residential District to R-3 High Density Multiple-Family District.

## 3.2 Project History

In October of 2016, the Leadership of the Episcopal Church of the Blessed Sacrament (the Church) was approached by Urban West Developers, a for-profit company, regarding the development of senior housing on the property located at 1314 North Angelina Drive, Placentia, CA 92870. The development concept included senior housing in the southwest corner of the Church grounds on the existing parking lot at the corner of Angelina Drive and Morse Avenue. It was determined that this concept would have impacts on the Church and surrounding homes by reducing parking onsite, increasing traffic congestion for drop off/pick up of children at the Church's preschool (Children's Learning Center) and creating aesthetic concerns including reduced visibility for the Church from Morse Avenue and limiting sun light for the south-facing stained glass windows. After much discussion and discernment, the Church declined to continue discussions with Urban West Developers.

Despite discontinuing conversations with Urban West Developers, in early 2017, the Church initiated discussions with Episcopal Community Services about how to effectively build senior housing on the

Church grounds. The Urban West development concept started with market-rate apartment building but the Church quickly evolved their vision into how the Church could serve the community by providing affordable homes for seniors. This evolution of the project will provide the Church with the opportunity to follow the vision statement of the people of Blessed Sacrament – "Making our Lord Jesus Christ visible to the world through our word and service." Furthermore, the development of affordable housing is akin to the City of Placentia Vision Statement – "The City of Placentia will maintain an open, honest, responsive and innovative government that delivers quality services in a fair and equitable manner while optimizing available resources."

The membership of the Blessed Sacrament, not unlike the City of Placentia, wants to use Church resources (the land) to serve the community by providing opportunities to for seniors (62+) to live in a safe, supportive and affordable environment. To achieve this aligned vision, the Church leadership and congregation spent much of 2017 meeting with two developers, National Community Renaissance of California (National CORE) and Jamboree Housing, both well-established, 501(c)(3), nonprofit affordable housing developers. Each presented different concepts on how to best use the Church's available land while respecting the neighborhood and Church architecture. In March of 2018, Jamboree Housing withdrew from consideration to be the project developer.

National CORE and the Church worked collaboratively through the first half of 2018 to develop three conceptual site plans focused on how to make the project competitive for funding by increasing the number of units developed onsite. The project applicant came up with three scenarios to develop housing on site. Two of the three scenarios (Scenarios A and B) were rejected because of aesthetic concerns for the Church, lack of distance between the proposed housing and the existing homes, and lack of parking for both the Church and the proposed housing. The third development option (Scenario C) was selected because it would require minimal changes to the existing Church buildings. This scenario also preserved the Church's prominence on the site, provided ample parking for the Church and housing units, buffered all but two of the surrounding single-family homes and increased the project's competitiveness for financing sources. During an iterative process, the Church also gave direction to further modify the site plan. In adjusting the building heights and number of stories, the number of units also increased to a total of 65 units which is beneficial to the development's competitiveness for financing. In this scenario, the Church facilities would be improved with a new Parish Hall and garden courtyard along Angelina Drive, ample parking is provided for both the Church and the housing development, and the impact to the surrounding neighborhood is largely mitigated. Refer to **Figure 3.2-1**, which shows the modifications that have been made to the project site in response to community feedback.

## 3.3 Project Outreach

The project applicant has been working with both the City and the community to receive input and provide information regarding the proposed project. The project went before the City of Placentia Development Subcommittee on November 14, 2019. The project applicant has engaged directly with the community surrounding the project. Community meetings were with the project applicant and the surrounding neighborhood on three separate occasions on June 26, 2019, August 21, 2019, and June 30, 2020. An additional community meeting is anticipated in early September during the CEQA IS/MND circulation period.

**Figure 3.2-1**
**SITE PLAN MODIFICATIONS**


Disclaimer: Illustration provided by RRM Design Group and National CORE, who has indicated that the information is true and correct. No other warranties are expressed or implied.

Source: RRM Design Group and National CORE, August 18, 2020

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Site Plan Modifications

On June 26, 2019, the project applicant (National CORE) held a neighborhood dinner at the Church campus located at 1314 North Angelina Drive to present the development plans to residents living adjacent to the Church property. National CORE went door to door personally inviting households to the meeting or leaving a paper invite on the doorstep. At the meeting, dinner was provided while National CORE Staff gave a PowerPoint presentation on the proposed development. A project handout was prepared and provided. Attendees were encouraged to share their comments, concerns and questions verbally to the National CORE team. The meeting lasted approximately an hour and a half from 6:30-8:00 pm.

On August 21, 2019, National CORE held a community meeting open to the public at the Church campus located at 1314 North Angelina Drive to present an updated site plan that was modified based on input collected at the June 26th meeting. National CORE mailed invitations to all property owners within 500 feet of the project site. Copies of a project handout, large print (24" by 36") boards with the design plans, and a handout showing the evolution of the project were provided to attendees. National CORE Staff gave a PowerPoint presentation on the proposed development. Residents were encouraged to share their comments, concerns and questions verbally or via a paper comment card. The meeting lasted approximately two hours from 6:00-8:00 pm.

On November 14, 2019, National CORE met with the City of Placentia Development Ad-hoc Committee. The development plans with reviewed by the committee members which includes members of the City Council.

On June 30, 2020, National CORE held a second community meeting open to the public at the Church campus located at 1314 North Angelina Drive to present an updated site plan that was modified based on input collected at the previous meetings and the City of Placentia Development Ad-hoc Committee. National CORE mailed invitations to all property owners within 500 feet of the Project site. Copies of a project handout, large print (24" by 36") boards with the design plans, and a handout showing the evolution of the project were provided to attendees. The meeting was held as an open house, with stations staffed by the development team to answer questions and hear comments on the revised design. Residents were encouraged to share their comments, concerns and questions verbally or via a paper comment card. The meeting lasted approximately two hours from 6:00-8:00 pm.

## 3.4 Project Modifications that Respond to Community Feedback

Since the preliminary project design, the project applicant has made several modifications to the site plan to result in the project as proposed in this document. The multiple project modifications are listed below.

1. Reduced Building 1 from three stories to two stories to ensure neighborhood compatibility.

2. Relocated Building 2 away from the eastern property line, adding a parking area, and enlarged it to an "L shaped" building with a small third story component (this has been since modified as detailed in #7 below).

3. Eliminated certain second-story balconies in Building 1 to ensure privacy for single-family home owners to the north.

4. Repositioned trash facilities from the northern and eastern property line to the interior of the site near the residential buildings.

5. Moved the community center from Building 1 to Building 2, a more central location.

6. Added additional landscaping and masonry walls along the property lines to ensure security and reduce any potential noise impacts.

7. Based on community demands, as analyzed in this IS/MND document, the applicant is proposing to modify Building 2 from three stories to two stories and Building 2 will change from an L shape to a U shape. Additionally, the unit count will remain the same (65 units); however, one of the one-bedroom units will become a studio and four parking spaces for the residential development would be lost.

## 3.5 Project Overview

The project would consist of: (1) utilities improvements; (2) construction of two new residential buildings; (3) demolition of the existing Parish Hall; (4) construction of a new Parish Hall; (5) construction of a new community building; and (6) project site amenities and landscaping. **Table 3.5-1** summarizes the proposed project features. **Figure 3.5-1** depicts the spatial relationships between the proposed residential structures onsite, the existing Blessed Sacrament Episcopal Church structures, and other onsite features.

**Table 3.5-1**
**PROJECT SUMMARY**

| New Construction | Proposed Uses/Features | Square Feet | No. of Stories | Building Height |
|---|---|---|---|---|
| Building 1 | 28 one-bedroom units and 4 two-bedroom units | 24,631 | 2 | 34 feet, 9 inches |
| Building 2 | 30 one-bedroom units<br>One Junior one-bedroom unit and 2 two-bedroom units | 30,316 | 2 | 25 feet, 5 inches |
| Community Center | A senior-oriented community center (for use by residents and guests) | 1,500 | 1 | To be located on the first floor of Building 2 |
| New courtyard and garden area | A new courtyard area and garden area are proposed west of Building 2 | N/A | N/A | N/A |
| Courtyard with outdoor seating | New courtyard with seating areas is proposed north of the Church, adjacent to the proposed memorial garden. | N/A | N/A | N/A |
| New courtyard area | A new courtyard area is proposed west of the existing Church | N/A | N/A | N/A |
| New Parish Hall | Parish Hall building addition | 3,974 | 1 | 32 feet, 6 inches |
| | Covered Porch | 544 | N/A | N/A |
| New children's picnic/ lunch area | Nine new picnic tables | N/A | N/A | N/A |
| New community garden | A community garden is proposed near the northeast corner of the project site | N/A | N/A | N/A |
| North Parking Lot | A new parking lot is proposed along the northern project | N/A | N/A | N/A |

| New Construction | Proposed Uses/Features | Square Feet | No. of Stories | Building Height |
|---|---|---|---|---|
| | boundary, north of Building 1, with driveway access along North Angelina Drive. | | | |
| South Parking Lot | A new parking lot is proposed both east and west of Building 2 with driveway access along North Angelina Drive and Morse Avenue. | N/A | N/A | N/A |
| Fire Truck Turn Around | A firetruck turnaround is proposed near the northwest corner of the project site | N/A | N/A | N/A |
| Memorial Garden | A memorial garden with accent trees is proposed between the existing Church building and the proposed new Parish Hall | N/A | N/A | N/A |
| Outdoor Terrace | An outdoor terrace is proposed fronting North Angelina Drive | N/A | N/A | N/A |
| Gathering Lawn | A gathering lawn with benches is proposed south of the Church, fronting North Angelina Drive | N/A | N/A | N/A |
| Courtyard Gathering Space | A courtyard gathering space is proposed south of the Parish Hall | N/A | N/A | N/A |
| Trash Enclosures | Trash enclosures would be located east of Building 1 and west of Building 2 | N/A | N/A | N/A |
| Shed | A relocated shed will be located east of the existing classroom building | N/A | 1 | N/A |
| Bike Racks | Bike racks would be located north of Building 1 and west of Building 2 | N/A | N/A | N/A |
| Parking Spaces | The existing parking for the Church is comprised of 85 parking spaces. The project proposes an additional 45 parking spaces for a total of 130 parking spaces on site. | N/A | N/A | N/A |
| New Transformer | The project proposes a new transformer to be located north of the existing Church. | N/A | N/A | N/A |
| **Demolition** | **Proposed Uses/Features** | **Area (square feet)** | **No. of Stories** | **Approximate Building Height** |
| Existing Parish Hall to be demolished[2] | Parish Hall building | 3,472 | 1 | 33 feet |

[1] This is a studio unit that is smaller than a one-bedroom unit.
[2] Existing Church Area to remain after demolition: 4,496 square feet
**Source**: RRM Design Group, Project Plans dated March 31, 2020 and Project Narrative by National Community Renaissance of California, dated September 3, 2019.

**Figure 3.5-1**
**SITE PLAN**


Disclaimer: Illustration provided by RRM Design Group and National CORE, who has indicated that the information is true and correct. No other warranties are expressed or implied.

Source: RRM Design Group and National CORE, August 18, 2020

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Site Plan

**Table 3.5-2** below provides project statistics compared to the requirements of the R-3 zone:

**Table 3.5-2**
**PROJECT STATISTICS**

| Project Characteristic | Required | Provided |
|---|---|---|
| Size of Property | Gross: 174,296 SF | Net: 169,536 |
| Front Setback (North Angelina Drive) | Required: 20 feet | Provided: 31 feet |
| **Side Setbacks** | | |
| Internal (northern property line) | Required: 10 feet | Provided: 73 feet |
| Street side (Morse Avenue) | Required: 20 feet | Provided: 27.5 feet |
| Rear Setback | Required: 10 feet | Provided: 70+ feet |
| Parking | Required: 134 spaces | Provided: 130 spaces |
| Density | Maximum: 25 du/ac | Proposed: 16.7 du/ac |
| Lot Coverage | Maximum: 60% | Proposed: 59% |
| Percent Open Space | Required: 40% | Proposed: 42% |

**Source**: National Community Renaissance of California Project Narrative, August 10, 2020.

**Table 3.2-3** below shows the anticipated range in population for the proposed project.

**Table 3.5-3**
**ESTIMATED RANGE IN PROJECT POPULATION**

| Unit Size | Number of Bedrooms | Range of Persons based on unit size | Estimated Population |
|---|---|---|---|
| One-bedroom | 59 | 1-3 people | 59-177 persons |
| Two-bedroom | 6 | 2-5 people | 12-30 persons |
| **Total** | **65** | -- | **71-207 persons** |

## 3.6 Proposed Project Features

### 3.6.1 New Residential Buildings

The proposed project includes the development of two residential buildings with a total of 65 units. The project is designed for seniors and a minimum age restriction of 62 years. Building 1, at the north end of the site, would be a linear two-story structure, with double-loaded corridors. Building 2 would be a two-story, U-shaped building located along Morse Avenue with an internal courtyard designed to include recreational amenities and seating areas. **Figure 3.6-1** to **Figure 3.6-3** show the elevations of the residential buildings. Careful consideration of the character and scale of surrounding neighborhood was taken to ensure that the project architecture and massing blends in with the existing surrounding uses. Building 1 would include 28 one-bedroom units, and four two-bedroom units. Building 2 would include one studio unit, 30 one-bedroom units and two two-bedroom units. Developed at an overall density of 16.7 units per acre, the proposed Project will provide 58 one-bedroom units that average 540 gross square feet, six two-bedroom units that average 750 gross square feet, and one studio unit that is 480 square feet. The proposed project would provide 64 units affordable to seniors age 62+ earning less than 60 percent of the Area Median Income (AMI) along with one exempt manager's unit. In total, the project proposes approximately 42,500 square feet of new residential building area.

**Figure 3.6-1**
**BUILDING 1 ELEVATIONS**


Disclaimer: Illustration provided by RRM Design Group and National CORE, who has indicated that the information is true and correct. No other warranties are expressed or implied.

Source: RRM Design Group and National CORE, August 28, 2020

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Building 1 Elevations

**Figure 3.6-2**
**BUILDING 2 WEST AND NORTH ELEVATIONS**


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Source: RRM Design Group and National CORE, August 28, 2020

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Building 2 Elevations (West and North)

**Figure 3.6-3**
**BUILDING 2 EAST AND SOUTH ELEVATIONS**


1 Building 2 - East
SCALE: 3/32" = 1'-0"


2 Building 2 - South
SCALE: 3/32" = 1'-0"

Disclaimer: Illustration provided by RRM Design Group and National CORE, who has indicated that the information is true and correct. No other warranties are expressed or implied.

Source: RRM Design Group and National CORE, August 28, 2020

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Building 2 Elevations (East and South)

Once occupied with residents, the development will be staffed by one full time onsite property manager. Two or three additional property management personnel may be onsite throughout the week to assist with resident services and maintenance. Property management would have no church affiliation. Supportive services will be coordinated by the Hope through Housing Foundation and programs for residents will be tailored to meet their needs (Walker, 2020). Two office spaces would be utilized to provide supportive services for residents living onsite.

### 3.6.2 New Community Center

A 1,500-square-foot senior-oriented community center is proposed on the ground floor of Building 2. The community center would be for the use of project residents and their visitors and would not be open to the public. The community center would interface with the new recreational courtyard and garden area proposed on site.

### 3.6.3 New Parish Hall

The existing 3,424-square-foot Blessed Sacrament Parish Hall would be demolished and replaced with a new Parish Hall (refer to **Figure 3.6-4**). The new Parish Hall would be approximately 3,974 square feet and would include a new 544-square-foot covered portico, as well as a memorial courtyard and plaza area fronting Angelina Drive. During construction, a temporary 2,880-square-foot facility consisting of two 24-foot by 60-foot portable units will be established in a parking area just south of the existing classroom building along the eastern edge of the site.

The project proposes a California Craftsman architectural style to complement the Church and the surrounding neighborhoods. It proposes both wall and roof plane articulation and would carry the design elements to each elevation, including the inner portions of the site and all detached structures, such as trash enclosures. The maximum building height of the proposed buildings is 43 feet, 10 inches, for a portion of Building 2 at the interior of the site.

### 3.6.4 Landscaping

The overall site plan design and building placement create several unique landscaped areas that include both passive and active spaces. Included are a courtyard gathering space south of the Parish Hall, a memorial garden, a gathering lawn south of the Church, an area with outdoor seating adjacent to the Church, a community garden, and a courtyard area. A new courtyard area and garden area are proposed west of Building 2. An outdoor terrace is proposed fronting North Angelina Drive. The project proposes approximately 42 percent open space. Additionally, the project proposes raised planters, green lawn/turf areas, drought-tolerant and native ground covers, decomposed granite walkways for residents to access community spaces and a hardscape courtyard area at the northeast corner of the site. **Figure 3.6-5** shows the landscaping envisioned for the proposed project.

### 3.6.5 Site Access, Circulation and Parking

#### Driveways

Three entry points to the site are proposed, including two driveways off North Angelina Drive and one driveway off Morse Avenue. A new driveway is proposed along North Angelina Drive, north of the existing Church driveway, to provide access for residents to a designated parking area.

**Figure 3.6-4**
**CHURCH/PARISH HALL ELEVATIONS**


4 Church/ Parish Hall - West
SCALE: 3/32" = 1'-0"


1 Church/ Parish Hall - North
SCALE: 3/32" = 1'-0"


3 Church/ Parish Hall - East
SCALE: 3/32" = 1'-0"


2 Church/ Parish Hall - South
SCALE: 3/32" = 1'-0"

Disclaimer: Illustration provided by RRM Design Group and National CORE, who has indicated that the information is true and correct. No other warranties are expressed or implied.

Source: RRM Design Group and National CORE, August 28, 2020

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**Senior Apartment Homes**

New Parish Hall Elevations

**Figure 3.6-5**
**ILLUSTRATIVE SITE AND LANDSCAPE PLAN**


Disclaimer: Illustration provided by RRM Design Group and National CORE, who has indicated that the information is true and correct. No other warranties are expressed or implied.

Source: RRM Design Group and National CORE, August 28, 2020

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Landscape Plan

**Firetruck Turnaround**

A firetruck turnaround is proposed near the northwest corner of the project site. The project proposes 56,048 square feet of paved parking and driveways.

**Parking**

A new parking lot is proposed along the northern project boundary, north of Building 1, with driveway access along North Angelina Drive. Another new parking lot is proposed both east and west of Building 2 with driveway access along North Angelina Drive and Morse Avenue. To accommodate residents, visitors, and staff, 45 parking stalls are proposed, for a total ratio of 0.7 space per unit. Of the 45 proposed parking spaces, there would be two accessible spaces and four electric vehicle spaces with charging stations to accommodate residents, visitors and staff . The 45 proposed parking spaces would be in addition to the 85 existing Church parking spaces, which would total 130 parking spaces.

The City of Placentia has established parking requirements based on the use and intensity of development. For a residential multifamily development in the High Density Residential (R-3) zone, the Placentia Zoning Code states that 1.75 spaces per one-bedroom unit and 2 spaces per two-bedroom unit are required plus an additional ten percent (10%) of said total for guest parking. One (1) space per unit must be in a garage; however, carports may be allowed for multifamily developments. Based on these standards, the proposed 65-unit project would be required to provide 134 parking spaces.

The Applicant is requesting a reduction in parking based on the demographic of residents being seniors living alone or in non-car owning households, access to existing bus routes, and the provision of alternative strategies to reduce vehicle trips, including car sharing and van pooling. The parking requirement for senior housing per State law is 0.5 parking space per unit (which equates to a requirement of 32.5 parking stalls for the proposed project). The project proposes 45 parking stalls. Therefore, the project exceeds the amount of required parking for senior housing per State law. Refer to **Appendix K** for the parking memo that has been prepared for the project.

### 3.6.6 New Transformer

A new transformer is proposed on the project site, north of the existing Church building. It is anticipated that the transformer will be approximately five feet high and would be approximately 266 feet from the northern property line. The voltage and electricity of the transformer would be as follows: 120/208V 3 phase 4 wire. The actual size and location of the equipment would be determined by SCE when electric loads are available and submitted.

### 3.6.7 Exterior Lighting

The project proposes area lighting and wall-mounted luminaires throughout the project site. The area lighting would be comprised of five different lantern types and the wall-mounted luminaire would be one type of architectural wall scone. Lighting for the project would comply with the requirements of the City's Municipal Code. Specifically, the project would be required to comply with City of Placentia Municipal Code § 23.78.080, resulting in light being reflected away from the public right-of-way and from adjacent residential properties.

### 3.6.8 Perimeter Fencing and Exterior Walls

The existing five- to six-foot-high wall along the northern and western property lines would be protected in place and would remain. The southern and western sides of the project site would not have perimeter fencing or exterior walls.

### 3.6.9 Utilities

The project would require a sewer, domestic water, fire water, irrigation and dry utilities connections to existing utility infrastructure on Morse Avenue and North Angelina Drive.

**Sanitary Sewer** - The site is served by an existing sanitary sewer network. New sewer laterals would be installed connecting to sewer mains near the project site. These improvements would require trenching and exposing sewer lines for connections to existing mainlines and/or manholes. Construction would need to occur in the public right-of-way during connections of proposed sewer laterals to existing mains.

**Domestic Water** - New domestic water meters would be installed as required to meet project demands in compliance with the requirements of the City's Public Works Department. Water would be provided by Golden State Water Company, which serves the City of Placentia (Golden State Water Company, 2019). Construction would need to occur in the public right-of-way during installation of domestic water laterals from the street to the project site.

**Fire Water -** The project proposes new fire water lines to the project site. Construction would need to occur in the public right of way during installation of fire water laterals from the street to the project site.

**Dry Utilities** - A new natural gas connection would be needed to serve the project. Natural gas service would be provided to the project site by the Southern California Gas Company. Southern California Edison would provide electricity to the project site (City of Placentia New Resident Guide, 2019). Construction would need to occur in the public right of way during installation of a new natural gas connection from Morse Avenue and North Angelina Drive to the project site. Additionally, new Southern California Edison (SCE) and AT&T connections would be made to the project site.

**Stormwater** - Stormwater runoff would be collected by downspouts, area drains, or catch basins and directed into the existing drainage system. Additionally, the project includes a proposed detention chamber at the southwest corner of the project site.

**Trash Service -** Trash service would be provided by the Republic Services (Republic Services Placentia, 2019).

**Cable Television** - It is anticipated that new cable television connections would be needed to serve the project. Spectrum and AT&T U-Verse provide television service (City of Placentia New Resident Guide, 2019).

## 3.7 Off-Site Improvements

Domestic, water, fire water, irrigation, and natural gas, connections would be required to existing water mains, water line, and gas lines in North Angelina Drive and/or Morse Avenue. Therefore,

construction would need to occur in North Angelina Drive and/or Morse Avenue to connect the utility lines for the proposed project to the existing main lines.

## 3.8 Construction Activities

For safety reasons, temporary barricades would be used to limit access to the site during project construction. The project may erect barricades for safety and security prior to construction activities, and will maintain safe access for construction workers throughout construction.

Construction activities would include the following:

- Site grading (during grading, there would be a raw cut of 85 cubic yards and a raw fill of 6,035 cubic yards)
- New construction, as described below.

After site preparation is completed, infrastructure such as sewer laterals and storm drains would be installed and/or connected to existing facilities. The building foundations would be poured and framing of the buildings would begin. The final steps of construction would involve interior furnishings, detail work, and completion of common areas and outside landscaping. The only offsite improvements would be installation of utility laterals and connections of laterals to mains. The construction contractor would utilize heavy equipment during grading; estimated numbers and types of equipment per construction phase are identified below in **Table 3.8-1**.

Construction staging would be limited to the project site; no offsite areas would be used. Project construction workers would park their vehicles on the project site. Employees would be able to park onsite in the existing paved parking areas; once the new parking lots are constructed, employees would use the new lots to park. The project applicant will strongly encourage/incentive employees to carpool and take public transit to the project site (Walker, 2020). Below is the anticipated number of construction employees by construction phase:

- Demolition: 10-12 employees
- Grading: 10-12 employees
- Site work: 5-10 employees
- Building construction: 75 employees

### 3.8.1 Construction Schedule and Equipment

Construction would occur in one phase but is broken down into different parts, as detailed in **Table 3.8-1** below. Project construction is anticipated to begin in January 2022 and would last approximately 16 months, ending in April 2023 (Walker, 2020).

**Table 3.8-1**
**CONSTRUCTION PHASING AND EQUIPMENT DETAILS**

| Phase/Months | Number of pieces of equipment | Equipment | Number of working days |
|---|---|---|---|
| **Demo Phase: 1 month** | 2 | Large Excavators | 10 working days |
| | 2 | Standard Backhoes | 10 working days |
| | 1 | Asphalt Grinder | 2 working days |
| | 1 | Large Loader | 15 working days |
| **Grading Phase: 1 month** | 2 | Standard Scrapers | 20 working days |
| | 1 | Larger Loader | 15 working days |
| | 1 | Standard Blade | 15 working days |
| | 1 | Standard Skiploader | 20 working days |
| **Site Work Phase: 2 Months** | 1 | Large Excavator | 20 working days |
| | 3 | Standard Backhoes | 20 working days |
| | 1 | Paving Machine | 4 working days |
| | 2 | Standard Skiploaders | 4 working days |
| **Vertical Phase: 12 Months** | 1 | Large Pettibone (forklift) | 75 working days |
| | 1 | Bobcat (Skid-steer) | 40 working days |
| | 1 | Standard Skiploader | 20 working days |

**Source**: Sarah Walker of National Community Renaissance of California, email correspondence on May 19, 2020 (Walker, 2020).

## 3.9 Discretionary Actions

**General Plan Amendment 2020-01**. The current Low Density Residential land use designation allows for a base density of up to six dwelling units per acre. The proposed project would require a General Plan amendment from Low Density Residential to High Density Residential.

**Zone Change 2020-01.** The proposed project would require a zone change from R-1 Single-Family Residential District to R-3 High Density Multiple-Family District to accommodate the density of the proposed project.

**Development Plan Review 2020-01.** The project is requesting to permit the construction of affordable senior housing units consisting of an approximately 24,631-square-foot, 32-unit, two-story building ("Building 1") and an approximately 30,316-square-foot, 33-unit, two-story building ("Building 2"), including the removal and replacement an existing Parish Hall on an approximately 3.85-net-acre property.

**Parking Reduction.** To accommodate residents, visitors, and staff a total of 45 parking stalls are proposed for a total ratio of 0.7 spaces per unit. Parking required for senior housing per State law is 0.5 space per dwelling unit. This equates to a parking requirement 32.5 parking spaces for senior housing. The parcel includes 85 existing parking spaces for the Church for a total of 130 parking spaces onsite. The City of Placentia has established parking requirements based on the use and intensity of development. For a residential multifamily development in the High Density Residential (R-3) zone, the Placentia Zoning Code states that 1.75 spaces per one-bedroom unit and 2 spaces per two-bedroom unit are required plus an additional ten percent (10%) of said total for guest parking. One (1) space per unit must be in a garage, however carports may be allowed for multifamily

developments. Based on these standards, the proposed 65-unit project would be required to provide 134 parking spaces. The project is requesting a reduction in parking based on the demographic of residents being seniors living alone or non-car owning households, access to existing bus routes, and the provision of alternative strategies to reduce vehicle trips including car sharing and van pooling.

### 3.9.1 Other Permits and Approvals

Following the Lead Agency's approval of the Initial Study/Mitigated Negative Declaration, the following permits and approvals would be required prior to construction, as shown in **Table 3.9-1** below.

**Table 3.9-1**
**PERMITS AND APPROVALS**

| Agency | Permit or Approval |
|---|---|
| City of Placentia Building & Safety Division | Site Plan review and approval and Grading and Building Permits |
| City of Placentia Planning Division | General Plan Amendment<br>Zone Change<br>Parking Reduction<br>Development Plan Review |
| City of Placentia Fire and Life Safety Department | Building plan check and approval. Review for compliance with the current California Fire Code, current California Building Code, California Health & Safety Code and City of Placentia Municipal Code.<br>Plans for fire detection and alarm systems, and automatic sprinklers. |
| Santa Ana Regional Water Quality Control Board | Water quality permits |
| South Coast Air Quality Management District | Potential asbestos and lead-based paint clearances. |

# 4.0 ENVIRONMENTAL CHECKLIST

## Environmental Factors Potentially Affected

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" or as a "Potentially Significant Unless Mitigation Incorporated," as indicated by the checklist on the following pages.

| | | |
|---|---|---|
| ☒ Aesthetics | ☐ Agricultural and Forest Resources | ☐ Air Quality |
| ☒ Biological Resources | ☒ Cultural Resources | ☐ Energy |
| ☒ Geology / Soils | ☐ Greenhouse Gas Emissions | ☒ Hazards & Hazardous Materials |
| ☐ Hydrology / Water Quality | ☐ Land Use / Planning | ☐ Mineral Resources |
| ☒ Noise | ☐ Population / Housing | ☒ Public Services |
| ☐ Recreation | ☐ Transportation | ☒ Tribal Cultural Resources |
| ☐ Utilities/Service Systems | ☐ Wildfire | ☒ Mandatory Findings of Significance |

## Determination (To Be Completed by the Lead Agency)

On the basis of this initial evaluation:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Andrew Gonzales
Signature

9/28/2020
Date

ANDREW GONZALES
Printed Name

City of Placentia

## Evaluation of Environmental Impacts

(1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors, as well as general standards (e.g., the project would not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

(2) All answers must take into account the whole action involved, including offsite as well as onsite, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

(3) Once the lead agency has determined that a particular physical impact may occur then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

(4) "Negative Declaration: Less than Significant with Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less than Significant Impact." The lead agency must describe the mitigation measures and briefly explain how they reduce the effect to less than significant level.

(5) Earlier analyses may be use where, pursuant to the tiering, Program EIR, or other CEQA process, an affect has been adequately analyzed in an earlier EIR or negative declaration. (See Section 15063(c)(3)(D) of the CEQA Guidelines. In this case, a brief discussion should identify the following:

(a) Earlier Analyses Used. Identify and state where the earlier analysis available for review.

(b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.

(c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures that were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

(6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference

to the page or pages where the statement is substantiated. A source list should be attached and other sources used or individuals contacted should be cited in the discussion.

(7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

(8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.

(9) The explanation of each issue should identify:

(a) The significance criteria or threshold, if any, used to evaluate each question; and

(b) The mitigation measure identified, if any, to reduce the impact to less than significant.

## 4.1 Aesthetics

| Would the project: | Potentially Significant Impact | Less than Significant Impact with Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| a) Have a substantial adverse effect on a scenic vista? | | | | **X** |
| b) Substantially damage scenic resources, including, but not limited to, trees, outcroppings, and historic buildings within a state scenic highway? | | | | **X** |
| c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality? | | | **X** | |
| d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area? | | **X** | | |

A "visual environment" includes the built environment (development patterns, buildings, parking areas, and circulation elements) and natural environment (such as hills, vegetation, rock outcroppings, drainage pathways, and soils) features. Visual quality, viewer groups and sensitivity, duration, and visual resources characterize views. Visual quality refers to the general aesthetic quality of a view, such as vividness, intactness, and unity. Viewer groups identify who is most likely to experience the view. High-sensitivity land uses include residences, schools, playgrounds, religious institutions, and passive outdoor spaces such as parks, playgrounds, and recreation areas. Duration of a view is the amount of time that a particular view can be seen by a specific viewer group. Visual resources refer to unique views, and views identified in local plans, from scenic highways, or of specific unique structures or landscape features.

### a) Would the project have a substantial adverse effect on a scenic vista?

**No Impact**

Scenic vistas generally include extensive panoramic views of natural features, unusual terrain, or unique urban or historic features, for which the field of view can be wide and extend into the distance, and focal views that focus on a particular object, scene or feature of interest. The project site is developed and is surrounded by one- and two-story homes to the north, south, and east, and a commercial shopping center and a post office to the west. The viewsheds associated with the project area are characterized by urban development and flat topography.

The General Plan does not identify any scenic vistas within the City boundaries (City of Placentia General Plan, 2019). Additionally, the General Plan EIR states that the City is approaching full buildout with 98 percent of the city developed and that the City does not offer any scenic resources. However, the City recognizes the distant mountain vistas of the Chino Hills (3.5 miles in the near north and east), the San Gabriel Mountains (17 miles in the distant north), and the Santa Ana Mountains (8.5 miles in the distant east) as scenic viewsheds (Tom Dodson & Associates, 2019, p. 4.2-5). Views from the project site of the distant mountain vistas are obstructed due to intervening structures and the large distance between the project site and mountains. Views within the project area are generally limited to adjacent uses/structures. Views to the north, south, east, and west consist of adjacent developed uses of varying scale, including residential and commercial uses. Therefore, the project would have no impact on a scenic vista.

**b) Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?**

**No Impact**

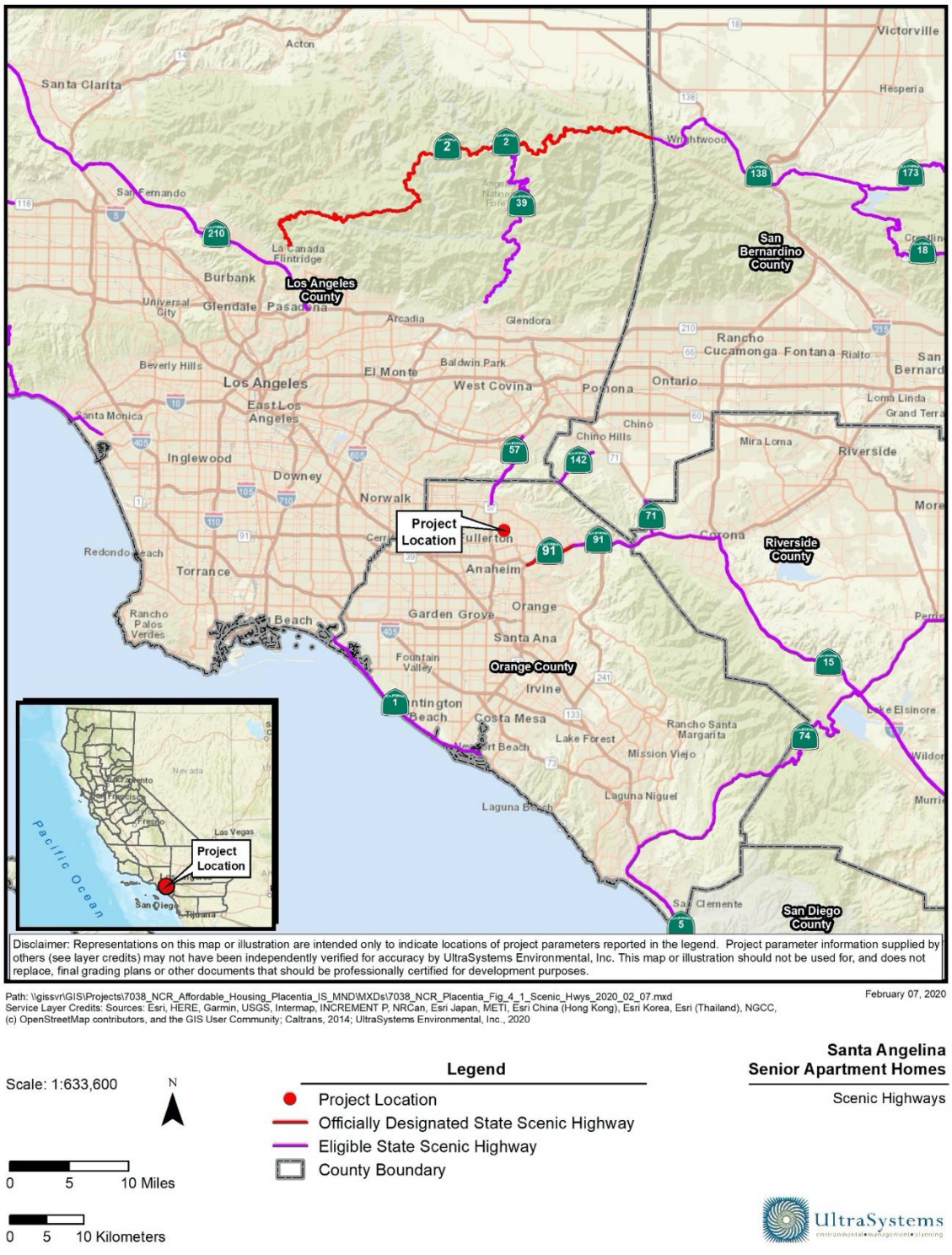
The California Department of Transportation (Caltrans) provides information regarding officially designated or eligible state scenic highways, designated as part of the California Scenic Highway Program. According to Caltrans, there are no officially designated scenic highways within or adjacent to the project area, and no roadways near the project site are currently eligible for scenic highway designation (Caltrans, 2015). As shown in **Figure 4.1-1**, the closest officially designated state scenic highway is a portion of State Route 91 (SR-91) easterly of State Route 55 (SR-55), which is approximately 3.5 miles southeast of project site. Due to the large distance between the project site and SR-91, construction and implementation of the project would have no impacts on state scenic highways. The nearest eligible highway a portion of the SR-91 freeway approximately 5.5 miles southeast of the project site. Therefore, the project would have no impacts on trees, rock outcroppings and historic buildings within a state scenic highway.

**c) In non-urbanized areas, would the project substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?**

**Less than Significant Impact**

The project site is located in an urban setting characterized by a mix of single-family residential and commercial development. Views of the existing streetscape are characterized by low height (one-story to two-story) buildings, utilities (including utility lines, poles, and street lights) and landscaping. Refer to **Table 4.1-1**, which describes the existing visual character in the vicinity of the project site. **Figure 4.1-2** includes photographs of the project vicinity.

**Figure 4.1-1**
**STATE SCENIC HIGHWAYS AND NATIONAL BYWAYS**




Disclaimer: Representations on this map or illustration are intended only to indicate locations of project parameters reported in the legend. Project parameter information supplied by others (see layer credits) may not have been independently verified for accuracy by UltraSystems Environmental, Inc. This map or illustration should not be used for, and does not replace, final grading plans or other documents that should be professionally certified for development purposes.

Path: \\gissvr\GIS\Projects\7038_NCR_Affordable_Housing_Placentia_IS_MND\MXDs\7038_NCR_Placentia_Fig_4_1_Scenic_Hwys_2020_02_07.mxd
Service Layer Credits: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community; Caltrans, 2014; UltraSystems Environmental, Inc., 2020

February 07, 2020

Scale: 1:633,600

N

0 5 10 Miles

0 5 10 Kilometers

**Legend**

- Project Location
- Officially Designated State Scenic Highway
- Eligible State Scenic Highway
- County Boundary

**Santa Angelina Senior Apartment Homes**

Scenic Highways

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**Table 4.1-1**
**EXISTING VISUAL CHARACTER AND LAND USES IN THE PROJECT AREA**

| Location | General Characteristics | Existing Lighting | Building Height and Design | Landscaping |
|---|---|---|---|---|
| Project Site | Developed with two church buildings and a large surface parking lot. | Exterior Lighting associated with the church buildings, parking lot lighting, street lighting. | One-story to two-story buildings with tiled sloping roofs and white plastered exterior walls. | Mature trees and ornamental vegetation. |
| **Surrounding Areas** | | | | |
| North | Single-family homes | Exterior lighting associated with the residential developments and street lighting. | One-story to two-story buildings with tiled sloping roofs and plastered exterior walls painted in varying colors. | Minimal landscaping including a few trees and ornamental vegetation. |
| South | Single-family homes | Exterior lighting associated with the residential developments and street lighting. | Single- to two-story buildings with tiled sloping roofs and plastered exterior walls painted in varying colors. | Minimal landscaping including a few trees and ornamental vegetation. |
| East | Single-family homes | Exterior lighting associated with the residential developments and street lighting. | One-story to two-story buildings with tiled sloping roofs and plastered exterior walls painted in varying colors. | Minimal landscaping including a few trees and ornamental vegetation. |
| West | A commercial plaza and United States Post Office | Exterior lighting associated with the commercial plaza, post office building, parking lot lighting and street lighting. | A two-story post office building with tiled sloping roof and plastered exterior walls. | A few trees and ornamental vegetation including bushes and shrubs. |

**Source:** UltraSystems, 2020 and Google Earth, 2019.

**Figure 4.1-2**
**EXISTING VISUAL CHARACTER IN THE VICINITY OF THE PROJECT SITE**

PHOTO 1: View along N. Angelina Drive from the northwest corner of the project site, facing north.

PHOTO 2: View looking at homes directly south of the project site, across Morse Avenue.

PHOTO 3: View along Morse Avenue, looking south west toward N. Angelina Drive.

PHOTO 4: View looking west of the project site, across N. Angelina Drive to commercial land uses.

**Construction**

Construction of the proposed project would result in view of construction activities, construction staging areas, grading, excavation, construction equipment, material storage areas, construction debris, and exposed trenches on the project site. During project construction, there would be certain elements on the project site that are not compatible with the project vicinity. These may include construction equipment, stockpiled materials, and construction-area barriers and fencing. While these elements would be removed following construction, they would nonetheless result in a temporary impact. However, during project construction, work areas would be screened from public view by temporary barriers/fencing. Project construction could temporarily degrade the existing visual character of the project area and its immediate surroundings. This impact would be short-term and thus would be less than significant.

**Operation**

Operation of the proposed project relies on the approval of a General Plan Amendment to change the project site's land use designation from Single Family Residential to High Density Residential. The project would increase the density, scale, and height of development on the project site when compared to existing conditions. The proposed residential project would not be out of character with the surrounding area, which contains primarily single-family residences. The project applicant proposes to use California Craftsman architecture to complement the existing Church building that would remain on the project site, as well as the neighboring buildings. The proposed buildings would have rock veneers, asphalt shingles, metal awnings, vinyl windows, metal rails, stucco, plaster board and batt and trim in various colors of grey, brown and tan (RRM Design Group, 2020, p. A9-A15). Refer to **Figure 4.1-3** through **Figure 4.1-7**, which provide conceptual renderings of what the proposed project would look like.

The proposed project would not degrade the existing visual character of the site because new buildings would be consistent with the general character of existing Church buildings on the project site and surrounding neighborhood buildings, in terms of architectural style, height, and setbacks. Refer to **Appendix A** which contains project plans that show visual simulations of the proposed project.

The project includes the development of two residential buildings (Building 1 and Building 2). The existing Parish Hall would be demolished and replaced with a new Parish Hall that would be approximately 3,974 square feet with a 544-square-foot covered portico. Building 1 would be two stories tall with a maximum height of 25 feet, five inches. Building 2 would be two stories tall, with a maximum building height of 35 feet for a portion of Building 2 at the interior of the site. The project includes both wall and roof plane articulation and carries the design elements to each elevation, including the inner portions of the site and all detached structures such as trash enclosures. Careful consideration regarding the character and scale of surrounding neighborhood was taken to ensure that the project architecture and massing blends in with the existing surrounding uses. Therefore, the project would not be out of character with the surrounding area, which contains a mix of land uses, including one- and two-story residences.

Building 1, at the north end of the site, would be a linear two-story structure. Building 2 would be a two-story, U-shaped building located interior to the site. **Figure 4.1-3** to **Figure 4.1-6** show the elevations of the residential buildings.

**Figure 4.1-3**
**BUILDING 1 ELEVATIONS**


Disclaimer: Illustration provided by RRM Design Group and National CORE, who has indicated that the information is true and correct. No other warranties are expressed or implied.

Source: RRM Design Group and National CORE, August 28, 2020

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Building 1 Elevations

**Figure 4.1-4**
**BUILDING 2 ELEVATIONS (WEST AND NORTH)**


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Source: RRM Design Group and National CORE, August 28, 2020

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Building 2 Elevations (West and North)

**Figure 4.1-5**
**BUILDING 2 ELEVATIONS (EAST AND SOUTH)**


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Source: RRM Design Group and National CORE, August 28, 2020

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**Santa Angelina**
**Senior Apartment Homes**

Building 2 Elevations (East and South)

**Figure 4.1-6**
**NEW PARISH HALL ELEVATIONS**


4 Church/ Parish Hall - West
SCALE: 3/32" = 1'-0"

1 Church/ Parish Hall - North
SCALE: 3/32" = 1'-0"

3 Church/ Parish Hall - East
SCALE: 3/32" = 1'-0"

2 Church/ Parish Hall - South
SCALE: 3/32" = 1'-0"

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Source: RRM Design Group and National CORE, August 28, 2020

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**Santa Angelina**
**Senior Apartment Homes**

New Parish Hall Elevations

**Figure 4.1-7**
**COLOR AND MATERIALS BOARD**


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**Santa Angelina**
**Senior Apartment Homes**

Colors and Materials Board

The overall site plan design and building placement would create several unique landscaped areas onsite. The project proposes a community garden near the northeast corner of the project site. A new courtyard and garden area are proposed west of Building 2. **Figure 3.3-4** in **Section 3.0** depicts the landscaping envisioned for the proposed project.

The project would improve an existing underutilized piece of land with affordable housing, a new Parish Hall, and landscaping, thereby resulting in a beneficial change to existing site conditions and would not represent an adverse impact or degradation in the existing visual character of the site and its surroundings.

**Shade and Shadow Impacts**

Shadow-sensitive uses include all residential uses and routinely usable outdoor spaces associated with recreational or institutional uses, commercial uses such as pedestrian-oriented outdoor spaces or restaurants with outdoor eating areas, nurseries, and existing solar collectors. These uses are considered sensitive because sunlight is important to function, physical comfort, or commerce. Shade-sensitive uses in the project vicinity are limited to the residential uses directly north and east of the project site.

Building 1 would be approximately be 65 feet away from the northern shade-sensitive uses, and Building 2 would be approximately 60 feet from the eastern shade-sensitive uses. These distances are similar to, if not further from, the existing buildings onsite. Additionally, the project has been modified to reduce the height of Building 2 from and 2/3 story L-shaped building to a two-story U-shaped building. The project would increase shade and shadows, both on and offsite, compared to existing conditions. Refer to **Figure 4.1-8** through **4.1-13** below, which illustrate approximate shade and shadows from the proposed project at different times during the day during the summer and winter (June and December).

**Winter Shadows**

During the winter months, shade and shadows created by the proposed new buildings would not be cast on any homes during the 9:00 AM and 6:00 PM hours. Some shadows would be cast outside of the project boundary to the north during the 3:00 PM hour during the winter time. The worst case shade/shadow impact from the proposed project would be casting shade/shadow as follows: After reviewing the time lapses of shading, the apartments would only cast a short shadow on the houses for a maximum of one hour (refer to **Figure 4.8-14** below). Within 30 minutes the sun sets and there are no more active shadows in the model. Therefore, impacts related to shade and shadows during winter months are anticipated to be less than significant.

**Summer Shadows**

During the summer months, shade and shadows created by the proposed new buildings would be contained within the boundary of the site and roadways adjacent to the project site, for most of the day. The June 21st **Figure 4.1-8** and **Figure 4.1-9** below show that during the 9:00 AM and 3:00 PM hours no off-site shadows would be cast.

During the 6:00 PM hour **Figure 4.1-10** below shows that shadows from the proposed project would be cast off-site to the east and south. Shadows of the proposed buildings could be cast off-site on to four of the single-family homes located along the eastern project boundary. The shadows cast off-site would predominantly fall in the back yards of the homes to the east, with shadows being cast on some

of the buildings to the east. However, project generated shadows during the summer months would be temporary. Therefore, impacts related to shade and shadows during summer months are anticipated to be less than significant.

In conclusion, the proposed project would have a less than significant impact regarding shade and shadow on adjacent residences due to the limited amount of shade/shadow that would be cast and that the shade and shadow would be cast only during a small portion of the year. For the reasons listed above, the proposed project would have a less than significant impact on the visual character or quality of the site and its surroundings.

**Figure 4.1-8**
**JUNE 21ST 9:00 AM SHADE/SHADOW RENDERINGS**

**Figure 4.1-9**
**JUNE 21ST 3:00 PM SHADE/SHADOW RENDERINGS**

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Sources: National CORE and RRM Design Group, August 26, 2020

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**Santa Angelina**
**Senior Apartment Homes**
Solar Exhibit - June 21st – 3pm

**Figure 4.1-10**
**JUNE 21ST 6:00 PM SHADE/SHADOW RENDERINGS**

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Sources: National CORE and RRM Design Group, August 26, 2020

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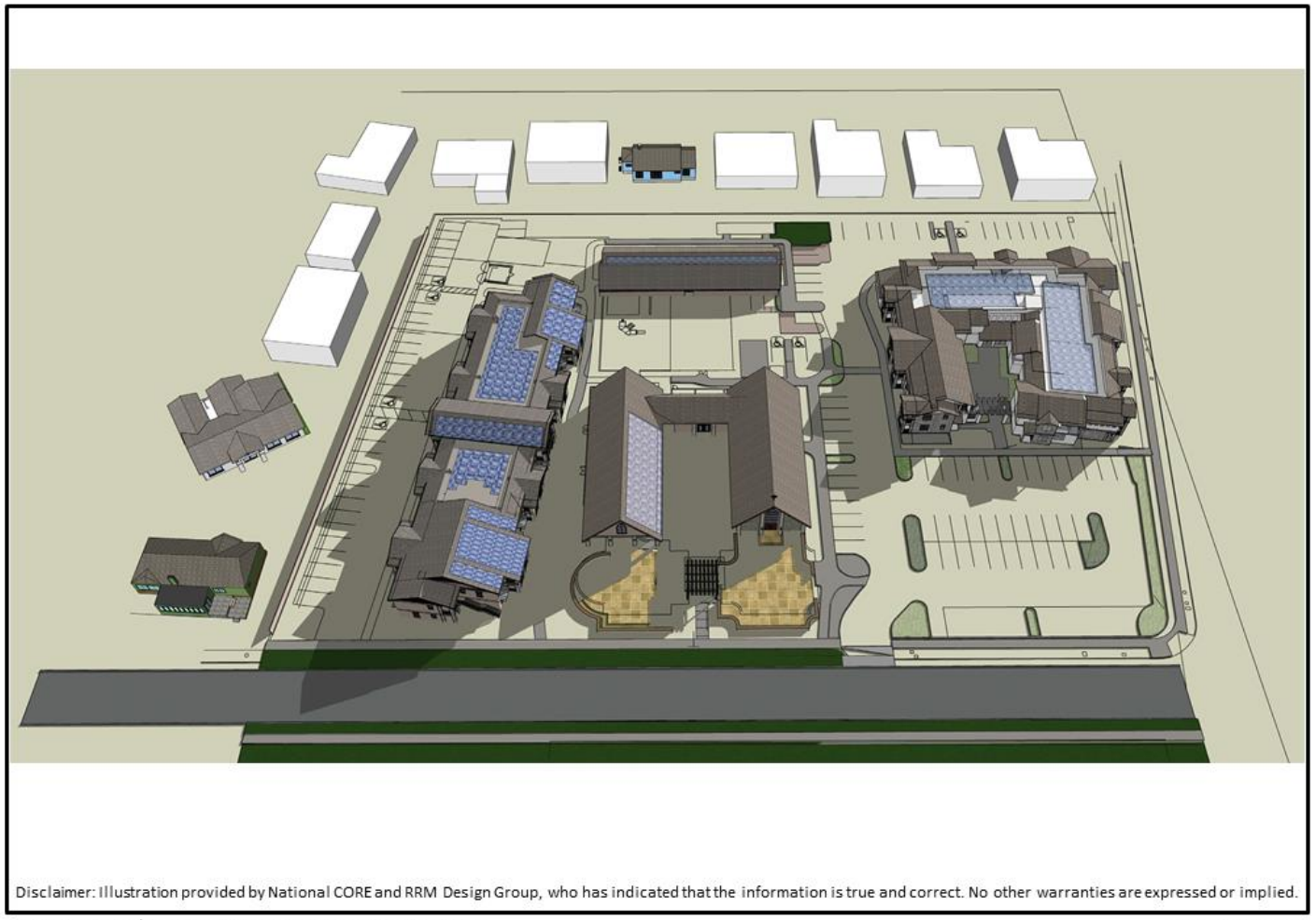
**Santa Angelina**
**Senior Apartment Homes**
Solar Exhibit - June 21st – 6pm

**Figure 4.1-11**
**DECEMBER 21ST 9:00 AM SHADE/SHADOW RENDERINGS**



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Sources: National CORE and RRM Design Group, August 26, 2020

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**Senior Apartment Homes**

Solar Exhibit - December 21st - 9am

**Figure 4.1-12**
**DECEMBER 21ST 3:00 PM SHADE/SHADOW RENDERINGS**

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Sources: National CORE and RRM Design Group, August 26, 2020

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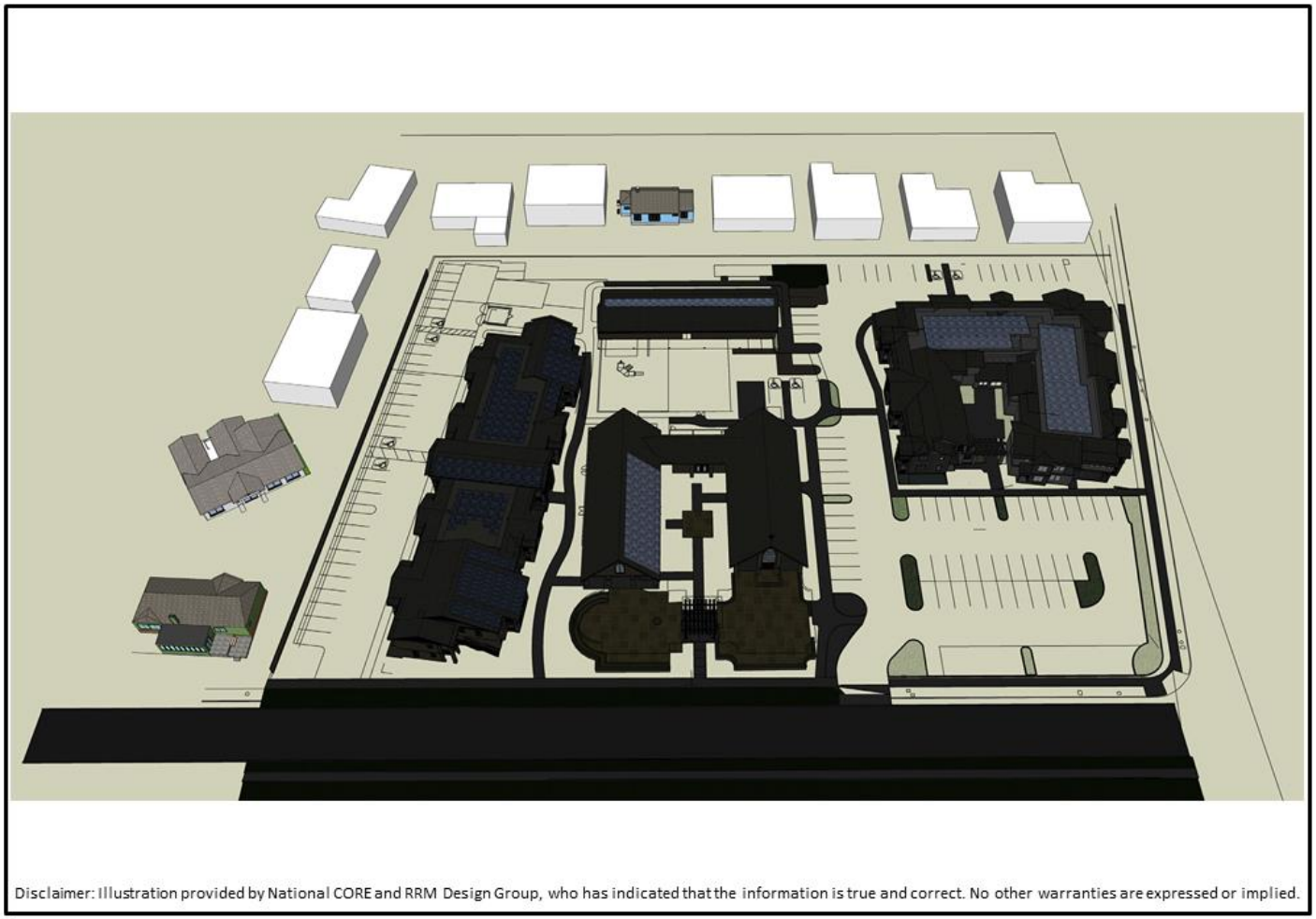
**Santa Angelina**
**Senior Apartment Homes**

Solar Exhibit - December 21st – 3pm

**Figure 4.1-13**
**DECEMBER 21ST 6:00 PM. SHADE/SHADOW RENDERINGS**



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**Santa Angelina**
**Senior Apartment Homes**
Solar Exhibit - December 21st – 6pm

**Figure 4.1-14**
**SHADOW STUDY AT SUNSET**

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Sources: National CORE and RRM Design Group, August 26, 2020

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**Santa Angelina**
**Senior Apartment Homes**
Shadow Study at Sunset

The proposed project would adhere to the City's regulations and policies in regard to aesthetics. **Tables 4.1-2** and **4.1-3** below detail the applicable aesthetics policies from the City General Plan and Municipal Code and how the project would adhere to them.

**Table 4.1-2**
**PROJECT COMPLIANCE WITH CITY OF PLACENTIA GENERAL PLAN POLICIES REGARDING SCENIC QUALITY**

| General Plan Element | Project Compliance |
|---|---|
| **Land Use Element: Goal LU-2 Ensure that new development is compatible with surrounding land uses, the circulation network, and existing development constraints.** | |
| **Policy LU-2.6:** Require new multifamily development to provide adequate buffers (such as decorative walls and landscaped setbacks) along boundaries with single-family residential uses to reduce impacts on residences due to noise, traffic, parking, light and glare, and differences in scale; to ensure privacy; and to provide visual compatibility. | The project proposes setbacks between the proposed buildings and the adjacent residences.<br><br>Additionally, the project proposes to retain the existing five to six-foot-high CMU masonry wall along the norther and eastern boundaries of the project site. Therefore, the project would not conflict with this policy. |
| **Land Use Element: Goal LU-5 Improve urban design in Placentia to ensure that development is both architecturally attractive and functionally compatible and to create identifiable neighborhoods, and community areas.** | |
| **Policy LU-5.1:** Encourage development projects to utilize high quality design for architecture and site planning through the City's design review process. Create Design Guidelines for focused areas and for development Citywide. | The proposed project is subject to the City's design review process. The proposed project would be developed with a California Craftsman architecture style that would be complementary of the surrounding development. Therefore, the project would not conflict with this policy. |
| **Policy LU-5.7:** Promote exterior signage and lighting that is subdued in character and nonintrusive upon neighboring uses. | The proposed project would be required to comply with City Municipal Code Title 20, Building Code and Regulations, which contain standards for outdoor lighting and signage. The project proposes a monument sign south of the existing Church adjacent to the sidewalk along North Angelina Drive. Therefore, the project would not conflict with this policy. |
| **Policy LU-5.8:** Improve the quality of Placentia's multi-family neighborhoods through a) improved buffers between multi-family residences, and commercial, and business park uses; b) provision of usable private and common open space in new multi-family projects; c) increased code enforcement; and d) improved site, building, and landscape design. | The proposed project has been designed to set the proposed buildings back from the existing residential uses to the north, south, and east. The project includes multiple open space areas on site, as detailed in the landscape plan. with the project proposes a California Craftsman architecture style that would complement the surrounding development. Therefore, the project would not conflict with this policy. |

**Source**: (UltraSystems, 2020).

**Table 4.1-3**
**PROJECT COMPLIANCE WITH CITY OF PLACENTIA MUNCIPAL CODE REGULATIONS REGARDING SCENIC QUALITY**

| Municipal Code | Project Compliance |
|---|---|
| **Chapter 23.75 Development Plan Review** | |
| **Chapter 23.75.020:** The following criteria are established as minimum standards to be considered by the planning commission in reviewing plans submitted prior to the approval of such plans:<br><br>(9) That the proposed landscaping shall be designed to enhance the visual and physical use of the property, screen deleterious uses, and in applicable development projects, will incorporate xeriscape principles in accordance with the provisions of Chapter 23.77; | The proposed project would adhere to all applicable City landscaping regulations. Therefore, the project would not conflict with this municipal code regulation. |

**Source**: (UltraSystems, 2020).

Based on the analysis above, the project would not conflict with applicable zoning and other regulations governing scenic quality. Therefore, impacts would be less than significant.

**d) Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?**

**Less Than Significant Impact with Mitigation Incorporated**

**Construction**

During project construction there would be additional sources of light that would be used to provide security lighting for the construction staging area(s) on the project site. Construction equipment used onsite may produce glare. To ensure that construction lighting and glare do not have a significant impact on surrounding residences, mitigation measure **AES-1** is recommended to reduce potential temporary construction lighting and glare impacts to a less than significant level.

**Mitigation Measure**

**MM AES-1** During project construction the project applicant shall place construction staging areas as far away as possible from adjacent residences so as to minimize, to the maximum extent possible, any potential lighting and/or glare impacts to nearby residences. The lighting used during project construction shall consist of the minimum amount of light necessary for safety and security on the project site.

**Level of Significance After Mitigation**

With implementation of **MM AES-1** and given that project construction would be temporary, the proposed project would have a less than significant impact regarding temporary construction lighting and glare.

**Operation**

The project proposes new exterior lighting throughout the site. Installation of exterior lighting would be necessary for safety and nighttime visibility throughout the proposed residential development. The new project lighting would be visible from the surrounding area. Therefore, the project's proposed exterior lighting is expected to contribute to ambient nighttime illumination in the project vicinity.

The project site is located in an urban area, which is characterized by low to medium nighttime ambient light levels. Street lights, traffic on local streets, and exterior lighting in surrounding developments are the primary sources of light that contribute to the ambient light levels in the project area. Light-sensitive uses in the project vicinity are limited to residences.

According to the Institution of Lighting Engineers (ILE, 2005), now called the Institution of Lighting Professionals, and the Electric Power Research Institute (EPRI, 2000), light trespass[6] varies according to surrounding environmental characteristics. Areas that are more rural in character, and therefore have few existing artificial sources of light, are more susceptible to impacts resulting from the installation of new artificial lighting sources. In contrast, urbanized areas are characterized by a large number of existing artificial lighting sources and are thus less susceptible to adverse effects associated with new artificial lighting sources.

To determine appropriate lighting standards that represent the existing lighting conditions, land uses are typically categorized into one of four environmental zones, as depicted in **Table 4.1-4** below. The project site and surrounding area can be characterized as an area of medium ambient brightness (E3 environmental zone).

Based on these environmental zones, the ILE and EPRI have established recommendations for limiting light trespass onto adjacent properties. The recommendations established by the ILE are summarized in **Table 4.1-4** below.

**Table 4.1-4**
**OBTRUSIVE LIGHT LIMITATIONS FOR EXTERIOR LIGHTING INSTALLATIONS**

| Environmental Zone | Light Trespass Illuminance | | | |
|---|---|---|---|---|
| | Pre-Curfew (Dusk – 11:00 p.m.) | | Post Curfew (11:00 p.m. – 7:00 a.m.) | |
| **ILE** | | | | |
| E1 | 2 lx | 0.2 fc | 1 lx | 0.1 fc |
| E2 | 5 lx | 0.5 fc | 1 lx | 0.1 fc |
| **E3** | **10 lx** | **0.9 fc** | **2 lx** | **0.2 fc** |
| E4 | 25 lx | 2.3 fc | 5 lx | 0.5 fc |
| **EPRI** | | | | |
| E1 | 1 lx | 0.1 fc | 1 lx | 0.1 fc |
| E2 | 3 lx | 0.3 fc | 1 lx | 0.1 fc |
| **E3** | **9 lx** | **0.8 fc** | **3 lx** | **0.3 fc** |
| E4 | 16 lx | 1.5 fc | 7 lx | 0.6 fc |

lx = lux fc = foot-candles
**Source**: Adopted from ILE (2003) and EPRI (2000).

6 Light trespass (also known as obtrusive light or spill light) is the condition where poorly shielded or poorly aimed light fixtures cast light onto areas where it is unwanted or not needed.

Curfew hours listed in the table are from the Institution of Lighting Engineers, Guidance Notes for the Reduction of Obtrusive Light. 2005 (ILE, 2005, p. 5), which states, "Curfew = the time after which stricter requirements (for the control of obtrusive light) will apply; often a condition of use of lighting applied by the local planning authority. If not otherwise stated - 23.00 hrs [11:00 pm] is suggested."

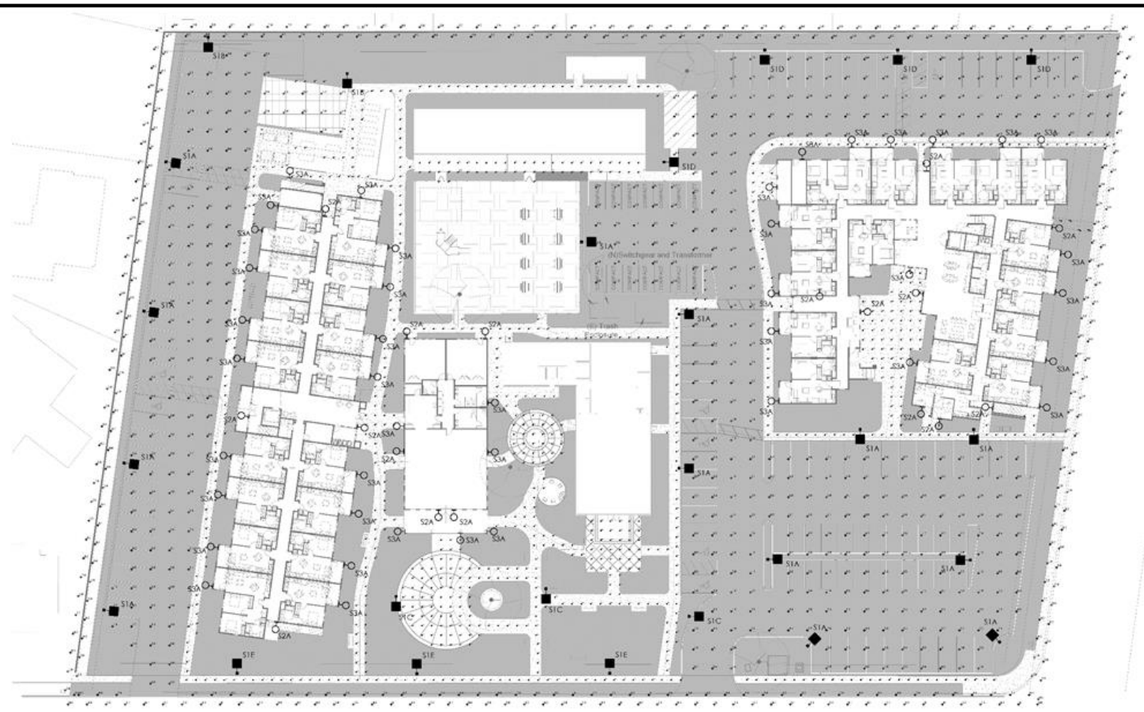
In the project area, light trespass impacts would be considered potentially significant if illuminance[7] produced by the project would impact sensitive receptors with lighting levels that exceed 0.8 foot-candles during pre-curfew hours (dusk to 11:00 PM) and 0.3 foot-candles during the post curfew hours (11:00 PM to 7:00 AM), as measured on the vertical and horizontal planes.[8]

The project proposes new exterior lighting throughout the site, including area lighting and wall mounted lighting. Refer to **Figure 4.1-8**, which depicts the location and type of lighting proposed onsite. As shown in the figure below, the area lighting would be along the perimeter of the project site, within the parking lots and within the courtyard area that fronts North Angelina Drive. The wall-mounted lighting would be located on the exterior walls of Building 1, Building 2, and the new Parish Hall.

7 Measured in foot-candles, illuminance is the intensity of light falling on a surface.

8 A full moonlit night in rural areas with negligible ambient light would equal approximately 0.02-0.03 foot-candle, while a typical 30-foot tall streetlamp would have an illumination of 1.3 foot-candles at a distance of 10 feet (NLPIP, 2007).

**Figure 4.1-8**
**SITE PHOTOMETRIC PLAN**



SITE PHOTOMETRIC PLAN
SCALE: 1" = 30'-0"

LUMINAIRE DESCRIPTION

S1A SY21P1 FGC 4 40W 3K 120 NONE BK TX
40W, 15' OVERALL HEIGHT, TYPE 4 OPTIC
BUG RATING - B1 U0 G1
SEE DETAIL 1 SHEET E2

S1B SY21P1 FGC 4 40W 3K 120 NONE BK TX
40W, 12' OVERALL HEIGHT, TYPE 4 OPTIC
BUG RATING - B1 U0 G1
SEE DETAIL 1 SHEET E2

S1C SY21P1 FGC 5 40W 3K 120 NONE BK TX
40W, 15' OVERALL HEIGHT, TYPE 5 OPTIC
BUG RATING - B2 U0 G1
SEE DETAIL 1 SHEET E2

S1D SY21P1 FGC 4H5 40W 3K 120 NONE BK TX
40W, 15' OVERALL HEIGHT, TYPE 4 OPTIC, PROVIDE WITH INTERNAL HOUSE SIDE SHIELD
BUG RATING - B1 U0 G1
SEE DETAIL 1 SHEET E2

S1E SY21P1 FGC 2H5 40W 3K 120 NONE BK TX
40W, 12' OVERALL HEIGHT, TYPE 2 OPTIC, PROVIDE WITH INTERNAL HOUSE SIDE SHIELD
BUG RATING - B1 U0 G1
SEE DETAIL 1 SHEET E2

S2A P6079-313069
17W, LARGE WALL LANTERN, MOUNT 7' ABOVE FINISHED FLOOR
SEE DETAIL 2 SHEET E2

S3A WDGE1 LED P1 30K 80CRI VW MVOLT
10W, ARCHITECTURAL WALL PACK, MOUNT 7' ABOVE FINISHED FLOOR
SEE DETAIL 3 SHEET E2

ELECTRICAL SYMBOLS

LIGHTING
AREA LIGHT (EXTERIOR)
WALL MOUNT LUMINAIRE (EXTERIOR)

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Source: RRM Design Group and National CORE, August 28, 2020

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**Santa Angelina**
**Senior Apartment Homes**

Site Photometric Plan

**Light Trespass**

As depicted in **Figure 4.1-8** (as well as sheet E1 in **Appendix A**), the project would result in minimal light leaving the project site. Light levels onsite would range from 0.0 lumens to 7.7 lumens near the wall-mounted luminaire outside of Building 2, near the south parking lot. The project would emit 0.0 lumens along the northern and eastern edges of the project site such that residences on the other side of the existing five- to eight-foot-high existing CMU wall along the northern and eastern property lines would not receive any light from the project site. Additionally, the project would emit between 0.0-0.1 lumens along the southern property line. Light levels along North Angelina Drive would range from 0.0 to 0.3 lumens. Given the urban and built up nature of the project's surroundings and that the project is located in an area with existing night time lighting, the proposed project would have a less than significant impact regarding new sources of light and glare.

**Sky Glow[9]**

The project site is located approximately 30 miles southeast of the Griffith Observatory, in an urbanized area in the City of Placentia, and would therefore have less potential to impact operations at the observatory than more closely-situated properties (Google Earth Pro, 2020). The proposed lighting onsite would comply with the requirements of the City's Municipal Code Title 20, Building Codes and Regulations, which follow the requirements of the California Building Code (CBC) that states that lighting on any premises shall be directed, controlled, screened, or shaded in such a manner as not to shine directly on surrounding premises. Based on the physical characteristics of the area surrounding the project site and the design of the proposed light fixtures, implementation of the project would result in no significant impacts from sky glow.

**Glare[10]**

The proposed project would introduce new outdoor artificial lighting elements, which have the potential to result in glare if the main beams of proposed lighting elements (i.e., the portion of the lamp with the greatest illuminance) are visible from offsite locations, resulting in excessive, uncontrolled brightness. However, the project would comply with the requirements of the City's Municipal Code Title 20, Building Codes and Regulations, which follow the requirements of the CBC that states that lighting on any premises shall be directed, controlled, screened, or shaded in such a manner as not to shine directly on surrounding premises. Adherence to applicable City municipal codes would ensure that new sources of light or glare would not adversely affect day or nighttime views in the area. Additionally, as detailed in **Figure 4.1-7**, the project would utilize light-colored building materials such as sand color exterior plaster and stone veneer with no use of highly reflective building materials. Therefore, impacts from new sources of substantial light or glare would be less than significant.

**Shade/Shadow**

Shadow-sensitive uses include all residential uses and routinely usable outdoor spaces associated with recreational or institutional uses, commercial uses such as pedestrian-oriented outdoor spaces or restaurants with outdoor eating areas, nurseries, and existing solar collectors. These uses are

9 Sky Glow is the brightening of the sky that occurs as a result of outdoor lighting fixtures emitting a portion of their light directly into the sky. Sky glow is of particular concern near observatories and in rural areas where there is low ambient light.

10 Glare is the objectionable brightness caused by over-illumination, as well as poorly shielded or poorly aimed light fixtures.

considered sensitive because sunlight is important to function, physical comfort, or commerce. Shade-sensitive uses in the project vicinity include the residences located to the north, south and east.

Although shade-sensitive uses are located to the north, south, and east, the project applicant consulted with the neighbors and surrounding residents about the proposed building heights and setbacks. Through consultation, the applicant modified the project site plan to move the proposed buildings away from the adjacent homes. The applicant modified the site plan to increase the setbacks between the proposed buildings. Building 1, at the north end of the site, would be a linear two-story structure, with double-loaded corridors. Building 2 would be a two-story, U-shaped building. Therefore, due to the distance from sensitive shade receptors and the modified building design, impacts regarding shade and shadow would be less than significant.

## 4.2 Agriculture and Forestry Resources

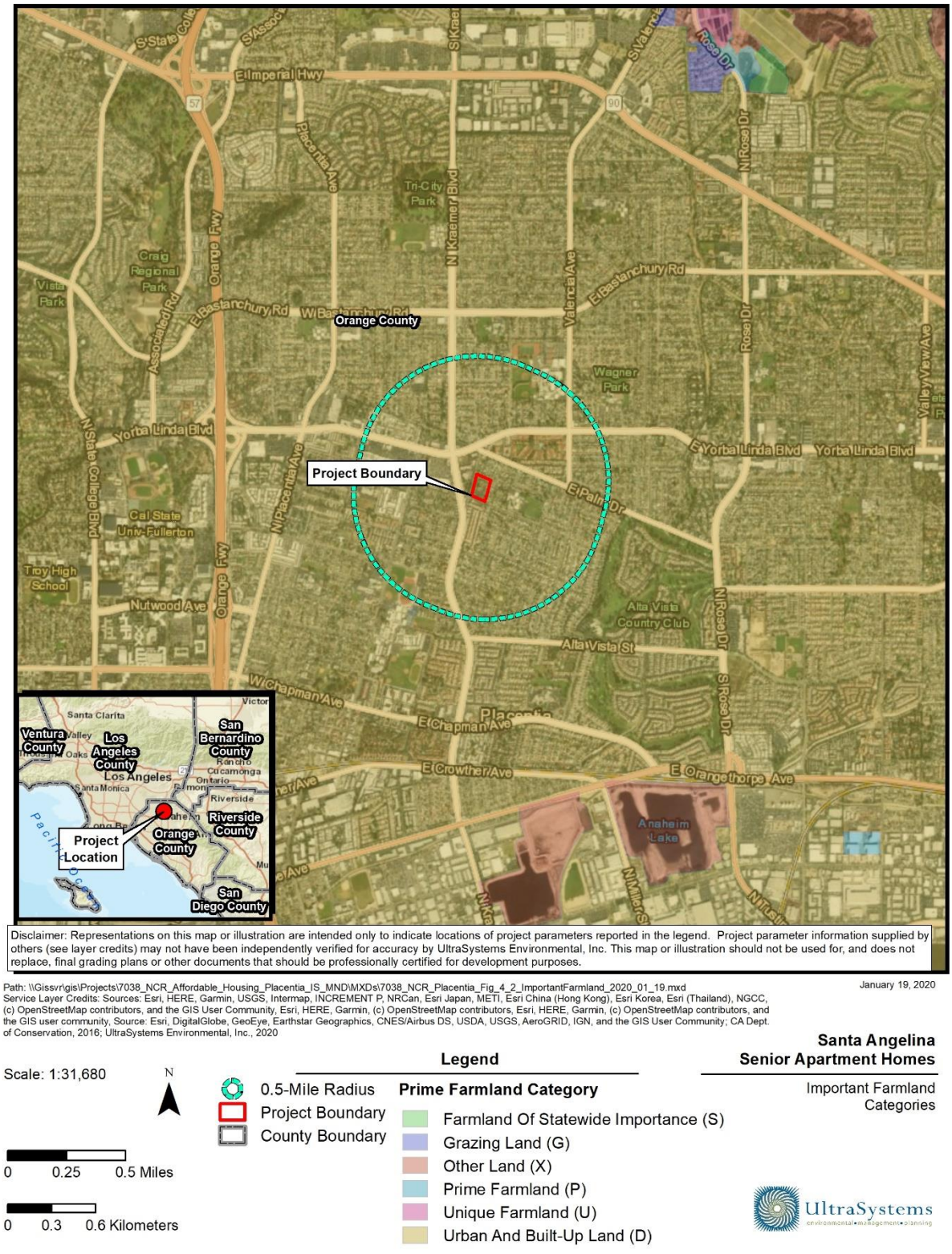
| Would the project: | Potentially Significant Impact | Less than Significant Impact with Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? | | | | **X** |
| b) Conflict with existing zoning for agricultural use, or a Williamson Act contract? | | | | **X** |
| c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code § 12220(g)), timberland (as defined by Public Resources Codes § 4526), or timberland zoned Timberland Production (as defined by Government Code § 51104(g))? | | | | **X** |
| d) Result in the loss of forest land or conversion of forest land to non-forest use? | | | | **X** |
| e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use? | | | | **X** |

### a) Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

**No Impact**

The California Department of Conservation (DOC) established the Farmland Mapping and Monitoring Program (FMMP) in 1982 to identify critical agricultural lands and track the conversion of these lands to other uses. The FMMP is a non-regulatory program and provides a consistent and impartial analysis of agricultural land use and land use changes throughout California. As depicted in **Figure 4.2-1** below, the project site and surrounding uses are designated by the FMMP as "Urban and Built-Up Land," which means that no agricultural uses were mapped onsite (DOC, 2016). The project is located within an urbanized area, and all construction activities and onsite improvements would occur within the site. Therefore, no farmland would be converted to non-agricultural use and no impacts would occur.

**Figure 4.2-1**
**IMPORTANT FARMLAND CATEGORIES**



**b) Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?**

**No Impact**

As depicted in **Figure 4.2-1** above, the project site is identified as "Urban and Built-Up Land," which means that no agricultural uses could potentially occupy the site (DOC, 2004). The existing zoning onsite is R-1 Single-Family Residential District, which prohibits commercial agricultural uses. Williamson Act contracts are made only on land within agricultural reserves; the project site is not within an agricultural reserve. Therefore, the project would not conflict with existing zoning for agricultural use or a Williamson Act contract and no impact would occur.

**c) Would the project (c) conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code § 12220(g)), timberland (as defined by Public Resources Codes § 4526), or timberland zoned Timberland Production (as defined by Government Code § 51104(g))?**

**No Impact**

The project site is located in a highly urbanized setting. The site's existing zoning of "R-1" (Single- Family Residential District) does not support the definitions provided by PRC § 42526 for timberland, PRC § 12220(g) for forestland, or California Government Code § 51104(g) for timberland zoned for production. PRC § 12220(g) defines forest land as "land that can support 10 percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits." Therefore, the proposed project would not conflict with zoning for forest land or timberland, and no impact would occur.

**d) Would the project result in the loss of forest land or conversion of forest land to non-forest use?**

**No Impact**

The project site and surrounding land uses do not contain forest land. Therefore, project implementation would not result in the loss of forest land or conversion of forest land to non-forest use, and no impact would occur.

**e) Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?**

**No Impact**

The project site is a developed property located within a highly-urbanized setting. The site is surrounded by residential and commercial uses. No existing farmland or forest land is located in the vicinity of the project. Therefore, implementation of the project would not result in changes to the environment, due to its location or nature, which could result in the conversion of farmland to non-agricultural use or conversion of forest land to non-forest use, and no impacts would occur.

## 4.3 Air Quality

| Would the project: | Potentially Significant Impact | Less than Significant Impact with Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| a) Conflict with or obstruct implementation of the applicable air quality plan? | | | **X** | |
| b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard? | | | **X** | |
| c) Expose sensitive receptors to substantial pollutant concentrations? | | | **X** | |
| d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people? | | | **X** | |

### 4.3.1 Pollutants of Concern

Criteria pollutants are air pollutants for which acceptable levels of exposure can be determined and an ambient air quality standard has been established by the U.S. Environmental Protection Agency (USEPA) and/or the California Air Resources Board (ARB). The criteria air pollutants of concern are nitrogen dioxide ($NO_2$), carbon monoxide (CO), particulate matter ($PM_{10}$ and $PM_{2.5}$), sulfur dioxide ($SO_2$), lead (Pb), and ozone, and their precursors, such as reactive organic gases (ROG) (which are ozone precursors). Since the Santa Angelina Senior Apartment Homes project (project) would not generate appreciable $SO_2$ or Pb emissions,[11] it is not necessary for the analysis to include those two pollutants. Presented below is a description of the air pollutants of concern and their known health effects.

The project is in the Orange County portion of the South Coast Air Basin (SCAB), for whose air pollution control the South Coast Air Quality Management District (SCAQMD) is substantially responsible. **Table 4.3-1** shows the attainment status of the SCAB for each criteria pollutant for both the National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS). Presented below is a description of the air pollutants of concern and their known health effects.

***Nitrogen oxides*** ($NO_X$) serve as integral participants in the process of photochemical smog production and are precursors for certain particulate compounds that are formed in the atmosphere and for ozone. A precursor is a directly emitted air contaminant that, when released into the atmosphere, forms, causes to be formed, or contributes to the formation of a secondary air

11 Sulfur dioxide emissions will be below 0.08 pound per day during construction and operations.

contaminant for which an ambient air quality standard (AAQS) has been adopted, or whose presence in the atmosphere will contribute to the violation of one or more AAQSs. When $NO_X$ and ROG are released in the atmosphere, they can chemically react with one another in the presence of sunlight to form ozone. The two major forms of $NO_X$ are nitric oxide (NO) and $NO_2$. NO is a colorless, odorless gas formed from atmospheric nitrogen and oxygen when combustion takes place under high temperature and/or high pressure. $NO_2$ is a reddish-brown pungent gas formed by the combination of NO and oxygen. $NO_2$ acts as an acute respiratory irritant and eye irritant and increases susceptibility to respiratory pathogens (USEPA, 2011).

**Table 4.3-1**
**FEDERAL AND STATE ATTAINMENT STATUS**

| Pollutants | Federal Classification | State Classification |
|---|---|---|
| Ozone ($O_3$) | Nonattainment (Extreme) | Nonattainment |
| Particulate Matter ($PM_{10}$) | Maintenance (Serious) | Nonattainment |
| Fine Particulate Matter ($PM_{2.5}$) | Nonattainment (Moderate) | Nonattainment |
| Carbon Monoxide (CO) | Maintenance (Serious) | Attainment |
| Nitrogen Dioxide ($NO_2$) | Maintenance | Attainment |
| Sulfur Dioxide ($SO_2$) | Attainment | Attainment |
| Sulfates | No Federal Standards | Attainment |
| Lead (Pb) | | Attainment |
| Hydrogen Sulfide ($H_2S$) | | Attainment |
| Visibility Reducing Particles | | Unclassified |

**Sources**: ARB, 2019; USEPA, 2020a, 2020b, 2020c, 2020d, 2020e.

***Carbon monoxide*** (CO) is a colorless, odorless non-reactive pollutant produced by incomplete combustion of fossil fuels. CO is emitted almost exclusively from motor vehicles, power plants, refineries, industrial boilers, ships, aircraft, and trains. In urban areas, such as the project location, automobile exhaust accounts for most CO emissions. CO is a non-reactive air pollutant that dissipates relatively quickly; therefore, ambient CO concentrations generally follow the spatial and temporal distributions of vehicular traffic. CO concentrations are influenced by local meteorological conditions; primarily wind speed, topography, and atmospheric stability. CO from motor vehicle exhaust can become locally concentrated when surface-based temperature inversions are combined with calm atmospheric conditions, a typical situation at dusk in urban areas between November and February. The highest levels of CO typically occur during the colder months of the year when inversion conditions are more frequent. In terms of health, CO competes with oxygen, often replacing it in the blood, thus reducing the blood's ability to transport oxygen to vital organs. The results of excess CO exposure can be dizziness, fatigue, and impairment of central nervous system functions. High concentrations are lethal (USEPA, 2010).

***Particulate matter*** (PM) consists of finely divided solids or liquids, such as soot, dust, aerosols, fumes and mists. Primary PM is emitted directly into the atmosphere from activities such as agricultural operations, industrial processes, construction and demolition activities, and

entrainment of road dust into the air. Secondary PM is formed in the atmosphere from predominantly gaseous combustion by-product precursors, such as sulfur oxides, $NO_X$, and ROGs.

Particle size is a critical characteristic of PM that primarily determines the location of PM deposition along the respiratory system (and associated health effects) as well as the degradation of visibility through light scattering. In the United States, federal and state agencies have focused on two types of PM. $PM_{10}$ corresponds to the fraction of PM no greater than 10 micrometers in aerodynamic diameter and is commonly called respirable particulate matter, while $PM_{2.5}$ refers to the subset of $PM_{10}$ of aerodynamic diameter smaller than 2.5 micrometers, which is commonly called fine particulate matter.

$PM_{10}$ and $PM_{2.5}$ deposition in the lungs results in irritation that triggers a range of inflammation responses, such as mucus secretion and bronchoconstriction, and exacerbates pulmonary dysfunctions, such as asthma, emphysema, and chronic bronchitis. Sufficiently small particles may penetrate the bloodstream and impact functions such as blood coagulation, cardiac autonomic control, and mobilization of inflammatory cells from the bone marrow. Individuals susceptible to higher health risks from exposure to $PM_{10}$ airborne pollution include children, the elderly, smokers, and people of all ages with low pulmonary/cardiovascular function. For these individuals, adverse health effects of $PM_{10}$ pollution include coughing, wheezing, shortness of breath, phlegm, bronchitis, and aggravation of lung or heart disease, leading, for example, to increased risks of hospitalization and mortality from asthma attacks and heart attacks (USEPA, 2019a).

***Reactive organic gases*** (ROG) are defined as any compound of carbon, excluding CO, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate, which participates in atmospheric photochemical reactions. It should be noted that there are no state or national ambient air quality standards for ROG because ROGs are not classified as criteria pollutants. They are regulated, however, because a reduction in ROG emissions reduces certain chemical reactions that contribute to the formation of ozone. ROGs are also transformed into organic aerosols in the atmosphere, which contribute to higher $PM_{10}$ and lower visibility. The term "ROG" is used by the ARB for this air quality analysis and is defined the same as the federal term "volatile organic compound" (VOC).

***Ozone*** is a secondary pollutant produced through a series of photochemical reactions involving ROG and $NO_X$. Ozone creation requires ROG and $NO_X$ to be available for approximately three hours in a stable atmosphere with strong sunlight. Because of the long reaction time, peak ozone concentrations frequently occur downwind of the sites where the precursor pollutants are emitted. Thus, ozone is considered a regional, rather than a local, pollutant. The health effects of ozone include eye and respiratory irritation, reduction of resistance to lung infection and possible aggravation of pulmonary conditions in persons with lung disease. Ozone is also damaging to vegetation and untreated rubber (USEPA, 2020f).

### 4.3.2 Climate/Meteorology

Air quality is affected by both the rate and location of pollutant emissions, and by meteorological conditions that influence movement and dispersal of pollutants. Atmospheric conditions such as wind speed, wind direction, and air temperature gradients, along with local topography, provide the link between air pollutant emissions and air quality.

The project site would be located wholly within the SCAB, which includes all of Orange County, as well as the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties. The

distinctive climate of the SCAB is determined by its terrain and geographical location. The SCAB is in a coastal plain with connecting broad valleys and low hills, bounded by the Pacific Ocean in the southwest quadrant with high mountains forming the remainder of the perimeter. The general region lies in the semi-permanent high-pressure zone of the eastern Pacific. Thus, the climate is mild, tempered by cool sea breezes. This usually mild climatological pattern is interrupted infrequently by periods of extremely hot weather, winter storms, or Santa Ana winds (SCAQMD, 1993).

The annual average temperature varies little throughout the 6,600-square-mile SCAB, ranging from the low 60s to the high 80s. However, with a less pronounced oceanic influence, the inland portion shows greater variability in the annual minimum and maximum temperatures. The mean annual maximum and minimum temperatures in the project area—as determined from the nearest weather station in the City of Yorba Linda (WRCC, 2020), which has a period of record from 1912 to 2016—are 77.0 degrees Fahrenheit (°F) and 49.7°F, respectively. The hottest month is August, with an average maximum temperature of 88.4°F and the coldest month is January, with an average minimum temperature of 41.7°F.

During the period of record, the average rainfall measured 13.69 inches, which occurs mostly during the winter and relatively infrequently during the summer. Monthly precipitation averages approximately 2.77 inches during the winter (December, January, and February), approximately 1.26 inches during the spring (March, April, and May), approximately 0.72 inch during the fall (September, October, and November), and approximately 0.05 inch during the summer (June, July, and August).

### 4.3.3 Local Air Quality

The SCAQMD has divided the SCAB into source receptor areas (SRAs), based on similar meteorological and topographical features. The project site is in SCAQMD's North Orange County air monitoring area (SRA 16), which is served by the SCAQMD's Anaheim/Pampas station, 5.5 miles southwest at 1630 Pampas Lane in Anaheim (SCAQMD, 2020a). This station monitors ozone, $PM_{10}$, $PM_{2.5}$, and $NO_2$. All stations in the SCAB ceased monitoring CO in 2012. The ambient air quality data in the project vicinity as recorded from 2016 through 2018, along with applicable standards, are shown in **Table 4.3-2**.

**Table 4.3-2**
**AMBIENT AIR QUALITY MONITORING DATA**

| Air Pollutant | Standard/Exceedance | 2016 | 2017 | 2018 |
|---|---|---|---|---|
| Ozone – Anaheim/Pampas | Max. 1-hour Concentration (ppm) | **0.103** | 0.090 | **0.112** |
| | Max. 8-hour Concentration (ppm) | **0.074** | **0.076** | **0.071** |
| | # Days > Federal 8-hour Std. of 0.070 ppm | 4 | 4 | 1 |
| | # Days > California 1-hour Std. of 0.09 ppm | 2 | 0 | 1 |
| | # Days > California 8-hour Std. of 0.070 ppm | 4 | 4 | 1 |
| $PM_{10}$ - Anaheim/ Pampas | Max. 24-hour Concentration (µg/m$^3$) | 74.0 | 95.7 | 94.6 |
| | Est. # Days > Fed. 24-hour Std. of 150 µg/m$^3$ | 0 | 0 | 0 |
| | State Annual Average (20 µg/m$^3$) | **27.5** | **26.9** | **27.9** |
| $PM_{2.5}$ - Anaheim/ Pampas | Max. 24-hour Concentration (µg/m$^3$) | **44.4** | **53.9** | **63.1** |
| | # Days > Fed. 24-hour Std. of 35 µg/m$^3$ | 1 | 7 | 7 |
| | State Annual Average (12 µg/m$^3$) | 9.4 | ND | 11.4 |
| $NO_2$ – Anaheim/ Pampas | Max. 1-hour Concentration (ppm) | 0.064 | 0.081 | 0.066 |
| | State Annual Average (0.030 ppm) | 0.014 | 0.014 | 0.013 |
| | # Days > California 1-hour Std. of 0.18 ppm | 0 | 0 | 0 |

**Source**: ARB, 2020.
ND - There was insufficient (or no) data available to determine the value.
**Bold** - exceedance

### 4.3.4 Air Quality Management Plan (AQMP)

The SCAQMD is required to produce plans to show how air quality would be improved in the region. The California Clean Air Act (CCAA) requires that these plans be updated triennially to incorporate the most recent available technical information.[12] A multi-level partnership of governmental agencies at the federal, state, regional, and local levels implement the programs contained in these plans. Agencies involved include the USEPA, ARB, local governments, Southern California Association of Governments (SCAG), and SCAQMD. The SCAQMD and the SCAG are responsible for formulating and implementing the Air Quality Management Plan (AQMP) for the SCAB. The SCAQMD updates its AQMP every three years.

The 2016 AQMP (SCAQMD, 2017b) was adopted by the SCAQMD Board on March 3, 2017, and on March 10, 2017 was submitted to the ARB (SCAQMD, 2017a) to become part of the State Implementation Plan (SIP)[13] (SCAQMD, 2017a). The AQMP was then submitted to the USEPA (ARB, 2017a). It focuses largely on reducing $NO_X$ emissions as a means of attaining the 1979 1-hour ozone standard by 2022, the 1997 8-hour ozone standard by 2023, and the 2008 8-hour standard by 2031. The AQMP prescribes a variety of current and proposed new control measures, including a request to the USEPA for increased regulation of mobile source emissions. The $NO_X$ control measures would also help the Basin attain the 24-hour standard for $PM_{2.5}$.

12 CCAA of 1988.
13 The State Implementation Plan (SIP) is a collection of local and regional plans, regulations, and rules for attaining ambient air quality standards. It is periodically submitted to the USEPA for approval.

### 4.3.5 Sensitive Receptors

Some people, such as individuals with respiratory illnesses or impaired lung function because of other illnesses, persons over 65 years of age, and children under 14, are particularly sensitive to certain pollutants. Facilities and structures where these sensitive people live or spend considerable amounts of time are known as sensitive receptors. For the purposes of a CEQA analysis, the SCAQMD considers a sensitive receptor to be a receptor such as a residence, hospital, or convalescent facility where it is possible that an individual could remain for 24 hours (Chico and Koizumi, 2008, p. 3-2). Commercial and industrial facilities are not included in the definition of sensitive receptor, because employees typically are present for shorter periods of time, such as eight hours. Therefore, applying a 24-hour standard for $PM_{10}$ is appropriate not only because the averaging period for the state standard is 24 hours, but because the sensitive receptor would be present at the location for the full 24 hours.

The nearest sensitive receptors to the project site are single-family residences adjacent to the northern and eastern boundaries of the project site. Additionally, three schools are within 0.5 mile of the project, site as seen in **Table 4.3-3**.

**Table 4.3-3**
**SCHOOLS WITHIN 0.5 MILE OF THE PROJECT SITE**

| School | Address | Distance (miles) |
|---|---|---|
| Morse Avenue Elementary | 431 Morse Avenue, Placentia | 0.09 |
| El Dorado High School | 1651 Valencia Ave, Placentia | 0.35 |
| Topaz Elementary School | 3232 Topaz Lane, Fullerton | 0.40 |

### 4.3.6 South Coast Air Quality Management District Fugitive Dust Rule (Rule 403)

During construction, the project would be subject to SCAQMD Rule 403 (fugitive dust). SCAQMD Rule 403 does not require a permit for construction activities, per se; rather, it sets forth general and specific requirements for all construction sites (as well as other fugitive dust sources) in the SCAB. The general requirement prohibits a person from causing or allowing emissions of fugitive dust from construction (or other fugitive dust source) such that the presence of such dust remains visible in the atmosphere beyond the property line of the emissions source. SCAQMD Rule 403 also prohibits construction activity from causing an incremental $PM_{10}$ concentration impact, as the difference between upwind and downwind samples, at the property line of more than 50 micrograms per cubic meter as determined through $PM_{10}$ high-volume sampling. The concentration standard and associated $PM_{10}$ sampling do not apply if specific measures identified in the rules are implemented and appropriately documented.

Other requirements of Rule 403 include not causing or allowing emissions of fugitive dust that would remain visible beyond the property line; no track-out extending 25 feet or more in cumulative length and all track-out to be removed at conclusion of each workday; and using the applicable best available control measures included in Table 1 of Rule 403.

### 4.3.7 Impact Analysis

**a) Would the project conflict with or obstruct implementation of the applicable air quality plan?**

**Less than Significant Impact**

The South Coast 2016 AQMP, discussed above, incorporates land use assumptions from local general plans and regional growth projections developed by the SCAG to estimate stationary and mobile air emissions associated with projected population and planned land uses. If the proposed land use is consistent with the local general plan, then the impact of the project is presumed to have been accounted for in the AQMP. This is because the land use and transportation control sections of the AQMP are based on the SCAG regional growth forecasts, which incorporate projections from local general plans. The proposed project would change the General Plan designation from Low Density Residential to High Density Residential, thereby increasing the maximum number of dwelling units per acre. Nevertheless, as is described in detail in **Section 4.11**, the project would advance six goals of the General Plan's Land Use and Community Design Element, and not conflict with any. Developing a housing community with rent-restricted units for senior residents would also enable the City to meet the unique housing need of senior residents, and advance the City's effort to meet its Regional Housing Needs Allocation (RHNA) of 231 units for low and very low-income households. Therefore, the land use would continue to be consistent with the local general plan and the impacts of the project are still accounted for in the AQMP.

Another measurement tool in evaluating consistency with the AQMP is to determine whether a project would generate population and employment growth and, if so, whether that growth would exceed the growth rates forecasted in the AQMP and how the project would accommodate the expected increase in population or employment. The project would create minimal increase in population and overall vehicle miles traveled (VMT), which would be included in the growth rates forecasted in the AQMP.

Additionally, to assist the implementation of the AQMP, projects must not create regionally significant emissions of regulated pollutants from either short-term construction or long-term operations. The SCAQMD (2019) has developed criteria in the form of emissions thresholds for determining whether emissions from a project are regionally significant. They are useful for estimating whether a project is likely to result in a violation of the NAAQS and/or whether the project is in conformity with plans to achieve attainment. SCAQMD's significance thresholds for criteria pollutant emissions during construction activities and project operation are summarized in **Table 4.3-4**. A project is considered to have a regional air quality impact if emissions from its construction and/or operational activities exceed the corresponding SCAQMD significance thresholds.

**Table 4.3-4**
**SCAQMD THRESHOLDS OF SIGNIFICANCE**

| Pollutant | Construction Thresholds (lbs/day) | Operational Thresholds (lbs/day) |
|---|---|---|
| Volatile Organic Compounds (VOC) | 75 | 55 |
| Nitrogen Oxides ($NO_x$) | 100 | 55 |
| Carbon Monoxide (CO) | 550 | 550 |
| Sulfur Oxides ($SO_x$) | 150 | 150 |
| Particulate Matter ($PM_{10}$) | 150 | 150 |
| Fine Particulate Matter ($PM_{2.5}$) | 55 | 55 |

**Note**: lbs = pounds.
**Source**: SCAQMD, 2019.

### Regional Construction Emissions

Construction activities for the project are anticipated to last 16 months and would begin in early January 2022 and end in late April 2023. There would be five construction phases:

- Demolition
- Site work (utilities and paving)
- Grading
- Building construction
- Architectural coating

There would be no overlap of construction activities among any of the phases. **Table 4.3-5** shows the project schedule used for the air quality, GHG emissions and noise analyses.

**Table 4.3-5**
**CONSTRUCTION SCHEDULE**

| Construction Phase | Start | End |
|---|---|---|
| Demolition | January 1, 2022 | January 31, 2022 |
| Grading | February 1, 2022 | February 28, 2022 |
| Site work | March 1, 2022 | April 29, 2022 |
| Building construction | May 1, 2022 | April 4, 2023 |
| Architectural coating | April 5, 2023 | April 28, 2023 |

These construction activities would temporarily create emissions of dusts, fumes, equipment exhaust, and other air contaminants. Mobile sources (such as diesel-fueled equipment onsite and traveling to and from the project site) would primarily generate $NO_X$ emissions. The amount of emissions generated daily would vary, depending on the amount and types of construction activities occurring at the same time.

Estimated criteria pollutant emissions from the project's onsite and offsite project construction activities were calculated using the California Emissions Estimator Model (CalEEMod), Version 2016.3.2 (CAPCOA, 2017). CalEEMod is a planning tool for estimating emissions related to land use projects. Model-predicted project emissions are compared with applicable thresholds to assess regional air quality impacts. Offroad construction equipment information was supplied by the client but CalEEMod defaults were used for onroad construction traffic inputs.

As shown in **Table 4.3-6**, construction emissions would not exceed SCAQMD regional thresholds. Therefore, the project's short-term regional air quality impacts would be less than significant. Refer to **Appendix B1** of this document for air quality calculations.

**Table 4.3-6**
**MAXIMUM DAILY REGIONAL CONSTRUCTION EMISSIONS**

| Construction Activity | Maximum Emissions (lbs/day) | | | | |
|---|---|---|---|---|---|
| | ROG | $NO_x$ | CO | $PM_{10}$ | $PM_{2.5}$ |
| Maximum Emissions, 2022 | 2.8 | **35.0** | **19.6** | **4.2** | **2.5** |
| Maximum Emissions, 2023 | **17.0** | 4.7 | 5.1 | 0.6 | 0.3 |
| *SCAQMD Significance Thresholds* | *75* | *100* | *550* | *150* | *55* |
| **Significant? (Yes or No)** | **No** | **No** | **No** | **No** | **No** |

**Source**: Calculated by UltraSystems with CalEEMod (Version 2016.3.2) (CAPCOA, 2017).

### Regional Operational Emissions

The project proposes 64 age-restricted residential units (and one exempt managers unit), a 1,500-square-foot community center, construction of a new 3,974-square-foot Parish Hall, and demolition of an existing 3,472-square-foot Parish Hall building. Operational emissions generated by area sources, motor vehicles and energy demand would result from normal day-to-day activities of the project. Note that since the community center is specifically for use of residents and guests, no trip generation attributes were assigned. CalEEMod 2016.3.2 was used to estimate these emissions. Trip rates were adjusted to match data supplied by the Transportation Assessment (Fehr and Peers, 2020). The results of these calculations are presented in **Table 4.3-7**. As seen in the table, for each criteria pollutant, operational emissions would be below the pollutant's SCAQMD significance threshold. Therefore, operational criteria pollutant emissions would be less than significant**.**

**Table 4.3-7**
**MAXIMUM DAILY PROJECT OPERATIONAL EMISSIONS**

| Emission Source | Pollutant (lbs/day) | | | | |
|---|---|---|---|---|---|
| | ROG | $NO_X$ | CO | $PM_{10}$ | $PM_{2.5}$ |
| Area Source Emissions | 1.16 | 0.06 | 5.36 | 0.03 | 0.03 |
| Energy Source Emissions | 0.03 | 0.23 | 0.11 | 0.02 | 0.02 |
| Mobile Source Emissions | 0.42 | 1.53 | 5.34 | 2.25 | 0.61 |
| Total Operational Emissions | **1.6** | **1.8** | **10.8** | **2.3** | **0.7** |
| *SCAQMD Significance Thresholds* | *55* | *55* | *550* | *150* | *55* |
| **Significant? (Yes or No)** | **No** | **No** | **No** | **No** | **No** |

**Source**: Calculated by UltraSystems with CalEEMod (Version 2016.3.2) (CAPCOA, 2017).

**b) 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?**

**Less Than Significant Impact**

Since the SCAB is currently in nonattainment for ozone and $PM_{2.5}$, related projects may exceed an air quality standard or contribute to an existing or projected air quality exceedance. The SCAQMD neither recommends quantified analyses of construction and/or operational emissions from multiple development projects nor provides methodologies or thresholds of significance to be used to assess the cumulative emissions generated by multiple cumulative projects. Instead, the District recommends that a project's potential contribution to cumulative impacts be assessed by utilizing the same significance criteria as those for project-specific impacts. Furthermore, the SCAQMD states that if an individual development project generates less-than-significant construction or operational emissions impacts, then the development project would not contribute to a cumulatively considerable increase in emissions for those pollutants for which the Basin is in nonattainment.

As discussed above, the mass daily construction and operational emissions generated by the project would not exceed any of the SCAQMD's significance thresholds. Also, as discussed below, localized emissions generated by the Project would not exceed the SCAQMD's Localized Significance Thresholds (LSTs). Therefore, the project would not contribute a cumulatively considerable increase in emissions for the pollutants which the SCAB is in nonattainment. Thus, cumulative air quality impacts associated with the project would be less than significant.

**c) Would the project expose sensitive receptors to substantial pollutant concentrations?**

**Less than Significant Impact**

Construction of the project would generate short-term and intermittent emissions. Following the SCAQMD's *Final Localized Significance Threshold Methodology* (Chico and Koizumi, 2008), only onsite construction emissions were considered in the localized significance analysis. The residence

immediately north of the project site is the nearest sensitive receptor (less than 5 meters away).[14] LSTs for projects in Source Receptor Area 16 (North Orange County) were obtained from tables in Appendix C of the aforementioned methodology. **Table 4.3-8** shows the results of the localized significance analysis for the project.

Localized short-term air quality impacts from construction of the project would be less than significant**.**

**Table 4.3-8**
**RESULTS OF LOCALIZED SIGNIFICANCE ANALYSIS**

| Nearest Sensitive Receptor | Maximum Onsite Emissions (pounds/day) | | | |
|---|---|---|---|---|
| | $NO_X$ | CO | $PM_{10}$ | $PM_{2.5}$ |
| Maximum daily emissions | 26.2 | 16.5 | 3.5 | 2.3 |
| *SCAQMD LST for 2 acres @ 25 meters* | *147* | *762* | *6* | *4* |
| **Significant (Yes or No)** | **No** | **No** | **No** | **No** |

**d) Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?**

**Less than Significant Impact**

A project-related significant adverse effect could occur if construction or operation of the proposed project would result in generation of odors that would be perceptible in adjacent sensitive areas. According to the SCAQMD *CEQA Air Quality Handbook*, land uses and industrial operations that are associated with odor complaints include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies and fiberglass molding. Potential sources that may emit odors during construction activities include equipment exhaust. Odors from these sources would be localized and generally confined to the immediate area surrounding the project. The project would use typical construction techniques, and the odors would be typical of most construction sites and temporary in nature.

The project would not create substantial objectionable odors and this impact would be less than significant.

14 According to SCAQMD guidance, a receptor closer than 25 meters to the source may be assumed to be 25 meters away (Chico and Koizumi, 2008, p. 3-3).

## 4.4 Biological Resources

| Would the project: | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? | | **X** | | |
| b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service? | | | | **X** |
| c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? | | | | **X** |
| d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native nursery sites? | | | | **X** |
| e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? | | | | **X** |
| f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan? | | | | **X** |

### 4.4.1 Methodology

UltraSystems Environmental, Inc. (UEI) biologist Matthew Sutton researched readily available information, including relevant literature, databases, agency web sites, various previously completed reports and management plans, GIS data, maps, aerial imagery from public domain sources, and in-house records to identify the following: 1) habitats, special-status plant and wildlife species, jurisdictional waters, critical habitats, and wildlife corridors that may occur in or in the immediate

vicinity of the project site and that may be impacted by the project operations; and 2) local or regional plans, policies, and regulations that may apply to the project. Plant and wildlife species federally listed under the Endangered Species Act (ESA) or under the California Endangered Species Act (CESA) will be referred to collectively as "listed species" in this document. Plant and wildlife species not listed under ESA or CESA but still protected by federal agencies, state agencies, and/or nonprofit resource organizations, such as the California Native Plant Society (CNPS), are collectively referred to as "sensitive species" in this document. The term "special-status species" [15] will be used in this document when collectively referring to both listed and sensitive species. Some of these plant and wildlife species are afforded special legal or management protection because they are limited in population size, and typically have a limited geographic range and/or habitat. The following data sources were accessed by UEI for synthesis of data within this report.

- United States Geological Survey (USGS) 7.5-Minute Topographic Map Quadrangle (USGS, 1974) and current aerial imagery (Google Earth Pro, 2020).

- Sawyer, J.O., T. Keeler-Wolf, J.M. Evens, 2009. *A Manual of California Vegetation, Second Edition,* provided by California Native Plant Society Press (Sawyer et al., 2009).

- California Natural Diversity Database (CNDDB), provided by the California Department of Fish and Wildlife (CDFW, 2020a).

- Official Species List and Information, Planning and Conservation (IPaC), provided by the United States Fish and Wildlife Service (USFWS, 2020a; USFWS, 2020b).

- The Web Soil Survey, provided by the United States Department of Agriculture (USDA) Natural Resources Conservation Service (Soil Survey Staff, 2019a; Soil Survey Staff, 2019b).

- Inventory of Rare and Endangered Plants of California, 8th Edition, provided by the California Native Plant Society (CNPS, 2020a).

- eBird online database of bird distribution and abundance, provided by Cornell Lab of Ornithology (eBird, 2017).

- Critical Habitat Portal, provided by the USFWS (USFWS, 2020c).

- National Hydrography Dataset, provided by the USGS (USGS, 2020).

- EPA Waters GeoViewer, provided by USEPA (USEPA, 2020g).

- National Wetlands Inventory (NWI), provided by the USFWS (USFWS, 2020d).

- California Department of Fish and Wildlife (CDFW) Biogeographic Information and Observation System (BIOS) California Essential Habitat Connectivity Layers: Natural Landscape Blocks (Rustigian-Romsos, 2017), and Natural Areas Small (Gogol-Prokurat, 2018).

- California Department of Fish and Wildlife (CDFW) BIOS Conservation Plan Boundaries, HCP and NCCP (ds760) [Mastair, 2020].

15 Avian species protected by the Migratory Bird Treaty Act (MBTA) are not considered "special-status species."

Aerial imagery from the above-mentioned sources was overlaid with geospatial data by utilizing Geographic Information System (GIS) software (ArcGIS 10.1) to identify documented observations of the following biological or environmental components within the project vicinity: 1) Previously recorded observations within the project vicinity and geographic range of special-status species and potentially suitable habitats; 2) special-status vegetation communities; 3) protected management lands; 4) proposed and final critical habitats; 5) wetlands, waters of the State (WOS), and waters of the United States (WOUS); and, 5) wildlife corridors. An analysis was then made to plan either the avoidance of or to minimize project impacts to any of those biological resources. A Biological Study Area (BSA) was defined for the project and includes the project site and a 500-foot buffer zone around the perimeter of the property boundary (refer to **Figure 4.4-1**).

In addition, Mr. Sutton conducted a field evaluation for existing biological resources of the BSA on February 10 and 12, 2020. In this survey Mr. Sutton documented habitat types, potential threats to ecosystem health and plant and wildlife species in the BSA.

### 4.4.2 Discussion of Impacts

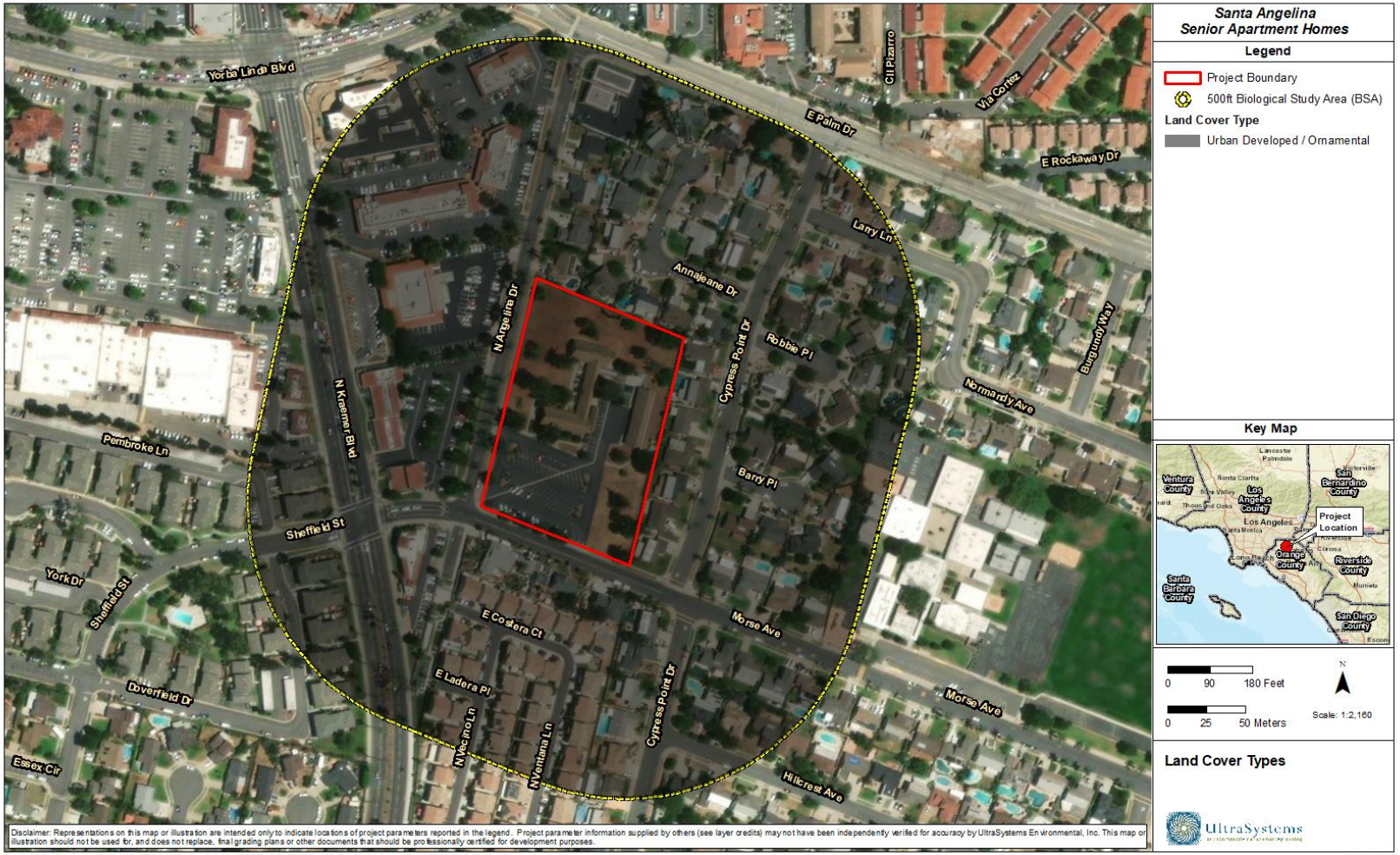
**a) Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?**

**Less Than Significant with Mitigation Incorporated**

Although the proposed project involves substantial disturbances to the existing surfaces and onsite vegetation, the overall effect of the project operations on special-status plant and wildlife species is not anticipated to be adverse or substantial as the impacts are relegated to temporal loss of foraging, perching and nesting habitat. Demolition and construction activities will cause impacts such as onsite soil disturbance and vegetation removal. However, there are no special-status plant species and only a few special-status wildlife species with a potential to occur onsite. Thus, there are no anticipated impacts to special-status plant species and the impacts to special-status wildlife species would be less than significant with the implementation of mitigation measures **BIO-1 Pre-Construction Breeding Bird Survey** and **BIO-2 Biological Monitor for Nesting Birds** proposed later in this section.

A series of demolition, construction and project operations would be conducted on the project site which may cause disturbances to plant and wildlife species within the BSA. Demolition activities would include the removal of an existing Parish Hall, paved surfaces and other structures. Construction activities would include grading, construction of a new Parish Hall, two multi-story residential buildings, new parking areas and several other structures, to conduct the demolition, construction, and other project operations, heavy equipment would be used, such as front loaders, backhoes and excavators; these activities would generate noise and dust that could impact plants and wildlife within the BSA. In spite of the construction-related disturbances, there would be limited impacts to special-status species because the BSA lacks suitable soils, biological resources, and physical features to support a healthy ecosystem with a diversity of plant and wildlife species. Thus, with the implementation of mitigation measures **BIO-1 Pre-Construction Breeding Bird Survey** and **BIO-2 Biological Monitor for Nesting Birds** described further below, and which are aimed at protecting nesting bird species from noise and dust disturbances, there would be less than significant impacts to the few special-status wildlife species that have a potential to occur onsite.

**Figure 4.4-1**
**LAND COVER TYPES**



**Habitat Assessment Survey Results (Land Cover Types)**

This section reviews the habitats, plants and wildlife observed during the habitat assessment survey conducted by biologist and International Society of Arboriculture (ISA) certified arborist Matthew Sutton (WE-12790A) on February 10, 2020. Plants and wildlife species observed during the survey will be reported in their respective subsections further below. Only one land cover type (**Figure 4.4-1**), Urban Developed/Ornamental, was determined to be present within the BSA as determined by the literature review and biological survey and augmented by examining aerial imagery. Description of the land cover type within the BSA was based on the dominance of non-native ornamental vegetation in vegetated areas and impermeable surfaces throughout the rest of the BSA. The classification of the only habitat type or vegetation community identified was made by referencing *A Manual of California Vegetation Second Edition* (Sawyer et al., 2009) to determine that there were no natural habitat types present in the BSA.

***Environmental Setting***

Considering that the project is located in a highly-urbanized area with developed and landscaped substrates, optimal habitat for special-status plant and wildlife species is lacking. The project site is bordered by residential homes to the north, east and south and a commercial area to the west. The project site is located in a highly-urbanized area, which provides low habitat value for special-status plant and wildlife species.

The project site itself has a relatively flat topography and comprises several buildings, artificial turf grass, a parking lot and various other structures. Some of the buildings include an existing Church, Parish Hall, and classroom building. Several large and smaller trees distributed throughout a spacious ornamental turf lawn and other landscaped areas around buildings cover about one third of the project site. In addition, approximately one third of the project site consists of paved or impervious surfaces such as a school playground, parking lots, and walkways.

The portion of the BSA outside of the project boundary comprises residential homes with landscaped yards, commercial buildings with some landscaping, parking lots, roads and other structures typical of urbanized areas. There is no critical habitat in the BSA. No special-status plants were observed within the BSA. The only land cover type within the BSA is Urban Developed/Ornamental and is described in the following paragraph (refer to **Figure 4.4-1**).

***Land Cover Types***

*Urban Developed/Ornamental*: Urban Developed/Ornamental lands are non-vegetated features within the BSA that describe areas occupied by manmade structures, paving and other impermeable surfaces that cannot support vegetation. Onsite developed lands consist of paved roads, parking lots, playground surfaces, walkways, classroom buildings, offices, and other permanent structures, which along with interspersed landscaped areas (ornamental trees, shrubs, turf lawn, etc.) of ornamental vegetation cover 3.85 acres. The offsite developed and landscaped areas cover 37.07 acres of the BSA. These developed areas provide limited habitat for wildlife species; however, birds use the ornamental trees for foraging, perching and likely for nesting. Similarly, fossorial (ground-burrowing) animals such as gophers and ground squirrels could utilize the sandy loam soils present in the BSA. Urban Developed/Ornamental land does not have a global or state rank and is not considered a sensitive plant community. There were no other land types observed within the BSA (CNPS, 2020b; Sawyer et al., 2009; USDA, 2006).

Impacts to Special-Status Plants

***Habitat Assessment and Tree Survey Findings***

UEI biologist Matthew Sutton conducted a habitat assessment survey on February 10, 2020 and a tree survey on February 10 and 12, 2020 at the project site. The following plants were found during the survey in the Urban Developed/Ornamental land type that represents the entire BSA:

- The majority of the plant species observed within the BSA were non-native, ornamental species. Offsite tree species included palm trees, conifers, oak, and several other evergreen and deciduous ornamental tree species. Onsite native and non-native tree species are reported below in the subsection discussing the tree survey results. Onsite shrub and forb species consisted of decorative species such as crossberry (*Grewia occidentalis*), myrtle-leaf milkwort (*Polygala myrtifolia*), juniper bush (*Juniperus chinensis*), tree mallow (*Lavatera maritima*), and chrysanthemum bush (*Dendranthema x grandiflora*). Throughout the BSA there are several lawns on private residential properties consisting of ornamental turf grass of various species. There are also several types of decorative shrub and forb species throughout the BSA in landscaped areas. No special-status plant species were observed in the BSA during the survey.

The UEI ISA-certified arborist, Matthew Sutton, conducted a tree survey on February 10 and 12, 2020 on the project site. A complete discussion of the survey methods, results, and recommendations is available in **Appendix C**, *Arborist Report*. All of the large onsite trees and trees within 10 feet of the curbs of the bordering streets, Morse Avenue and North Angelina Drive, were surveyed.

Onsite surveyed trees comprised all large trees and small trees growing within 10 feet of the curb of either North Angelina Drive or Morse Avenue. Large trees were defined as having a minimum diameter at breast height (DBH) of 24 inches or a height exceeding 30 feet. Small trees were defined as trees that did not meet the size criteria of large trees. Small trees that were not within 10 feet of the street curbs were recorded to species but were not surveyed for their characteristics.

Mr. Sutton grouped all onsite trees into three categories: Surveyed Protect Trees, Surveyed Removal Trees, and Non-Surveyed Removal Trees. Surveyed Protect Trees comprised Large trees that were scheduled for protection by the project applicant. Surveyed Removal Trees comprise all remaining Large trees and any small tree whose trunk was located within 10 feet of a street curb, all of which are scheduled for removal by the project applicant. Non-Surveyed Removal Trees comprised all Small trees that were not within 10 feet of a street curb, all of which are scheduled for removal by the project applicant.

In addition to mapping all surveyed trees, the UEI arborist gathered tree characteristics data, which included species, number of trunks per tree, trunk diameter, height, canopy diameter, and general health and vigor.

The UEI arborist surveyed 30 onsite trees (**Figure 4.4-2**). Of the 30 surveyed trees, six are Surveyed Protect Trees and 24 are Surveyed Removal Trees. Of the six Surveyed Protect Trees, four are native species, one coast live oak (*Quercus pacifica*) and three western sycamore (*Platanus racemosa*), and two are non-native ornamental species. Of the 24 Surveyed Removal Trees seven were native species and the other 17 were non-native ornamental tree species. The native Surveyed Removal Trees include, six western sycamore, and one Ponderosa pine (*Pinus ponderosa*). There were nine species of ornamental Surveyed Removal Trees. All 30 of the surveyed trees occur within the project boundary. Details about the surveyed and non-surveyed onsite trees are represented in **Appendix C**.

**Figure 4.4-2**
**TREE INVENTORY MAP**

The most common non-native Surveyed Removal Tree was carrotwood (*Cupaniopsis anacardioides*) with seven individuals surveyed onsite, and which mostly occur on the southern border of the property that abuts Morse Avenue. One of the Surveyed Removal Trees in the survey, Brazilian pepper tree (*Schinus terebinthifolius*), is classified as an invasive species with a moderate rating by the California Invasive Plant Council (Cal-IPC, 2020; SelecTree, 2020). Two species of the Surveyed Removal Trees are classified as invasive species with a limited rating (Cal-IPC, 2020; SelecTree, 2020): Peruvian pepper tree (*Schinus molle*) and black locust (*Robinia pseudoacacia*).

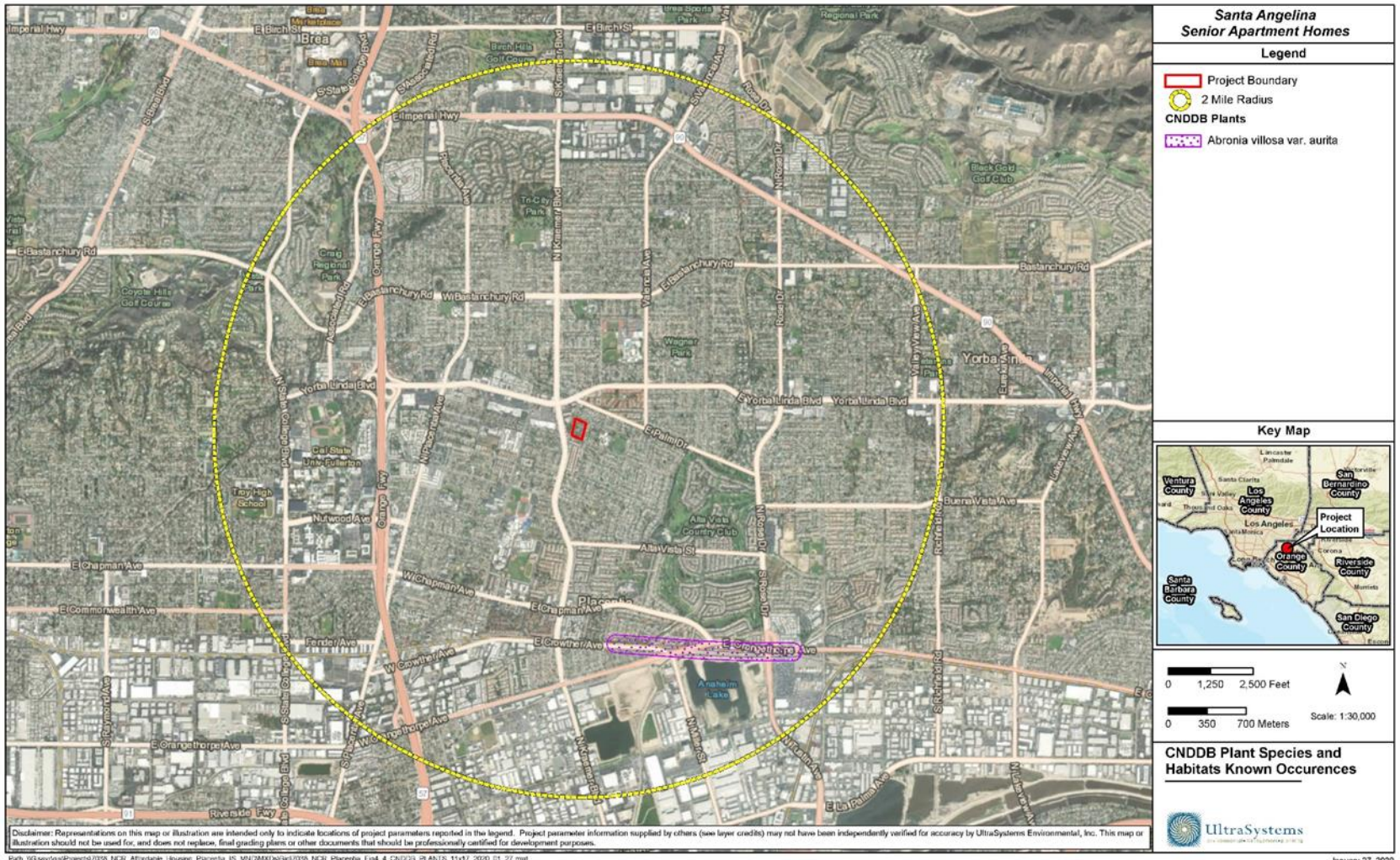
In addition to the 30 surveyed trees, the arborist also documented nine onsite Non-Surveyed Removal Trees, some distributed across the turf lawn and others in landscaped areas adjacent to the buildings. Of those nine trees, one was a native western sycamore tree and the other eight were non-native ornamental trees. None of the non-native, Non-Surveyed Removal Trees are classified as an invasive species (Cal-IPC, 2006).

***Literature Search Findings***

Based on a literature review and query from publicly available databases for reported occurrences, within a five-mile radius of the project site, a total of eight special-status plant species resulted from the query. One of these, chaparral sand-verbena (*Abronia villosa* var. *aurita*, 1B.1) had recorded observations within two miles of the project site (refer to **Figure 4.4-3,** *CNDDB Species Map*); however, there is not suitable habitat present within the BSA for this species or any of the other seven reported species. Therefore, none of the eight special-status plant species were determined to have a potential to occur within the project BSA because it lacks one or more of the following critical factors: a) suitable habitat for the establishment of those species; or b) the BSA is located within the species' reported geographic or elevation range. All federal, state and other agencies special-status species designations for plants and wildlife are represented in **Table 4.4-1**.

Due to several biological and physical disturbances within the BSA (which are listed below), it was determined that all eight of the special-status plant species identified in the 5-mile radius database query do not have the potential to occur in the BSA. First, there is a high level of soil compaction due to development and foot traffic. Many species cannot establish in compacted soils. Second, there is high cover of non-native ornamental landscaping species that occupy most of the available soils and thus greatly reduce available soil necessary for the recruitment and establishment of native plant species. Third, habitat fragmentation from development reduces the size of habitat patches containing contiguous stands of native vegetation. Fourth, the hydrology of the region has been altered from its historical pattern and it no longer operates as a floodplain. Some of the special-status species in this list require periodic flooding events in order for their germination and establishment to occur. For all of the abovementioned reasons, all eight special-status plant species were determined not to have the potential to occur within the BSA and will not be discussed further.

**Figure 4.4-3**
**CNDDB SPECIES MAP**



There are several special-status plant and wildlife species that occur in the vicinity of the project site. Their statuses as determined by various state, federal, regional and local regulatory agencies and the ranking notations from the most relevant agencies are listed below in **Table 4.4-1,** *Special-Status Plant and Wildlife Species Ranking Notations*.

**Table 4.4-1**
**SPECIAL-STATUS PLANT AND WILDLIFE SPECIES RANKING NOTATIONS**

| **California Endangered Species Act Listing Codes** | **Federal Endangered Species Act Listing Codes** |
|---|---|
| SE State listed as Endangered<br>ST State listed as Threatened<br>SCE State candidate for listing as Endangered | FE Federal listed as Endangered<br>FT Federal listed as Threatened |
| **USFWS Designations**<br>**BCC** = **bird of conservation concern**: a bird of conservation concern is listed in the USFWS' 2008 Birds of Conservation Concern report. The report identifies species, subspecies and populations of all migratory and non-migratory bird species (beyond those already designated as federally threatened or endangered) that, without additional conservation actions are likely to become candidates for listing under the Endangered Species Act (ESA). While all of the bird species included in the report are prioritized for conservation action, the list makes no finding with regard to whether they warrant consideration for ESA listing. | |
| **CDFW Designations**<br>**SSC = species of special concern:** a species of special concern is a species, subspecies, or distinct population of an animal (fish, amphibian, reptile, bird and mammal) native to California that currently satisfies one or more of the following (not necessarily mutually exclusive) criteria: is extirpated from the state or, in the case of birds, in its primary seasonal or breeding role; is listed as federally-, but not state-, threatened or endangered; meets the state definition of threatened or endangered, but has not formally been listed; is experiencing, or formerly experienced, serious (noncyclical) population declines or range retractions (not reversed) that, if continued or resumed, could qualify it for state threatened or endangered status; has naturally small populations exhibiting high susceptibility to risk from any factor(s), that if realized, could lead to declines that would qualify it for state threatened or endangered status.<br>**FP = fully protected:** this animal species may not be taken or possessed at any time and no licenses or permits may be issued for their take except for collecting these species for necessary scientific research and relocation of the bird species for the protection of livestock. Lists were created for fish (Fish and Game Code § 5515), amphibians and reptiles (Fish and Game Code § 5050), birds (Fish and Game Code § 3511) and mammals (Fish and Game Code § 4700).<br>**WL = watch list:** this list includes birds identified in the *California Bird Species of Special Concern* (Shuford and Gardali, 2008) report and are not on the current CDFW species of special concern list, but were on previous lists and they have not been state-listed under CESA; were previously state or federally listed and now are on neither list; or are on the list of fully protected species. | |
| **NatureServe Element Ranking: Global Ranking**<br>G1 Critically Imperiled – At very high risk of extinction due to extreme rarity (often 5 or fewer populations), very steep declines, or other factors.<br>G2 Imperiled – At high risk of extinction due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors.<br>G3 Vulnerable – At moderate risk of extinction due to a restricted range, relatively few populations (often 80 or fewer), recent and widespread declines, or other factors. | **NatureServe Element Ranking: State Ranking**<br>S1 Critically Imperiled – Critically imperiled in the state because of extreme rarity (often 5 or fewer populations) or because of factor(s) such as very steep declines making it especially vulnerable to extirpation from the state.<br>S2 Imperiled – Imperiled in the state because of rarity due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors making it very vulnerable to extirpation from the state.<br>S3 Vulnerable – Vulnerable in the state due to a restricted range, relatively few populations |

| | |
|---|---|
| G4 Apparently Secure – Uncommon but not rare; some cause for long-term concern due to declines or other factors.<br>G5 Secure – Common; widespread and abundant.<br>Subspecies Level – Taxa which are subspecies or varieties receive a taxon rank (T-rank) attached to their G-rank. | (often 80 or fewer), recent and widespread declines, or other factors making it vulnerable to extirpation from the state.<br>S4 Apparently Secure – Uncommon but not rare in the state; some cause for long-term concern due to declines or other factors.<br>S5 Secure – Common, widespread, and abundant in the state. |

**California Rare Plant Ranks (Based on ranking system developed by the California Native Plant Society [CNPS])**

**CRPR: 1B – California Rare Plant Rank 1B - plants rare, threatened, or endangered in California and elsewhere:** plants with a CRPR of 1B are rare throughout their range with the majority of them endemic to California. Most of the plants that are ranked 1B have declined significantly over the last century. All of the plants constituting CRPR 1B meet the definitions of § 2062 and § 2067 (CESA) of the Fish and Game Code, and are eligible for state listing. It is mandatory that they be fully considered during preparation of environmental documents relating to CEQA.

**CNPS Threat Ranks** – The CNPS Threat Rank is an extension added onto the California Rare Plant Rank (CRPR) (as a decimal code) and designates the level of threats by a 1 to 3 ranking with 1 being the most threatened and 3 being the least threatened. A Threat Rank is present for all CRPR 1B's, 2B's, 4's, and the majority of CRPR 3's. CRPR 4 plants are seldom assigned a Threat Rank of .1, as they generally have large enough populations to not have significant threats to their continued existence in California; however, certain conditions exist to make the plant a species of concern and hence be assigned a CRPR. In addition, all CRPR 1A and 2A (presumed extirpated in California), and some CRPR 3 (need more information) plants, which lack threat information, do not have a Threat Rank extension.

.1 – seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat)
.2 – moderately threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat)

Below is a list of eight special-status plant species that occur in the project vicinity (Calflora, 2020; CDFW, 2020a; CDFW, 2020b; CNPS, 2020a; Jepson Flora Project, 2020; Soil Survey Staff, 2019a; Soil Survey Staff, 2019b; USFWS, 2020a; USFWS, 2020b; USFWS, 2020c) but lack the potential to occur in the BSA due to lack of suitable habitat conditions:

- chaparral sand-verbena (*Abronia villosa* var*. aurita*); 1B.1
- Braunton's milk-vetch (*Astragalus brauntonii*); FE, 1B.1
- Nevin's barberry (*Berberis nevinii*); FE, SE, 1B.1
- intermediate mariposa lily (*Calochortus weedii* var. *intermedius*); 1B.2
- San Fernando Valley spineflower (*Chorizanthe parryi* var. *fernandina* FE, SE, 1B.1
- slender-horned spineflower (*Dodecahema leptoceras*); FE, SE, 1B.1
- Santa Ana River woollystar (*Eriastrum densifolium* ssp*. sanctorum*); FE, SE, 1B.1
- Gambel's water cress (*Nasturtium gambelii*); FE, ST, 1B.1

## Impacts to Special-Status Wildlife

*Habitat Assessment Survey Findings*

During the February 10, 2020 habitat assessment survey, 10 wildlife species were observed. Other than a lizard, neither terrestrial wildlife nor their sign (including burrows) were observed in the proposed project site during the biological survey. Nine bird species, seven of which are native to California were observed visually, by vocalization, or by their sign. The native bird species include Cooper's hawk (*Accipiter cooperii*, WL, G5, S4) Accipitridae, Allen's hummingbird (*Selasphorus sasin*,

BCC, G5, SNR/NR) Trochilidae, mourning dove (*Zenaida macroura*) Columbidae, American crow (*Corvus brachyrhynchos*) Corvidae, Mexican house finch (*Haemorhous mexicanus*) Fringillidae, band-tailed pigeon (*Patagioenas fasciata*) Columbidae, and black phoebe (*Sayornis nigricans*) Tyrannidae. Two non-native bird species were observed on the site: European Starling (*Sturnus vulgaris*) Sturnidae; and a parrot (*Amazonia* sp.) Psittacidae. In addition, a western side-blotched lizard (*Uta stansburiana elegans*) Phrynosomatidae, was observed onsite.

Two of the native bird species observed on the project site, Allen's hummingbird and Cooper's hawk, are special-status species. Other special-status wildlife species were not observed within the project site nor are they expected to occur due to lack of suitable habitat, and/or the site is outside of the known elevation, and/or general range of the target species. The breeding and foraging behaviors of the two observed special-status avian species and potential project impacts are discussed in the next two paragraphs.

Allen's hummingbirds were observed feeding in the canopy of a western sycamore tree. This species has been reported recently within 0.5 mile of the project site (eBird, 2017). They most commonly breed in scrub, chaparral and woodland habitats (CDFW, 2020b; Cornell, 2015), but also breed in pine, urban and redwood habitats. Although there are no scrub or woodland habitats in the BSA, there are several large ornamental trees onsite and offsite which these hummingbirds could use for breeding or foraging activities. Hummingbirds are dependent on an abundant insect and nectar supply. Considering that several flowering ornamental trees, shrubs and forbs such as carrotwood, pepper tree, melaleuca and cherry tree species are located on the project site, and within the BSA, there is adequate habitat for their foraging and breeding. Allen's hummingbirds breed between February and August. No nests were observed in the BSA during the survey. Tree removal activities associated with the project would directly impact nesting and breeding behavior of this bird; noise and dust generated by construction activities would indirectly impact its foraging and nesting behavior. With the implementation of mitigation measures **BIO-1 Pre-Construction Breeding Bird Survey** and **BIO-2 Biological Monitor for Nesting Birds**, the impacts of construction and project operations to Allen's hummingbird would be less than significant.

Another special-status bird species that was observed onsite is Cooper's hawk. Cooper's hawks occur in urbanized habitats such as this where there are numerous larger trees available for perching and abundant prey sources such as rodents and smaller birds. However, they prefer to breed in more densely wooded areas than occur in the BSA, such as woodland openings and edges of riparian and oak habitats (CDFW, 2020b; Cornell, 2015). None of the trees contained a raptor nest and the trees are routinely trimmed removing dense foliage needed for nesting cover. Thus, the onsite trees do not provide optimal nesting habitat for this raptor. Cooper's hawks breed between March and August. Tree removal activities associated with the project would directly impact nesting and breeding behavior of this raptor; noise and dust generated by construction activities would indirectly impact its foraging and nesting behavior. With the implementation of mitigation measures **BIO-1 Pre-Construction Breeding Bird Survey** and **BIO-2**, **Biological Monitor for Nesting Birds** the impacts of construction and project operations to Cooper's hawk would be less than significant.

No nests were observed during the February 10, 2020 biological survey. However, trees in adjacent properties within the typical 200 to 500-foot buffer zone[16] were not surveyed. Onsite and offsite trees and building structures could provide suitable future or current nesting sites for birds

16 Generally nesting bird surveys encompass a 200-foot buffer zone for passerine species, a 300-foot buffer zone for special-status species, and a 500-foot buffer zone for raptor species.

adapted to urban settings, including nesting sites for passerine species such as the ones observed during the biological survey. Birds that nest on the ground, such as killdeer (*Charadrius vociferus*) may also utilize the terrestrial areas within the project site for nesting.

Several bird species are protected by the Migratory Bird Treaty Act (MBTA) and the California Fish and Game Code (Sections 3503, 3503.5, and 3513), which render it unlawful to take native breeding birds, and their nests, eggs, and young. Indirect impacts on breeding birds could occur from increased noise, vibration, and dust during construction, which could adversely affect the breeding behavior of some birds, and lead to the loss (take) of eggs and chicks, or nest abandonment. Migratory avian species that may use portions of the area for nesting during the breeding season such as mourning dove are protected under the MBTA and the California Fish and Game Code. Construction-related activities that may include, but are not necessarily limited to, building demolition and/or relocation, grading, materials laydown, access and infrastructure improvements, and building construction, could result in the disturbance of nesting migratory species covered under the MBTA. With the implementation of mitigation measures **BIO-1 Pre-Construction Breeding Bird Survey** and **BIO-2 Biological Monitor for Nesting Birds**, impacts from construction and project operations would be less than significant.

*Literature Search Findings*

A literature review and site habitat assessment were conducted by UEI biologist Matthew Sutton. He concluded that the project site does not support habitat that is suitable to a diverse community of wildlife species. Thus, only a few special-status wildlife species have the potential to occur in the BSA.

Based on a literature review and query from publicly available databases for reported occurrences within a five-mile radius of the project site, 27 special-status wildlife species were reported as recent occurrences (≤ 20 years), were identified by historical observations within five miles of the BSA, are recognized as occurring based on previous surveys or knowledge of the area, or were observed during the habitat assessment survey. Of those 27 species, nine were determined to have a potential to occur within the project BSA as represented in **Table 4.4-2,** *Wildlife Literature Review Results – Potential to Occur* (refer to **Figure 4.4-4**).

**Table 4.4-2**
**WILDLIFE LITERATURE REVIEW RESULTS – POTENTIAL TO OCCUR**

| Scientific Name | Common Name | Status | General Habitat | Suitable Habitat Present in BSA (Yes, No) | Potential for Occurrence in the BSA |
|---|---|---|---|---|---|
| **Listed Endangered, Threatened, and Candidate Wildlife: Wildlife with official status under the federal Endangered Species Act (ESA) and/or the California Endangered Species Act (CESA). A species may have other sensitive designations in addition to their federal or state listing.** | | | | | |
| **Listed Invertebrates** | | | | | |
| *Bombus crotchii* | Crotch bumble bee | SCE, SSC, G5T4, S3S4 | Found in open grassland and scrub habitats. | No | Low potential for occurrence. Species was recorded within 3 miles (CDFW 2020a), the BSA does not supports suitable habitat within the project area. This habitat over much of the BSA may be too disturbed for their occurrence. This species may forage or move through the area; however, nesting habitat does not exist due to ongoing landscape maintenance and use of herbicides/pesticides. |
| **Sensitive Wildlife: These animals have no official status under the ESA and/or the CESA; however, they are designated as sensitive or locally important by federal agencies, state agencies, and/or local conservation agencies and organizations.** | | | | | |
| **Sensitive Birds** | | | | | |
| *Accipiter cooperii* | Cooper's hawk | WL, G5, S4 | In woodland openings and edges of deciduous, conifer and mixed woodland habitats and urban settings with forested areas. | Yes | Present. Species was recorded in the immediate vicinity (eBird, 2017) and the BSA supports moderately suitable habitat (larger pine and sycamore trees onsite). There are numerous small and medium-sized birds observed onsite such as house finch, hummingbirds, and mourning dove that could attract this species. |

| Scientific Name | Common Name | Status | General Habitat | Suitable Habitat Present in BSA (Yes, No) | Potential for Occurrence in the BSA |
|---|---|---|---|---|---|
| *Athene cunicularia* | burrowing owl | SSC, BCC, G4, S3<br><br>Season of Concern: burrowing sites and some wintering sites | Typical BUOW habitat is open, dry, flat ground or low rolling hills with sparse vegetation and available burrows. BUOWs are generally found in open country, where tree or shrub canopies cover less than 30% of the habitat. Typical habitats include annual and perennial grasslands, open agricultural areas, deserts floors, and vacant lots. Nest and roost burrows of the BUOW in California are most commonly dug by California ground squirrels (*Spermophilus beecheyi*). (*Thomomys bottae*), | Yes | Low potential for occurrence.<br>Species was recorded in the immediate vicinity (eBird 2017) and the BSA supports marginally suitable habitat (non-native grassland community). The loam and sandy loam soils on the project site provide a usable substrate for burrowing, however, , no burrows or California ground squirrels were observed within the BSA. However, valley pocket gopher burrows were observed onsite and may provide potential burrowing opportunities for dispersing burrowing owls. Transients may use the site between September and February when local, post-fledging owls and non-local, short-distance migrant owls disperse from nest areas to wintering sites. It is likely that the urban disturbance and feral domestic cats would preclude this species from using the site for anything other than resting and foraging. |
| *Falco peregrinus anatum* | American peregrine falcon | FP, BCC, G4T4, S3S4 | Found in a large variety of open habitats, including seacoasts, savannahs and high mountains. Prefer high ledges, generally 100 to 300 feet in height, that overlook water bodies for suitable nesting sites. Riparian areas and coastal and inland wetlands are important habitats year-round, especially in non-breeding seasons. | No | Low potential for occurrence.<br>Species was recorded in the immediate vicinity (CDFW, 2020a; eBird 2017), but the BSA supports only marginally suitable foraging habitat in the taller pine and sycamore trees onsite. The habitat in the BSA may lack sufficiently tall buildings or trees from which this species can hunt. |

| Scientific Name | Common Name | Status | General Habitat | Suitable Habitat Present in BSA (Yes, No) | Potential for Occurrence in the BSA |
|---|---|---|---|---|---|
| *Selasphorus rufus* | rufous hummingbird | BCC, G5, S1S2 | Riparian, open woodlands, chaparral, gardens, orchards. | Yes | Low potential for occurrence. Species was recorded in the immediate vicinity (eBird, 2017) and the BSA supports marginally suitable habitat (flowering ornamental trees and bushes onsite, but few with tubular flowers). This species may forage onsite during its migratory season in the summer months. |
| *Selasphorus sasin* | Allen's hummingbird | BCC, G5, SNR/SU | Sparse to dense scrub habitats. Sparse to open woodlands. Nest on twig or fork of tree or shrub. | Yes | Present. Species was recorded in the immediate vicinity (eBird, 2017) and the BSA supports marginally suitable habitat (flowering ornamental trees and bushes onsite). This species may forage onsite except during winter months when they migrate to Mexico. |
| *Setophaga petechia* | yellow warbler | SSC, BCC, G5, S3S4 | For breeding, the yellow warbler is restricted to the deciduous trees of the riparian woodland from coastal desert woodlands to the Sierra Nevada – willows (*Salix* sp.), cottonwoods (*Populus* sp.), aspens (*Populus* sp.), California sycamores (*Platanus racemosa*), and alders (*Alnus* sp.). Yellow warblers generally occupy riparian vegetation in close proximity to water along streams and in wet meadows and nesting habitat must contain dense understory vegetation. | No | Low potential for occurrence. Species was recorded in the immediate vicinity (CDFW, 2020a; eBird, 2017) and the BSA supports marginally suitable habitat (sycamore trees onsite). This species may forage onsite during its migratory season. However, since there is no riparian habitat or combination of tall trees and thickets within the BSA, this species may not find foraging opportunities in the BSA. |

| Scientific Name | Common Name | Status | General Habitat | Suitable Habitat Present in BSA (Yes, No) | Potential for Occurrence in the BSA |
|---|---|---|---|---|---|
| **Sensitive Mammals** | | | | | |
| *Eumops perotis californicus* | western mastiff bat | SSC, WBWG:H, G5T4, S3S4 | Found in a variety of habitats, such as semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, annual and perennial grasslands, palm oases, chaparral, desert scrub, and urban, but the species' distribution may be geomorphically determined, occurring primarily where there are significant rock features offering suitable roosting habitat. A cliff dwelling species, Western mastiff bats can also be found in similar crevices in large boulders and buildings. Western mastiff bats prefer deep crevices that are at least 15 or 20 feet above the ground. | No | Low potential for occurrence. Species was recorded in the immediate vicinity (CDFW, 2020a) and the BSA supports marginal foraging habitat (non-native grasses on homeowner's properties) for this species. Due to level of historic and recent disturbances in the region, and low diversity of prey species in this urbanized area, it is highly unlikely that this species would find foraging opportunities there. |
| *Nyctinomops femorosaccus* | pocketed free-tailed bat | SSC, WBWG:M, G4, S3 | Found in a variety of habitats, such as desert shrub and pine-oak habitats, but the species' distribution may be geomorphically determined, occurring primarily where there are significant rock features offering suitable roosting habitat. A cliff dwelling species, they can also | No | Low potential for occurrence. Species was recorded within three miles of the BSA (CDFW, 2020a) and the BSA supports marginal foraging habitat (non-native grasses on homeowner's properties) for this species. Due to level of historic and recent disturbances in the region, and low diversity of prey species in this urbanized area, it is highly unlikely that this species would find foraging opportunities there. |

| Scientific Name | Common Name | Status | General Habitat | Suitable Habitat Present in BSA (Yes, No) | Potential for Occurrence in the BSA |
|---|---|---|---|---|---|
| | | | be found in similar crevices in large boulders and buildings, and under roof tiles. Western mastiff bats prefer deep crevices that are at least 15 or 20 feet above the ground. | | |

***Notes**

- he BSA contains approximate elevations of 292 to 302 feet above mean sea level (amsl)
- The BSA comprises urban developed/ornamental land type
- **Low =** the BSA contains suitable habitat and is within the species' distribution; however, there is a low probability of occurrence due to lack of optimal foraging and/or nesting habitat.
- **Moderate =** the BSA contains suitable habitat and is within the species' distribution and there is a reasonable likelihood of occurrence due to the presence of favorable foraging and/or nesting habitat.
- **Yes** = the BSA is located within the species' known distribution, elevation range, and/or the BSA contains suitable habitats and/or soils to support the species. The species has a potential to occur within the BSA. Further evaluation is needed.
- **No** = the BSA is located outside the species' known distribution, elevation range, and/or the BSA lacks suitable habitats and/or soils to support the species. It is highly unlikely for the species to have a potential to occur within the BSA. No further evaluation is needed.

***California Endangered Species Act (CESA) Listing Codes:*** the CESA is administered by CDFW. The official listing of *Animals of California Declared to Be Endangered or Threatened* is contained in the California Code of Regulations, Title 14, § 670.5. Species and subspecies of California native animals are declared to be endangered or threatened as defined by §§ 2062 and 2067 of the Fish and Game Code.

- **SCE = state candidate for listing as endangered:** a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that the Fish and Game Commission has formally noticed published in the California Regulatory Notice Register as being under review by CDFW for addition to the list of endangered species, or a species for which the Fish and Game Commission has published a notice of proposed regulation to add the species to the list (Fish and Game Code § 2068).

***California Department of Fish and Wildlife (CDFW) Designations:***

For some wildlife species, the CNDDB is only concerned with specific portions of the life history, such as roosts, rookeries, or nesting colonies. For many species of birds, the primary emphasis is on the breeding population in California. For some species which do not breed in California but winter here, emphasis is on wintering range. The species of special concern (SSC) designation thus may include a comment regarding the specific protection provided such as nesting or wintering

- **SSC = species of special concern:** a species of special concern is a species, subspecies, or distinct population of an animal (fish, amphibian, reptile, bird and mammal) native to California that currently satisfies one or more of the following (not necessarily mutually exclusive) criteria: is extirpated from the state or, in the case of birds, in its primary seasonal or breeding role; is listed as federally-, but not state-, threatened or endangered; meets the state definition of threatened or endangered, but has not formally been listed; is experiencing, or formerly experienced, serious (noncyclical) population declines or range retractions (not reversed) that, if continued or resumed, could qualify it for state threatened or endangered status; has naturally small populations exhibiting high susceptibility to risk from any factor(s), that if realized, could lead to declines that would qualify it for state threatened or endangered status.

| Scientific Name | Common Name | Status | General Habitat | Suitable Habitat Present in BSA (Yes, No) | Potential for Occurrence in the BSA |
|---|---|---|---|---|---|

- **FP = Fully protected:** fully protected animal species may not be taken or possessed at any time and no licenses or permits may be issued for their take except for collecting these species for necessary scientific research and relocation of the bird species for the protection of livestock. Lists were created for fish (Fish and Game Code § 5515), amphibians and reptiles (Fish and Game Code § 5050), birds (Fish and Game Code § 3511) and mammals (Fish and Game Code § 4700).
- **WL = watch list:** this list includes birds identified in the *California Bird Species of Special Concern* (Shuford and Gardali, 2008) report and are not on the current CDFW species of special concern list, but were on previous lists and they have not been state-listed under CESA; were previously state or federally listed and now are on neither list; or are on the list of fully protected species.

***United States Fish and Wildlife Service (USFWS) Designations:***

- **BCC = bird of conservation concern:** a bird of conservation concern is listed in the USFWS' 2008 *Birds of Conservation Concern* report. The report identifies species, subspecies, and populations of all migratory and non-migratory bird species (beyond those already designated as federally threatened or endangered) that, without additional conservation actions, are likely to become candidates for listing under the ESA. While all of the bird species included in the report is priorities for conservation action, the list makes no finding with regard to whether they warrant consideration for ESA listing.

***Global Conservation Status Definitions***:

- **G1 = Critically Imperiled**: At very high risk of extinction due to extreme rarity (often 5 or fewer populations), very steep declines, or other factors.
- **G4 = Imperiled**: At high risk of extinction due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors.
- **G3 = Vulnerable**: At moderate risk of extinction due to a restricted range, relatively few populations (often 80 or fewer), recent and widespread declines, or other factors.
- **G4 = Apparently Secure**: Uncommon but not rare; some cause for long-term concern due to declines or other factors.
- **G5 = Secure**: Common, widespread and abundant.

1.

**Subspecies Level**

Taxa which are subspecies or varieties receive a taxon rank (T-rank) attached to their G-rank. Where the G-rank reflects the condition of the entire species, the T-rank reflects the global situation of just the subspecies. For example, the Point Reyes mountain beaver, Aplodontia rufa ssp. phaea is ranked G5T2. The G-rank refers to the whole species range i.e., Aplodontia rufa. The T-rank refers only to the global condition of ssp. phaea. Taxa which have taxonomic questions associated with them are assigned a letter Q notation. For example, G1Q indicates the element is very rare, but there are taxonomic questions associated with it.

***State Conservation Status Definitions:***

- **S1 = Critically Imperiled:** Critically imperiled in the state because of extreme rarity (often 5 or fewer populations) or because of factor(s) such as very steep declines making it especially vulnerable to extirpation from the state.
- **S2 = Imperiled:** Imperiled in the state because of rarity due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors making it very vulnerable to extirpation from the state.
- **S3 = Vulnerable:** Vulnerable in the state due to a restricted range, relatively few populations (often 80 or fewer), recent and widespread declines, or other factors making it vulnerable to extirpation from the state.

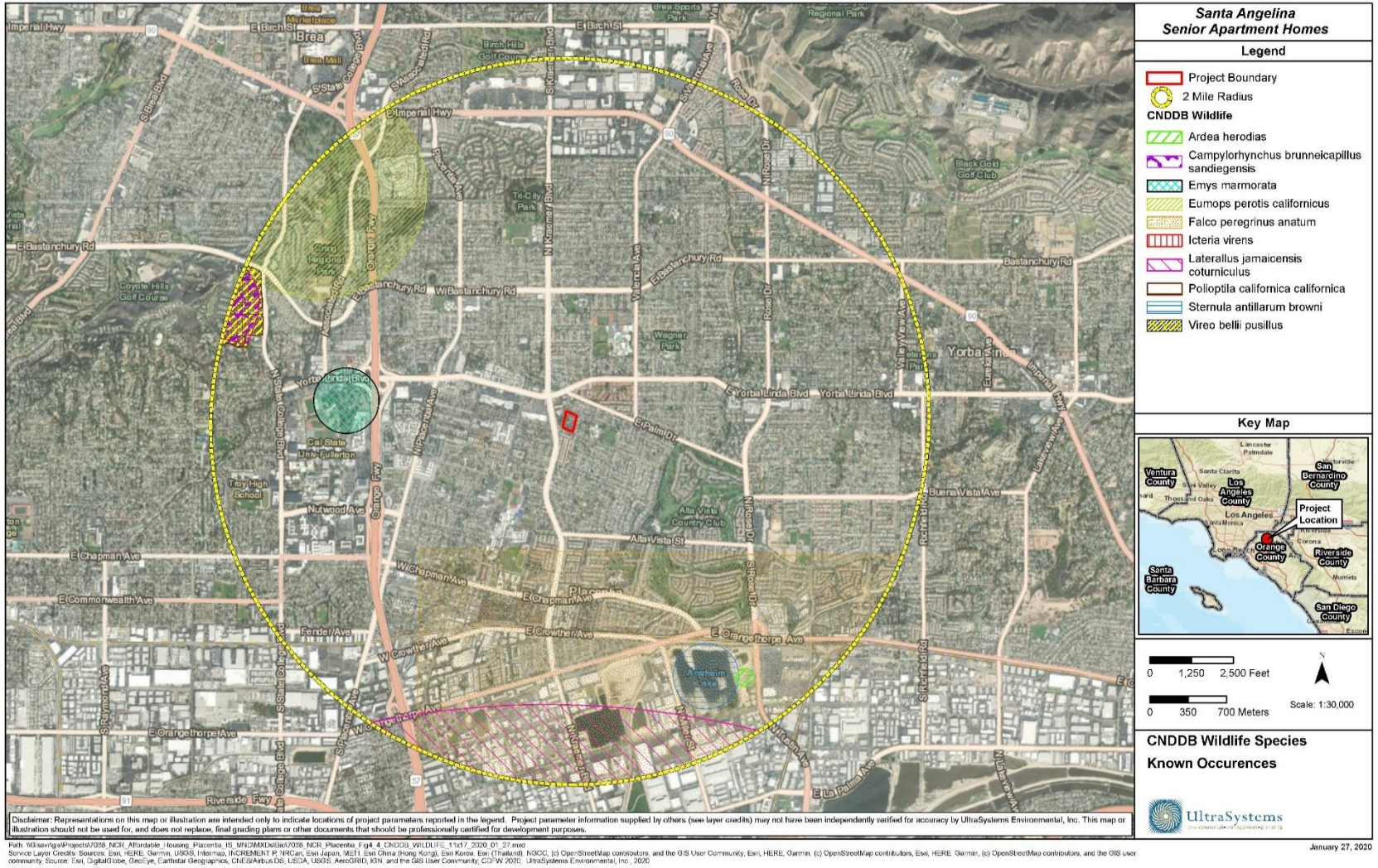
| Scientific Name | Common Name | Status | General Habitat | Suitable Habitat Present in BSA (Yes, No) | Potential for Occurrence in the BSA |
|---|---|---|---|---|---|

- **S4 = Apparently Secure:** Uncommon but not rare in the state; some cause for long-term concern due to declines or other factors.
- **SNR/SU = No Status Rank:** Common and not rare in the state; minimal cause for long-term concern due to declines or other factors.

***Western Bat Working Group (WBWG) Priority Matrix:*** The Western Bat Species Regional Priority Matrix is a product of the Western Bat Working Group Workshop held in Reno, Nevada, February 9-13, 1998. The matrix is intended to provide states, provinces, federal land management agencies, interested organizations and individuals a better understanding of the overall status of a given bat species throughout its western North American range. Subsequently, the importance of a single region or multiple regions to the viability and conservation of each species becomes more apparent. The matrix should also provide a means to prioritize and focus population monitoring, research, conservation actions, and the efficient use of limited funding and resources currently devoted to bats.

- **H** = **High** 'high' designation represents those species considered the highest priority for funding, planning, and conservation actions. These species are imperiled or are at high risk of imperilment.
- **M** = **Medium** 'medium' designation indicates a level of concern that should warrant closer evaluation, more research, and conservation actions of both the species and possible threats. A lack of meaningful information is a major obstacle in adequately assessing these species' status and should be considered a threat.

**Figure 4.4-4**
**CNDDB WILDLIFE SPECIES MAP**



The 18 reported special-status wildlife species (including mammals, birds, insects and reptiles) identified in the search that were determined to have no potential to occur within the project BSA are discussed briefly below because the BSA lacks suitable habitat for foraging, nesting or breeding, or the BSA does not lie within the species reported geographic or elevation range, or a combination of all of those factors (CDFW, 2019a; CDFW, 2019b; CDFW, 2020a; CDFW, 2020b; Cornell Lab of Ornithology, 2015; eBird, 2017; Soil Survey Staff, 2019a; Soil Survey Staff, 2019b; USFWS, 2008; USFWS, 2020a; USFWS, 2020b; USFWS, 2020c; USFWS, 2020e; WBWG, 2020; Zeiner et al., 1988-1990). These 18 species listed below comprise the following classes of wildlife species with number of species represented in parenthesis; birds (12), reptiles and amphibians (5), and fish (1).

- southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*); WL, G5, S3
- southern California legless lizard (*Anniella stebbinsi*); SSC, G3, S3
- great blue heron (*Ardea herodias*); SSC, G5, S4
- Swainson's hawk (*Buteo swainsoni*); ST, BCC, G5, S3
- coastal cactus wren (*Campylorhynchus brunneicapillus sandiegensis*); SSC, BCC, G5T3Q, S3
- Santa Ana sucker (*Catostomus santaanae*) FT, SSC, G1, S1
- western yellow-billed cuckoo (*Coccyzus americanus occidentalis*); FT, SE, BCC, G5T2T3, S1
- red-diamond rattlesnake (*Crotalus ruber*) SSC, G4, S3
- white-tailed kite (*Elanus leucurus*); FP, G5, S3S4
- western pond turtle (*Emys marmorata*); SSC, G3G4, S3
- California horned lark (*Eremophila alpestris actia*); WL, G5T4Q, S4
- yellow-breasted chat (*Icteria virens*); SSC, G5, S3
- California black rail (*Laterallus jamaicensis coturniculus*); FP, BSC, G3G4T1, S1
- Blainville's horned lizard (*Phrynosoma blainvillii*); SSC, G3G4, S3S4
- coastal California gnatcatcher (*Polioptila californica californica*); FT, SSC, G4G5T2Q, S2
- coast patch-nosed snake (*Salvadora hexalepis virgultea*); SSC, G5T4, S2S3
- California least tern (*Sternula antillarum browni*); FE, SE, FP, G4T2T3Q, S2
- least Bell's vireo (*Vireo bellii pusillus*); FE, SE, G5T2, S2

In total, there were six special-status bird species determined to have a low potential to occur in the BSA based on the literature review – a hummingbird, a raptor, an owl, and another passerine bird. Those species were as follows: rufous hummingbird (*Selasphorus rufus,* BCC, G5, S1S2) Trochilidae; American peregrine falcon (*Falco peregrinus anatum*, FP, BCC, G4T4, S3S4), Falconidae; burrowing owl (*Athene cunicularia*, SSC, BCC, G4, S3), Strigidae; and yellow warbler (*Setophaga petechia*, SSC, BCC, G5, S3S4), Parulidae. As discussed earlier, two special-status bird species, Cooper's hawk and Allen's hummingbird, were observed onsite.

In addition to the abovementioned avian species, the following special-status wildlife species and their respective classes were determined to have a low potential to occur in the BSA:

- Insects
    - Crotch bumble bee (*Bombus crotchii*, SCE, SSC, G5T4, S3S4), Apidae
- Mammals
    - western mastiff bat (*Eumops perotis californicus*, SSC, WBWG:H, G5T4, S3S4), Molossidae
    - pocketed free-tailed bat (*Nyctinomops femorosaccus*, SSC, WBWG:M, G4, S3), Molossidae

**Mitigation Measures**

**MM BIO-1: Pre-Construction Breeding Bird Survey**

If construction is anticipated to commence during the nesting season (between February 1 and August 31 of any given year, or as determined by a local CDFW office), a qualified avian biologist shall conduct a pre-construction nesting bird survey no earlier than one week prior to construction.

In accordance with the MBTA and California Fish and Game Code (CFGC) (3503, 3503.5, 3513), if an active bird nest of a protected species is located during the pre-construction survey and potentially will be affected, a no-activity buffer zone shall be delineated on maps and marked in the field by fencing, stakes, flagging, or other means up to 500 feet for raptors, or 100 feet for non-raptors. Materials used to demarcate the nests will be removed as soon as work is complete or the fledglings have left the nest. The qualified avian biologist will determine the appropriate size of the buffer zone based on the type of activities planned near the nest and bird species.

Buffer zones will not be disturbed until the qualified avian biologist determines that the nest is inactive, the young have fledged, the young are no longer being fed by the parents, the young have left the area, or the young will no longer be affected by project activities. Periodic monitoring by the qualified avian biologist will be performed to determine when nesting is complete. After the nesting cycle is complete, project activities may begin within the buffer zone.

**MM BIO-2: Biological Monitor for Nesting Birds**

If special-status wildlife species or nesting bird species are observed and determined present within the project site during the pre-construction breeding bird surveys, then a biological monitor shall be onsite to monitor throughout activities that result in tree or vegetation removal to minimize the likelihood of inadvertent impacts on nesting birds and other wildlife species. Monitoring shall also be conducted periodically during construction activities to ensure no new nests occur during any vegetation removal or building demolition activities between February 1 and August 31. The biological monitor shall ensure that all best management practices, avoidance, protection and mitigation measures described in the relevant project permits and reports are in place and are adhered to.

The biological monitor shall have the authority to temporarily halt all construction activities and all non-emergency actions if sensitive species and/or nesting birds are identified and would be directly affected. The monitor shall notify the appropriate resource agency and consult if needed. If necessary, the biological monitor shall relocate the individual outside of the work area where it will not be harmed. Work can continue at the location if the applicant and the consulted resource agency determine that the activity will not result in adverse effects on the species.

The appropriate agencies shall be notified if a dead or injured protected species is located within the project site. Written notification shall be made within 15 days of the date and time of the finding or incident (if known) and must include; location of the carcass, a photograph, cause of death (if known), and other pertinent information.

**Level of Significance After Mitigation**

With implementation of mitigation measures **BIO-1 Pre-Construction Breeding Bird Survey** and **BIO-2 Biological Monitor for Nesting Birds**, the proposed project would have less than significant impacts, either directly or through habitat modifications, to special-status plant and wildlife species.

**b) Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?**

**No Impact**

The project site is situated on relatively level ground, and consists of upland areas only; no ephemeral, intermittent, or perennial streams or rivers were observed during the biological survey. Vegetation within the BSA is mostly non-native grasses, and ornamental trees, shrubs and forbs. The BSA is either developed or landscaped and does not support riparian habitat or other sensitive natural communities. Both the literature review (USFWS, 2020c) and results of the reconnaissance-level field survey indicate that riparian habitat or other sensitive natural communities do not exist on or adjacent to the project site. Therefore, the project would not result in impacts on any riparian habitat, or sensitive natural communities identified in local, regional state, or federal plans, policies, or regulations. No impact would occur and no mitigation is proposed.

**c) Would the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?**

**No Impact**

As previously discussed, the project site is situated on relatively level ground in a developed suburban and commercial area. Wetlands, including marshes, vernal pools, or other waters of the U.S. or State, were not observed during the biological survey, nor identified during the literature review (USFWS, 2020d). The project would not directly remove, fill, or interrupt the hydrology of state or federal protected wetlands. Therefore, no direct or indirect impacts to federally-protected wetlands as defined by Section 404 of the Clean Water Act would occur and no mitigation is proposed.

**d) Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?**

**No Impact**

The project site and surrounding areas do not support resident or migratory fish species or wildlife nursery sites. The proposed project area is densely developed. The nearest natural area, the Chino Hills State Park, and the nearest resident or wildlife corridor are approximately 2.67 and 0.83 miles, respectively; the nearest Essential Connectivity Area and Natural Landscape Block are approximately 0.67 and 2.22 miles, respectively, from the proposed project site (Gogol-Prokurat, 2018; Rustigian-Romsos, 2017; Google Earth Pro, 2020). Taking into account the factors of distance from existing wildlife corridors and development, the project would not interfere with or impede: (1) the movement of any resident or migratory fish or wildlife species; (2) established resident or

migratory wildlife corridors; or (3) the use of wildlife nursery sites. No impact would occur and no mitigation is proposed.

**e) Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?**

**No Impact**

The City of Placentia recently adopted a tree ordinance that covers a broad set of regulations relating to tree and shrub management. This ordinance, Ordinance No. 0-2020-04, was adopted on June 2, 2020. This ordinance repeals the old Chapter 14.12 of the City ordinance for tree management entitled "Trees & Shrubs" and replaces it with a new version of Chapter 14.12 entitled "Urban Forest Protection Ordinance (UFPO)" (City of Placentia, 2020b); this new version codifies the UFPO, a program that presents regulations relating to the long-term management of City trees, as part of the Placentia Municipal Code.

City of Placentia ordinances such as the UFPO were reviewed during the planning of the tree survey for the Arborist Report (see **Appendix C**, *Arborist Report*) and it was determined that none apply to this project because there are no City trees within the project boundary. The tree survey was conducted to characterize the health and size characteristics of larger, onsite trees and to confirm whether any of the trees were located in City right-of-way. No City trees or protected trees would be impacted by the construction activities or project operations.

The City of Placentia recognizes that it is located in an urban setting, and has tailored the goals of its Conservation Element (City of Placentia, 2019b), and Sustainability Element (City of Placentia, 2019c) accordingly. To obtain its overall conservation goals with respect to development, the City has established objectives that focus on protecting biological resources. One way in which the City encourages conservation of resources is by encouraging the planting of native plants and the discontinuation of planting turf grass. The proposed project would remove the existing turf lawn and several ornamental trees, which would likely reduce water consumption compared to existing conditions. The project would not conflict with any local policies or ordinances protecting biological resources.

**f) Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?**

**No Impact**

This project is located within the general boundary of, but does not conflict with, the OCTA M2 Natural Community Conservation Plan/ Habitat Conservation Plan (OCTA, 2016; Mastair, 2020) because this plan applies only to transportation corridors, such as federal interstates (freeways) and state routes (highways) and their associated 300-foot buffer zones.

Therefore, this project is not located in an applicable Habitat Conservation Plan (HCP), Natural Communities Conservation Plan (NCCP), or other approved HCP area. For this reason, the project would not conflict with the provisions of an adopted HCP, NCCP, or other approved local, regional, or state HCP. Therefore, the project would have no impact in this regard.

## 4.5 Cultural Resources

| Would the project: | Potentially Significant Impact | Less than Significant Impact with Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| a) Cause a substantial adverse change in the significance of a historical resource pursuant to in § 15064.5? | | | | **X** |
| b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5? | | **X** | | |
| c) Disturb any human remains, including those interred outside of formal cemeteries? | | **X** | | |

Information from the Cultural Resources Inventory Report, dated January 16, 2020 (see **Appendix D1**), prepared for the Santa Angelina Senior Apartment Homes Project, City of Placentia by UltraSystems has been included within this section.

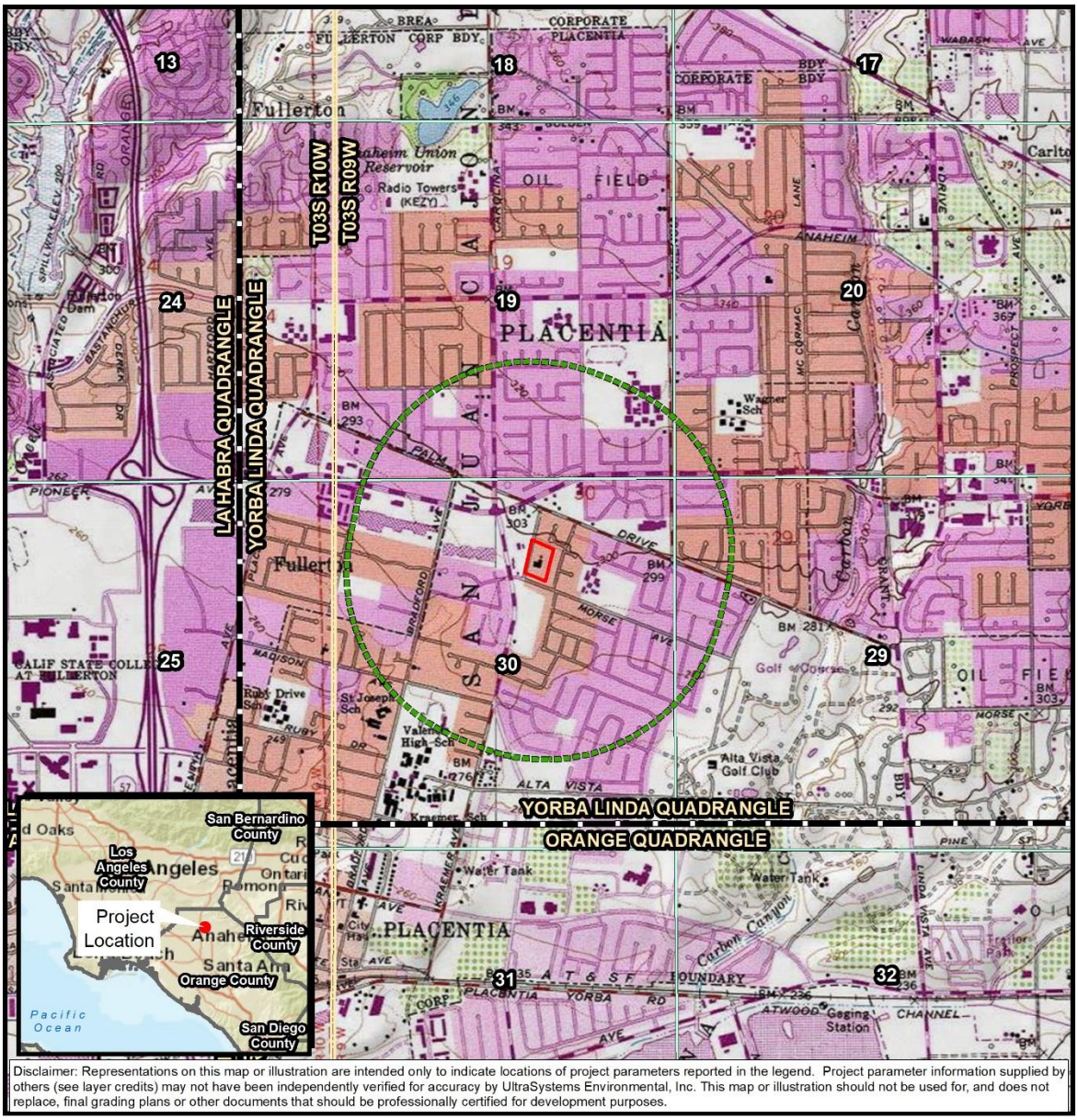
### 4.5.1 Methodology

A cultural resources inventory was conducted for the Santa Angelina Senior Apartment Homes Project site (**Figure 4.5-1**) that included a California Historic Resources Inventory System (CHRIS) records and literature search at the South Central Coastal Information Center (SCCIC) located at California State University, Fullerton. Additionally, a request was made to the Native American Heritage Commission (NAHC) to conduct a search of their Sacred Lands File (SLF) for potential traditional cultural properties as well as to provide a list of local Native American tribal organizations to contact. A pedestrian survey of the project site was also completed. The SCCIC records search was conducted on November 13, 2019. The NAHC request was made on November 8, 2019, and a reply was received on November 26, 2019; letters were sent to the listed tribes on December 6, 2019; follow-up telephone calls will be conducted following conclusion of the 30-day response period on January 8, 2020. The pedestrian field survey was conducted on December 19, 2019.

### 4.5.2 Existing Conditions

Based on the cultural resources records search, it was determined that no cultural resources have been previously recorded within the project site boundary. Within the half-mile buffer zone around the project site, there have been six previously recorded historic-era cultural resources, and no pre-historic resources. **Table 4.1-1** in **Appendix D1** of this document summarizes these resources.

**Figure 4.5-1**
**TOPOGRAPHIC MAP**



The several historic structures within the surrounding half-mile buffer zone of the project site are a variety of pioneer ranch homes and civic buildings dating to the early twentieth century (see Sections 2.2.3.3 and 4.1.1 in **Appendix D1**).

The Pierotti Ranch, also known as the Pierotti-Strain House, is located at 1731 Bradford Avenue, approximately 0.26 miles west of the project site. Recorded as 30-157208, it is a two-story white wood-sided frame house surrounded by various gardens and remnants of fruit orchards. It was constructed by the Pierotti family in 1909 who raised oranges; the Strain family bought land nearby and raised several crops and grazed livestock; the two families intermarried. This site was listed in the National Register of Historic Places in 1993.

The A. S. Bradford Home is located at 136 Palm Circle, Placentia, approximately 0.22 miles northwest of the project site. It was built by the founder of Placentia, Albert S. Bradford, in 1902, in the Colonial Revival style and is a two-story, 15 room residence. It is recorded as 30-160084, and is listed on the NRHP, and on the Orange County Point of Historic Interest listing in 1978.

The John Tuffree House is located at 1612 Kingston Road, approximately 0.38 miles northwest of the project site. Built by John Tuffree, son of one of Placentia's pioneers, he built this residence in 1918 near the family dairy farm and orchard. It is a two-story Spanish Colonial House with a flat roof; stucco-clad, red brick pattern on the parapet. Recorded as 30-177091, it "appears to be eligible for the NRHP on the basis of its architecture, its place as a center of community social life, and for its associations with John and Mable Tuffree, prominent members of the community."

The E. Boynton House (30-177108) is located at 1027 N. Kraemer Boulevard, approximately 0.30 miles southwest of the project site. A large two-story Spanish Colonial Revival residence with hipped-roof with red clay tiles and pueblo-style chimney, it was built by Boynton, a citrus rancher, in 1931.

The oldest building on the Valencia High School campus is a remaining wing of the Bradford School that was built in 1912. The entire campus is recorded as 30-177090; and the site appears to be eligible for the National Register for its architecture and its place in the broad patterns of Placentia's history. The high school is located at 500 N. Bradford Avenue; and while the portion of the campus closest to the project site is 2,000 feet to the south, this part of the campus contains its athletic fields, the campus structures with the Bradbury School building lie beyond the half-mile buffer zone of the project.

The "Church of the Lord" Annex (30-177066) is located at 1022 N. Bradford Avenue, approximately 0.39 miles southwest of the project site. This is a single-story structure with a bellcast hipped roof, narrow shiplap siding and five-panel doors all suggest construction around the turn of the 20th century. Work to the building does not appear original; thus, while the property may not be a National Register potential, it could be made a local landmark by the City of Placentia.

The proposed project would be constructed on the Blessed Sacrament Episcopal Church campus. This Church was built approximately 1957, and thus is over 50 years old. The Parish Hall wing was built around 1976, and a day school was added to the project site around 1998. The Church itself and the school will not be directly affected by the project construction, but the Parish Hall and northern portion of the connecting wing will be demolished and replaced. A Primary Site Record is being prepared to record this building (see Section 4.4 in **Appendix D1**).

### 4.5.3 Impact Analysis

**a) Would the project cause a substantial adverse change in the significance of a historical resource pursuant to in § 15064.5?**

**No Impact**

A historical resource is defined in § 15064.5(a)(3) of the *CEQA Guidelines* as any object, building, structure, site, area, place, record, or manuscript determined to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California. Historical resources are further defined as being associated with significant events, important persons, or distinctive characteristics of a type, period or method of construction; representing the work of an important creative individual; or possessing high artistic values. Resources listed in or determined eligible for the California Register, included in a local register, or identified as significant in a historic resource survey are also considered as historical resources under CEQA.

Similarly, the National Register criteria (contained in 36 CFR 60.4) are used to evaluate resources when complying with Section 106 of the National Historic Preservation Act. Specifically, the National Register criteria state that eligible resources comprise districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and that (a) are associated with events that have made a significant contribution to the broad patterns of our history; or (b) that are associated with the lives of persons significant in our past; or (c) that embody the distinctive characteristics of a type, period, or method of construction, or that possess high artistic values, or that represent a significant distinguishable entity whose components may lack individual distinction; or (d) that have yielded or may be likely to yield, information important to history or prehistory.

A substantial adverse change in the significance of a historical resource, as a result of a project or development, is considered a significant impact on the environment. Substantial adverse change is defined as physical demolition, relocation, or alteration of a resource or its immediate surroundings such that the significance of the historical resource would be materially impaired. Direct impacts are those that cause substantial adverse physical change to a historic property. Indirect impacts are those that cause substantial adverse change to the immediate surroundings of a historic property, such that the significance of a historical resource would be materially impaired.

Three existing buildings of the Blessed Sacrament Episcopal Church parish, namely the Church, Parish Hall and educational (Early Childhood Development Center) building, were constructed approximately 1957, 1976 and 1998, respectively, on the Church campus. Since their construction, these buildings have been nearly continuously occupied and used for their original purposes. All buildings remain intact and have had few alterations, especially on the exterior, and thus retain excellent integrity in relation to their periods of origin.

The history of the Church and Parish Hall buildings is related to the mid- to late-20th century community development in the City of Placentia. As two of the many surviving buildings of similar vintages in the City; however, they do not demonstrate a unique, important, or particularly close association with this event, nor are they known to be closely associated with any other important events or established themes in local history. Over the decades the buildings have hosted several Church leaders and members, many of them esteemed in the congregation, but this study has

uncovered no evidence that either of them has attained, through their association with the buildings, a level of historic significance that would meet the California Register criteria.

In terms of architectural, engineering, or aesthetic qualities, neither building is known to be an important example of any architectural style, property type, period, region, or method of construction, nor are they known to embody the work of architects, designers, or builders who have achieved historic distinction in their field. As a building of relatively plain California Craftsman style, the Church does not display a high level of artistic or aesthetic value, nor does it hold the potential for any important data for the study of national, state, or local history. Similarly, while the Parish Hall and childhood development educational buildings are examples of the Mid-Century Modern style, they do not occupy a distinguished position in the Modernist movement in architecture, nor does they otherwise exhibit an extraordinary artistic merit.

In light of these findings, the existing buildings of the Blessed Sacrament Episcopal Church at 1314 Angelina Drive do not appear to meet any of the criteria for listing in the California Register of Historical Resources, either individually or collectively. At this time, none of the three buildings bear any historic designation of the national or state level, nor are they officially listed in the Placentia list of Historic Sites (Draft General Plan pages 5-43 to 5-49 2019). The northern half of the Parish Hall will be demolished; the hall is approximately 44 years old and thus is under the 50 years or older threshold for being regarded as historic. Additionally, the hall does not possess significant associations of architecture or associated events. Including the Parish Hall in the California Department of Parks and Recreation historic site record of the Blessed Sacrament Episcopal Church campus would provide a sufficient record of the building.

With no impacts to the Church or school anticipated, and the Parish Hall not meeting criteria for a significant historic property, there will be no substantial adverse change in the significance of a historical resource pursuant to in § 15064.5, and therefore no impact in this regard.

**b) Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?**

**Less than Significant Impact with Mitigation Incorporated**

An archaeological resource is defined in § 15064.5(c) of the CEQA Guidelines as a site, area or place determined to be historically significant as defined in § 15064(a) of the CEQA Guidelines, or as a unique archaeological resource defined in § 21083.2 of the Public Resources Code as an artifact, object, or site that contains information needed to answer important scientific research questions of public interest or that has a special and particular quality such as being the oldest or best example of its type, or that is directly associated with a scientifically-recognized important prehistoric or historic event or person.

The past agricultural use on the project site and level elevation relative to adjacent roads suggests that ground on the project site has been minimally disturbed, with the native surface soil remaining. It is unlikely that undisturbed unique archeological resources exist on the project site. This is based upon the cultural resources investigation conducted by UltraSystems which included a CHRIS records search of the project site and buffer zone, a search of the SLF by the NAHC, and pedestrian field survey.

The cultural resources records search conducted at the SCCIC determined that there are no known prehistoric cultural resource sites or isolates recorded within the half-mile radius buffer area around

the project footprint and areas of direct and indirect impacts. The result of the pedestrian survey was negative for both prehistoric and historic sites and isolates on the project site.

According to records at the SCCIC, there have been no previous cultural resources surveys that included a portion of the project area. Three surveys were conducted within or intersecting the half-mile radius project buffer but were not within the project footprint or within areas of direct and indirect impacts (refer to Table 4.5-2 in **Appendix D1**). As noted above, none of these surveys recorded prehistoric or historic cultural resources within the project boundary.

A NAHC SLF search was conducted on and within a half-mile buffer around the project site. The NAHC letter of November 26, 2019 indicated that no records exist documenting the presence of traditional cultural properties within this area. Twenty-one representatives of 16 Native American tribes were contacted requesting a reply if they have knowledge of cultural resources in the area that they wished to share and asking if they had any questions or concerns regarding the project. These tribes included:

- Agua Caliente Band of Cahuilla Indians
- Gabrieleno Band of Mission Indians – Kizh Nation
- Gabrieleno/Tongva San Gabriel Band of Mission Indians
- Gabrielino / Tongva Nation
- Gabrielino Tongva Indians of California Tribal Council
- Gabrielino-Tongva Tribe
- Juaneño Band of Mission Indians (Johnston)
- Juaneño Band of Mission Indians Acjachemen Nation - Belardes
- Juaneño Band of Mission Indians Acjachemen Nation - Romero
- La Jolla Band of Luiseno Indians
- Pala Band of Luiseño Indians
- Pauma Band of Luiseño Indians
- Pechanga Band of Luiseño Indians
- Rincon Band of Luiseño Indians
- San Luis Rey Band of Mission Indians
- Soboba Band of Luiseño Indians

To date there have been four responses from the 16 tribes. The Rincon Band of Luiseño Indians and the Agua Caliente Band of Cahuilla Indians both stated that the project area is outside their tribes' traditional use area. Joyce Perry, representing the Juaneño Band of Mission Indians Acjachemen Nation – Belardes stated that if the Blessed Sacrament Church had been constructed prior to the 1980s then they request archaeological and tribal monitors be present during ground disturbing construction. The Administrative Specialist for the Gabrielino Band of Mission Indians – Kizh Nation replied for Chairperson Andrew Salas stating that the tribe wished to conduct AB 52 consultation concerning the project, but did not note any concerns or recommendations for the project. Following up on the initial letter and email contacts, telephone calls were conducted on January 9, 2020, to complete the outreach process. These calls were to the 13 tribal contacts who had not already responded to UEI mailing and email. Sonia Johnston, Chairperson of the Juaneño Band of Mission Indians was not contacted over telephone because a phone number was not provided. Seven telephone calls were placed with no answer and so messages were left describing the project and requesting a response. These were to Chairperson Anthony Morales, Chairperson of the Gabrielino/Tongva San Gabriel Band of Mission Indians; Chairperson Sandonne Goad, Chairperson of the Gabrielino/Tongva Nation; Mr. Charles Alvarez of the Gabrieleno-Tongva Tribe; Chairperson Fred Nelson, Chairperson of the La Jolla Band of Luiseño Indians; Shasta Gaughen, Tribal Historic Preservation Officer of the Pala Band of Mission Indians; Chairperson Mark Macarro, Chairperson of the Pechanga Band of Luiseño Indians; Scott Cozart, Chairperson of the Soboba Band of Luiseño

Indians. There have been no responses to date of the preparation of this report from these individuals.

During the telephone calls of November 9, 2020, Chairperson Robert Dorame of the Gabrielino Tongva Indians of California Tribal Council asked if we were performing consultation and we explained UEI was not the lead agency for AB 52 consultation, rather we were gathering data for our cultural resources report. The Chairperson asked for us to resend through email our original request to him; this was done the same day; no further response has been received. For the Juaneño Band of Mission Indians Acjachemen Nation we were directed to Cultural Resource Manager, Heidi Lucero. An email was sent to Ms. Lucero the same day; no further response was received. The Pauma Band of Luiseño Indians Chairperson, Temet Aguilar's assistant indicated that the tribe has a Cultural Committee that deals with cultural resources. She requested that UEI email her our request and that she would provide this directly to the committee; an email was sent to her the same day; no further response was received. The San Luis Rey Band of Mission Indians' receptionist indicated that all cultural resources questions should be directed to "Cami" and provided her telephone number. She was called; there was no answer and a message was left; no further response has been received. Joseph Ontiveros, of Cultural Resource Department of the Soboba Band of Luiseño Indians asked if he could call UEI back; no further response has been received. Juan Ochoa of the Pechanga Band of Luiseño Indians, assistant to the Cultural Resources Coordinator Paul Macarro, called and indicated that the project is outside of the tribe's area and that they would defer response to closer tribes. (See **Attachment C** of the Cultural Resources Inventory).

The result of the pedestrian survey was negative for both prehistoric and historic sites and isolates on the project site. Based on the results of the records search and the onsite field survey, it is unlikely that cultural resources would be adversely affected by construction of the project. However, grading activities associated with development of the project would cause new subsurface disturbance and may result in the unanticipated discovery of unique historic and/or prehistoric archeological resources. This impact would be potentially significant without mitigation. In the event of an unanticipated discovery, implementation of mitigation measures **CUL-1** and **CUL-2** below would ensure that impacts on archeological resources would be less than significant.

**Mitigation Measure**

**MM CUL-1** If archaeological resources are discovered during construction activities, the contractor will halt construction activities in the immediate area and notify the City. The project applicant shall retain an archaeologist who meets the Secretary of the Interior's Professional Qualifications Standards for Archaeology who will be notified and afforded the necessary time to recover, analyze, and curate the find(s). The qualified archaeologist will recommend the extent of archaeological monitoring necessary to ensure the protection of any other resources that may be in the area and afforded the necessary time and funds to recover, analyze, and curate the find(s). Construction activities may continue on other parts of the building site while evaluation and treatment of archaeological resources takes place.

**MM CUL-2** If evidence of an archaeological site or other suspected historical resource as defined by CEQA Guidelines § 15064.5, including darkened soil representing past human activity ("midden"), that could conceal material remains (e.g., worked stone, fired clay vessels, faunal bone, hearths, storage pits, or burials) are discovered during any project-related earth-disturbing activities, all earth-disturbing activities within 100 feet of the find shall be halted until the City of Placentia is notified. The project

applicant shall retain an archaeologist who meets the Secretary of the Interior's Professional Qualifications Standards for Archaeology to assess the significance of the find. Impacts on any significant resources shall be mitigated to a less-than-significant level through data recovery or other methods determined adequate by the archaeologist and that are consistent with the Secretary of the Interior's Standards for Archaeological Documentation. Any identified cultural resources shall be recorded on the appropriate DPR 523 (A-L) form and filed with the SCCIC. Construction activities may continue on other parts of the project site while evaluation and treatment of prehistoric archaeological resources takes place.

**Level of Significance After Mitigation**

With implementation of mitigation measures **CUL-1** and **CUL-2** above, the project would result in less than significant impacts to archeological resources.

**c) Would the project disturb any human remains, including those interred outside of formal cemeteries?**

**Less than Significant Impact with Mitigation Incorporated**

As previously discussed in **Section 4.5.b)** above**,** the project would be built on relatively undisturbed land, within suburban land that has not been previously graded. No human remains have been previously identified or recorded onsite.

The project proposes grading activities for the implementation of infrastructure that includes water, sewer, and utility lines. Grading activities associated with development of the project would involve new subsurface disturbance and could result in the unanticipated discovery of unknown human remains, including those interred outside of formal cemeteries. In the unlikely event of an unexpected discovery, implementation of mitigation measure **CUL-3** would ensure that impacts related to the accidental discovery of human remains would be less than significant.

California Health and Safety Code § 7050.5 specifies the procedures to follow during the unlikely discovery of human remains. CEQA § 15064.5 describes determining the significance of impacts on archeological and historical resources. California Public Resources Code § 5097.98 stipulates the notification process during the discovery of Native American human remains, descendants, disposition of human remains, and associated grave goods. Therefore, with adherence to applicable codes and regulations protecting cultural resources and implementation of mitigation measure **CUL-3**, potential impacts related to the discovery of unknown human remains would be less than significant.

**Mitigation Measure**

**MM CUL-3** If human remains are encountered during excavations associated with this project, all work will stop within a 30-foot radius of the discovery and the Orange County Coroner will be notified (§ 5097.98 of the Public Resources Code). The Coroner will determine whether the remains are recent human origin or older Native American ancestry. If the coroner, with the aid of the supervising archaeologist, determines that the remains are prehistoric, they will contact the NAHC. The NAHC will be responsible for designating the Most Likely Descendant (MLD). The MLD (either an individual or sometimes a committee) will be responsible for the ultimate disposition of the

remains, as required by § 7050.5 of the California Health and Safety Code. The MLD will make recommendations within 24 hours of their notification by the NAHC. These recommendations may include scientific removal and nondestructive analysis of human remains and items associated with Native American burials (§ 7050.5 of the Health and Safety Code).

**Level of Significance After Mitigation**

With implementation of **MM CUL-3** above, the Santa Angelina Senior Apartment Homes project would result in less than significant impacts to human remains.

## 4.6 Energy

| Would the project: | Potentially Significant Impact | Less than Significant Impact with Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation? | | | **X** | |
| b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency? | | | **X** | |

### a) Would the project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

**Less than Significant Impact**

According to the CEQA Guidelines § 15126.2(d), "uses of nonrenewable resources during the initial and continued phases of the project may be irreversible since a large commitment of such resources makes removal or nonuse thereafter unlikely. Primary impacts and, particularly, secondary impacts (such as highway improvement that provides access to a previously inaccessible area) generally commit future generations to similar uses. Also, irreversible damage can result from environmental accidents associated with the project. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified." Therefore, the purpose of this analysis is to identify any significant irreversible environmental effects of project implementation that cannot be avoided.

Both construction and operation of the project would lead to the consumption of limited, slowly renewable, and non-renewable resources, committing such resources to uses that future generations would be unable to reverse. The new development would require the commitment of resources that include (1) building materials, (2) fuel and operational materials/resources and (3) the transportation of goods and people to and from the project.

During project construction, energy would be consumed in the form of electricity associated with the conveyance of water used for dust control and, on a limited basis, powering lights, electronic equipment, or other construction activities necessitating electrical power. Construction activities for residential units and Church buildings typically do not involve the consumption of natural gas. Project construction would also consume energy in the form of petroleum-based fuels associated with the use of off-road construction vehicles and equipment on the project site, construction worker travel to and from the project site, and delivery and haul truck trips hauling solid waste from and delivering building materials to the project site. During project operation, energy would be consumed for multiple purposes, including heating, air conditioning, appliances, and use of electronics.

During project operations, energy would also be required for water transport, solid waste disposal, and vehicle trips. Estimated project operation total and per-capita[17] energy usage, which was estimated by CalEEMod as part of the greenhouse gas emissions analysis,[18] is shown in **Table 4.6-1.** Vehicle miles traveled (VMT) were used as a surrogate for energy from consumption of transportation fuels. While a variety of factors govern the relationship between VMT and fuel energy, in general, an increase in VMT results from an increase in motor vehicle energy use. Note that the table does not include energy use by existing buildings and activities; to obtain a conservative estimate of energy use impact, existing use was assumed to be zero.

The new buildings will be designed and built in compliance with the California Green Building Standards (CAL Green) Code (California Code of Regulations, Title 24, Part 11), which includes mandatory measures for nonresidential site development, energy efficiency, water efficiency and conservation, material conservation and resource efficiency, and environmental quality (CBSC, 2017, p. 2).

In the interest of energy efficiency, the buildings are being designed to accept solar panels and battery storage, in addition to high-efficiency HVAC systems. This will assist in increasing reliance on renewable energy resources and decreasing reliance on natural gas and oil. Therefore, the energy usage of the new building will be substantially lower than it would be in absence of the Green Code. Additionally, the project would comply with all applicable regulations and codes which require achievement of various levels of energy efficiency in building construction, design and operation.

The commitment of resources required for the construction and operation of the project would limit the availability of such resources for future generations or for other uses during the life of the project. However, the use of such resources would be reduced when compared to what they would be in the absence of complying with the CAL Green Code. Therefore, energy consumption would not result in a substantial increase in energy production for energy providers and the energy demand associated with the project would be less than significant.

**Table 4.6-1**
**ESTIMATED PROJECT OPERATIONAL ENERGY USE**

| Energy Type | Units | Value | Per Capita |
|---|---|---|---|
| Onroad Motor Vehicle Travel | Vehicle miles traveled per year | 878,632 | 4,964 |
| Natural Gas Use | 1,000 BTU per year | 912,430 | 5,155 |
| Electricity Use | Kilowatt-hours per year | 303,988 | 1,717 |

**Source**: UltraSystems, 2020

**b) Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?**

17 The divisor for the per capita calculations is 71 residential occupants, the minimum estimate developed in Section 4.14, plus 106 members of the church congregation.
18 See Section 4.8 (Greenhouse Gas Emissions).

**Less than Significant Impact**

As mentioned above, the proposed project would be in compliance with the California Green Building Standards (CAL Green) Code (California Code of Regulations, Title 24, Part 11), which includes mandatory measures for nonresidential site development, energy efficiency, water efficiency and conservation, material conservation and resource efficiency, and environmental quality (CBSC, 2017, p.2). Additionally, the City of Placentia does not have local energy plans. The City General Plan Sustainability Element has sustainability programs such as the Natural Gas Vehicle Station program, which offers CNG gas fuel for vehicles. (Tom Dodson & Associates, 2019, p. 4.7-3 to 4.7-4). Additionally, Placentia is involved in the Home Energy Renovation Program (HERO), offered through the Western Riverside Council of Governments, which allows residential and commercial property owners to finance various energy and water efficient improvements through the State of California's Property Assessed Clean Energy program (Tom Dodson & Associates, 2019, p. 4.7-3). However, those programs do not apply to the proposed project because the proposed project would not develop a fuel station, nor would there be renovation of existing buildings. Further, given the area's warm climate, the most important alternative and renewable energy resource in Placentia is solar energy. This energy source has considerable potential and can be developed to substitute for oil, gas and other energy supplies. Solar energy's ability to substitute for fossil fuels can be an important tool in the battle against air pollution (Tom Dodson & Associates, 2019, p. 4.7-3). The proposed project would install a solar photovoltaic (PV) system atop the buildings, which would further the City's goal of sustainability. Therefore, there would be no conflict, and there would be less than significant impacts.

## 4.7 Geology and Soils

| Would the project: | Potentially Significant Impact | Less than Significant Impact with Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: | | | | |
| i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42. | | | | **X** |
| ii) Strong seismic ground shaking? | | | **X** | |
| iii) Seismic-related ground failure, including liquefaction? | | | **X** | |
| iv) Landslides? | | | | **X** |
| b) Result in substantial soil erosion or the loss of topsoil? | | | **X** | |
| c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on or off-site landslide, lateral spreading, subsidence, liquefaction or collapse? | | **X** | | |
| d) Be located on expansive soil, as defined in Table 18-1 B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property? | | | **X** | |
| e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water? | | | | **X** |
| f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? | | **X** | | |

The information in this section is based on the following two technical reports:

- Preliminary Geotechnical Investigation, Proposed Residential Development, 1314 Angelina Drive, Placentia, California. Prepared by Albus Keefe & Associates Inc. dated January 10, 2020. A complete copy of this Report is included as **Appendix E** to this Initial Study.

- Paleontological Records Search for the proposed Affordable Housing Project in the City of Placentia, Orange County. Prepared by Natural History Museum of Los Angeles County, dated December 20, 2019. A complete copy of this Report is included as **Appendix D2** to this Initial Study.

**a) Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:**

**i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.**

**No Impact**

The Alquist-Priolo Zones Special Studies Act defines active faults as those that have experienced surface displacement or movement during the last 11,000 years. The project site is not located within a designated Alquist-Priolo Earthquake Fault Zone. As shown in **Figure 4.7-1, t**he nearest known fault is the Puente Hills blind thrust system, Coyote Hills Section (Class A; USGS, 2017) that is approximately one mile west of the proposed project site. This fault trends northeast, and is not likely to result in a surface rupture that would directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death.

The Alquist-Priolo Fault Zone nearest to the project site is the Elsinore Fault Zone, Whittier Section (Class A; USGS, 1998; SCEDC, 2019a; SCDEC, 2019b), which is located approximately three miles north of the project site and trends northwest to southeast along the base of the Coyote Hills (CGS, 2015; refer to **Figure 4.7-2)**.

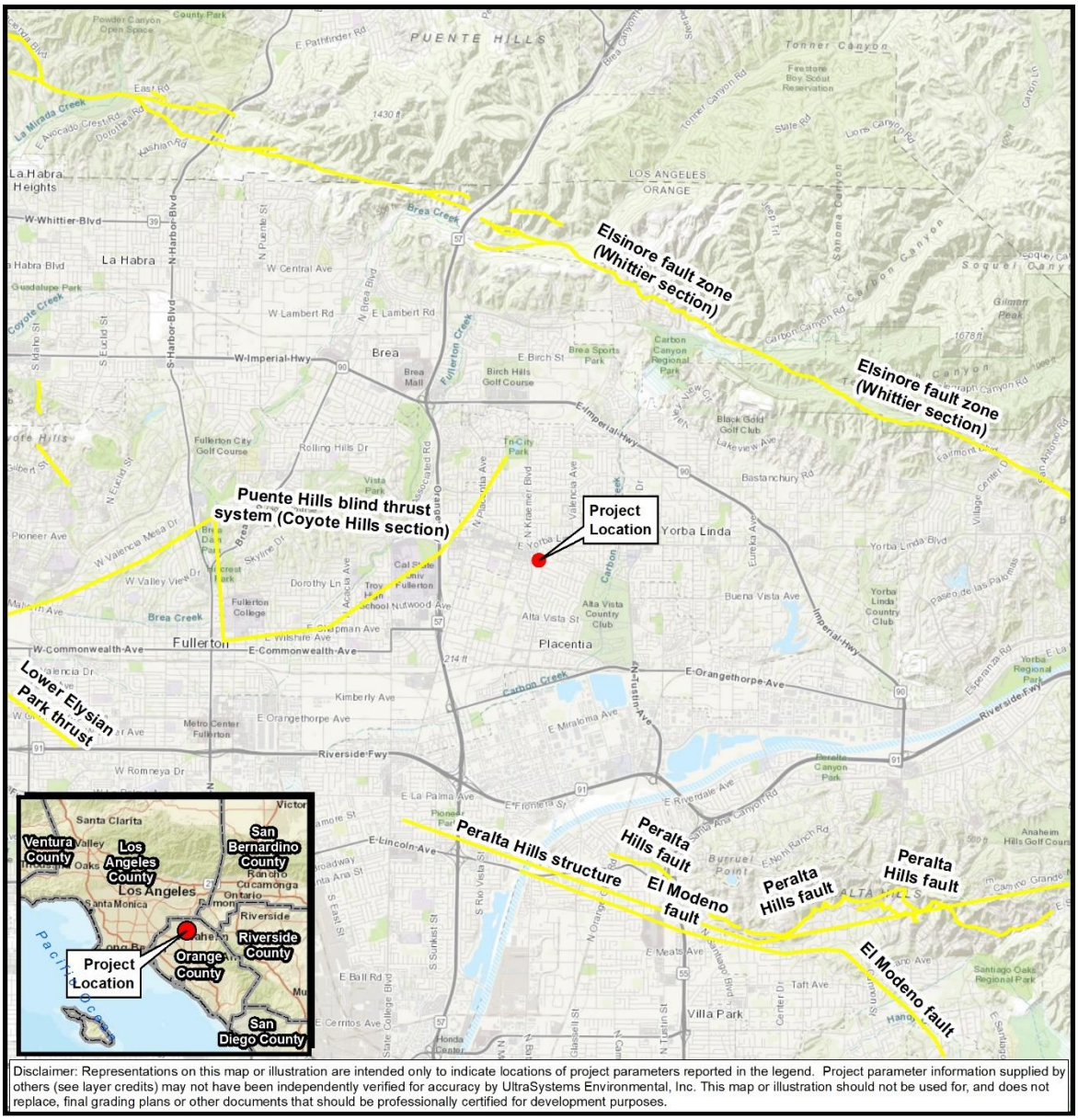
The nearest known earthquake fault and nearest Alquist-Priolo Zone to the proposed project site are approximately one mile and three miles, respectively, from the project site and neither fault is oriented such that a rupture of the fault would result in a surface rupture that would directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death. Development of the proposed project would not expose people or structures to potential substantial adverse effects from rupture of a known earthquake fault identified in the project geotechnical report or that is delineated on an Alquist-Priolo Earthquake Fault Zoning Map; no impact would occur, and mitigation is not required.

**ii) Strong seismic ground shaking?**

**Less than Significant Impact**

The project is located within a seismically active region of Southern California, and all structures in the region are susceptible to collapse, buckling of walls, and damage to foundations from strong seismic ground shaking. The closest Alquist-Priolo Earthquake Fault Zone is the Elsinore Fault Zone, Whittier Section located approximately three miles north of the project site.

## Figure 4.7-1
## REGIONALLY ACTIVE FAULTS




Disclaimer: Representations on this map or illustration are intended only to indicate locations of project parameters reported in the legend. Project parameter information supplied by others (see layer credits) may not have been independently verified for accuracy by UltraSystems Environmental, Inc. This map or illustration should not be used for, and does not replace, final grading plans or other documents that should be professionally certified for development purposes.

Path: \\Gissvr\gis\Projects\7038_NCR_Affordable_Housing_Placentia_IS_MND\MXDs\7038_NCR_Placentia_Fig_4_6_Active_Faults_2020_01_19.mxd
January 19, 2020

Service Layer Credits: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community, Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community; USGS 2018; UltraSystems Environmental, Inc., 2020

Scale: 1:95,040

N

0 0.75 1.5 Miles

0 1 2 Kilometers

**Legend**

- Project Location
- Quaternary Fault

**Santa Angelina Senior Apartment Homes**

Regionally Active Faults

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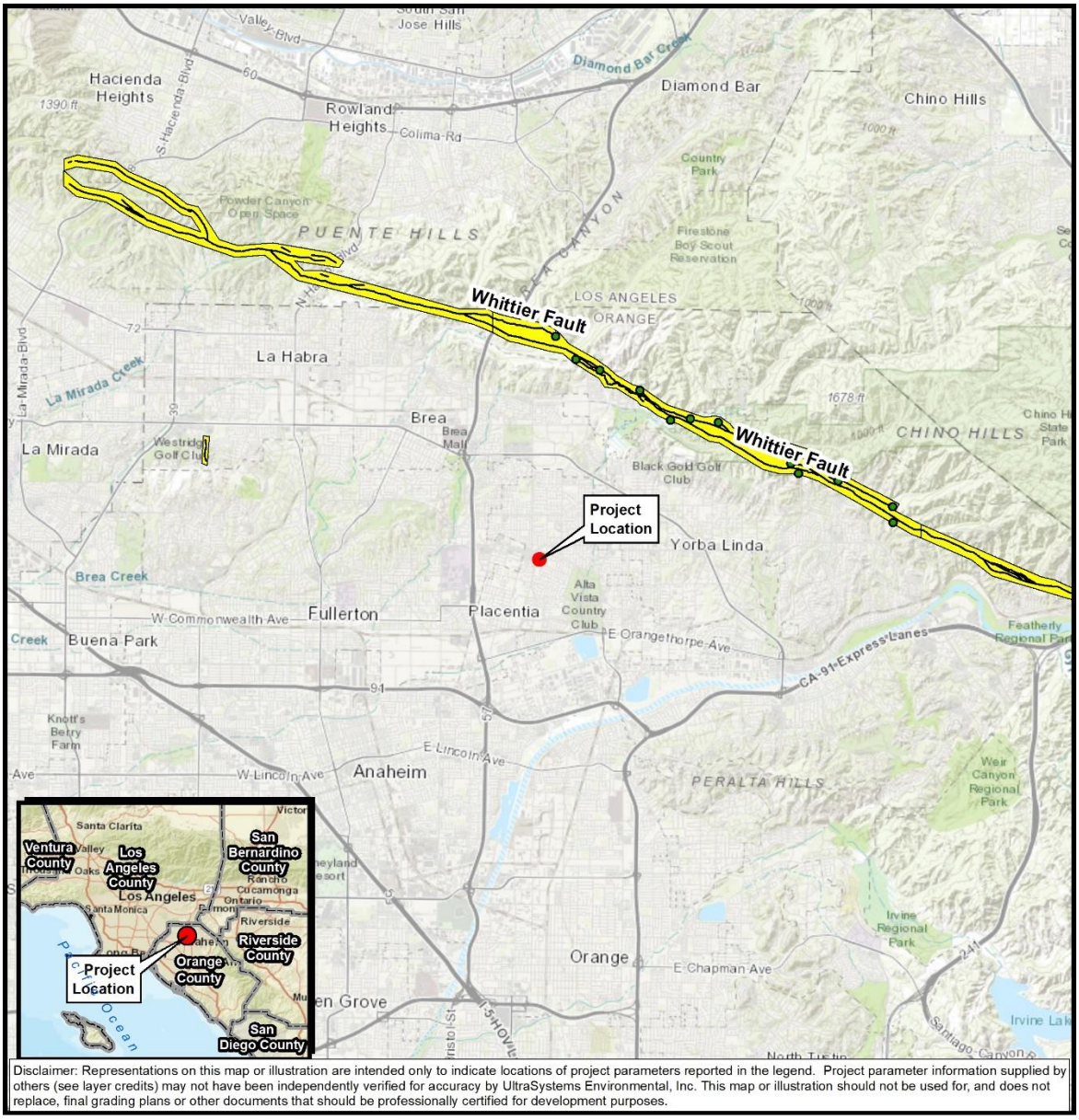
**Figure 4.7-2**
**ALQUIST PRIOLO FAULT ZONES**

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Path: \\Gissvr\gis\Projects\7038_NCR_Affordable_Housing_Placentia_IS_MND\MXDs\7038_NCR_Placentia_Fig_4_6_Alquist_Priolo_2020_01_19.mxd
January 19, 2020

Service Layer Credits: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community, Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community; CA Dept. of Conservation, 2019; UltraSystems Environmental, Inc., 2020

Scale: 1:142,560

N

0 1.125 2.25 Miles

0 1.2 2.4 Kilometers

**Legend**

- Project Location
- Fault Trace
- Alquist-Priolo Earthquake Fault Zone

**Santa Angelina Senior Apartment Homes**

Alquist Priolo Earthquake Fault Zones

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The project would be constructed in accordance with the applicable 2019 California Building Code (CBC) adopted by the legislature, issued by the California Building Standards Commission and used throughout the state (California Code of Regulations, Title 24). In addition, the CBC is included by reference in the City's Municipal Code (City of Placentia, 2020) and provides minimum standards to protect property and for public welfare by regulating the design and construction of excavations, foundations, building frames, retaining walls, and other building elements to mitigate the effects of seismic shaking and adverse soil conditions. The CBSC contains provisions for earthquake safety based on factors including occupancy type, the types of soil and rock onsite, and the strength of ground motion with specified probability of occurring at the site.

Although the project site is susceptible to occasional moderate/high ground shaking from seismically active fault zones in the Southern California region, design and construction in accordance with the CBC would address issues related to potential seismic ground shaking at the site (Albus-Keefe & Associates, 2020, p. 10). For these reasons, impacts from strong seismic ground shaking would be less than significant and mitigation is not proposed.

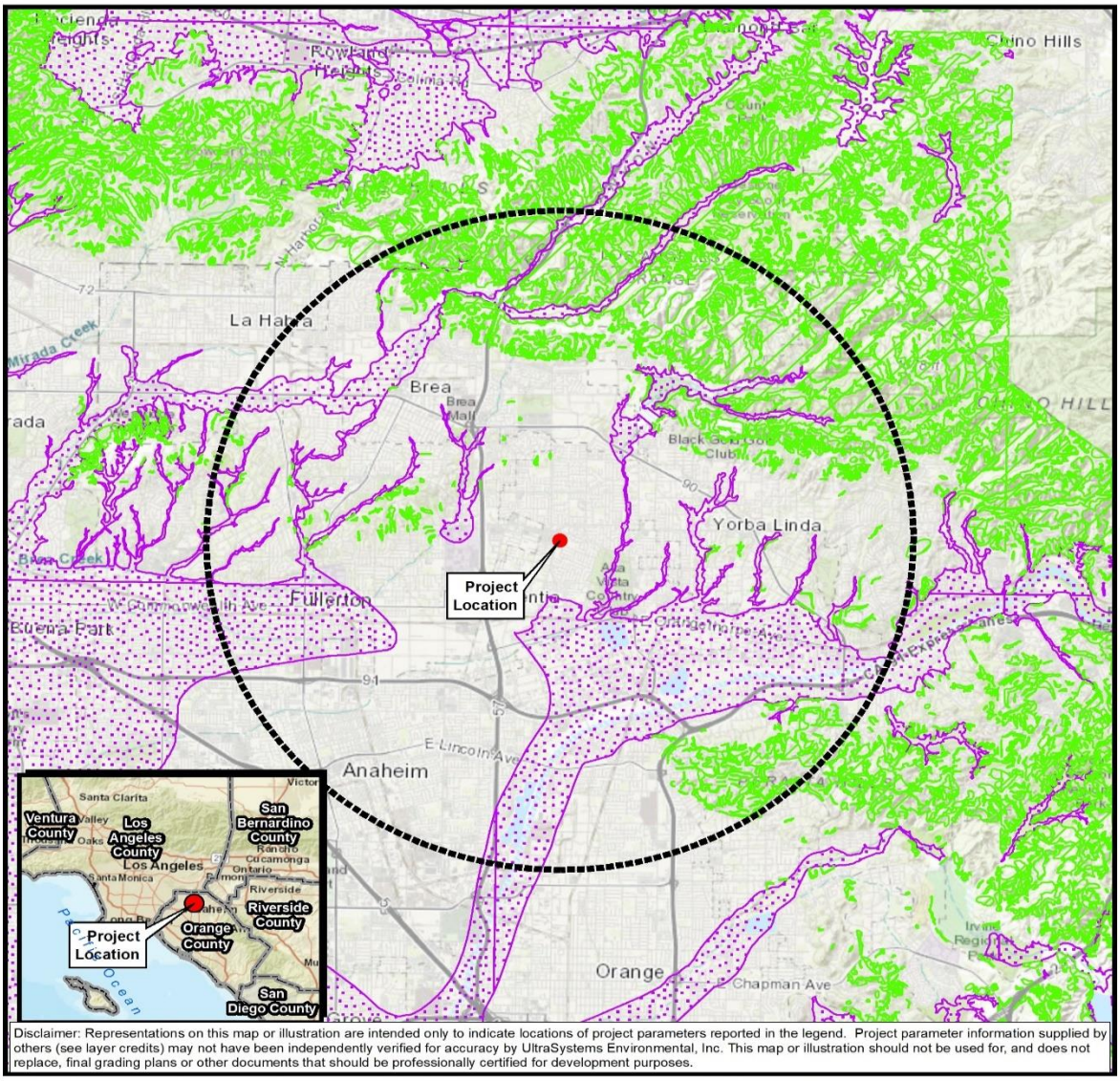
**iii) Seismic-related ground failure, including liquefaction?**

**Less than Significant Impact**

General types of ground failures that might occur as a consequence of severe ground shaking typically include landslides, ground subsidence, ground lurching and shallow ground rupture. The probability of occurrence of each type of ground failure depends on the severity of the earthquake, distance from the faults, topography, subsoils and relatively shallow groundwater tables (approximately 50 feet or less below ground surface), in addition to other factors.

Liquefaction typically occurs when saturated or partially saturated soils behave like a liquid, as a result of losses in strength and stiffness in response to an applied stress caused by earthquake shaking or other sudden change in stress conditions. The California Statewide Groundwater Elevation Monitoring (CASGEM) Program tracks seasonal and long-term groundwater elevation trends in groundwater basins statewide. The CASGEM monitoring well nearest to the proposed project site is located approximately 0.59 mile northeast of the site. The highest groundwater level recorded at this well was 147.78 feet (ground surface to water surface, or GS to WS) recorded on June 5, 2013. The most recent measurement was recorded on November 13, 2013; on this date, depth to groundwater was 159.26 feet GS to WS (CASGEM, 2019). Additionally, as shown in **Figure 4.7-3**, the project site is not located within or adjacent to a liquefaction zone (Albus-Keefe & Associates, 2020, p. 11). Liquefaction potential onsite is considered to be low based on the presence or potential presence of three main factors contributing to susceptibility to liquefaction—strong ground shaking; relatively loose, silty or sandy soils; and groundwater within approximately 50 feet of the ground surface (Albus-Keefe, 2020, p. 11). Furthermore, compliance with federal, state, and local regulations, including the CBC and the City's Municipal Code, would minimize potential seismic-related ground failure, including liquefaction, that could be exacerbated by project development. Impacts would be less than significant, and mitigation is not proposed.

**Figure 4.7-3**
**LANDSLIDES AND LIQUEFACTION**



**iv) Landslides?**

**No Impact**

Landslides occur when the stability of the slope changes from a stable to an unstable condition. A change in the stability of a slope can be caused by a number of factors, acting together or alone. Natural causes of landslides include groundwater (pore water) pressure acting to destabilize the slope, loss of vegetative structure, erosion of the toe of a slope by rivers or ocean waves, weakening of a slope through saturation by snow melt or heavy rains, earthquakes adding loads to barely stable slope, earthquake-caused liquefaction destabilizing slopes, and volcanic eruptions.

Topography within the project site is relatively flat. The project is approximately 298 feet above mean sea level (Google Earth Pro, 2019). As shown in **Figure 4.7-3**, the project site is not located within or adjacent to an earthquake-induced landslide zone (Albus-Keefe & Associates, 2020, p. 10). Additionally, the project site is located in a flat, developed suburban area that does not contain steep slopes or hills. Therefore, the potential for development of the proposed project inducing or being impacted by landslides is negligible and mitigation is not proposed.

**b) Would the project result in substantial soil erosion or the loss of topsoil?**

**Less Than Significant Impact**

Two soil units have been mapped on the project site by the USDA Soil Survey:

**Table 4.7-1**
**USDA SOILS MAPPED ON THE PROJECT SITE**

| Soil Name (Map Unit Numbers) | K Factor (Whole Soil) | Wind Erodibility Group | Liquid Limit (Percent) | Plasticity Index and Expansion Potential |
|---|---|---|---|---|
| Mocho loam, 0 to 2 percent slopes, warm MAAT, MLRA 19 (166) | 0.32 | 6 | 36.5 | 16.6/Medium |
| Myford sandy loam, 2 to 9 percent slopes (173) | 0.32 | 3 | 33.5 | 15.0/Medium |

**Sources**: Soil Survey Staff 2019a, 2019b; Day 2000.

Under current conditions, approximately 52 percent of the project site is covered by impervious surfaces including pavement and buildings. The remainder of the project site contains areas of landscaping. Ground-disturbing construction activities such as grading and excavation would increase the potential for erosion by water and wind.

Erosion factor K (refer to **Table 4.7-1**) indicates the susceptibility of a soil to sheet and rill erosion by water. K Factor is estimated based primarily on percentage of silt, sand, and organic matter, and on soil structure and saturated hydraulic conductivity (Ksat). Values of K range from 0.02 to 0.69. Other factors being equal, the higher the value, the more susceptible the soil is to sheet and rill erosion by water (Soil Survey Staff, 2019a, p. 25). Both of the soil units mapped on the project site have a K factor of 0.32, indicating that both soils are moderately susceptible to sheet and rill erosion by water.

A wind erodibility group (WEG) consists of soils that have similar properties affecting their susceptibility to wind erosion in cultivated areas. The soils assigned to group 1 are the most susceptible to wind erosion, and those assigned to group 8 are the least susceptible (Soil Survey Staff, 2019a, p. 30). Approximately 75 percent of the proposed project site has been mapped as having Myford sandy loam (Map Unit Number 173), which has a WEG rating of 3, indicating that this soil has a moderate to high susceptibility to wind erosion. The remainder of the project site is mapped with Mocho Loam (Map Unit Number 166), which has a WEG rating of 6 (Soil Survey Staff, 2019a, pp. 30 and 34). This soil has a moderate to low potential for wind erosion.

The project site would be most susceptible to erosion during the construction phase, when soil is exposed, and before landscaped areas have been installed. To minimize the potential for water and wind erosion, the project would adopt construction best management practices (BMPs) in accordance with the County of Orange Drainage Management Plan (DAMP). The DAMP requires construction site to implement control practices that address soil erosion/sedimentation to avoid or minimize the transport of soil or contaminants offsite (OCPW, 2003, Section 8.0). The project would also be required to implement site-specific construction stormwater BMPs designed to avoid or minimize wind- and water erosion, as described in the required SWPPP (see **Section 4.10**).

As designed, the project would be developed with a mix of impervious surfaces such as concrete and pavement. In addition, the project proposes the development of grass and landscaped areas, including landscaping along the site boundary. This combination of impervious surfaces and landscaped areas would reduce the operational potential of the proposed project for soil erosion to a negligible level.

With the implementation of soil erosion and sedimentation BMPs during the construction phase and the proposed combination of impervious and landscaped surfaces during the operational phase, the project would have less than significant impacts related to soil erosion or loss of topsoil and mitigation is not proposed.

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

**Less than Significant Impact with Mitigation Incorporated**

The proposed project site straddles two geologic units:

Soil materials encountered at the subject site generally consisted of Quaternary-aged alluvium (Qal); the Quaternary Period extends from 2.58 million years before present to the present. The alluvial materials were encountered to the maximum depth explored of 51.5 feet and are comprised of interbedded layers of damp to moist, reddish brown and light reddish-brown sandy clay, silty sand, clayey sand, silty clay, and sand. The granular alluvial soils are typically medium dense while the fine-grained alluvial soils are typically very stiff to hard.

Artificial fill materials were encountered within the parking lot in the southwest part of the project site with an approximate thickness of 4 feet. The artificial fill consists of a sandy clay, grayish brown, moist, very stiff with fine to medium grained sand.

- Young Alluvial Fan Deposits are unconsolidated to slightly consolidated, undissected to slightly dissected boulder, cobble, gravel, sand, and silt deposits issued from a confined canyon or body. These are surficial deposits, Holocene to Late Pleistocene in nature; and

- Very Old Alluvial Fan Deposits which are moderately to well-consolidated, highly dissected boulder, cobble, gravel, sand, and silt deposits issued from a confined valley or canyon. These are also surficial deposits, but are Middle to Early Pleistocene in age (Bedrossian et.al., 2012).

Natural deposits of alluvial soil may have an unstable soil structure which collapses when wet (Day, 2000, p. 9.16). The liquid limit of a soil indicates the plasticity characteristics of a soil. It is the water content at which the soil changes from a plastic to a liquid state. Generally, the amount of clay-and silt-size particles, the organic matter content, and the type of minerals determine the liquid limit. Soils that have a high liquid limit have the capacity to hold a lot of water while maintaining a plastic or semisolid state. The soils mapped on the project site are natural alluvial soils, and have moderate liquid limit ratings (Soil Survey Staff, 2019, pp. 24 and 28; see Table 4.7-1).

Collapsible soils shrink upon being wetted and/or being subject to a load. Existing artificial fills on the project site are considered unsuitable for support of the proposed development. In addition, the near-surface alluvial soils are compressible, which would result in excessive settlement of the proposed project unless these soils are removed and recompacted as described in the project Preliminary Geotechnical Investigation Report (Albus-Keefe & Associates, 2020, p. 11). Proposed project impacts respecting unstable soils would be potentially significant. Mitigation measure **GEO-1** is recommended to reduce potential impacts from settlement, subsidence, or collapse to a less than significant level.

Lateral spreading is the downslope movement of surface sediment due to liquefaction in a subsurface layer. The downslope movement is due to gravity and earthquake shaking combined. Lateral spreading of the ground surface during a seismic activity usually occurs along the weak shear zones within a liquefiable soil layer and has been observed to generally take place toward a free face (i.e., retaining wall, slope, or channel) and to lesser extent on ground surfaces with a very gentle slope.

Impacts related to liquefaction and landslides are discussed above in Section 4.7 a) above. Furthermore, as described in previous responses, the site possesses low probability of landslides and liquefaction. Additionally, the project would be constructed in accordance with the requirements of the City of Placentia, CBC, and the Occupational Safety and Health Administration, which are designed to assure safe construction and include building foundation requirements appropriate to site-specific conditions.

**Mitigation Measure**

**MM GEO-1** To minimize potential impacts resulting from unstable soils, prior to the issuance of a certificate of occupancy, the project applicant shall implement applicable recommendations provided in Section 6.0 of the Preliminary Geotechnical Investigation Report dated January 10, 2020 for the proposed project prepared by Albus Keefe & Associates.

**Level of Significance After Mitigation**

Impacts resulting from unstable soils would be less than significant after implementation of mitigation measure **GEO-1**, which requires implementation of applicable recommendations from the Geotechnical Investigation Report for the proposed project.

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

**Less than Significant Impact**

Expansive soils shrink and swell with changes in soil moisture. Soil moisture may change from landscape irrigation, rainfall, and utility leakage. The soils mapped on the project site have plasticity indices of 16.6 and 15.0, respectively, both of which correspond to a medium expansion potential (Soil Survey Staff, 2019, p. 39; Day, 2000, p. 12.6). Moreover, the Preliminary Geotechnical Investigation determined that the near-surface soils at the level of the proposed basement subgrade within the project site are anticipated to possess a Low to Medium expansion potential (Albus-Keefe & Associates, 2020, p. 12).

The geotechnical investigation report provided recommendations for engineering of fill soils and for foundation design (continuous footings, spread footings, and slabs on grade) to minimize hazards from expansive soils, in accordance with City of Placentia and the CBC requirements (see **MM GEO-1**).

The project would be designed and constructed in accordance with the requirements of the City of Placentia and the CBC, which requires soil tests be performed on sites where expansive soils may occur (CBSC 2019, § 1803.5.3) and includes building foundation requirements appropriate to site-specific conditions, such as expansive soils.

The proposed project would be designed and constructed in compliance with the requirements of the City of Placentia and applicable California Building Codes. Impacts related to expansive soils would be less than significant, and mitigation is not proposed.

**e) Would the project have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?**

**No Impact**

The project site is currently connected to the City of Placentia's sewer system, and the project would also connect to existing sewers. Therefore, the project would not use septic tanks or alternative wastewater disposal systems. For this reason, no impacts associated with septic tanks or alternative waste water disposal systems would occur.

**f) Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?**

**Less than Significant Impact with Mitigation Incorporated**

The project site boundary encompasses two separate but related geological deposits (DOC, 2005). The northern half of the project site is underlain by Quaternary Young Surficial Deposits (Qyf). This deposit consists of lightly consolidated to cemented, undissected to slightly dissected deposits of unsorted boulders, cobbles, gravel, and sand and dates to the Holocene (11,650 years before present [ybp] to present) and late Pleistocene (126,000 to 11,650 years ybp) (DOC, 2005). The southern half of the project site is underlain by Quaternary Very Old Surficial Deposits (Qvof). This deposit consists of moderately consolidated and moderately to well dissected and dates to the middle (760,000-126,000 ybp) to early Pleistocene (2.59 million to 760,000 ybp) (DOC, 2005). The soil at the northern portion of the project site is also described as "Young Quaternary Alluvium, whereas the southeastern portion of the proposed project area has surface deposits composed of older Quaternary Alluvium, both derived as alluvial fan deposits from the Chino Hills to the northeast broadly via Carbon Canyon Creek that currently flows to the east" (McLeod 2019:1). Deposits of younger Quaternary Alluvium "typically do not contain significant vertebrate fossils, at least in the uppermost layers, but at depth there are older Quaternary deposits such as occur in the southeastern portion of the proposed project area that may well contain significant fossil vertebrate remains" (McLeod 2019:1).

Excavations or grading that extend into the uppermost layers of soil and younger Quaternary Alluvium in the proposed project area are unlikely to encounter significant fossil vertebrate remains. Significant vertebrate fossils could be encountered with deeper excavation as well as any excavations in the older Quaternary Alluvium sediments.

Any substantial excavations below the uppermost layers should be closely monitored to quickly and professionally collect any specimens without impeding development. Grading and excavation activities associated with development of the project would cause new subsurface disturbance and could result in the unanticipated discovery of paleontological resources.

**Mitigation Measure**

**MM GEO-2** Prior to the issuance of the grading permit, the applicant shall provide a letter to the City of Placentia Planning Department, or designee, from a qualified paleontologist stating that the paleontologist has been retained to provide services for the project. The paleontologist shall develop, as needed, a Paleontological Resources Impact Mitigation Plan (PRIMP) to mitigate the potential impacts to unknown buried paleontological resources that may exist onsite for the review and approval by the City. The PRIMP shall require that the paleontologist perform paleontological monitoring of any ground disturbing activities within undisturbed native sediments during mass grading, site preparation, and underground utility installation. The project paleontologist may reevaluate the necessity for paleontological monitoring after 50 percent or greater of the excavations have been completed. In the event paleontological resources are encountered, ground-disturbing activity within 50 feet of the area of the discovery shall cease. The paleontologist shall examine the materials encountered, assess the nature and extent of the find, and recommend a course of action to further investigate and protect or recover and salvage those resources that have been encountered. Criteria for discard of specific fossil specimens will be made explicit. If the qualified paleontologist determines that impacts to a sample containing significant paleontological resources cannot be avoided by project planning, then recovery may be applied. Actions may include recovering a sample of the fossiliferous

material prior to construction, monitoring work and halting construction if a significant fossil needs to be recovered, and/or cleaning, identifying, and cataloging specimens for curation and research purposes. Recovery, salvage and treatment shall be done at the Applicant's expense. All recovered and salvaged resources shall be prepared to the point of identification and permanent preservation by the paleontologist. Resources shall be identified and curated into an established accredited professional repository. The paleontologist shall have a repository agreement in hand prior to initiating recovery of the resource.

**Level of Significance After Mitigation**

With implementation of **MM GEO-2**, potential impacts to paleontological resources would be reduced to a less than significant level.

## 4.8 Greenhouse Gas Emissions

| Would the project: | Potentially Significant Impact | Less than Significant Impact with Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? | | | **X** | |
| b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases? | | | **X** | |

### 4.8.1 Background Information on Greenhouse Gas Emissions

Life on earth depends on energy coming from the sun. About half the light reaching Earth's atmosphere passes through the air and clouds to the surface, where it is absorbed and then radiated upward in the form of infrared heat. About 90% of this heat is then absorbed by carbon dioxide ($CO_2$) and other greenhouse gases (GHG) and radiated back toward the surface, which is warmed to a life-supporting average of 59 degrees Fahrenheit (°F) (NASA, 2018).

Human activities are changing the natural greenhouse. Over the last century, the burning of fossil fuels such as coal and oil has increased the concentration of atmospheric $CO_2$. This happens because the coal or oil burning process combines carbon in the fuel with oxygen in the air to make $CO_2$. To a lesser extent, the clearing of land for agriculture, industry, and other human activities has increased concentrations of GHGs (NASA, 2018).

GHGs are defined under the California Global Warming Solutions Act of 2006 (AB 32) as $CO_2$, methane ($CH_4$), nitrous oxide ($N_2O$), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulfur hexafluoride ($SF_6$). [19]

Associated with each GHG species is a "global warming potential" (GWP), which is a value used to compare the abilities of different GHGs to trap heat in the atmosphere. GWPs are based on the heat-absorbing ability of each gas relative to that of $CO_2$, as well as the decay rate of each gas (the amount removed from the atmosphere over a given number of years). The GWPs of $CH_4$ and $N_2O$ are 25 and 298, respectively (GMI, 2019). "Carbon dioxide equivalent" ($CO_2e$) emissions are calculated by weighting each GHG compound's emissions by its GWP and then summing the products. HFCs, PFCs, and $SF_6$ would not be emitted in significant amounts by Santa Angelina Senior Apartment Homes project (Santa Angelina Project or project) sources, so they are not discussed further.

**Carbon Dioxide ($CO_2$)**. Carbon dioxide is a colorless, odorless gas consisting of molecules made up of two oxygen atoms and one carbon atom. $CO_2$ is produced when an organic carbon compound (such as wood) or fossilized organic matter (such as coal, oil, or natural gas) is burned in the presence of oxygen. Since the industrial revolution began in the mid-1700s, industrial activities have increased

19 http://www.leginfo.ca.gov/pub/05-06/bill/asm/ab_0001-0050/ab_32_bill_20060927_chaptered.pdf.

in scale and distribution. Prior to the industrial revolution, $CO_2$ concentrations were stable at a range of 275 to 285 ppm (IPCC, 2007a). The National Oceanic and Atmospheric Administration's Earth System Research Laboratory indicates that global concentration of $CO_2$ was 413.67 parts per million (ppm) in March 2020 (ESRL, 2020). These concentrations of $CO_2$ exceed by far the natural range over the last 650,000 years (180 to 300 ppm) as determined from ice cores.

**Methane ($CH_4$)**. Methane is a colorless, odorless non-toxic gas consisting of molecules made up of four hydrogen atoms and one carbon atom. $CH_4$ is combustible, and is the main constituent of natural gas, a fossil fuel. $CH_4$ is released when organic matter decomposes in low oxygen environments. Natural sources include wetlands, swamps and marshes, termites, and oceans. Anthropogenic sources include the mining of fossil fuels and transportation of natural gas, digestive processes in ruminant animals such as cattle, rice paddies, and the buried waste in landfills. Over the last 50 years, human activities such as growing rice, raising cattle, using natural gas, and mining coal have added to the atmospheric concentration of $CH_4$. Other anthropogenic sources include fossil-fuel combustion and biomass burning.

**Nitrous Oxide ($N_2O$)**. Nitrous oxide is a colorless, non-flammable gas with a sweetish odor, commonly known as "laughing gas," and sometimes used as an anaesthetic. $N_2O$ is naturally produced in the oceans and in rainforests (USEPA, 2019b). Manmade sources of $N_2O$ include the use of fertilizers in agriculture, nylon and nitric acid production, cars with catalytic converters and the burning of organic matter. Concentrations of $N_2O$ also began to rise at the beginning of the industrial revolution.

### 4.8.2 Regulatory Setting

GHGs are regulated at the national, state, and air basin level; each agency has a different degree of control. The United States Environmental Protection Agency (USEPA) regulates at the national level; the California Air Resources Board (ARB) regulates at the state level; and the South Coast Air Quality Management District (SCAQMD) regulates at the air basin level in the Santa Angelina project area.

#### 4.8.2.1 Federal Regulations

The USEPA collects several types of GHG emissions data. These data help policy makers, businesses, and the USEPA track GHG emissions trends and identify opportunities for reducing emissions and increasing efficiency. The USEPA has been maintaining a national inventory of GHG emissions since 1990 and in 2009 established mandatory reporting of GHG emissions from large GHG emissions sources.

Previous USEPA efforts documented through historical website material reflecting the USEPA website as it existed on January 19, 2017 (USEPA, 2017a) include regulatory initiatives such as mobile source GHG emission standards and the Clean Power Plan; partnering with the private sector through voluntary energy and climate programs; and reducing USEPA's carbon footprint with the federal GHG requirements and USEPA's Strategic Sustainability Performance Plan. The current administration has a different strategy in relation to climate change and is taking the USEPA in a new direction (USEPA, 2017b). Executive Order (EO) on Energy Independence (White House, 2017) specifically addresses revisions in the Clean Power Plan and standards of performance for GHGs for new stationary sources; $CH_4$ standards for the oil and gas sector; and light-duty vehicle GHG standards.

#### 4.8.2.2 State Regulations

**Executive Order S 3-05**

On June 1, 2005, the governor issued EO S 3-05, which set the following GHG emission reduction targets:

- By 2010, reduce GHG emissions to 2000 levels;
- By 2020, reduce GHG emissions to 1990 levels;
- By 2050, reduce GHG emissions to 80% below 1990 levels.

To meet these targets, the Climate Action Team (CAT)[20] prepared a report to the Governor in 2006 that contains recommendations and strategies to help ensure that the targets in EO S-3-05 are met.

**Assembly Bill 32 (AB 32)**

In 2006, the California State Legislature enacted the California Global Warming Solutions Act of 2006, also known as AB 32. AB 32 focuses on reducing GHG emissions in California. GHGs, as defined under AB 32, include $CO_2$, $CH_4$, $N_2O$, HFCs, PFCs, and $SF_6$. AB 32 requires that GHGs emitted in California be reduced to 1990 levels by the year 2020. The ARB is the state agency charged with monitoring and regulating sources of emissions of GHGs that cause global warming. AB 32 also requires that by January 1, 2008, the ARB must determine what the statewide GHG emissions level was in 1990, and it must approve a statewide GHG emissions limit, so it may be applied to the 2020 benchmark. The ARB approved a 1990 GHG emissions level of 427 million metric tons of $CO_2e$ ($MMTCO_2e$), on December 6, 2007 in its Staff Report. Therefore, in 2020, emissions in California are required to be at or below 427 $MMTCO_2e$.

Under the "business as usual or (BAU)" scenario established in 2008, statewide emissions were increasing at a rate of approximately one percent per year as noted below. It was estimated that the 2020 estimated BAU of 596 $MMTCO_2e$ would have required a 28% reduction to reach the 1990 level of 427 $MMTCO_2e$.

**Climate Change Scoping Plan**

The Scoping Plan released by the ARB in 2008 (ARB, 2008) outlined the state's strategy to achieve the AB 32 goals. This Scoping Plan, developed by ARB in coordination with the CAT, proposed a comprehensive set of actions designed to reduce overall GHG emissions in California, improve the environment, reduce dependence on oil, diversify our energy sources, save energy, create new jobs, and enhance public health. It was adopted by ARB at its December 2008 meeting. According to the Scoping Plan, the 2020 target of 427 $MMTCO_2e$ requires the reduction of 169 $MMTCO_2e$, or approximately 28.3%, from the state's projected 2020 BAU emissions level of 596 $MMTCO_2e$.

In August 2011, the Scoping Plan was re-approved by the Board and includes the Final Supplement to the Scoping Plan Functional Equivalent Document (ARB, 2011). This document includes expanded analysis of project alternatives and updates the 2020 emission projections by considering updated

20 The Climate Action Team (CAT) members are state agency secretaries and the heads of agencies, boards, and departments, led by the Secretary of the California Environmental Protection Agency (Cal/EPA). They coordinate statewide efforts to implement global warming emission reduction programs and the state's Climate Adaptation Strategy.

economic forecasts. The updated 2020 BAU estimate of 507 $MMTCO_2e$ yielded that only a 16% reduction below the estimated new BAU levels would be necessary to return to 1990 levels by 2020. The 2011 Scoping Plan expands the list of nine Early Action Measures into a list of 39 Recommended Actions contained in Appendices C and E of the Plan.

In May 2014, ARB developed, in collaboration with the CAT, the First Update to California's Climate Change Scoping Plan (Update) (ARB, 2014), which shows that California is on track to meet the near-term 2020 GHG limit and is well positioned to maintain and continue reductions beyond 2020 as required by AB 32. In accordance with the United Nations Framework Convention on Climate Change, ARB has mostly transitioned to the use of the Intergovernmental Panel on Climate Change's (IPCC's) Fourth Assessment Report (AR4)'s 100-year GWP (IPCC, 2007b) in its climate change programs. ARB recalculated the 1990 GHG emissions level with the AR4 GWPs to be 431 $MMTCO_2e$; therefore the 2020 GHG emissions limit established in response to AB 32 is now slightly higher than the 427 $MMTCO_2e$ in the initial Scoping Plan.

In November 2017, ARB published the 2017 Scoping Plan (ARB, 2017b) which builds upon the former Scoping Plan and Update by outlining priorities and recommendations for the state to achieve its target of a 40% reduction in GHGs by 2030, compared to 1990 levels. The major elements of the framework proposed are enhancement of the Renewables Portfolio Standard (RPS) and the Low Carbon Fuel Standard; a Mobile Source Strategy, Sustainable Freight Action Plan, Short-Lived Climate Pollutant Reduction Strategy, Sustainable Communities Strategies, and a Post-2020 Cap-and-Trade Program; a 20% reduction in GHG emissions from the refinery sector; and an Integrated Natural and Working Lands Action Plan.

**Renewables Portfolio Standard (Scoping Action E-3)**

The California Energy Commission estimates that in 2000 about 12% of California's retail electric load was met with renewable resources. Renewable energy includes (but is not limited to) wind, solar, geothermal, small hydroelectric, biomass, anaerobic digestion, and landfill gas. California's current RPS is intended to increase that share to 33% by 2020. Increased use of renewables will decrease California's reliance on fossil fuels, thus reducing emissions of GHGs from the electricity sector. Most recently, Governor Brown signed into legislation Senate Bill (SB) 350 in October 2015, which requires retail sellers and publicly-owned utilities to procure 50% of their electricity from eligible renewable energy resources by 2030.

**Senate Bill 375 (SB 375)**

SB 375 was signed by the governor on September 30, 2008. SB 375 requires coordination of land use and transportation planning to reduce GHG emissions from transportation sources. Regional transportation plans, which are developed by metropolitan transportation organizations such as the Southern California Association of Governments (SCAG), are to include "sustainable community strategies" to reduce GHG emissions.

**Title 24**

The Energy Efficiency Standards for Residential and Nonresidential Buildings (Title 24, Part 6, of the California Code of Regulations) were established in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods. Compliance with Title 24 will result in decreases in GHG emissions.

The provisions of Title 24, Part 6 apply to all buildings for which an application for a building permit or renewal of an existing permit is required by law. They regulate design and construction of the building envelope, space-conditioning and water-heating systems, indoor and outdoor lighting systems of buildings, and signs located either indoors or outdoors. Title 24, Part 6 specifies mandatory, prescriptive and performance measures, all designed to optimize energy use in buildings and decrease overall consumption of energy to construct and operate residential and nonresidential buildings. Mandatory measures establish requirements for manufacturing, construction and installation of certain systems, equipment and building components that are installed in buildings.

#### 4.8.2.3 South Coast Air Quality Management District (SCAQMD)

In the process of fulfilling its mandate to reduce local air pollution, the SCAQMD has promoted a number of programs to combat climate change, e.g. energy conservation, low-carbon fuel technologies, renewable energy, vehicle miles traveled (VMT) reduction programs, and market incentive programs.

**Air Quality-Related Energy Policy**

In 2011, the SCAQMD Board adopted an Air Quality-Related Energy Policy (SCAQMD, 2011) that integrates air quality, energy, and climate change issues in a coordinated and consolidated manner. The Energy Policy presents policies to guide and coordinate SCAQMD efforts and actions to support the policies.

#### 4.8.2.4 Local Regulations

The City of Placentia's updated General Plan (City of Placentia General Plan, 2019) includes goals and policies in the mandated Conservation Element that also effect a reduction in GHG emissions by:

- Reducing water usage and energy necessary for conveyance through Goal CON-1.
- Reducing emissions from automobiles through proper land use and transportation planning through Goals CON-2 and CON-3.
- Reducing energy usage in residential, commercial, and industrial sectors through Goal CON-6.
- Reducing the emissions associated with the processing of solid waste through Goal CON-8.

Additionally, the GP added an optional Sustainability Element that explains the City's commitment to sustainability through goals and policies. Sustainability has a direct connection to GHG emissions reduction by:

- Reducing GHG emissions by emphasizing and incorporating design principles in Goal S-5.
- Reducing energy consumption by incorporating building and construction practices in Goal S-7.
- Reducing single occupant vehicle usage through Goal S-8.
- Reducing GHG emissions by enhancing integrated transit-oriented development through Goal S-9.
- Reducing GHG emissions by protecting community-based environmental regulations through Goal S-10.

### 4.8.3 GHG Emissions

#### 4.8.3.1 National Emissions

The United States is the second largest emitter of GHGs globally (behind China) and emitted approximately 6.5 billion metric tons of $CO_2$ equivalent ($MTCO_2e$) in 2016, not including GHG absorbed by forests and agricultural land. The largest source of GHG in the United States (28.5 percent) comes from burning fossil fuels for transportation. Electrical power generation accounted for the second largest portion (28.4 percent) and industrial emissions accounted for the third largest portion (21.6 percent) of U.S. GHG emissions. The remaining 21.5 percent of U.S. GHG emissions were contributed by the agriculture, commercial, and residential sectors, plus emissions generated by U.S. Territories. Agriculture accounted for 9.4 percent of the U.S. emission, commercial accounted for 6.4 percent, and residential accounted for 5.1 percent with U.S. territories accounting for 0.6 percent of emissions.

#### 4.8.3.2 State Emissions

The World Resources Institute (WRI) reports that in 2014, the average GHG emissions per capita in the United States was 20.00 $MTCO_2e$ (WRI, 2019) but with a total GHG emissions in California of 444.7 $MMTCO_2e$ in 2014 (ARB, 2020b), California had an average GHG emissions per capita of only 11.36 $MTCO_2e$.[21] California had a larger percentage of its total GHG emissions coming from the transportation sector (56%) and a smaller percentage of its total GHG emissions from the electricity generation sector; i.e., California has 13 percent.

#### 4.8.3.3 Local Emissions

The Placentia General Plan Update (City of Placentia General Plan, 2019) presented a current and projected GHG emissions estimate in its Appendix 2 – Air Quality Analysis (AQA), which showed the City to have an existing GHG emissions inventory totaling 1.622 $MMTCO_2e$ and an estimated 2040 inventory of 1.05 $MMTCO_2e$. **Table 4.8-1** shows the results of the existing citywide inventory and **Table 4.8-2** shows the estimated 2040 inventory. The AQA projected that the citywide GHG emissions would show a 35% decrease in 2040.

**Table 4.8-1**
**EXISTING CITY-WIDE GREENHOUSE GAS INVENTORY**

| Source | $MTCO_2e$ | % of Total $CO_2e$ |
|---|---|---|
| Area (hearths, consumer products, architectural coatings, and landscape equipment) | 11,401 | 1% |
| Energy (building electricity and natural gas use) | 177,937 | 11% |
| Mobile (vehicle emissions) | 1,368,374 | 84% |
| Waste (emissions associated with landfill disposal) | 24,702 | 2% |
| Water (electricity associated with transport and treatment of water) | 39,788 | 2% |
| **Total** | **1,622,202** | **100%** |

**Source**: City of Placentia General Plan, 2019.

21 Based on a California population of 39,148,760 (USDOC, 2018).

**Table 4.8-2**
**2040 PROJECTED CITY-WIDE GREENHOUSE GAS INVENTORY**

| Source | $MTCO_2e$ | % of Total $CO_2e$ |
|---|---|---|
| Area (hearths, consumer products, architectural coatings, and landscape equipment) | 20,600 | 2% |
| Energy (building electricity and natural gas use) | 25,140 | 2% |
| Mobile (vehicle emissions) | 969,363 | 92% |
| Waste (emissions associated with landfill disposal) | 29,550 | 3% |
| Water (electricity associated with transport and treatment of water) | 6,032 | 1% |
| **Total** | **1,050,685** | **100%** |

#### 4.8.3.4 Methodology

Short-term construction GHG emissions and long-term operational GHG emissions were assessed using the California Environmental Emissions Estimator Model (CalEEMod) Version 2016.3.2 (CAPCOA, 2017). This analysis focused upon emissions of $CO_2$, $CH_4$, and $N_2O$. HFCs, PFCs, and $SF_6$, are emitted in negligible quantities by Santa Angelina Project sources, so they are not discussed further.

### 4.8.4 Impact Analysis

**a) Would the project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?**

**Less than Significant Impact**

California has enacted several pieces of legislation that relate to GHG emissions and climate change, much of which set aggressive goals for GHG reductions within the state. Per Senate Bill 97, the California Natural Resources Agency adopted amendments to the CEQA Guidelines, which address the specific obligations of public agencies when analyzing GHG emissions under CEQA to determine a project's effects on the environment. However, neither a threshold of significance nor any specific mitigations are included or provided in these CEQA Guideline amendments.

**GHG Significance Threshold**

Neither the City of Placentia, the SCAQMD, nor the State CEQA Guidelines Amendments has adopted quantitative thresholds of significance for addressing a project's GHG emissions. Nonetheless, § 15064.4 of the CEQA Guidelines serves to assist lead agencies in determining the significance of the impacts of GHGs. As required in § 15064.4 of the CEQA Guidelines, this analysis includes an impact determination based on the following: (1) an estimate of the amount of GHG emissions resulting from the Santa Angelina Project; (2) a qualitative analysis or performance based standards; (3) a quantification of the extent to which the Santa Angelina Project increases GHG emissions as compared to the existing environmental setting; and (4) the extent to which the Santa Angelina Project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions.

SCAQMD's guidance (SCAQMD, 2018) uses a tiered approach rather than a single numerical emissions threshold. If a project's GHG emissions "fail" the non-significance of a given tier, then one goes to the next one.

The threshold selected for this analysis is Tier 3, which establishes a screening significance threshold level to determine significance using a 90% emission capture rate. For Tier 3, the SCAQMD estimated that at an emissions threshold of approximately 3,000 metric tons $CO_2e$ per year would capture 90% of the GHG emissions from new residential or commercial projects (SCAQMD, 2010). Thus, this analysis uses 3,000 $MTCO_2e$ per year as the significance threshold under the first impact criterion in Section 4.8.3**.**

**Construction GHG Emissions**

Construction is an episodic, temporary source of GHG emissions. Emissions are generally associated with the operation of construction equipment and the disposal of construction waste. To be consistent with the guidance from the SCAQMD for calculating criteria pollutants from construction activities, only GHG emissions from onsite construction activities and offsite hauling and construction worker commuting are considered as project-generated. As explained by the California Air Pollution Control Officers Association (CAPCOA) in its 2008 white paper (CAPCOA, 2008), the information needed to characterize GHG emissions from manufacture, transport, and end-of-life of construction materials would be speculative at the CEQA analysis level. CEQA does not require an evaluation of speculative impacts (*CEQA Guidelines* § 15145). Therefore, the construction analysis does not consider such GHG emissions, but does consider non-speculative onsite construction activities, and offsite hauling and construction worker trips. All GHG emissions are identified on an annual basis.

Estimated criteria pollutant emissions from the Santa Angelina Project's onsite and offsite project construction activities were calculated using CalEEMod, Version 2016.3.2, which was described in Section 4.3.6. The results of this analysis are presented in **Table 4.8-3**. The greatest annual increase in GHG emissions from Santa Angelina Project construction activities would be 256 metric tons in 2022 and 49 metric tons in 2023 for a total construction GHG emissions of 305 metric tons. Consistent with SCAQMD recommendations (SCAQMD, 2008, p. 3-10) and to ensure that construction emissions are assessed in a quantitative sense, construction GHG emissions have been amortized over a 30-year period. The amortized value, **10.2 $MTCO_2e$**, has been added to the Santa Angelina project's annual operational GHG emissions. (See below.) Modeling results are in **Appendix B2**.

**Table 4.8-3**
**PROJECT CONSTRUCTION-RELATED GHG EMISSIONS**

| Year | Annual Emissions (MT) | | | |
|---|---|---|---|---|
| | $CO_2$ | $CH_4$ | $N_2O$ | $CO_2e$ |
| 2022 | 256.3 | 0.0583 | 0 | 257.8 |
| 2023 | 48.9 | 0.0093 | 0 | 49.1 |
| **Total** | **305** | **0.068** | **0** | **307** |

**Operational GHG Emissions**

For a reasonable maximum emissions case, it was assumed that GHG emissions from the Santa Angelina Project site are currently zero. Operational GHG emissions calculated by CalEEMod are shown in **Table 4.8-4**. Total annual unmitigated emissions from the Santa Angelina Project would be 518 $MTCO_2e$ per year. Energy production and mobile sources account for about 88% of annual operational emissions and about 86% of total annual emissions.[22]

**Table 4.8-4**
**PROJECT OPERATIONAL GHG EMISSIONS**

| Emissions Source | Estimated Project Generated $CO_2e$ Emissions (Metric Tons per Year) |
|---|---|
| Area Sources | 1.12 |
| Energy Demand (Electricity & Natural Gas) | 146.18 |
| Mobile (Motor Vehicles) | 310.44 |
| Solid Waste Generation | 26.42 |
| Water Demand | 34.26 |
| Construction Emissions [a] | 10.17 |
| **Total** | **528.6** |

[a] *Total construction GHG emissions were amortized over 30 years and added to those resulting from the operation of the project.*

Therefore, under the first significance criterion, GHG emissions would be less than significant, and no mitigation is necessary.

**b) Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHG?**

**Less than Significant Impact**

As was noted in Section 4.8.2.4, the City's General Plan has identified goals and policies that would reduce GHG emissions from community-wide and municipal operations. Many of these measures are directly relevant to the Santa Angelina Project, and the project does not conflict with any of them.

22 Calculations are provided in **Appendix B2**.

## 4.9 Hazards and Hazardous Materials

| Would the project: | Potentially Significant Impact | Less than Significant Impact with Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? | | **X** | | |
| b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment? | | **X** | | |
| c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one quarter mile of an existing or proposed school? | | | **X** | |
| d) 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? | | | | **X** |
| e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area? | | | | **X** |
| f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? | | | **X** | |
| g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires? | | | | **X** |

The analysis for this section refers to the Phase I Environmental Site Assessment (referred as Phase I or Phase I ESA) by Converse Consultants on January 6, 2020 (Refer to **Appendix G**). A Phase I report presents information conducted from a site reconnaissance of the project area, historical developments of the project site, and a comprehensive database search to determine if the project site contains potentially Recognized Environmental Conditions (RECs).

**a) Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?**

**Less than Significant Impact with Mitigation Incorporated**

**Construction**

A Phase I Environmental Site Assessment (Phase I ESA) (refer to **Appendix E**) was conducted for the project site and revealed no evidence or recognized environmental conditions in connection with the property (Converse Consultants, 2019, p. iii).[23] The project site appeared developed for agricultural use from as early as 1928 to 1953. The historical agricultural use at the site is not a REC as the site has been redeveloped (Converse Consultants, 2020, p. 31).

**Asbestos-Containing Materials (ACMs)**

Construction of the proposed project would include the demolition of the existing Parish Hall. Per the Phase I Cultural Resources Inventory, initially there was the Church itself, offices and a small Parish Hall (visible in the 1963 aerial photo map). A larger Parish Hall and expanded kitchen were added in 1976 (visible in the 1980 aerial photo map) (UltraSystems, 2020, p. 2-6). On July 12, 1989, the EPA issued a final rule under Section 6 of the Toxic Substances Control Act banning most asbestos-containing products in the United States (EPA, 2020c). Therefore, the Parish Hall may contain asbestos-containing materials (ACMs). South Coast Air Quality Management District (SCAQMD) Rule 1403, Asbestos Emissions from Renovation/Demolition Activities, regulates asbestos as a toxic material and controls the emissions of asbestos from demolition and renovation activities by specifying agency notifications, appropriate removal procedures, and handling and cleanup procedures. Rule 1403 applies to owners and operators involved in the demolition or renovation of structures with asbestos-containing materials, asbestos storage facilities, and waste disposal sites. The federal Occupational Safety and Health Administration (OSHA) also regulates asbestos as a potential worker safety hazard (SCAQMD, 2020b).

Mandatory compliance with Rule 1403 and with OSHA regulations would reduce potential impacts to less than significant levels. Any activity that involves cutting, grinding, or drilling during building renovation or demolition, or that involves relocation of underground utilities, could release friable asbestos fibers unless proper precautions are taken (SCAQMD, 2020b). Due to the age of the existing Parish Hall which would be demolished and the potential presence of asbestos-containing materials, testing shall be conducted prior to demolition, as detailed in mitigation measure **HAZ-1** below. If the Parish Hall is found to contain any asbestos-containing materials, these materials would need to be removed prior to demolition, as required, and in accordance with applicable laws, including guidelines of OSHA.

**Lead-Based Paint (LBP)**

Lead is a highly toxic metal that affects virtually every system of the body. Lead-based paint is defined as any paint, varnish, stain, or other applied coating that has 1 mg/cm2 (or 5,000 µg/g or 0.5% by weight) or more of lead. In 1978, the federal government banned consumer uses of lead-containing

23 A recognized environmental condition is the presence or likely presence of any hazardous substances or petroleum products in, at or on a property due to any release to the environment; under conditions indicative of a release to the environment; under conditions that pose a material threat of a future release to the environment (Converse Consultants, 2019, p. 1).

paint (EPA, 2020d). Due to the fact that the larger Parish Hall was constructed in 1976, there is the potential for the occurrence of lead-based paint (LBP) in the existing Parish Hall. Due to the age of the existing Parish Hall which would be demolished and the potential presence of lead-based paint, testing shall be conducted prior to demolition, as detailed in mitigation measure **HAZ-1** below.

**Oil Field**

The project site is located within the Richfield Oil Field and a plugged oil and gas well is approximately 0.1 mile southwest of the project site (Converse Consultants, 2020, p. 30). This is noted as an environmental concern in the Phase I ESA (Converse Consultants, 2020, p. iii).

The project site's location within the Richfield Oil Field meets the Placentia Fire and Life Safety Department (PFLSD) criterion for properties that are required to follow the Combustible Soil Gas Hazard Mitigation Guideline C-03. Converse Consultants recommends consultation with PFLSD and then completion of a soil gas survey (Converse Consultants, 2020, p. v).

The Combustible Soil Gas Hazard Mitigation Guideline C-03 provides guidelines for "scientific investigation, remediation, and/or mitigation of potentially hazardous concentrations of combustible soil gases associated with the construction and occupancy of a building or structure" in areas that meet any of six criteria. Based on the guidance document, the Property meets the first criterion of "Any location within an administrative boundary or a distance less than or equal to 100 feet beyond the administrative boundary of any oil/gas field that has been defined by the Division of Oil, Gas, and Geothermal Resources (D.O.G.G.R.)[24]" (OCFA, 2017, p. 1).

The Pipeline and Hazardous Material Safety Administration (PHMSA) online mapping system for gas transmission pipelines and hazardous liquid pipelines on the project site or adjacent properties was reviewed as part of the Phase I ESA. No pipelines were identified on the project site or adjacent properties (Converse Consultants, 2020a, p. 20).

Regarding methane, the project site is located in the Richfield Oil Field and would require compliance with Guideline C-03 for assessment in and mitigation of combustible soil gas (Converse Consultants, 2020a, p. 22).

In April 2020 Converse Consultants prepared a Site Testing for Methane Report (Converse Consultants, 2020b) for the project site. A soil gas investigation was conducted to evaluate the Site for the presence of oil field gasses (Converse Consultants, 2020b, p. 2). Soil gas was evaluated for methane, hydrogen sulfide, oxygen, and carbon dioxide gas concentrations. Vapor pressure within the probes was also measured. Two sets of measurements were taken a minimum of 24 hours apart (Converse Consultants, 2020b, p. 3). Based upon the measured concentration of methane less than or equal to 1,000 parts per million (ppm) and the location of the project site outside of the 300-foot prescribed distance from a plugged oil and gas well, no further action is recommended. Per Guideline C-03 this report should be submitted to the PFLSD for their review and approval that no further mitigation efforts are required (Converse Consultants, 2020b, p. 4). Per Guideline C-03, the April 2020 Methane Report by Converse Consultants was submitted to PFLSD for their review. The proposed project will comply with all requirements of the PFLSD. Therefore, the proposed project would have a less than significant impact regarding the presence of methane.

24 Note that the name D.O.G.G.R has been recently changed to CalGEM.

**Mitigation Measure**

**MM HAZ-1** Due to the age of the existing buildings and the potential presence of ACMs and LBP, prior to the commencement of demolition, the project proponent shall retain a qualified environmental consultant to conduct a comprehensive survey of the existing building to be demolished (i.e., the Parish Hall) to confirm the presence or absence of ACMs and LBP. A comprehensive survey of ACMs and a comprehensive LBP survey of painted surfaces in the Parish Hall shall occur prior to any demolition activities to confirm the presence or absence of ACMs or LBP to prevent potential exposure to workers and/or building occupants.

- If the existing buildings are found to contain any ACMs or LBP, a detailed Hazardous Material Abatement Plan shall be prepared, approved, and implemented. The Hazardous Material Abatement Plan shall include a site-specific scope of work and specifications for the proper disposal of hazardous materials. The Hazardous Material Abatement Plan shall be prepared and implemented in accordance with the Asbestos National Emission Standards for Hazardous Air Pollutants (NESHAP) and all other federal and state standards and regulations.

- The Hazardous Material Abatement Plan shall require that all ACMs and LBP be removed and properly disposed of in accordance applicable laws.

- The Hazardous Material Abatement Plan shall be implemented prior to demolition activities to ensure that any hazardous materials are properly identified, removed, and disposed of offsite at a landfill that can accept asbestos and any other hazardous materials removed from the site.

- A qualified environmental consultant shall be present on the project site during demolition activities and shall monitor compliance with the Hazardous Material Abatement Plan.

**Level of Significance After Mitigation**

After implementation of **MM HAZ-1** above, potential impacts from ACMs, LBP and methane during project construction would be less than significant.

**Operation**

The project would require the transport, storage, use, and disposal of certain chemicals typically used for cleaning and landscaping supplies, such as commercial cleansers, paints, and lubricants for maintenance and upkeep of the proposed buildings and landscaping. These materials would be stored, handled, and disposed of in accordance with applicable regulations. The proposed project would not involve the routine transport, use, or disposal of quantities of hazardous materials that may create a significant hazard to the public or environment. Therefore, impacts regarding hazardous operations would be less than significant.

**b) Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?**

**Less than Significant Impact with Mitigation Incorporated**

**Construction**

As analyzed above, the proposed project may contain ACMs, LBPs, and contaminated soils; however, compliance with **MM HAZ-1** would ensure less than significant impacts. Additionally, construction of the project would involve transport, storage, and use of chemical agents, solvents, paints, and other hazardous materials commonly associated with construction activities. Chemical transport, storage, and use would comply with Resource Conservation and Recovery Act (RCRA); Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA); Occupational Safety and Health Administration (OSHA); California hazardous waste control law (California Health and Safety Code, Division 20, Chapter 6.5, Hazardous Waste Control); California Division of Safety and Health (DOSH); SCAQMD; and Orange County Environmental Health requirements. Therefore, compliance with applicable laws and regulations during project construction and implementation of **MM HAZ-1** provided above would reduce the potential for accidental releases of hazardous materials, and construction hazards impacts would be less than significant.

**Mitigation Measures**

Refer to **MM HAZ-1** above.

**Level of Significance After Mitigation**

After implementation of **MM HAZ-1** above, potential impacts from ACMs, LBP and contaminated soils during project construction would be less than significant.

**Operation**

The project would result in the handling and storage of materials such as commercial cleansers, solvents and other janitorial or industrial-use materials, paints, and landscape fertilizers/pesticides during project operations. However, these materials would be stored, handled, and disposed of in accordance with applicable regulations and would not be stored in amounts that would create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions. The project would have a less than significant impact in this regard.

**c) 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?**

**Less than Significant Impact**

One school is within one-quarter mile of the project site. Morse Avenue Elementary School, located at 431 Morse Avenue, is approximately 0.09 mile east of the project site (Google Earth Pro, 2020).

**Construction**

During construction, the project would entail the use and handling of limited volumes of commonly used hazardous materials. Project personnel would ensure that all uses of hazardous materials during construction would adhere to any applicable local, state, and/or federal regulations required by the City of Placentia.

**Operation**

During project operations, the project would result in the handling and storage of materials such as commercial cleansers, solvents and other janitorial or industrial-use materials, paints, and landscape fertilizers/pesticides during project operations. However, these materials would be stored, handled, and disposed of in accordance with applicable regulations and would not be stored in amounts that would pose a hazard to schools in the project vicinity. The project would have less than significant impacts in this regard.

**d) 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?**

**No Impact**

Government Code § 65962.5 requires the Department of Toxic Substances Control (DTSC) to compile and update, at least annually, lists of the following:

- Hazardous waste and substances sites from the DTSC EnviroStor database.
- Leaking Underground Storage Tank (LUST) sites by county and fiscal year in the State Water Resources Control Board (SWRCB) GeoTracker database.
- Solid waste disposal sites identified by SWRCB with waste constituents above hazardous waste levels outside waste management units.
- SWRCB Cease and Desist Orders (CDOs), and Cleanup and Abatement Orders (CAOs).
- Hazardous waste facilities subject to corrective action pursuant to § 25187.5 of the Health and Safety Code, identified by DTSC.

These lists are collectively referred to as the "Cortese List." The project site is not included on the Cortese List. (EPA, 2020b and Converse, 2020, Appendix E p. 7). Therefore, the project would have no impact in this regard.

**e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?**

**No Impact**

The nearest active public airport is Fullerton Municipal Airport, the only municipal airport in Orange County, located approximately 6.75 miles west of the project site (Google Earth Pro, 2019b). According to the Airport's Pilot's Guide (City of Fullerton, 2020), the proposed project is not located within the Noise Abatement Areas of the Fullerton Municipal Airport.

John Wayne International Airport is located approximately 14 miles south of the project site. The Joint Forces Training Base, Los Alamitos, is located approximately 12 miles southwest of the project (Google Earth Pro, 2018c). As shown in **Figure 4.9-1** below, the project is not located within the Planning Areas for Fullerton Municipal Airport or for Joint Forces Training Base, Los Alamitos, or for the Land Use Influence Area of John Wayne Airport.

Due to the project's distance from the nearest active airports, the project site is not located within the boundary of an Airport Influence Area (AIA), or within two miles of a public airport or public use airport. Therefore, the project would not expose people to safety hazards due to proximity to a public airport, and no impacts would occur.

**f) Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?**

**Less than Significant Impact**

**Construction**

The City of Placentia has elected to provide pre-designated evacuation routes and Transportation Assembly Points (TAPs) for persons within or traveling through the community. TAPs are pre-designated locations for members of the community who may not have access to adequate transportation, require special assistance, have access and/or functional needs; and/or they are, or are with, an unaccompanied minor(s). TAPs are provided to ensure that equal access to evacuation transportation is provided to all members of the community. Without diversified methods of evacuation, the most vulnerable populations will not have adequate access to services and safety afforded to members of the community with private, functioning methods of transportation; therefore, the TAPs have been strategically located throughout the City to allow for all members of the community to have access to these resources (City of Placentia General Plan, 2019, pp. 7-15 and 7-16).

The project site is not located along any of the City's evacuation routes or TAPs (City of Placentia General Plan, 2019, Exhibit 7-5). Additionally, as further detailed in **Section 4.17**, the proposed project would not alter the surrounding roadways that would interfere with emergency response in the project area. Therefore, the proposed project would have less than significant impacts in regard to the City's evacuation plan.

As further detailed in **Section 4.17**, the project could temporarily impact street traffic adjacent to the project site during the construction phase due to construction activities into the right-of-way (ROW). Project construction could temporarily reduce the number of lanes or temporarily close a portion of North Angelina Drive and Morse Avenue. The City of Placentia requires preparation and implementation of a Traffic Management Plan (TMP), which would ensure adequate circulation during project construction (Tom Dodson & Associates, 2019, p. 4.10-22).

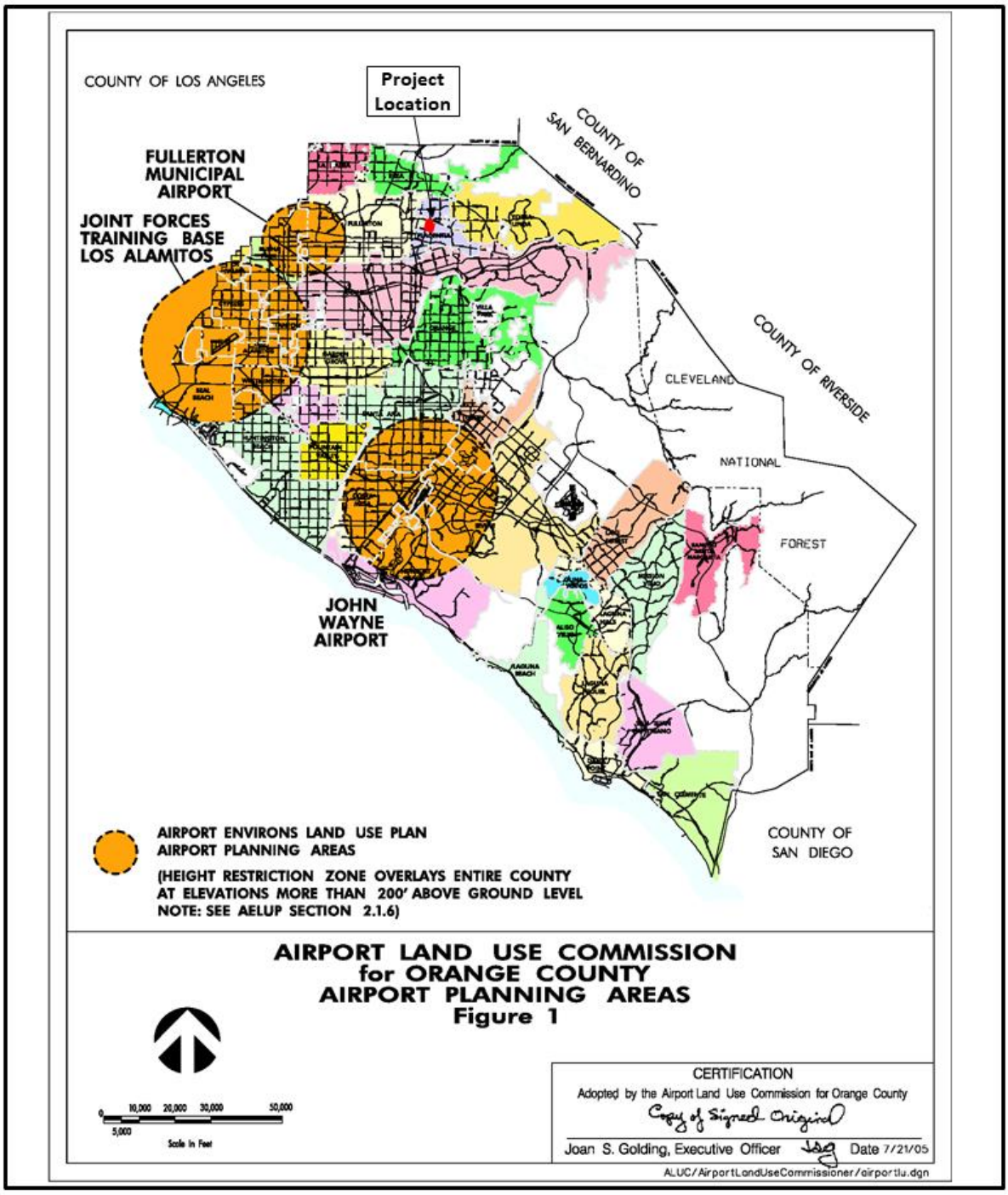
The City of Placentia does not have an adopted emergency response plan. The Placentia Operations Plan (POP) provides guidance during emergency situations associated with natural disasters, technological incidents and nuclear defense operations. The POP does not address normal day-to-day emergencies or the established and routine procedures used in coping with such emergencies (Tom Dodson & Associates, 2019, p. 4.18-45). The proposed project is infill development on an already developed site and would not block existing roads or alter traffic patterns on adjacent streets. The project could temporarily impact street traffic adjacent to the project site during the construction phase due to construction activities encroaching into the ROW. Project construction could temporarily reduce the number of lanes or temporarily close a portion of North Angelina Drive and Morse Avenue. The City requires preparation and implementation of a TMP for all projects that require construction in the public ROW. The TMP must be reviewed and approved by the City of Placentia prior to the start of construction activity in the public ROW. The typical TMP requires such things as the installation of K-Rail between the construction area and open traffic lanes, the use of

flagmen and directional signage to direct traffic where only one travel lane is available or when equipment movement creates temporary hazards, and the installation of steel plates to cover trenches under construction. Emergency access must be maintained. Compliance with City requirements for traffic management during construction in the public ROW would ensure that the project would have a less than significant impact.

**Operation**

As mentioned above, the proposed project would not interfere with the City's evacuation routes or TAPs. A new driveway would be added along North Angelina Drive, near the northwest corner of the project site to provide access for residents to a designated parking area. A firetruck turnaround would be located at the northeast corner of the project site. The project's circulation system, including driveways and parking areas, would be designed to meet the development standards of the City and would not result in uses or design features that would create traffic hazards. Therefore, there would be less than significant impacts.

**Figure 4.9-1**
**AIRPORT INFLUENCE AREA MAP FOR JOHN WAYNE AIRPORT**




Disclaimer: Illustration provided by Airport Land Use Commission for Orange County, who has indicated that the information is true and correct. No other warranties are expressed or implied.

Source: Airport Land Use Commission for Orange County, 2005

UltraSystems

**Santa Angelina Senior Apartment Homes**

Airport Planning Areas

**g) Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?**

**No Impact**

The California Department of Forestry and Fire Protection (CAL FIRE) developed Fire Hazard Severity Zones (FHSZ) for State Responsibility Areas (SRA) and Local Responsibility Areas (LRA).

Very High Fire Hazard Severity Zone (VHFHSZ) designation refers to either:

a) wildland areas supporting high-to-extreme fire behavior resulting from climax fuels typified by well-developed surface fuel profiles (e.g., mature chaparral) or forested systems where crown fire is likely. Additional site elements include steep and mixed topography and climate/fire weather patterns that include seasonal extreme weather conditions of strong winds and dry fuel moistures. Burn frequency is typically high, and should be evidenced by numerous historical large fires in the area. Firebrands from both short- (<200 yards) and long-range sources are often abundant.

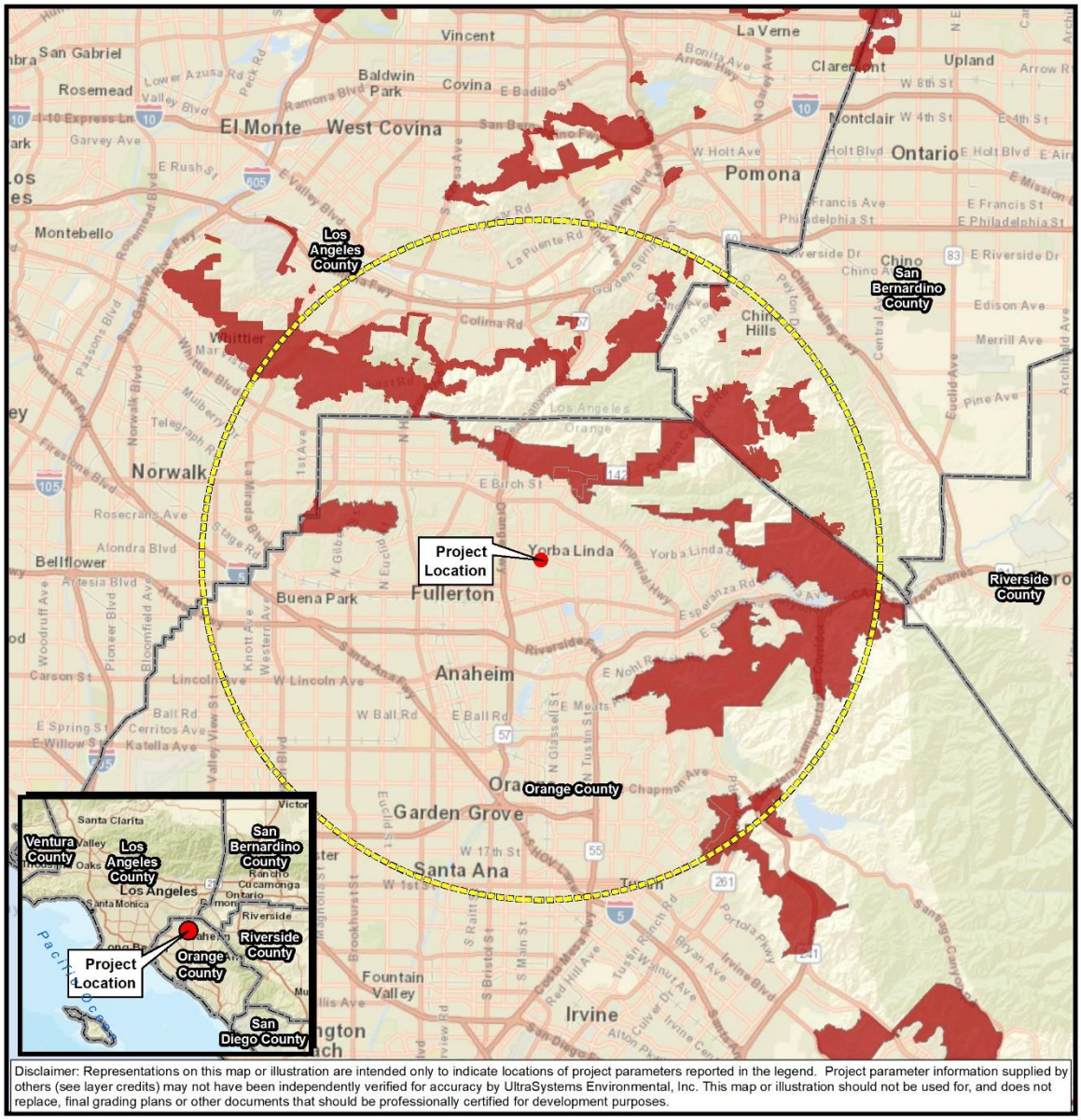
OR

b) developed/urban areas typically with high vegetation density (>70% cover) and associated high fuel continuity, allowing for frontal flame spread over much of the area to progress impeded by only isolated non-burnable fractions. Often where tree cover is abundant, these areas look very similar to adjacent wildland areas. Developed areas may have less vegetation cover and still be in this class when in the immediate vicinity (0.25 mile) of wildland areas zoned as Very High (see above).

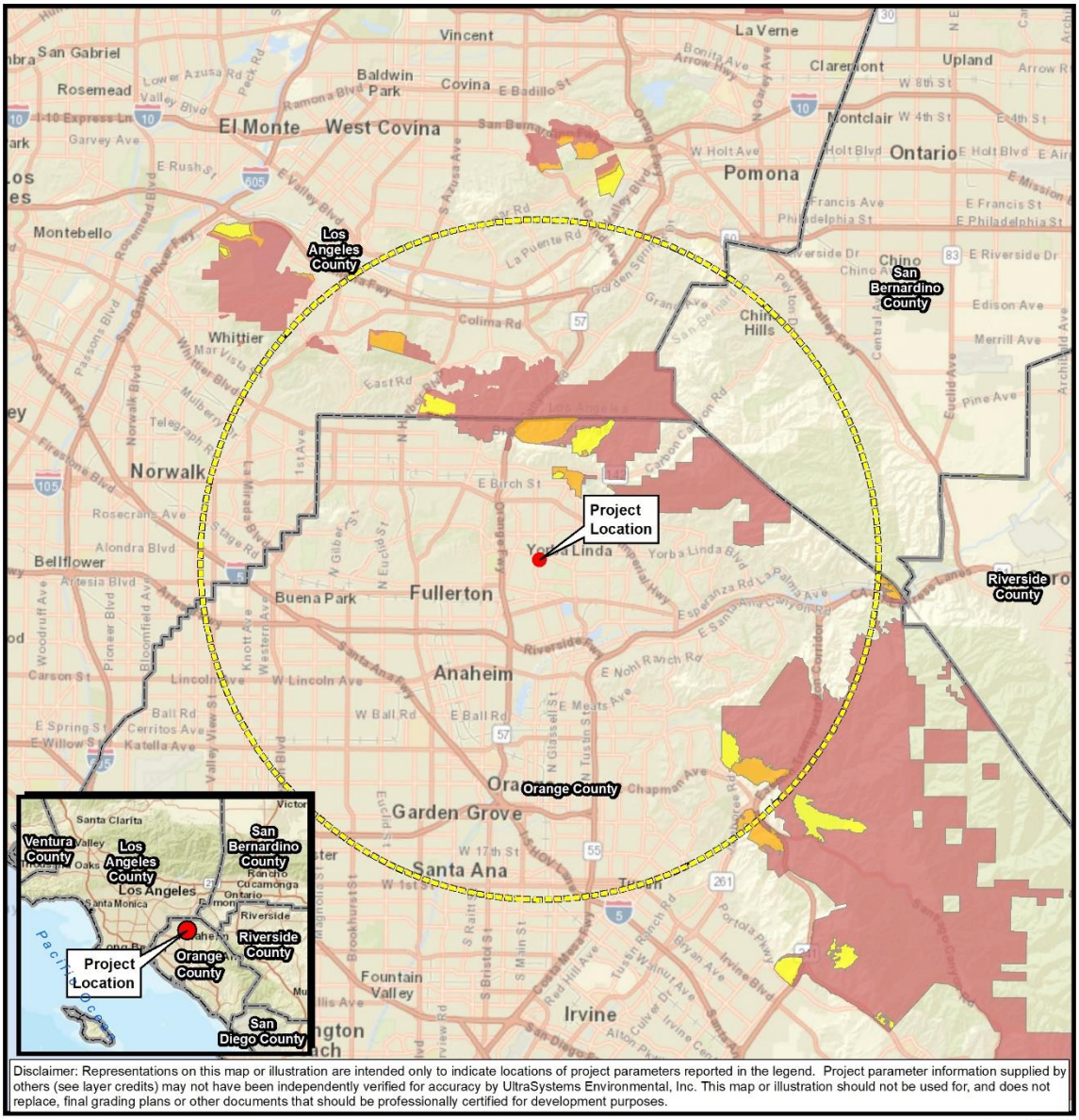
The proposed project would include required fire suppression design features (i.e., fire-resistant building materials, where appropriate, smoke detection and fire alarm systems, automatic sprinkler systems, portable fire extinguishers, emergency signage in all buildings, and fuel modification/brush clearance) identified in the latest edition of the CBC, and is located in an urbanized area that is presently afforded fire protection and Emergency Medical Services (EMS).

The project site is located in a densely urban and developed area and is not located within a VHFHSV within an LRA or SRA as depicted in **Figures 4.9-2** and **4.9-3**, respectively. Therefore, no impacts would occur and mitigation is not required.

## Figure 4.9-2
## FIRE HAZARD SEVERITY ZONES – LOCAL RESPONSIBILITY AREA



## Figure 4.9-3
## FIRE HAZARD SEVERITY ZONES – STATE RESPONSIBILITY AREA



## 4.10 Hydrology and Water Quality

| Would the project: | Potentially Significant Impact | Less than Significant Impact with Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality? | | | **X** | |
| b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin? | | | **X** | |
| c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: | | | | |
| i) result in substantial erosion or siltation on or offsite; | | | **X** | |
| ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite; | | | **X** | |
| iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or | | | **X** | |
| iv) impede or redirect flood flows? | | | | **X** |
| d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation? | | | | **X** |
| e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan? | | | | **X** |

### a) Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

**Less than Significant Impact**

The California State Water Resources Control Board requires its nine Regional Water Quality Control Boards (RWQCBs) to develop water quality control plans (Basin Plans) designed to preserve and enhance water quality and protect the beneficial uses of all Regional waters. Specifically, Basin Plans

designate beneficial uses for surface waters and groundwater, set narrative and numerical objectives that must be attained or maintained to protect the designated beneficial uses and conform to the State antidegradation policy, and describe implementation programs to protect all waters in the Regions. In addition, Basin Plans incorporate by reference all applicable State and Regional Board plans and policies, and other pertinent water quality policies and regulations. The proposed project is under the jurisdiction of the Santa Ana RWQCB.

As shown in **Figure 10.4-1,** the project site is located within the Carbon Creek Hydrologic Unit (HU; HU Code 180701060605), which drains an area of approximately 57.6 square miles (USEPA, 2020). Stormwater generated on the project site enters the municipal storm drain system which discharges into Carbon Creek/Carbon Creek Channel.

The project site is currently developed. Under existing conditions, stormwater runoff generated on the project site is discharged as sheet flow to the south and southwest toward the intersection of North Angelina Drive and Morse Avenue, via surface flow, including a ribbon gutter within the at-grade parking lot, which conveys stormwater flows toward the southwest corner (Fuscoe, 2020b, p. 5).

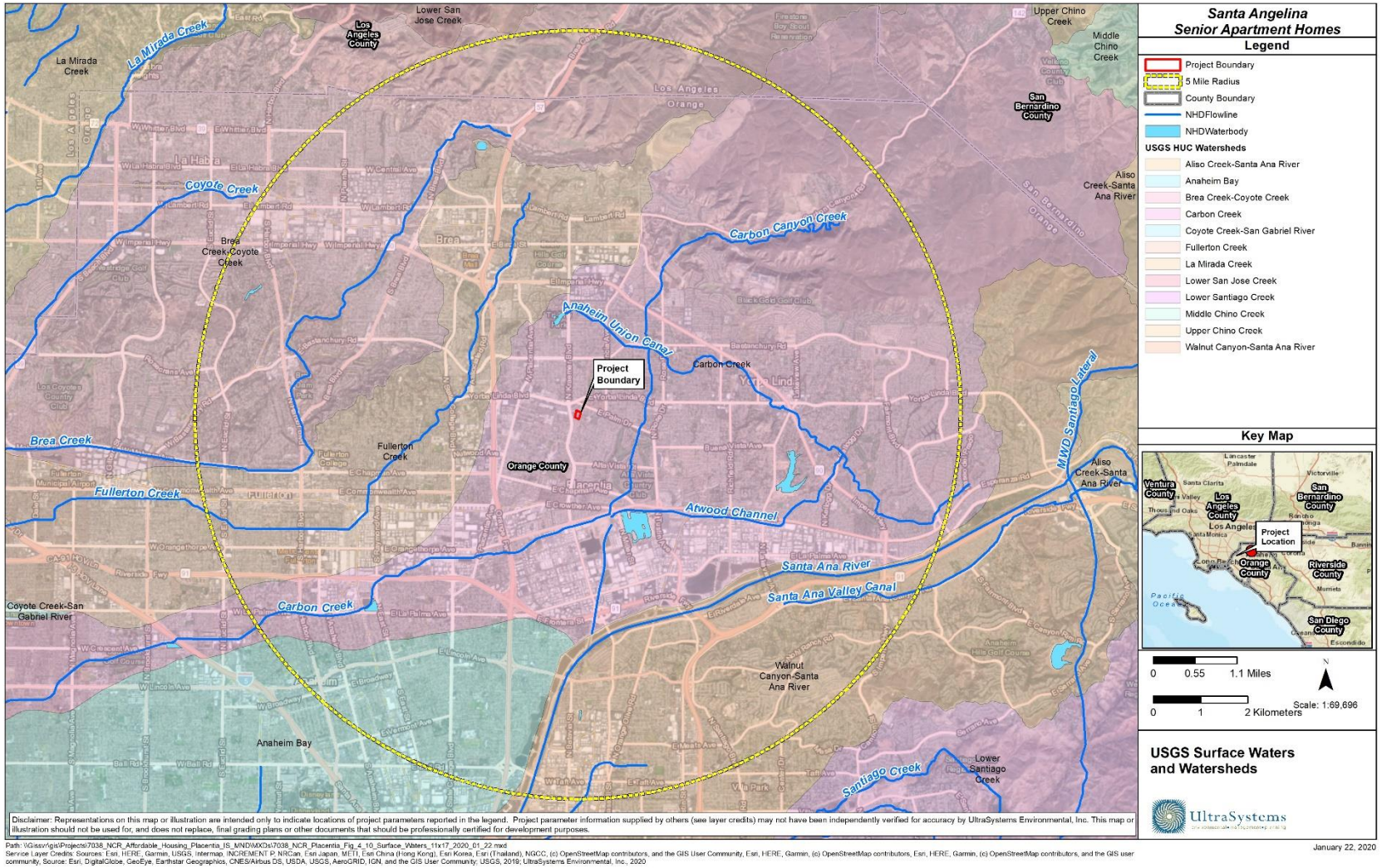
Development of the project has the potential to result in two types of water quality impacts: (1) short-term impacts due to construction-related discharges; and (2) long-term impacts from operation. Temporary soil disturbance would occur during project construction, due to earth-moving activities such as excavation and trenching for foundations and utilities, soil compaction and moving, cut and fill activities, and grading. Disturbed soils are susceptible to high rates of erosion from wind and rain, resulting in sediment transport via stormwater runoff from the project area. Erosion and sedimentation affect water quality through interference with photosynthesis, oxygen exchange, and respiration, growth, and reproduction of aquatic species. Runoff from construction sites may include sediments and contaminants such as oils, fuels, paints, and solvents. Additionally, other pollutants such as nutrients, trace metals, and hydrocarbons can attach to sediment and be carried by stormwater into storm drains which discharge into the Santa Ana River and, eventually, to the Pacific Ocean.

Spills and mishandling of construction materials and waste may also potentially leave the project site and negatively impact water quality. The use of construction equipment and machinery may potentially result in contamination from petroleum products, hydraulic fluids, and heavy metals. Contamination from building preparation materials such as paints and solvents, and landscaping materials such as fertilizers, pesticides, and herbicides may also potentially degrade water quality during project construction. Trash and demolition debris may also be carried into storm drains and discharged into receiving waters.

**Construction Pollutants Control**

Temporary impacts to water quality, such as those described above, could result from stormwater runoff during construction of the project. Project construction would require ground-disturbing activities, including demolition and clearing of the existing structures and paved parking lot, and grading for construction of building foundations. Disturbed soils accelerate erosion and increase sediment in stormwater runoff to receiving waters, causing increased turbidity and sedimentation. Additionally, fuel, oil, and other fluids used in construction vehicles, equipment, and heavy machinery could leave the site, enter the storm drain system and create or add to contaminant loads in receiving waters (e.g., Carbon Creek Channel, Coyote Creek Channel, San Gabriel River, and the Pacific Ocean).

**Figure 4.10-1**
**USGS SURFACE WATERS AND WATERSHEDS**



The area of the project is approximately 3.85 acres (Fuscoe, 2020a, pg. 4); the California State Water Resources Control Board (SWRCB) implements water quality regulations under the federal CWA and California Porter-Cologne Water Quality Control Act and require compliance with the National Pollutant Discharge Elimination System (NPDES) for discharges of stormwater runoff associated with a construction activity.

Dischargers whose projects disturb one acre or more of soil are required to obtain coverage under the General Permit for Discharges of Storm Water Associated with Construction Activity (Construction General Permit, 2009-009-DWQ, as amended). Construction Activity subject to this permit includes clearing, grading, and disturbances to the ground such as stockpiling or excavation but does not include regular maintenance activities performed to restore the original line, grade, or capacity of the facility.

The Construction General Permit requires the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP would contain a site map which would show the construction site perimeter, existing and proposed buildings, lots, roadways, stormwater collection and discharge points, general topography both before and after construction, and drainage patterns. The SWPPP would also provide site-specific construction best management practices (BMPs) which would be implemented to minimize or avoid pollutants and sediment from entering receiving waters. The project would be required to inspect, maintain, and replace all BMPs, as needed, throughout the duration of construction.

The project would be required to obtain a Construction General Permit through the SWRCB, prepare a SWPPP, and implement site-specific BMPs, that would minimize or prevent pollutants from leaving the project site and discharging into receiving waters via the municipal storm drain system. For these reasons, potential violations of water quality standards or waste discharge requirements during construction would be less than significant.

**Operational Pollutant Controls**

NPDES Municipal Stormwater Permits require new development and significant redevelopment projects to incorporate post-construction BMPs to comply with the local Standard Urban Stormwater Mitigation Plan (SUSMP) or Water Quality Management Plan (WQMP) to reduce the quantity of rainfall runoff and improve the quality of water that leaves a site. To maintain compliance with Order No. R8-2009-0030 (as amended)/NPDES No. CAS618030, Waste Discharge Requirements for the County of Orange, Orange County Flood Control District, and the Incorporated Cities of Orange County within the Santa Ana Region Areawide Urban Storm Water Runoff (MS4 Permit), the project would be required to *minimize the short and long-term impacts on receiving water quality from new developments and significant re-developments…by* [submitting] *a WQMP, emphasizing implementation of LID* [Low Impact Development] *principles and addressing hydrologic conditions of concern, prior to issuance of any grading or building permits and/or prior to recordation of any subdivision maps* (RWQCB, 2009, pg. 47). The intent of the MS4 is to maintain or improve water quality of surface water, prevent water quality degradation, and protect beneficial uses as defined in the water quality control plan (Basin Plan) of the Santa Ana River Basin (RWQCB, 1995).

LID is a leading stormwater management strategy that seeks to mitigate the impacts of runoff and stormwater pollution as close to its source as possible. LID comprises a set of site design approaches and BMPs that are designed to address runoff and pollution at the source. These LID practices can effectively remove nutrients, bacteria, and metals while reducing the volume and intensity of stormwater flows.

The project has prepared a preliminary WQMP which incorporates LID BMPs into project design. Under proposed conditions, the project would include a detention system to ensure that storm water discharges would not exceed the existing condition 2-year, 10-year, 25-year, and 100-year storm events at the site's discharge location at the southwest corner of the property. In addition, the initial 2-year stormwater runoff would be directed to a hydromodification storage system for retention and infiltration of the required hydromodification volume, which would include a series of drywells that would be connected to the hydromodification storage system (Fuscoe, 2020b. p. 5).

Specific pollutants of concern for this project include heavy metals, pathogens, pesticides, oil and grease, toxic organic compounds, and trash and debris; with the exception of oil and grease, and trash and debris, all of the aforementioned pollutants are § 303(d) listed impairments for project receiving waters (Fuscoe, 2020a, p. 7). Runoff from the entire project site would be captured by area drains and routed to a detention system to ensure that stormwater discharges do not exceed the existing conditions for flood control purposes. A diversion structure would divert low flows to a hydrodynamic separator (Contech CDS® or similar) for pre-treatment before entering the detention system (Contech corrugated metal pipe [CMP] or similar) designed to capture water quality and hydromodified flows. The detention system would be drawn down by one of five drywells for infiltration. Low flows would be retained onsite while high flows would follow existing drainage patterns with a connection at the existing discharge location at the southwest corner of the site along North Angelina Drive and Morse Avenue. Flows exiting the site would continue to discharge into the receiving waters of Carbon Creek Channel, Coyote Creek Channel, San Gabriel River, and the Pacific Ocean (Fuscoe, 2020a, p. 4).

Project-specific LID BMPs include:

- **Infiltration BMPs:** Infiltration BMPs are LID BMPs that capture, store and infiltrate storm water runoff. These BMPs are engineered to store a specified volume of water and have no design surface discharge (underdrain or outlet structure) until this volume is exceeded.

  Five (5) MaxWell IV drywell systems are proposed. Each drywell would be a total of 52 feet deep, with the lower 34 feet consisting of the infiltrating drywell, and the upper 18 feet a concrete settling chamber. The MaxWell IV system incorporates pre-treatment of runoff through a settling chamber that traps trash, floating debris, oil and grease, and large sediment. Pre-treated flows would then be diverted to the drywell and surrounding soil. With the incorporation of pretreatment and infiltration, drywells have high removal effectiveness for all storm water pollutants of concern (Fuscoe, 2020a, p. 18).

  To maximize infiltration, underground detention systems would be located upstream of the drywells. These systems would temporarily detain onsite stormflow and hydromodification volume and would provide constant head to the drywells during the drawdown process. A detention gallery system (Contech CMP or equivalent) is proposed to provide detention capacity in addition to the storage capacity of the drywell settling chambers. The detention gallery prior to the five drywells located in the project site would have a total storage of approximately 7,666 cubic feet while the five drywells would have a total storage of approximately 1,734 cubic feet (Fuscoe, 2020a, p. 18).

- **Pre-Treatment BMPs:** The most important part of all drywell systems is the incorporation of proper upstream pre-treatment to remove solids and fines from entering the final infiltration chamber. The MaxWell IV drywell system includes a pretreatment settling chamber and slotted inlet to provide treatment prior to entering the infiltration chamber. To

provide additional pre-treatment and filtration of runoff prior to infiltrating, the detention systems would include upstream pre-treatment devices (Contech CDS® or equivalent) to pre-treat runoff before entering the detention systems and drywells. The Contech CDS® hydrodynamic separator uses swirl concentration and continuous deflective separation to remove trash, debris, and hydrocarbons from stormwater runoff. Treatment of this level would be consistent with the treatment standards required by the MS4 Permit for removal of pollutants prior to discharge into the drywell and detention system (Fuscoe, 2020a, p. 19).

- **Non-Structural Source Control BMPs:** In addition to Infiltration and Pretreatment BMPs, project design would include non-structural source control such as education for property owners, tenants, and occupants; activity restrictions; common area landscape management; employee training; common area catch basin inspection; and street sweeping of private streets and parking lots (Fuscoe, 2020a, p. 22).

- **Structural Source Control BMPs:** Structural source control BMPs to be incorporated into the project include the provision of storm drain system stenciling and signage (e.g. "DO NOT DUMP – LEADS DIRECTLY TO OCEAN"); design and construction of trash and waste storage areas to reduce introduction of pollution to stormwater; and the use of efficient irrigation systems and landscape design, water conservation, smart controllers, and source control (Fuscoe, 2020a, p. 24).

A preliminary draft WQMP has been prepared for the project site and is included as **Appendix I1**. The MS4 and the associated WQMP require the implementation of water quality features to ensure that runoff is treated prior to discharge into the storm drain or regional conveyance facilities to the receiving waters. Therefore, with adherence to existing state water and regional quality requirements, impacts to water quality would be less than significant and no mitigation would be necessary.

**b) Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?**

**Less than Significant Impact**

The project site is in the Coastal Plain of Orange County Groundwater Basin (Basin; California Department of Water Resources [DWR] Basin ID 8-001). This groundwater basin is bound on the northwest and the north by the Los Angeles-Orange County line. The Whittier fault zone and consolidated rocks of the Puente Hills and Chino Hills form the northeast extent of the basin. Consolidated rocks of the Santa Ana Mountains form the western boundary, and the consolidated rocks of the Laguna Hills and San Joaquin Hills form the southern boundary. The Pacific Ocean is the southwest extent of the groundwater basin (DWR, 2004).

Golden State Water Company (GSWC) serves customers in the project area and is a member agency of the Orange County Water District (OCWD), which manages the Basin. Water is delivered to customers in the project area is a blend of groundwater pumped from the Basin and imported water from the Colorado River Aqueduct and the State Water Project (GSWC, 2019).

In December 2018, OCWD and two member agencies (collectively referred to as "Agencies") submitted an alternative groundwater sustainability plan (Coastal Basin Alternative, or Alternative) to the DWR for evaluation and assessment as provided by the Sustainable Groundwater Management

Act (SGMA). The Coastal Basin Alternative was based on an analysis of basin conditions that demonstrated that the basin had operated within its sustainable yield over a period of at least 10 years. The Alternative demonstrated that the Agencies had a thorough understanding of groundwater conditions and sustainable management and have stabilized groundwater levels through active monitoring and management actions including purchasing land and water rights, ensuring a minimum amount of flow in the Santa Ana River for Orange County, importing water, implementation of groundwater management programs, wastewater recycling, and artificial recharge (DWR, 2019a).

In July 2019, DWR determined that the Alternative included a reasonable and sufficient assessment of the Basin's groundwater conditions, including the basin's hydrology, historical and current groundwater elevations, historical and current groundwater production, and future water demand projections and approved the Alternative (DWR 2019b).

As detailed in the project's preliminary Geotechnical Investigation, included as **Appendix E** to this document, groundwater was not encountered during the geotechnical field investigation, which investigated the subsurface of the site to depths of 51.5 feet (Albus & Keefe, 2020, p. 7). In addition, on March 16, 2020 a California Statewide Groundwater Elevation Monitoring (CASGEM) well located approximately 0.5 mile northeast of the project site (CASGEM Well #26699) measure a groundwater depth of 157.3 feet (ground surface to water surface, or GS to WS); on September 10, 2013 this well measured a verified historic high groundwater depth of 166.9 feet GS to WS (CASGEM, 2020a and CASGEM, 2020b).

The project site covers an area of approximately 3.85 acres; under existing conditions, 45 percent of the area is covered by impervious surfaces and, under proposed conditions, impervious area would increase to 75 percent (Fuscoe, 2020a, p. 4). However, as detailed in Section 4.10 a), stormwater generated by the 2-, 10-, 25-, and 100-year storm events would be captured by the proposed LID BMPs and allowed to infiltrate into the soil, recharging the local aquifer.

Based on the analysis above, the project would not substantially deplete groundwater supplies or result in a substantial net deficit in the aquifer volume or lowering of the local groundwater table. The project would have no impact and mitigation is not required.

**c) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:**

**i) Result in substantial erosion or siltation on or offsite;**

**Less Than Significant Impact**

The project is located on nearly level topography in a developed urban area. However, development of the proposed project could alter the existing drainage pattern of the area and may potentially result in erosion or siltation offsite.

**Construction**

As described in Section 4.10 a), temporary soil disturbance would occur during project construction, due to earth-moving activities such as excavation and trenching for foundations and utilities, soil compaction and moving, cut and fill activities, and grading. Disturbed soils are susceptible to high

rates of erosion from wind and rain, resulting in sediment transport via stormwater runoff from the project area.

Implementation of the required SWPPP, including installation, maintenance, and replacement of BMPs, as discussed in Section 4.10 a) would minimize or avoid potential impacts resulting from on- or offsite erosion and siltation to a level that is less than significant.

**Operation**

As detailed in Section 4.10 a), the LID BMPs proposed as part of project design would minimize or avoid on- or offsite erosion and siltation by a combination of maintaining drainage patterns, installation of landscaping, and installation of LID BMPs which would prevent erosion and prevent siltation-laden stormwater from leaving the site. Applicable regulations (e.g., the MS4 permit, and installation of LID BMPs, including site design, infiltration and pre-treatment BMPs, etc.), would limit pollutant discharges from development of the project. The project's adherence to existing requirements would reduce erosion and siltation during operation; therefore, impacts resulting from operation of the project would be less than significant.

**ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;**

**iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?**

**Less than Significant Impact**

The project Preliminary Hydrology Report (Fuscoe, 2020b), included as **Appendix I2** to this document, provides a conceptual description of the proposed drainage approach (as described in Section 4.10 a) and in the preliminary WQMP), as well as calculations and exhibits to estimate the values for the existing and proposed condition stormwater flows. The information presented in the hydrology report demonstrates that the proposed stormwater design would not adversely impact existing drainage conditions. Results of the percolation test indicate a storm water disposal system consisting of a dry well is feasible at the project site (Albus-Keefe & Associates, Inc., 2020b, p. 8). Refer to **Appendix H**, which is a percolation test prepared for the proposed project.

As presented in **Table 4.10-1** below, based on the hydrologic and detention analyses for the project site, the mitigated post-developed runoff (Qs; mitigated as described in the preliminary WQMP) will be reduced, as compared to the predeveloped (existing condition) for the various storm events.

**Table 4.10-1**
**RUNOFF SUMMARY**

| | Q2 (cfs) | Q10 (cfs) | Q25 (cfs) | Q100 (cfs) |
|---|---|---|---|---|
| Existing Condition | 4.0 | 7.7 | 9.3 | 12.1 |
| Unmitigated Proposed Condition | 5.3 | 9.8 | 11.7 | 15.1 |
| Mitigated Proposed Condition | 4.0 | 7.2 | 8.6 | 10.6 |

However, based on the hydrologic and detention analyses included in the preliminary hydrology report, the proposed project will not adversely impact the existing storm drain system or adjacent offsite areas. The proposed condition storm runoff flow rates (2-, 10-, 25-, 100-year storm events) will not exceed the existing condition storm runoff rates, due to the implementation of the proposed detention system as detailed in the preliminary WQMP (Fuscoe, 2020b, p. 7).

As detailed in the project's preliminary WQMP and preliminary Hydrology Report (Fuscoe, 2020a, 2020b), the project would not substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite, create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. Impacts would be less than significant.

**iv) Impede or redirect flood flows?**

**No Impact**

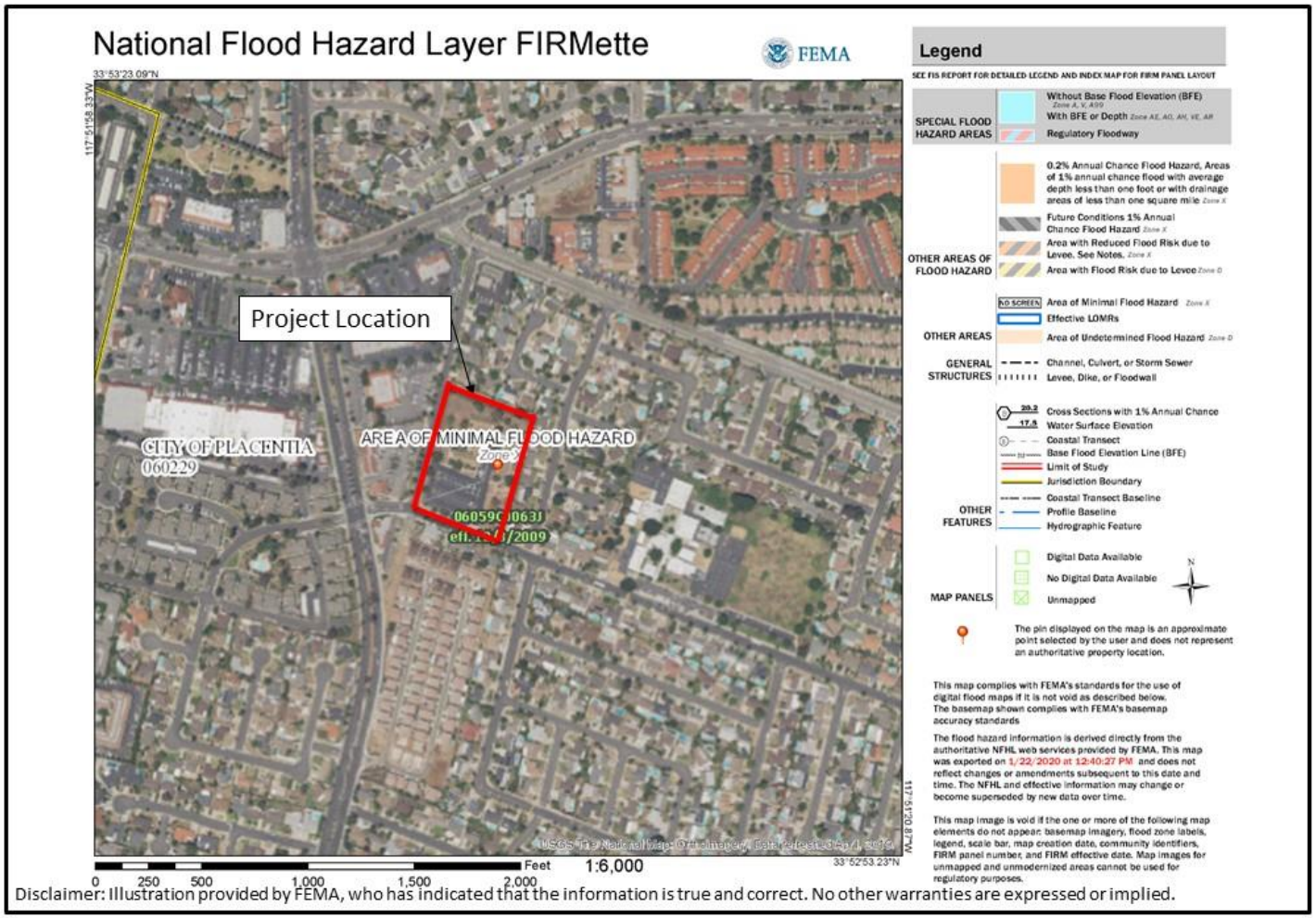
The project site is located on the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) for Orange County, California and Incorporated Areas (Map Number 06059C0063J, revised December 3, 2009); the site is located in Zone X, defined on this FIRM as *Areas determined to be outside the 0.2 percent chance* [500-year] *floodplain* (FEMA, 2009; see **Figure 10.4-2,** *FEMA FIRM Map*). The floodplain (i.e., flood hazard zone) nearest to the project site is the 500-year floodplain associated with the former Anaheim Union Reservoir located in Tri-City Park in Placentia; the eastern boundary of this floodplain is mapped approximately 0.5 mile west of and downgradient from the project site (FEMA, 2009; Fuscoe, 2020b; Google, Earth 2020a). The project would be located outside the nearest 500-year floodplain and would not impede or redirect flood flows. No Impacts would occur, and mitigation is not required.

**d) In flood hazard, tsunami, or seiche zones, would the project risk release of pollutants due to project inundation?**

**No Impact**

As discussed previously, the project site is located outside the 500-year floodplain and would not be at risk of inundation by flood hazards.

**Figure 4.10-2**
**FEMA FIRM MAP**




Sources: FEMA, January 22, 2020

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FEMA FIRM Map

The tsunami inundation area nearest to the project site is in the Bolsa Chica Channel and extends upstream to the Barber City Channel confluence, near the intersection of Bolsa Chica Road and Rancho Road in the City of Westminster. The project site is located approximately 15.7 miles northeast of the northern extent of this inundation area (CEMA, CGS, and USC, 2009; Google Earth, 2020b) and would not be at risk of inundation by tsunami.

A seiche is an oscillating wave, formed by earthquakes or winds, in an enclosed or partially enclosed waterbody. The former Anaheim Union Reservoir is the nearest waterbody to the project site in which a seiche could form; however, as discussed previously, the project site is outside of the flood hazard zone mapped for this waterbody (FEMA, 2009), and the project would not be at risk of inundation by seiche.

The proposed project would not be at risk of inundation by flood hazards, tsunami, or seiche, and would therefore not be at risk of release of pollutants due to inundation. No impact would occur, and mitigation is not required.

**e) Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?**

**No Impact**

As discussed in Section 4.10 a), the proposed project would comply with the Construction General Permit by developing and implementing a site-specific SWPPP and construction stormwater BMPs throughout the construction phase. The proposed project would comply with the MS4 Permit by incorporating LID BMPs into project design, which would avoid or minimize the amount and type of pollutants leaving the project, entering receiving waters, and impacting water quality and beneficial uses defined for these waters by the Basin Plan (RWQCB, 1995). In addition, the LID BMPs would allow stormwater infiltration into the local aquifer, similar to existing conditions (Fuscoe, 2020b). The proposed project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan; no impact would occur, and mitigation is not required.

## 4.11 Land Use and Planning

| Would the project: | Potentially Significant Impact | Less than Significant Impact with Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| a) Physically divide an established community? | | | | **X** |
| b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect? | | | **X** | |

### a) Would the project physically divide an established community?

**No Impact**

The project includes construction of two residential buildings accommodating 65 units on an existing Church site. The project proposes infill development on land currently developed with two buildings (housing Blessed Sacrament Episcopal Church and adjacent classrooms) and a large surface parking lot. The project would remove and replace the Blessed Sacrament Parish Hall, replacing the structure with a new 3,974-square-foot Parish Hall.

The project site is surrounded by single-family detached homes to the north, east, and (across Morse Avenue) to the south. Across Angelina Drive to the west are commercial land uses, including a United States Post Office and a surface parking lot serving businesses that front on Kramer Boulevard.

Amending the General Plan to change the designation of the project site from Low Density Residential to High Density Residential would allow for development that is similar in nature to the existing apartments located along Kraemer Boulevard and the west side of Angelina Drive. While the project site is adjacent to single family neighborhoods on the north, east and south, careful consideration to the architectural design of the proposed buildings has been given to ensure that the existing neighborhoods are protected and enhanced. Using landscaped open space and parking areas as buffers and including step-backs in the buildings, and placing two-story elements in key locations near single-family homes, the project is designed to blend into the existing setting. Development of the project site with mixed uses would be compatible with the established land use patterns in the area and would not physically divide an established community.

The project would not divide existing public spaces in the vicinity of the site or extend beyond the project site's boundaries. Furthermore, no streets or sidewalks would be permanently closed as a result of the development. The project would utilize existing roadways and there would be no change in roadway patterns. No separation of uses or disruption of access between land use types would occur as a result of the project. Therefore, the project would not physically divide an established community and no impact would occur.

**b) Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?**

**Less than Significant Impact**

The General Plan land use designation for the project site is Low Density Residential (refer to **Figure 4.11-1**) and the site is zoned R-1 Single-Family Residential District (refer to **Figure 4.11-2**). Under the existing General Plan designation and Zoning Ordinance, onsite residential development is permitted up to a maximum base density of 6.0 dwelling units per acre.

The City's General Plan land use designations surrounding the project site include R-1 to the north, east and south, and T-C (Town Center District) to the west. Large areas of R-1 zoning are found to the west and south of the site. Sites to the west of Kramer Boulevard, less than 150 yards west of the proposed project, are zoned R-G (Medium Density Multiple-Family District) and T-C.

To develop the proposed project, the Applicant is seeking General Plan Amendment to change the project General Plan land use designation from Low Density Residential to High Density Residential. The High Density Residential land use designation allows for multi-family units (apartments and condominiums), row homes, and townhomes at a maximum of 25 du/ac. According to the General Plan Land Use Element, high density residential development is intended to accommodate multiple family residences such as apartments.

The City of Placentia General Plan outlines goals in the Land Use Element to provide direction for future growth and development in Placentia, while minimizing existing and potential land use conflicts (City of Placentia General Plan, 2019, p. 2-30). The following Land Use Element goals are applicable to the proposed project:

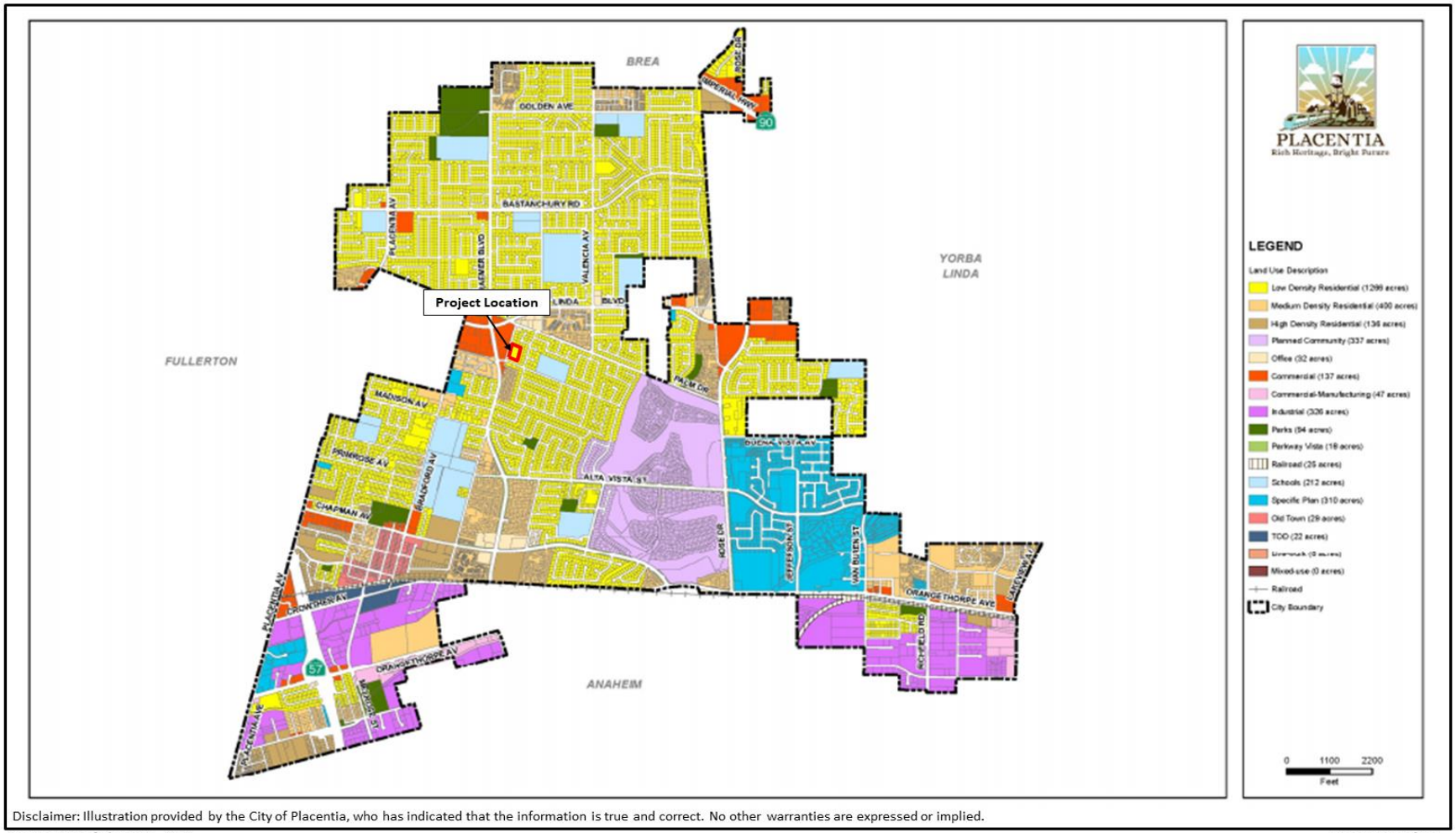
- GOAL 1: Provide a well-balanced land use pattern that accommodates existing and future needs for housing, commercial, industrial and open space/recreation uses, while providing adequate community services to City residents.
- GOAL 2: Ensure that new development is compatible with surrounding land uses, the circulation network, and existing development constraints.
- GOAL 4: Ensure that new development minimizes the impacts on the natural environment including the natural landscape, vegetation, air and water resources.

The proposed project is consistent with the City's Land Use Element because it proposes as an infill development on an underutilized, partially developed lot that is surrounded by existing development and in close proximity to a major arterial roadway.

Developing a housing community with rent-restricted units for senior residents would enable the City to meet the unique housing need of senior residents, and also advance the City's effort to meet their Regional Housing Needs Allocation (RHNA) of 231 units for low and very low-income households.[25] As detailed on the City's website, as of March 2018, the City had five multi-family residential projects pending; however, there is no indication that any units would be rent or age restricted with the exception of a 50-unit development for formerly homeless Veterans. The proposed project would help the City of Placentia meet its RHNA requirements.

25 Refer to page 4-77 of the Housing Element

**Figure 4.11-1**
**GENERAL PLAN LAND USE DESIGNATION**




Disclaimer: Illustration provided by the City of Placentia, who has indicated that the information is true and correct. No other warranties are expressed or implied.

Source: City of Placentia, 2019

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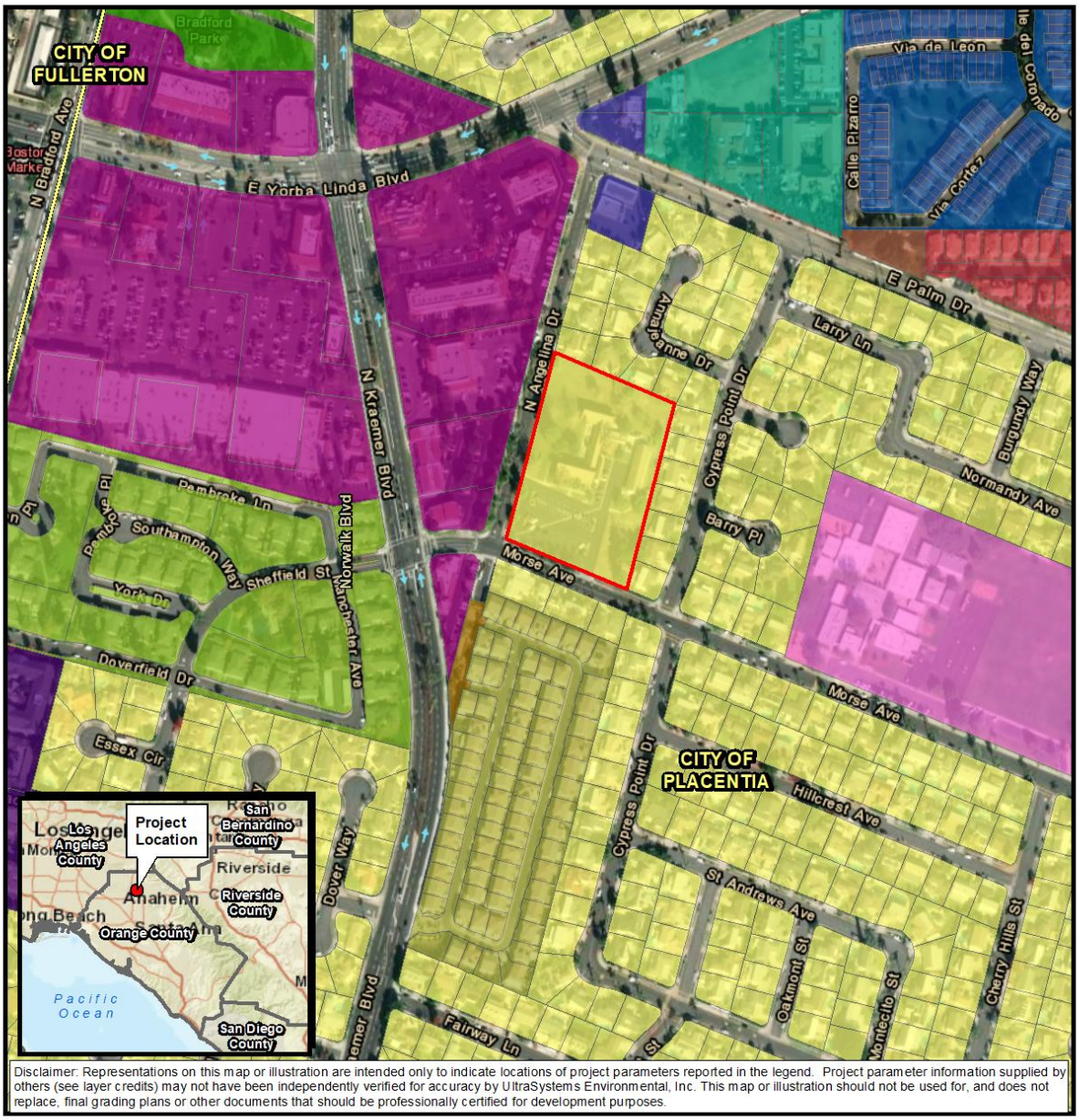
General Plan Land Use Map

**Figure 4.11-2**
**ZONING DESIGNATION**



Regarding the City's Housing Element for the 2013-2021 planning period, the proposed project would not conflict with any of the City's focus areas and programs, but would advance the following goals and policies:

**Goal HE-1:** Housing Supply and Variety - Develop and maintain an adequate supply of housing that varies sufficiently in cost, size, type, and tenure to meet the economic and social needs of existing and future residents within the constraints of available land.

**Goal HE-4:** Housing Cooperation and Coordination - Coordinate local housing efforts with appropriate federal, state, regional, and local governments and/or agencies and to cooperate in the implementation of intergovernmental housing programs to ensure maximum effectiveness in solving local and regional housing problems.

The proposed project would also implement the following programs:

- Program HE-1.2: Locate Housing Near Transportation, Employment and Services;
- Program HE-1.12: Development of Senior Housing; and
- Program HE-4.1: Partnerships with the Housing Industry.

The project site is zoned Single Family Residential on the City of Placentia Zoning Map. The R-1 zone allows for residential development at a maximum density of 6 units per net acre before a density bonus is applied. The City has a density bonus ordinance that permits a 25% increase in residential units if they are rent restricted to be affordable for lower income households, as detailed in Section 23.23 of the City of Placentia Zoning Code. Even with the density bonus, the project is over the permitted density allowed under the R-1 District.

The Applicant is seeking a Zone Change from R-1 to R-3 High Density Multiple-Family District. The R-3 District allows for the development and preservation of medium high-density apartment living with substantial space for cooperatively used facilities and open spaces with densities up to 25 dwelling units per acre. A density bonus would not be required for the project if a zone change to R-3 is granted because the project would have a density of 16.8 units per acre and the R-3 zone allows for 25 units per acre. Section 23.21.030 of the City's Municipal Code states the following regarding churches in an R-3 Zone: "Uses permitted subject to obtaining a use permit in the "R-3" district shall be as follows:…Churches, public utility uses not including corporation or equipment yards, private nonprofit recreation facilities;… [and] Day nursery. (Ord. O-2001-03 § 3, 2001; Ord. 91-O-113 § 2, 1991; Ord. 84-O-116 § 2, 1984; Ord. 72-O-109 § 12, 1972; prior code § 25-44)." Therefore, with the project's proposed Zone Change to R-3, the existing Church and Children's Learning Center[26] would be permitted.

The project site is located on Angelina Drive one block from North Kraemer Boulevard; the latter roadway is part of the Smart Street Program and Orange County Congestion Management Program. Within the City of Placentia General Plan Circulation Element, Kraemer Boulevard is classified as a Major Arterial Roadway, four lanes wide, intended to carry a large volume of intra-regional through traffic not handled by the freeway system. Best practices in New Urbanism and sustainable urban planning encourage infill development in and around major arterial roadways like Kraemer Boulevard to preserve lower density neighborhoods and open space areas. While the

26 Blessed Sacrament operates a not-for-profit, full- and partial-day, child care and education center offering a developmental program for children age 2 through 5, Monday through Friday, 7 a.m. to 6 p.m., twelve months a year (Blessed Sacrament Church, 2020)

project site is adjacent to one and two-story single-family homes, along Angelina Drive to the west there are parcels that are designed and developed with high density residential and commercial uses, including the Broadmoor condominium community. Allowing a zone change from R-1 to R-3 would allow for development that is similar in nature to the existing apartments located along Kraemer Boulevard and the west side of Angelina Drive. While the project site is adjacent to single-family neighborhoods on the north, east and south, careful consideration to the architectural design of buildings has been given to sure that the existing neighborhoods are protected and enhanced. Using landscaped open space and parking areas as buffers and including step-backs in the buildings, placing two-story elements in key locations near single family homes, the project is designed to blend into the existing setting. Additionally, the project originally proposed a three-story portion to Building 2 but the project applicant has modified the design so that Building 2 would be two stories high, to better blend in with the existing fabric of the neighborhood.

The project would be developed in compliance with the development standards and provisions of the R-3 District. Therefore, pending the requested General Plan Amendment and Zone Change, the project would have less than significant impacts regarding consistency with local land use plans, policies, or regulations.

## 4.12 Mineral Resources

| Would the project: | Potentially Significant Impact | Less than Significant Impact with Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| a) 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? | | | | **X** |
| b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan? | | | | **X** |

**a) 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?**

**and**

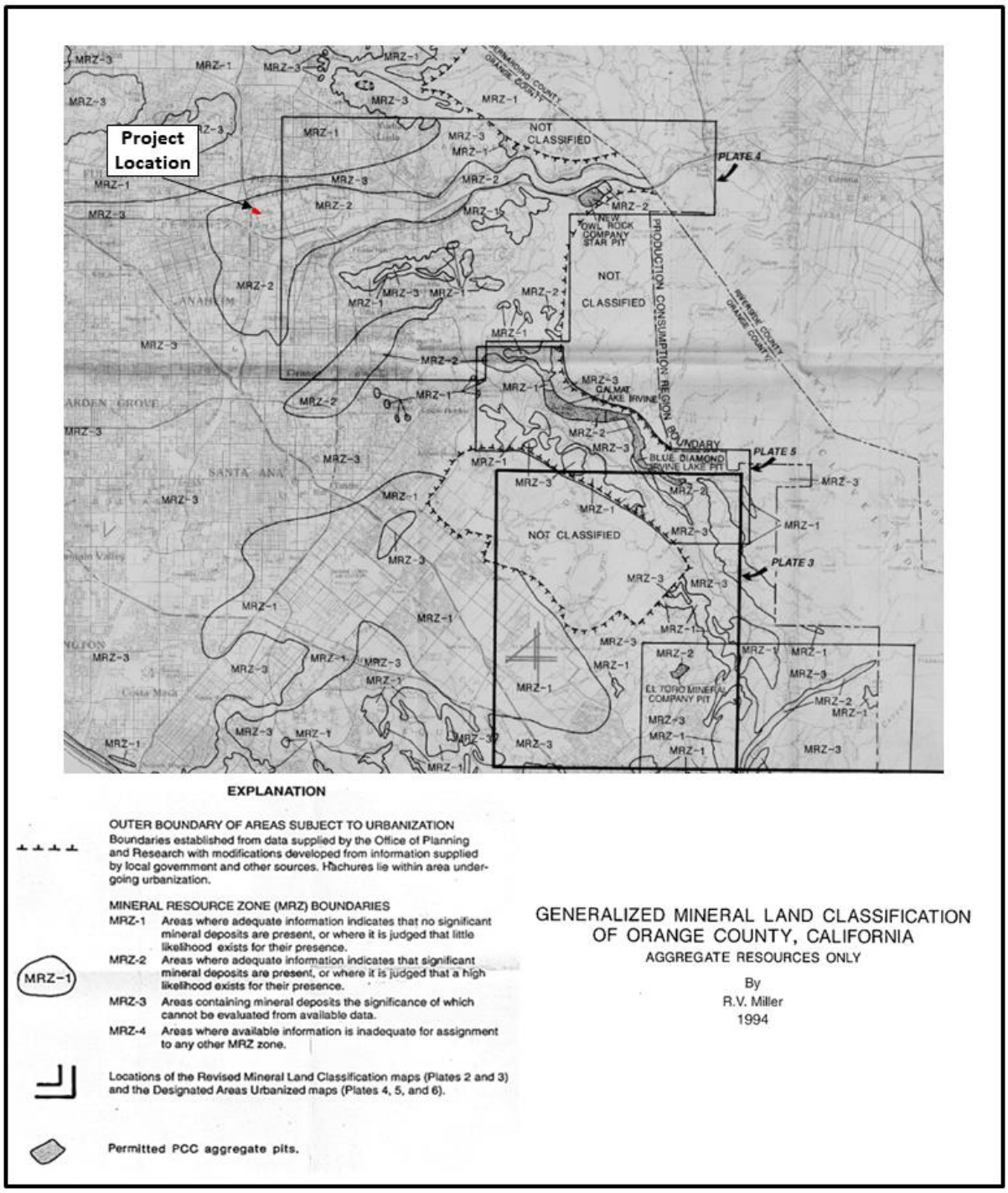
**b) Would the project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?**

**No Impact**

Assessment of mineral resources is based on the State of California's Mineral Land Classification/Designation Program established after the adoption of the Surface Mining and Reclamation Act (SMARA) in 1975. The primary objectives of SMARA are the assurance of adequate supplies of mineral resources important to California's economy and the reclamation of mined lands. These objectives are implemented through land use planning and regulatory programs administered by local government with the assistance of the Department of Conservation (DOC), California Geological Survey (CGS). Information on the location of important mineral deposits is developed by the CGS through a land use planning process termed *mineral land classification*.

As detailed on the SMARA Generalized Mineral Land Classification Map for Orange County (DOC, 1995), the project site is classified within SMARA designated Mineral Resource Zone-2 (MRZ-2) defined as areas where adequate information indicates that significant mineral deposits are present, or where it is judged that a high likelihood exists for their presence (refer to **Figure 4.12-1**). The DOC Division of Mine Reclamation reports no active or inactive mines on the project site (DOC, 2020). According to the DOC Division of Oil, Gas, & Geothermal Resources Well Finder, the project site is located within the Richfield Oil/Gas Field (DOC, 2019) (refer to **Figure 4.12-2**).

**Figure 4.12-1**
**DESIGNATED MINERAL RESOURCE ZONE**



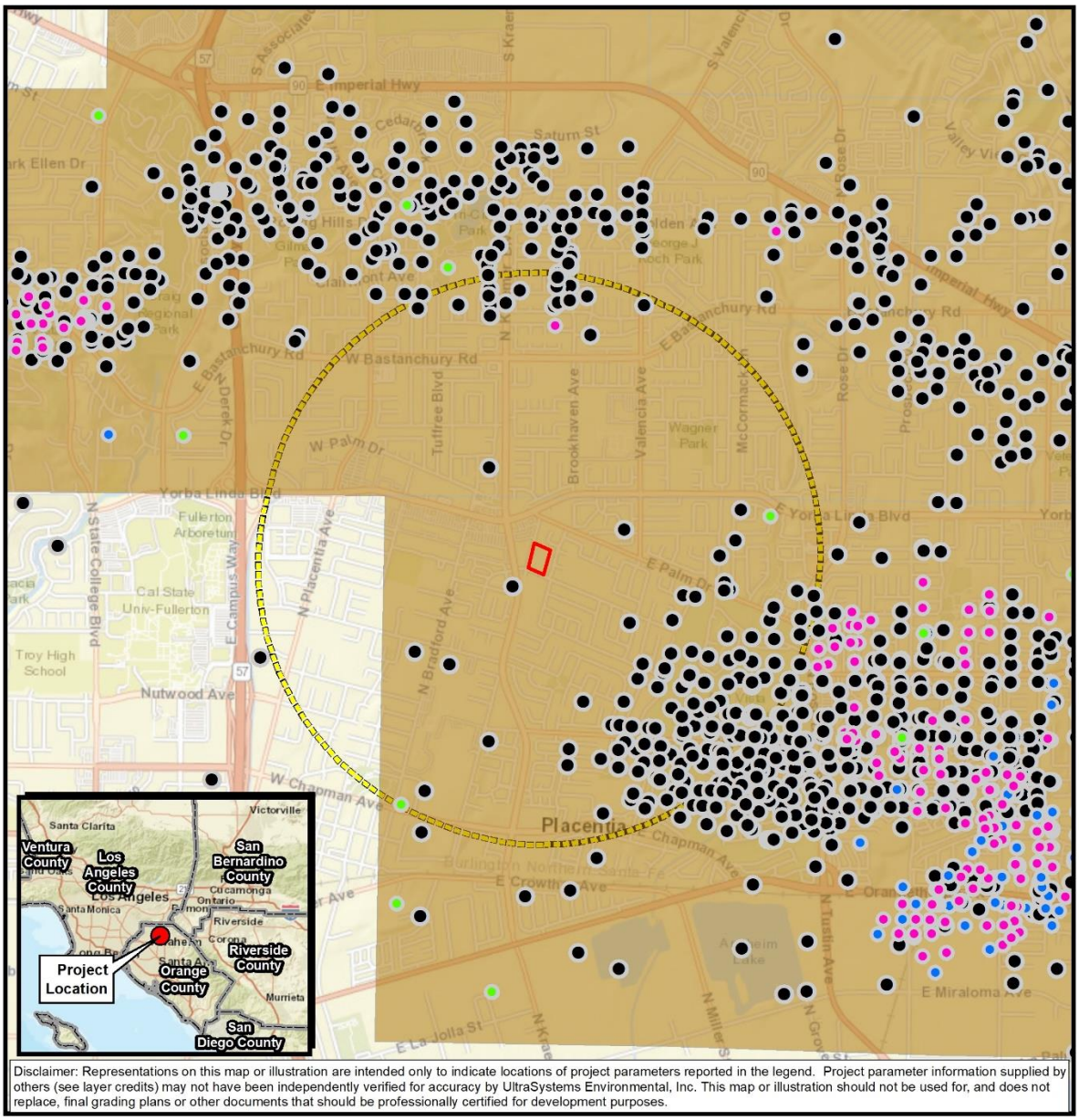

Disclaimer: Illustration provided by the California Department of Conservation, who has indicated that the information is true and correct. No other warranties are expressed or implied.

Source: Miller, Russel V. 1994.

UltraSystems

**Santa Angelina**
**Senior Apartment Homes**
Mineral Land Classification

**Figure 4.12-2**
**OIL, GAS AND GEOTHERMAL WELLS**



The location of the project site in the Richfield Oil Field was identified in Converse Consultants' Phase I Environmental Site Assessment Report dated January 6, 2020 as an environmental concern (refer to **Appendix G**). The nearest identified oil well (identified as 1-BC Chevron USA) was reported to be located approximately 450 feet south west of the southwest corner of the project site. Subsequently, a Methane report was prepared in April 2020 by Converse Consultants. Based on the location of the project site in the Richfield Oil Field, and the proposed redevelopment of the site, a soil gas investigation was determined to be required. A soil gas investigation was conducted to evaluate the project site for the presence of oil field gases. Based upon the measured concentration of methane less than or equal to 1,000 ppm and the location of the site outside of the 300-foot prescribed distance from a plugged oil and gas well, no further action is recommended (Converse Consultants, 2020b, p. 4). For the purposes of mineral resources, the project site does not contain any oil wells and is not actively used for oil production or extraction. Therefore, the project would have no impact regarding oil resources.

The General Plan land use designation for the project site is Low Density Residential and the site is zoned R-1. Existing uses onsite include a Church and children's learning center. Therefore, the project site is not zoned or designated for mineral reclamation activities and no such activities occur on the project site. For these reasons the project would have no impact to: (1) the availability of known mineral resources of value to the region or state residents; or (2) a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan.

## 4.13 Noise

| Would the project result in: | Potentially Significant Impact | Less than Significant Impact with Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? | | X | | |
| b) Generation of excessive groundborne vibration or groundborne noise levels? | | | X | |
| c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels? | | | | X |

### 4.13.1 Characteristics of Sound

Sound is a pressure wave transmitted through the air. It is described in terms of loudness or amplitude (measured in decibels), frequency or pitch (measured in hertz or cycles per second), and duration (measured in seconds or minutes). The decibel (dB) scale is a logarithmic scale that describes the physical intensity of the pressure vibrations that make up any sound. The pitch of the sound is related to the frequency of the pressure vibration. Because the human ear is not equally sensitive to all frequencies, a special frequency-dependent rating scale is used to relate noise to human sensitivity. The A-weighted decibel scale (dBA) provides this compensation by discriminating against upper and lower frequencies in a manner approximating the sensitivity of the human ear. The scale is based on a reference pressure level of 20 micropascals (zero dBA). The scale ranges from zero (for the average least perceptible sound) to about 130 (for the average human pain level).

### 4.13.2 Noise Measurement Scales

Several rating scales have been developed to analyze adverse effects of community noise on people. Since environmental noise fluctuates over time, these scales consider that the effect of noise on people depends largely upon the total acoustical energy content of the noise, as well as the time of day when the noise occurs. Those that are applicable to this analysis are as follows:

- $L_{eq}$, the equivalent noise level, is an average of sound level over a defined time period (such as 1 minute, 15 minutes, 1 hour or 24 hours). Thus, the $L_{eq}$ of a time-varying noise and that of a steady noise are the same if they deliver the same acoustic energy to the ear during exposure.

- $L_{90}$ is a noise level that is exceeded 90 percent of the time at a given location; it is often used as a measure of "background" noise.
- $L_{max}$ is the root mean square (RMS) maximum noise level during the measurement interval. This measurement is calculated by taking the RMS of all peak noise levels within the sampling interval. $L_{max}$ is distinct from the peak noise level, which only includes the single highest measurement within a measurement interval.
- CNEL, the Community Noise Equivalent Level, is a 24-hour average $L_{eq}$ with a 4.77-dBA "penalty" added to noise during the hours of 7:00 p.m. to 10:00 p.m., and a 10-dBA penalty added to noise during the hours of 10:00 p.m. to 7:00 a.m. to account for noise sensitivity in the evening and nighttime (Hendriks et al., 2013). The logarithmic effect of these additions is that a 60-dBA 24-hour $L_{eq}$ would result in a calculation of 66.7 dBA CNEL.
- $L_{dn}$, the day-night average noise, is a 24-hour average $L_{eq}$ with an additional 10-dBA "penalty" added to noise that occurs between 10:00 p.m. and 7:00 a.m. The $L_{dn}$ metric yields values within 1 dBA of the CNEL metric. As a matter of practice, $L_{dn}$ and CNEL values are considered to be equivalent and are treated as such in this assessment.

### 4.13.3 Existing Noise

The City of Placentia's General Plan lists sensitive receptors as locations where human populations (especially children, senior citizens, and sick persons) are present, and where there is a reasonable expectation of lower levels of human exposure to noise. Current land uses located within the City of Placentia that are sensitive to intrusive noise include residential uses, schools, libraries, hospitals, churches, and parks (City of Placentia General Plan, 2019, p. 8-29). Additionally, the City's Municipal Code has noise controls that are applicable to the proposed project, which require residential acoustical designs to not exceed significant noise exposure. The nearest sensitive receivers to the project site are the Blessed Sacrament Church on the project site, and the single-family residences that surround the project site to the north, south and east. The northern and eastern residential properties that abut the project site have an approximately 5.5-foot concrete block wall. Sensitive receivers are shown in **Figure 4.13-1**. **Table 4.13-1** summarizes information about them.

**Figure 4.13-1**
**SENSITIVE RECEIVERS NEAR THE PROJECT SITE**

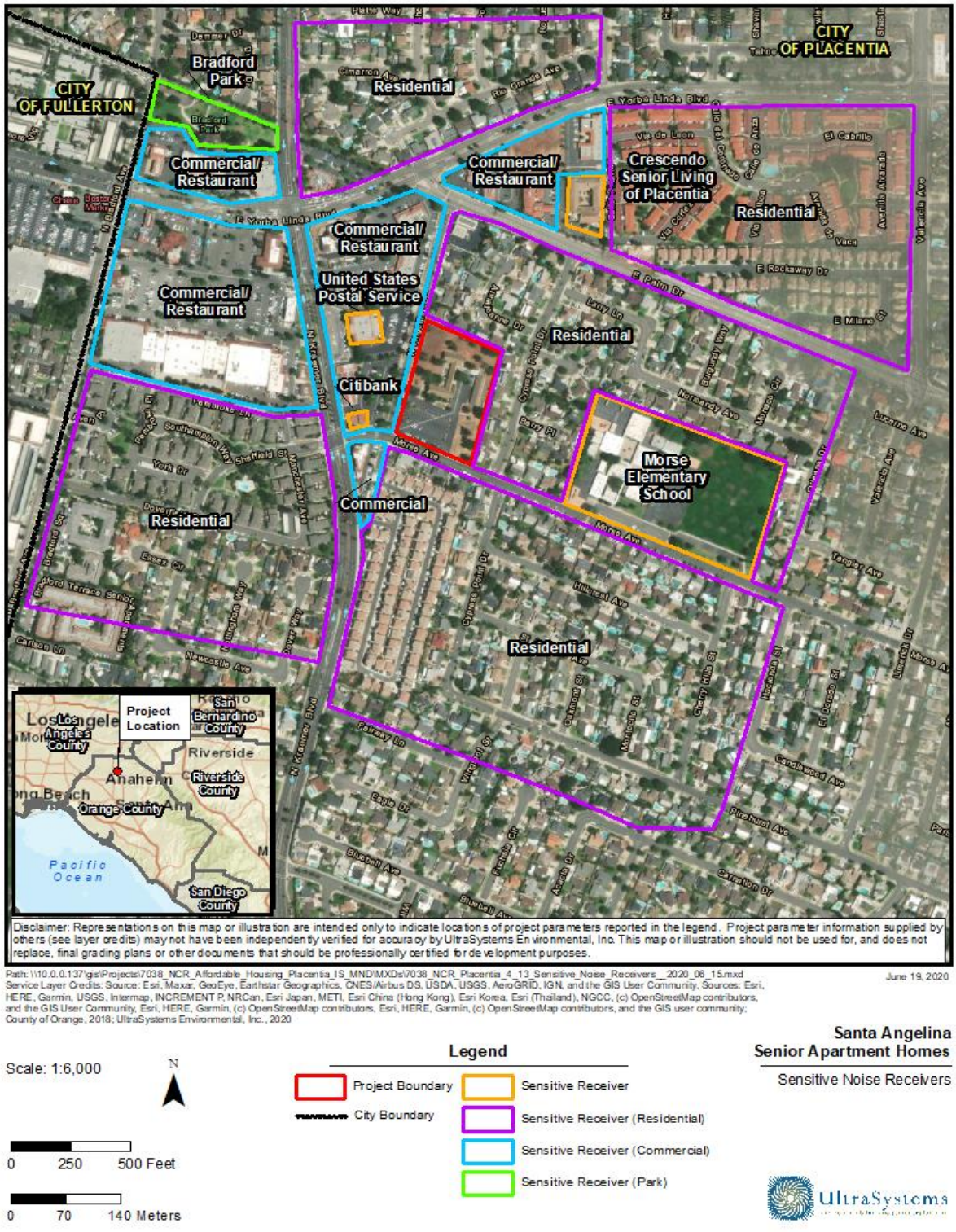


**Table 4.13-1**
**SENSITIVE RECEIVERS IN PROJECT AREA**

| Description | Location | Distance From Site Boundary (feet) | Nearest Ambient Sampling Point[a] |
|---|---|---|---|
| Blessed Sacrament Church | 1314 North Angelina Drive | 0 | 8,15 |
| Single-family Residence (North) | 320 Annajeanne Drive | 20 | 7,14 |
| Single-family Residence (South) | 330 Morse Avenue | 75 | 5,12 |
| Single-family Residence (East) | 1313 Cypress Point Drive | 20 | 5,12 |
| Morse Elementary School | 431 Morse Avenue | 445 | 4,16 |
| Crescendo Senior Living of Placentia | 8700 Hoffman Street | 650 | 3,11 |

[a]See **Figure 4.13-2** for locations of ambient noise sampling points.

The predominant source of noise in the City is vehicular traffic (City of Placentia General Plan, 2019, p. 8-9). The City's General Plan Noise Element reports results of traffic noise modeling of 24-hour average noise levels (as dBA CNEL) at 100 feet from the centerlines of roadway segments throughout the City in 2040. The project site is south of Palm Drive, between Yorba Linda Boulevard to Valencia Avenue, and east of Kraemer Boulevard. Existing noise levels are shown in **Table 4.13-2**.

**Table 4.13-2**
**MODELED 24-HOUR AVERAGE NOISE LEVELS IN PROJECT AREA IN 2040**

| Roadway Segment | Proposed 2040 General Plan Conditions | | | | |
|---|---|---|---|---|---|
| | ADT | dBA @100 Feet from Roadway Center | Distance from Roadway Centerline to: (Feet) | | |
| | | | 60 CNEL Noise Contour | 65 CNEL Noise Contour | 70 CNEL Noise Contour |
| **Yorba Linda Boulevard** | | | | | |
| Kraemer Boulevard to Valencia Avenue | 28,990 | 67.6 | 679 | 215 | 68 |
| **Palm Drive** | | | | | |
| Yorba Linda Boulevard to Valencia Avenue | 9,200 | 62.7 | 215 | 68 | 22 |
| **Kraemer Boulevard** | | | | | |
| Madison Avenue to Yorba Linda Boulevard | 27,200 | 67.3 | 637 | 201 | 64 |
| **Valencia Avenue** | | | | | |
| Palm Drive to Yorba Linda Boulevard | 6,250 | 61.1 | 147 | 46 | 15 |

ADT= average daily trips; dBA= A-weighted decibels; CNEL= community noise equivalent level.
**Source**: City of Placentia General Plan, 2019, p. 8-17 to 8-20

On December 19, 2019, 15-minute ambient noise level samples were obtained at eight locations in the general area of the project. These are shown in **Figure 4.13-2**. (See **Appendix J**.) Measurements were made between 8:46 a.m. and 3:56 p.m. As shown in **Table 4.13-3,** average short-term ambient noise levels ($L_{eq}$) ranged from 43.6 to 54.9 dBA $L_{eq}$. The 54.9-dBA noise level was along Morse Avenue, in front of Morse Elementary School. All monitored noise levels were within the range considered typical for the nearby land uses.

**Figure 4.13-2**
**AMBIENT NOISE MEASUREMENT LOCATIONS**

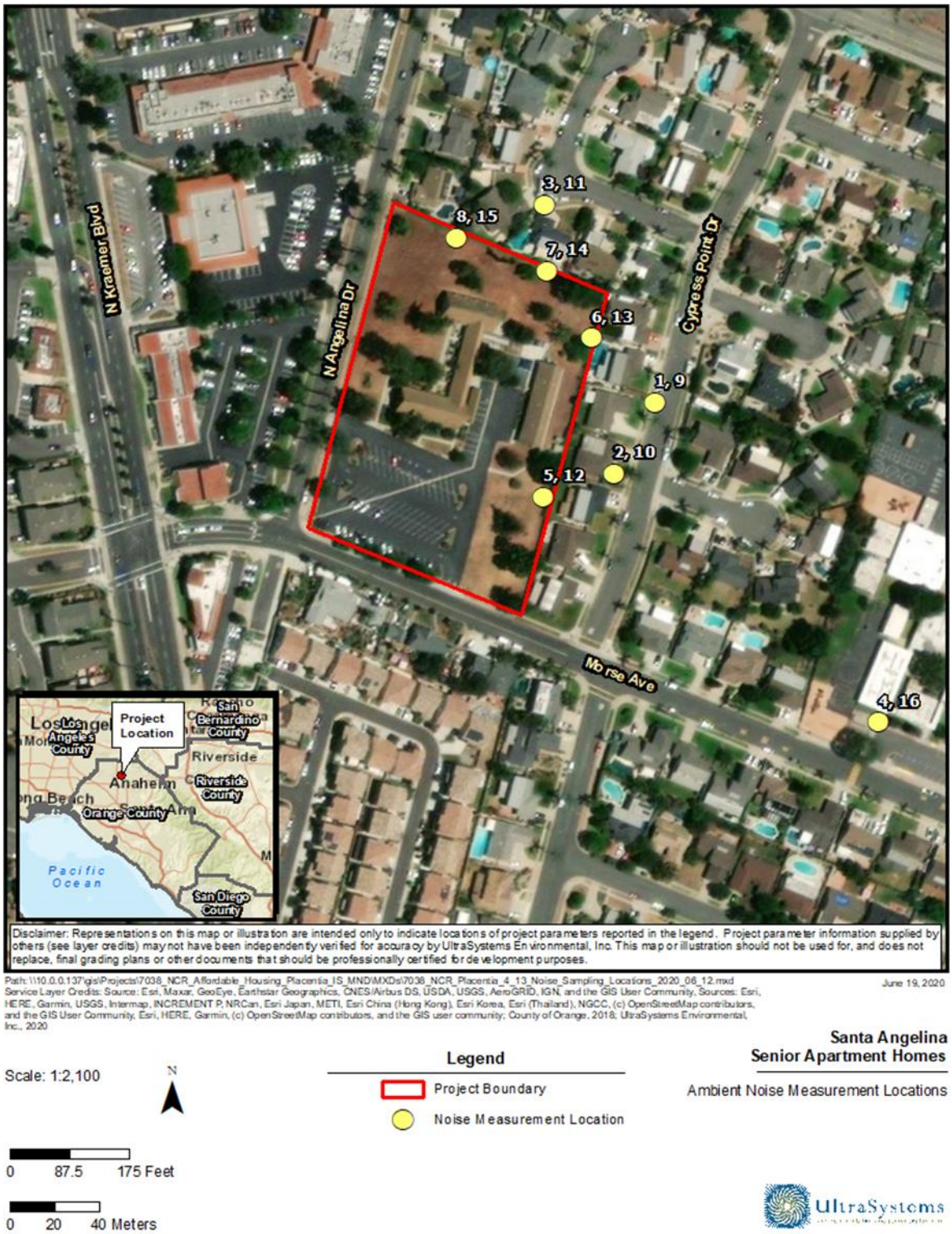


**Table 4.13-3**
**AMBIENT NOISE MEASUREMENT RESULTS**

| Point | Data Set | Sampling Time | Address | Sound Level (dBA) | | | Notes |
|---|---|---|---|---|---|---|---|
| | | | | $L_{eq}$ | $L_{max}$ | $L_{90}$ | |
| **1** | S103 | 0846-0901 | 1331 Cypress Point Drive | 51.8 | 65.3 | 43.6 | In front of single-family residence east of project site. |
| **2** | S104 | 0906-0921 | 1313 Cypress Point Drive | 50.1 | 66.8 | 42.0 | In front of single-family residence east of project site. |
| **3** | S105 | 0925-0940 | 314 Annajeanne Drive | 44.7 | 56.0 | 39.9 | In front of single-family residence north of project site. |
| **4** | S106 | 0950-1005 | 431 Morse Avenue | 48.5 | 62.1 | 37.5 | In front of Morse Elementary School east of the project site. |
| **5** | S107 | 1016-1031 | 1314 North Angelina Drive | 45.8 | 54.2 | 40.9 | Inside project boundary, east of the parking lot. |
| **6** | S108 | 1052-1107 | 1314 North Angelina Drive | 45.7 | 58.7 | 41.3 | Located northeast within the project boundary. |
| **7** | S109 | 1111-1126 | 1314 North Angelina Drive | 45.4 | 57.2 | 41.3 | Located north within the project boundary. |
| **8** | S110 | 1128-1143 | 1314 North Angelina Drive | 48.6 | 63.3 | 41.8 | Located northeast within the project boundary. |
| **9** | S111 | 1326-1341 | 1331 Cypress Point Drive | 52.2 | 77.5 | 38.5 | Refer to Point 1. |
| **10** | S112 | 1344-1359 | 1313 Cypress Point Drive | 53.8 | 72.8 | 39.4 | Refer to Point 2. |
| **11** | S113 | 1402-1417 | 314 Annajeanne Drive | 43.6 | 59.3 | 39.0 | Refer to Point 3. |
| **12** | S114 | 1424-1439 | 1314 North Angelina Drive | 46.5 | 56.6 | 43.7 | Refer to Point 5. |
| **13** | S116 | 1443-1458 | 1314 North Angelina Drive | 57.2 | 81.0 | 45.6 | Refer to Point 6. |
| **14** | S117 | 1459-1514 | 1314 North Angelina Drive | 47.4 | 61.2 | 42.6 | Refer to Point 7. |
| **15** | S118 | 1516-1531 | 1314 North Angelina Drive | 47.5 | 62.5 | 42.9 | Refer to Point 8. |
| **16** | S119 | 1539-1554 | 431 Morse Avenue | 54.9 | 68.3 | 47.4 | Refer to Point 4. |

### 4.13.4 Regulatory Setting

**State of California**

The California Department of Health Services (DHS) Office of Noise Control has studied the correlation of noise levels with effects on various land uses. (The Office of Noise Control no longer exists.) The most current guidelines prepared by the state noise officer are contained in the "General Plan Guidelines" issued by the Governor's Office of Planning and Research in 2003 and reissued in 2017 (Governor's Office of Planning and Research, 2017). These guidelines establish four categories for judging the severity of noise intrusion on specified land uses:

- **Normally Acceptable**: Is generally acceptable, with no mitigation necessary.
- **Conditionally Acceptable**: May require some mitigation, as established through a noise study.
- **Normally Unacceptable**: Requires substantial mitigation.
- **Clearly Unacceptable**: Probably cannot be mitigated to a less-than-significant level.

The types of land uses addressed by the state standards, and the acceptable noise categories for each, are presented in **Table 4.13-4**. There is some overlap between categories, which indicates that some judgment is required in determining the applicability of the numbers in a given situation.

Title 24 of the California Code of Regulations requires performing acoustical studies before constructing dwelling units in areas that exceed 60 dBA $L_{dn}$. Given the General Plan modeling results shown in **Table 4.13-2** and the transportation noise contours in the City of Placentia General Plan, the entire project site is within a 60 dBA contour (City of Placentia General Plan, 2019, p. 8-23). In addition, the California Noise Insulation Standards identify an interior noise standard of 45 dBA CNEL for new multi-family residential units. Local governments frequently extend this requirement to single-family housing.

**Table 4.13-4**
**CALIFORNIA LAND USE COMPATIBILITY FOR COMMUNITY NOISE SOURCES**

| Land Use Category | Noise Exposure (dBA, CNEL) | | | | | | |
|---|---|---|---|---|---|---|---|
| | 55 | 60 | 65 | 70 | 75 | 80 | |
| Residential – Low-Density Single-Family, Duplex, Mobile Homes | | | | | | | |
| Residential – Multiple Family | | | | | | | |
| Transient Lodging – Motel, Hotels | | | | | | | |
| Schools, Libraries, Churches, Hospitals, Nursing Homes | | | | | | | |
| Auditoriums, Concert Halls, Amphitheaters | | | | | | | |
| Sports Arena, Outdoor Spectator Sports | | | | | | | |
| Playgrounds, Neighborhood Parks | | | | | | | |
| Golf Courses, Riding Stables, Water Recreation, Cemeteries | | | | | | | |
| Office Buildings, Business Commercial and Professional | | | | | | | |
| Industrial, Manufacturing, Utilities, Agriculture | | | | | | | |

| | |
|---|---|
| | **Normally Acceptable**: Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction without any special noise insulation requirements. |
| | **Conditionally Acceptable**: New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply system or air conditioning will normally suffice. |
| | **Normally Unacceptable**: New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design. |
| | **Clearly Unacceptable**: New construction or development should generally not be undertaken. |

**Source**: Governor's Office of Planning and Research, 2017.

**City of Placentia General Plan Noise Element**

The Noise Element of the City of Placentia General Plan (City of Placentia General Plan, 2019) identifies sources of noise in the City and provides objectives and policies that ensure that noise from various sources would not create an unacceptable noise environment. The Municipal Code explicitly exempts construction activities from these requirements as long as they occur between 7:00 a.m. and 7:00 p.m. Monday through Friday, and between the hours of 9:00 a.m. and 6:00 p.m. on Saturday.[27] Project operations are not exempt.

As seen in **Table 4.13-4**, for a multi-family housing development such as the proposed project, exterior noise levels of 65 dBA CNEL or less are desirable. The General Plan Noise Element states that noise impacts can be mitigated in three basic ways; (1) by reducing the sound level of the noise generator, (2) by increasing the distance between the source and receiver and (3) insulating the receiver (City of Placentia General Plan, 2019, p. 8-43).

The General Plan Noise Element has the following applicable goals and associated policies for addressing noise issues in the community (City of Placentia General Plan, 2019, p. 8-44):

***Goal N-1: Reduce noise impacts from transportation noise sources.***

Policy N-1.3 Enforce all applicable City, State, and federal noise standards.

***Goal N-2: Incorporate noise considerations into land use planning decisions***

Policy N-2.1: Land use planning decisions should be guided by the "normally acceptable" and "conditionally acceptable" community noise exposures, as established by the Office of Planning and Research and shown on Table [8-]5.

Policy N-2.2: Require noise-reduction techniques and mitigation measures in site planning, architectural design, and construction where new projects do not meet the land use compatibility standards in Table [8-5].

Policy N-2.3: Discourage and, if necessary, prohibit the exposure of noise-sensitive land uses to noisy environments. Incorporate noise-reduction features during site planning to mitigate anticipated noise impacts on affected noise-sensitive land uses.

Policy N-2.5: Require proposed development and building projects to demonstrate compliance with the Noise Element and Noise Ordinance prior to project approval. Inform building permit applicants of the relevant sections of the Noise Element and Ordinance.

***Goal N-5: Develop measures to control objectionable noise impacts.***

Policy N-5.3: Where possible, resolve existing and potential conflicts between various noise sources and other human activities.

Policy N-5.4: Require sound attenuation devices on construction equipment.

27 Placentia Municipal Code §§ 23.76.080(8) and 23.81.170.

Policy N-5.5: Encourage additional sound attenuation measures to reduce noise impacts to sensitive uses.

Policy N-5.7: Require construction activity to comply with City Noise Ordinance. Ensure adequate noise control measures at all construction sites through good sound attenuation practices.

To the extent that the foregoing applies to the proposed project, the project design and operational characteristics are compatible with the Noise Element's goal, objectives and policies.

**City of Placentia Municipal Code**

The City of Placentia's regulations with respect to noise are included in Municipal Code Chapters 10.32 (Noise), 23.76 (Noise Control), and 23.81 (General Regulations and Exceptions).

**City of Placentia Municipal Code § 10.32.030**

No person shall use, operate or employ any system or electrical hookup or connection, including but not limited to, any public address system, loudspeaker or sound amplifying system or device in such a manner as to permit the sound emitted therefrom or transferred thereover or carried through such system or device, to travel into, on or over any other building or property or any public street or any space occupied by any such public street or property, in tones or volume which emits a loud, unnecessary or unusual noise, or which emits any noise which either annoys, disturbs, injures or endangers the comfort, repose, health, peace or safety of other persons. (Ord. 450 § 2, 1967; prior code § 18-28).

**City of Placentia Municipal Code Chapter 23.76**

The City of Placentia interior and exterior noise standards are shown below in **Table 4.13-5**.

**Table 4.13-5**
**CITY OF PLACENTIA GENERAL PLAN INTERIOR AND EXTERIOR NOISE STANDARDS**

| Noise Zone | Noise Level Limits dBA $L_{eq}$ – 1-hour average | Time Period |
|---|---|---|
| **Exterior Noise Standard** | | |
| 1 | 55 | 7:00 a.m. – 10:00 p.m. |
| | 50 | 10:00 p.m. – 7:00 a.m. |
| 2 | 65 | Anytime |
| 3 | 70 | Anytime |
| **Interior Noise Standard** | | |
| 1 | 55 | 7:00 a.m. – 10:00 p.m. |
| | 45 | 10:00 p.m. – 7:00 a.m. |
| Noise Zone 1: All Residential Property<br>Noise Zone 2: All Commercial Property<br>Noise Zone 3: All Industrial Property | | |

**Source**: City of Placentia General Plan, 2019, p. 8-40; City of Placentia Municipal Code §§ 23.76.050 and 23.76.060.

**Additional Exterior Noise Standards:**

In the event the alleged offensive noise consists entirely of impact noise, simple tone noise, speech, music, or any combination thereof, each of the above noise levels shown in **Table 4.13-5** shall be reduced by 5 dB(A).

(b) It is unlawful for any person at any location within the incorporated area of the city to create any noise, or to allow the creation of any noise on property owned, leased, occupied, or otherwise controlled by such person, when the foregoing causes the noise level, when measured on any other residential, commercial, or industrial property, either incorporated or unincorporated to exceed:

(1) The noise standards for a cumulative period of time more than thirty (30) minutes in any hour; or

(2) The noise standard plus five (5) dB(A) for a cumulative period of more than fifteen (15) minutes in any hour; or

(3) The noise standard plus ten (10) dB(A) for a cumulative period of more than five (5) minutes in any hour; or

(4) The noise standard plus fifteen (15) dB(A) for a cumulative period of more than one (1) minute in any hour; or

(5) The noise standard plus twenty (20) dB(A) for any period of time.

(c) In the event the ambient noise level exceeds any of the first four (4) noise limit categories above, the cumulative period applicable to said category shall be increased to reflect said ambient noise level. In the event the ambient noise level exceeds the fifth noise limit category, the maximum allowable noise level under said category shall be increased to reflect the maximum ambient noise level.

(d) In the event that the noise source and the affected property are within different noise zones, the noise standard applicable to the affected property shall apply. (Ord. 75-O-105 § 5, 1975).

**Additional Interior Noise Level Standards:**

In the event the alleged offensive noise consists entirely of impact noise, simple tone noise, speech, music, or any combination thereof, each of the above noise levels shown in **Table 4.13-5** shall be reduced by 5 dB(A).

(b) It is unlawful for any person at any location within the incorporated area of the city to create any noise, or to allow the creation of any noise on property owned, leased, occupied, or otherwise controlled by such person, when the foregoing causes the noise level when measured within any other dwelling unit on any residential property, either incorporated or unincorporated, to exceed:

(1) The interior noise standard for a cumulative period of more than five (5) minutes in any hour; or

(2) The interior noise standard plus five (5) dB(A) for a cumulative period of more than one (1) minute in any hour; or

(3) The interior noise standard plus ten (10) dB(A) for any period of time.

(c) In the event the ambient noise level exceeds either of the first two (2) noise limit categories above, the cumulative period applicable to said category shall be increased to reflect said ambient noise level. In the event the ambient noise level exceeds the third noise limit category, the maximum allowable noise level under said category shall be increased to reflect the maximum ambient noise level. (Ord. 75-O-105 § 6, 1975)

### 4.13.5 Significance Thresholds

This analysis incorporated is based upon the noise thresholds prescribed in Appendix G of the CEQA Guidelines, as amended (AEP, 2018), and shown as checklist questions a) through c) at the beginning of this section. As stated in the City's General Plan, the City of Placentia's regulations with respect to noise are included in Chapters 10.32 (Noise) and 23.76 (Noise Control) of the Municipal Code.

- **Construction Noise**. Section 23.81.170 (Grading, construction and maintenance of real property) of Chapter 23.81 (General Regulations and Exceptions) is the relevant ordinance controlling construction noise. According to § 23.81.170, all grading of any real property shall be permitted only between the hours of 7:00 a.m. and 7:00 p.m. Monday through Friday, and between the hours of 9:00 a.m. and 6:00 p.m. on Saturday, and shall be prohibited at any time on Sunday and on all federal holidays, unless other hours are approved by the chief building official or city engineer upon receipt of evidence that an emergency exists which would constitute a hazard to persons or property.

- **Operational Noise**. Refer to the interior and exterior noise standards shown in **Table 4.13-5**, above. Additionally, refer to the additional interior and exterior noise exceedance standards above.

- An increase in noise exposure exceeding 5 dBA is considered to be significant.

### 4.13.6 Impact Analysis

**a) Would the project result in generation of substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?**

**Less than Significant Impact with Mitigation Incorporated**

Noise impacts associated with housing projects include short-term and long-term impacts. Construction activities, especially heavy equipment operation, would create noise effects on and adjacent to the construction site. Long-term noise impacts include project-generated onsite and offsite operational noise sources. Onsite (stationary) noise sources from the apartment homes would include operation of mechanical equipment such as air conditioners, landscape and building maintenance. Offsite noise would be attributable to project-induced traffic, which would cause an incremental increase in noise levels within and near the project vicinity.

**Construction**

Noise impacts from construction activities are a function of the noise generated by the operation of construction equipment and onroad delivery and worker commuter vehicles, the location of equipment, and the timing and duration of the noise-generating activities. For the purpose of this analysis, it was estimated that the proposed project would be built in four phases,[28] which are listed in **Table 4.13-6**. Construction is anticipated to run from early January 2022 to late April 2023.

The types and numbers of pieces of equipment to be deployed during each construction phase were determined as part of the air quality and greenhouse gas emissions analyses for this project.[29] For each equipment type, **Table 4.13-6** shows an average noise emission level (in dB at 50 feet, unless otherwise specified) and a "usage factor," which is an estimated percentage of operating time that the equipment would be producing noise at the stated level.

**Table 4.13-6**
**CONSTRUCTION EQUIPMENT CHARACTERISTICS**

| Construction Phase | Equipment Type | Horse-power | No. of Pieces | Usage Factor | dBA @ 50 Feet |
|---|---|---|---|---|---|
| 1 - Demolition | Excavators | 158 | 2 | 0.4 | 80 |
| | Other Construction Equipment[a] | 172 | 1 | 0.4 | 90 |
| | Rubber-Tired Loaders | 203 | 1 | 0.4 | 79 |
| | Tractor/Loader/Backhoe | 97 | 2 | 0.37 | 85 |
| 2 - Grading | Rubber-Tired Dozers | 247 | 1 | 0.4 | 79 |
| | Rubber-Tired Loaders | 203 | 1 | 0.4 | 79 |
| | Scrapers | 367 | 2 | 0.14 | 88 |
| | Tractor/Loader/Backhoe | 97 | 1 | 0.37 | 85 |
| 3- Site Work | Excavators | 158 | 1 | 0.4 | 80 |
| | Paving Equipment | 132 | 1 | 0.5 | 85 |
| | Rubber-Tired Loaders | 203 | 2 | 0.4 | 79 |
| | Tractor/Loader/Backhoe | 97 | 3 | 0.37 | 85 |
| 4 – Building Construction | Forklifts | 89 | 1 | 0.3 | 67 |
| | Rubber-Tired Loaders | 203 | 1 | 0.4 | 79 |
| | Skid Steer Loaders | 65 | 1 | 0.4 | 80 |

**Sources**:
Knauer et al., 2006 unless otherwise noted.
Crane, cement and mortar mixer, and roller noise emissions data from County of Ventura, 2010.
Usage factors for cranes, cement and mortar mixers, pavers, and rollers from County of Ventura, 2010.
Forklift data and trencher usage factor from Port of Long Beach, 2009.
Skid steer loader noise data from Nugent, 2015.
[a]Assumed to be asphalt grinder; data from Devcon Construction, 2018.

28 A fifth phase, indoor painting, was not included in the noise analysis because of its low probability of adverse noise impact.
29 See **Section 4.3** and **Section 4.8**.

Using calculation methods published by the Federal Transit Administration,[30] UltraSystems estimated the average hourly exposures at four sensitive receivers, all single-family houses. The distances used for the calculation were measured from the receivers to the approximate center of activity of each construction phase, since that would be the average location of construction equipment most of the time. **Table 4.13-7** shows the relationships between the receivers, the noise sources, and the nearest ambient measurement points. For all receivers, there is a 5.5-foot high wall between the noise source and the residence. Ambient measurement values on both sides of the wall were taken into account in the analysis.

**Table 4.13-7**
**NOISE ANALYTICAL FRAMEWORK**

| Receiver | Description | Construction Phase(s)[a] | Nearest Ambient Sampling Point(s)[b] |
|---|---|---|---|
| A | Single-family residence | Demolition | 1,2,9,10<br>5,6,12,13 |
| B | Single-family residence | Grading, Site Work | 5,12<br>2,10 |
| C | Single-family residence | Building Construction-1 | 7,14<br>3,11 |
| D | Single-family residence | Building Construction-2 | 5,12<br>2,10 |

[a]See **Table 4.13-6**. The suffix "-1" or "-2" indicates that the construction activity in the stated phase occurs in two widely separated portions of the project site.
[b]See text.

**Table 4.13-8** summarizes the estimated construction-related short-term noise exposures at the nearest sensitive receiver for each construction phase. In no cases were there intervening buildings between a noise source and a receiver. The calculated noise attenuation by the existing 5.5-foot-high was wall was found to be negligible during the demolition, site work, and grading phases. However, the wall would provide 8.5 dBA and 9.0 dBA of attenuation for the two nearest receivers during building construction. Residential noise exposures due to construction activities would be about 64 to 81 dBA $L_{eq}$. These relatively high values are due mainly to the fact that the sensitive receivers are immediately adjacent to the project site, and most of the construction activities will be near the project boundary.

As noted above, construction activities are exempt from numerical noise limits, as long as they are confined to specified hours of the day. However, throughout construction, the increase in noise exposures at sensitive receivers would exceed 5 dBA. Construction noises would be less than significant after implementation of the following measures.

30 Transit Noise and Vibration Impact Assessment Manual. Federal Transit Administration, Office of Planning and Environment, Washington, DC, FTA Report No. 0123. September 2018. Internet: https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf.

**Table 4.13-8**
**ESTIMATED ONE-HOUR CONSTRUCTION NOISE EXPOSURES AT NEAREST SENSITIVE RECEIVERS**

| Receiver | Source | Distance (feet) | Ambient (dBA $L_{eq}$) | Construction (dBA $L_{eq}$)[a] | New Total (dBA $L_{eq}$) | Increase (dBA $L_{eq}$) |
|---|---|---|---|---|---|---|
| A | 1 | 123 | 52 | 80.9 | 80.9 | 28.9 |
| B | 2 | 180 | 52 | 74.4 | 74.4 | 22.4 |
| | 3 | 180 | 52 | 76.7 | 76.7 | 24.7 |
| C | 4-1 | 65 | 44 | 67.9 | 67.9 | 23.9 |
| D | 4-2 | 108 | 44 | 64.0 | 64.0 | 20.0 |

[a] Barrier attenuation taken into account.

### Mitigation Measures

**MM N-1** Project applicants shall require by contract specifications that the following construction best management practices (BMPs) be implemented by contractors to reduce construction noise levels:

- Ensure that construction equipment is properly muffled according to industry standards and in good working condition.
- Place noise-generating construction equipment and locate construction staging areas away from sensitive uses, where feasible.
- Schedule high noise-producing activities between the hours of 8:00 AM and 7:00 PM to minimize disruption on sensitive uses.
- Implement noise attenuation measures to the extent feasible, which may include, but are not limited to, temporary noise barriers or noise blankets around stationary construction noise sources.
- Use electric air compressors and similar power tools rather than diesel equipment, where feasible.
- Construction-related equipment, including heavy-duty equipment, motor vehicles, and portable equipment, shall be turned off when not in use for more than 30 minutes.
- Construction hours, allowable workdays, and the phone number of the job superintendent shall be clearly posted at all construction entrances to allow for surrounding owners and residents to contact the job superintendent. If the City or the job superintendent receives a complaint, the superintendent shall investigate, take appropriate corrective action, and report the action taken to the reporting party. Contract specifications shall be included in the proposed project construction documents, which shall be reviewed by the City prior to issuance of a grading permit.

**MM N-2** Project applicants shall require by contract specifications that heavily loaded trucks used during construction would be routed away from residential streets to the extent feasible. Contract specifications shall be included in the proposed project construction documents, which shall be reviewed by the City prior to issuance of a grading permit.

**Level of Significance After Mitigation**

With implementation of mitigation measures **N-1** and **N-2** above, the proposed project would result in less than significant impacts to sensitive receivers.

**Operational Noise**

**Onsite**

Onsite noise sources from the proposed housing project would include operation of mechanical equipment such as air conditioners, lawnmowers, leaf blowers, and building maintenance equipment; and motor vehicles accessing, driving on, and exiting the parking lot. Noise levels associated with operation of the project are expected to be comparable to those of nearby residential areas. In addition, noise from activities associated with the new Church facilities would be similar to that occurring now. Therefore, noise from onsite sources would be less than significant.

**Mobile Sources**

As seen in **Table 4.13-2**, the forecasted average daily traffic on streets near the project in 2040 are forecast to be between 6,280 and 28,990 vehicles per day. The CalEEMod analysis described in **Section 4.3** estimated that the project will generate a maximum of 297 trips per day. This would constitute an increase of between 1.0 and 4.7%. Given the logarithmic nature of the decibel, traffic volume needs to be doubled in order for the noise level to increase by 3 dBA (ICF Jones & Stokes, 2009), the minimum level perceived by the average human ear. A doubling is equivalent to a 100% increase. Because the maximum increase in traffic in any road segment would be far below 100%, the increase in roadway noise experienced at sensitive receivers would not be perceptible to the human ear. Therefore, roadway noise associated with project operation would not expose a land use to noise levels that are considered incompatible with or in excess of adopted standards, and impacts

**b) Would the project result in generation of excessive groundborne vibration or groundborne noise levels?**

**Less than Significant Impact**

Vibration is sound radiated through the ground. Vibration can result from a source (e.g., subway operations, vehicles, machinery equipment, etc.) causing the adjacent ground to move, thereby creating vibration waves that propagate through the soil to the foundations of nearby buildings. This effect is referred to as groundborne vibration. The peak particle velocity (PPV) or the RMS velocity is usually used to describe vibration levels. PPV is defined as the maximum instantaneous peak of the vibration level, while RMS is defined as the square root of the average of the squared amplitude of the level. PPV is typically used for evaluating potential building damage, while RMS velocity in dB is typically more suitable for evaluating human response.

The background vibration velocity level in residential areas is usually around 50 vibration decibels (VdB). The vibration velocity level threshold of perception for humans is approximately 65 VdB. A vibration velocity level of 75 VdB is the approximate dividing line between barely perceptible and distinctly perceptible levels for most people. Most perceptible indoor vibration is caused by sources within buildings such as operation of mechanical equipment, movement of people, or the slamming of doors. Typical outdoor sources of perceptible groundborne vibration are construction equipment, steel-wheeled trains, and traffic on rough roads. If a roadway is smooth, the groundborne vibration from traffic is rarely perceptible. The range of interest is from approximately 50 VdB to 100 VdB, which is the general threshold where minor damage can occur in fragile buildings.

**Construction Vibration**

Construction activities for the project have the potential to generate low levels of groundborne vibration. The operation of construction equipment generates vibrations that propagate though the ground and diminish in intensity with distance from the source. Vibration impacts can range from no perceptible effects at the lowest vibration levels, to low rumbling sounds and perceptible vibration at moderate levels, to slight damage of buildings at the highest levels. The construction activities associated with the project could have an adverse impact on both sensitive structures (i.e., building damage) and populations (i.e., annoyance).

Pile drivers or other major vibration sources will not be used for construction of the Santa Angelina Senior Apartment Homes project. The question is whether the equipment that will be deployed will have significant vibration impacts. The FTA (2018) has published standard vibration levels for construction equipment operations, at a distance of 25 feet. The construction related vibration levels for the nearest sensitive receivers for major construction phases are shown in **Table 4.13-9**. These calculations were based on the distances from the construction activity to the closest sensitive receivers.

**Table 4.13-9**
**VIBRATION LEVELS OF TYPICAL CONSTRUCTION EQUIPMENT**

| Equipment | Demolition (123 feet) | | Site Work or Grading (180 feet) | | Building Construction-1 (65 feet) | | Building Construction-2 (108 feet) | |
|---|---|---|---|---|---|---|---|---|
| | RMS (in/sec) | VdB | RMS (in/sec) | VdB | RMS (in/sec) | VdB | RMS (in/sec) | VdB |
| Loaded trucks | 0.0070 | 65.2 | 0.0039 | 60.3 | 0.0181 | 73.6 | 0.0085 | 66.9 |
| Jackhammer | 0.0032 | 58.2 | 0.0018 | 53.3 | 0.0083 | 66.6 | 0.0039 | 59.9 |
| Small bulldozer | 0.0003 | 37.2 | 0.0002 | 32.3 | 0.0007 | 45.6 | 0.0003 | 38.9 |
| Large bulldozer | 0.0082 | 66.2 | 0.0046 | 61.3 | 0.0212 | 74.6 | 0.0099 | 67.9 |

As shown in **Table 4.13-9**, the PPV of construction equipment at the nearest sensitive receiver (65 feet) is at most 0.0212 inch per second, which is less than the FTA damage threshold of 0.12 inch per second PPV for fragile historic buildings. The maximum VdB are 67.9 VdB, which are below the FTA threshold for human annoyance of 80 VdB. Unmitigated vibration impacts would therefore be less than significant.

**Operational Vibration**

The project involves the operation of residential uses and would not involve the use of stationary equipment that would result in high vibration levels, which are more typical for large manufacturing and industrial projects. Groundborne vibrations at the project site and immediate vicinity currently result from heavy-duty vehicular travel (e.g., refuse trucks and transit buses) on the nearby local roadways, and the project would not result in a substantive increase of these heavy-duty vehicles on the public roadways. Therefore, vibration impacts associated with operation of the project would be less than significant.

**c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?**

**No Impact**

The nearest active public airport is Fullerton Municipal Airport, the only municipal airport in Orange County, located approximately 6.75 miles west of the project site (Google Earth Pro, 2019b). According to the Airport's Pilot's Guide (City of Fullerton, 2020), the proposed project is not located within the Noise Abatement Areas of the Fullerton Municipal Airport. Therefore, no impact related to the exposure of people residing or working in the proposed project area to excessive airport-related noise levels is anticipated.

## 4.14 Population and Housing

| Would the project: | Potentially Significant Impact | Less than Significant Impact with Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| a) Induce substantial unplanned 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)? | | | X | |
| b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere? | | | | X |

### a) Would the project induce substantial unplanned growth in an area either directly (for example, by proposing new homes and business) or indirectly (for example, through extension of roads or other infrastructure)?

**Less than Significant Impact**

The proposed project would induce direct population growth with construction of two residential buildings accommodating 65 residential units and removal and replacement of the Blessed Sacrament Parish Hall. The project constitutes infill development on a portion of land currently developed with Church buildings and a surface parking lot.

The proposed project would construct 65 residential developments consisting of 59 one-bedroom apartments and six two-bedroom apartments; one of the one-bedroom apartments is reserved for the property manager. The project applicant estimates that the one-bedroom apartments would have a minimum of one resident and maximum of three residents. The two-bedroom apartments would have a minimum of two residents and maximum of five residents. Therefore, the estimated population increase generated from the proposed project would range between 71 and 207 residents.[31] As of January 1, 2020, the City of Placentia had an estimated population of 51,494 residents (DOF, 2020). The projected 2040 population for the City is 58,400 people (SCAG, 2016). Population growth in the City between 2020 and 2040 is estimated as 6,906 or approximately 13.4 percent of the 2020 population. The proposed project at full occupancy, using 207 residents for a conservative analysis, would house approximately 3 percent of the estimated population growth in the City between 2020 and 2040.

31 Minimum Residents= ((59) one-bedroom apartments x (1) resident) + ((6) two-bedroom apartments x (2) residents) = 71 residents
Maximum Residents= ((59) one-bedroom apartments x (3) resident) + ((6) two-bedroom apartments x (5) residents) = 207 residents

Implementation of the project is consistent with the overall intent of the City of Placentia to provide adequate housing opportunities to meet its fair share of projected housing needs. Additionally, the estimated increase in population resulting from the project has been anticipated by the City and the region. Therefore, impacts from substantial population growth would be less than significant.

The increased population and housing resulting from the project would not necessarily cause direct adverse physical environmental effects; however, indirect physical environmental effects such as project-related traffic or air quality impacts could occur. These indirect physical environmental effects associated with the project are analyzed in **Section 4.3**, (Air Quality) and **Section 4.17**, (Transportation) of this IS/MND. The project may require extension of some existing utilities from the project site into the right-of-way of adjacent streets (for the connection of utilities such as water or sewer lines). However, the project constitutes infill development and does not propose infrastructure improvements (such as new roads or other infrastructure) not already established in and near the project site. Therefore, no indirect impacts associated with the extension of roads and other infrastructure would occur.

**b) Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?**

**No Impact**

The project site is currently developed with existing Church buildings and a large surface parking lot. No housing exists onsite and no one currently resides on the project site. Therefore, the project would not displace any housing or people and the project would not necessitate the construction of replacement housing. No impact would occur.

## 4.15 Public Services

| Would the project: | Potentially Significant Impact | Less than Significant Impact with Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the need for new or physically altered governmental facilities, construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: | | | | |
| a) Fire protection? | | | **X** | |
| b) Police protection? | | **X** | | |
| c) Schools? | | | | **X** |
| d) Parks? | | | **X** | |
| e) Other public facilities? | | | **X** | |

### a) Fire protection?

**Less than Significant Impact**

Fire Services for the City of Placentia are provided by the Placentia Fire and Life Safety Department (PFLSD).[32]. The nearest PFLSD station to the project site is Station 2 at 1530 North Valencia, approximately 0.5 mile to the northeast. As detailed in **Section 4.14**, the project is anticipated to generate between 71 and 207 residents, which would have a minimal impact on demand for fire and emergency medical services. Additionally, the project site includes a fire turn around area in the north east corner of the project site.

Staff at UltraSystems reached out to Chief Van Gieson on multiple occasions (8/12/20, 8/24/20, 8/27/20, 8/31/20 and 9/14/20 via either phone or email. UltraSystems staff also reached out to two people at the City's Police Department on 9/16/20 and 9/17/20 via email and/or phone). No response was provided from the Fire Chief or staff at the Police Department. However, due to the limited number of dwelling units and the project's estimated population, it is anticipated that the project would not result in the need for construction of a new or expanded fire station and that the project would not result in substantial adverse physical impacts associated with the provision of, or the need for, new or physically altered fire protection facilities. As detailed in **Section 4.14**, the project is anticipated to generate between 71 and 207 residents, which would have a minimal impact on demand for fire services. Additionally, the project applicant would pay any applicable fire/development fees, per the City's fee schedule. Thus, the project's impacts on fire protection services would be less than significant.

32 The Placentia Fire and Life Safety Department began operations on July 1, 2020; the Orange County Fire Authority (OCFA) provided fire protection and emergency medical services to the City of Placentia for many years before that.

**b) Police protection?**

**Less than Significant Impact with Mitigation Incorporated**

The City of Placentia operates its own police department at the City Hall complex. The City's police department headquarters is located at 401 E. Chapman Avenue, approximately 1.0 mile south of the project site (Google Earth, 2019).

The City's police department is comprised of the Administrative Services and Operations Divisions. Administrative Services includes Communications/Records, Detectives (sergeant, four detectives, two civilian investigators, crime analyst), Professional Standards and Property and Evidence. Operations includes Canine Unit (three officers and three service dogs), Explorers, Patrol (including a Traffic subgroup), Reserves, School Resource Officers (two SROs), and SWAT (member of North County Special Weapons and Tactics Team) (City of Placentia Police Department, 2019).

The proposed project would not adversely affect demand for law enforcement services as described below. An information request letter was sent to the Police Department asking about the potential impacts of the project to law enforcement services (refer to **Appendix L** of this document). As detailed in the response from Captain Eric Point, the proposed project is under the jurisdiction of the Placentia Police Department (Point, 2020). Captain Point stated that the proposed project would not require the construction of new law enforcement facilities to meet existing law enforcement demands, in addition to the proposed project's demands. Captain Point also stated that traffic congestion at the intersection of Morse Avenue and North Angelina Drive can be moderately heavy during morning and afternoon commute times, especially during Morse Elementary School drop off and pick up times. He stated that there would be a possible traffic increase from project residents as they ingress and egress the property during commute times. Refer to **Section 4.17** of the IS/MND, which analyses potential transportation/traffic impacts of the project.

Captain Point stated that as with the other senior apartments in the City, the most common call for service would likely be for medical aid. Other calls for service may include traffic accidents and occasional auto burglaries in the parking area. Due to the project's potential to result in additional calls for service to the project site, compared to existing conditions, the Police Department makes the following recommendations (Point, 2020):

1. Install automatic gates at each entrance to help prevent theft.
2. Install "Click-2-Enter" emergency gate openers so the officers can rapidly access the property via radios.
3. Install large, visible numbers on buildings and apartments so officers can quickly identify calls for service locations from a distance.
4. Restrict residents from having long term guests reside at the site (residents' adult children residing at other senior properties have been problematic at times and have led to an increase in calls for service for domestic violence, elder abuse, and drug/alcohol related disturbances).

To reduce potential project impacts on law enforcement services, mitigation measures **PS-1** and **PS-2** are recommended. The project applicant is not proposing to install gates on site as the entire project site is currently not gated and the project would not alter that.

**Mitigation Measure**

**MM PS-1** The project applicant, with approval from with City of Placentia Planning Department, shall install large visible numbers on buildings and apartments to aid police officers in quickly identifying calls for service locations from a distance.

**MM PS-2** The project applicant shall restrict residents from having long term guests reside at the project site.

**Level of Significance After Mitigation**

With implementation of **MM PS-1** and **PS-2**, impacts to law enforcement services in the City of Placentia would be less than significant.

**c) Schools?**

**No Impact**

The project is located within the boundaries of the Placentia-Yorba Linda Unified School District, which serves the cities of Placentia and Yorba Linda, as well as portions of Anaheim, Brea, Fullerton and nearby areas of unincorporated Orange County (PYLUSD, 2019). The District has a total of 34 schools. The closest school to the project site is Morse Elementary School, located about 0.09 mile to the east at 431 Morse Avenue, in the City of Placentia. The proposed project would result in a population increase of between 71-207 residents. However, due to the age restriction of the persons living onsite, the project would not generate school-aged children. Therefore, the project would not result in an increase in students that could impact local schools. The project would have no impact in this regard.

**d) Parks?**

**Less Than Significant Impact**

As of December 2018, Placentia has 224.2 acres of parks distributed throughout the City. The City has a total of 16 parks operated by the Community Services Department, including two parkettes,[33] seven neighborhood parks, three community parks, three special use facilities, and one subregional park (Tom Dodson & Associates, 2019, p. 4.17-3).

The parks that would most likely serve the project site are Bradford Park, at 136 E. Palm Circle, located approximately 0.25 miles northwest of the project site and Goldenrod Park, at 925 Goldenrod Street, located approximately 0.5 mile south of the project site at (Google Earth, 2019). Additionally, the proposed project would construct onsite recreational amenities including a 1,500 square-foot senior-oriented community center, a new terrace and garden area, a memorial courtyard, and several unique landscaped areas.

The addition of between 71-207 residents associated with the project would not result in the need for construction of a new or expanded park facilities. The project would not result in substantial adverse physical impacts associated with the provision of, or the need for, new or physically altered

33 Parklette: a small park, usually open to the public and containing amenities like benches and children's play facilities (Dictionary.com, 2020)

park facilities because the residents would be provided with onsite amenities such as the community center and outdoor spaces onsite such that the residents would not create a substantial adverse physical impact to existing parks or recreational facilities. Additionally, the project applicant would pay any applicable fees, per the City's fee schedule. Based on the analysis above, the project's impacts on park facilities would be less than significant.

**e) Other Public Facilities?**

**Less Than Significant Impact**

The City's public library is located at 411 E. Chapman in the Placentia Civic Center, approximately one mile south of the project site. The City has a current population of approximately 51,494 (DOF, 2020). The increase of 71-207 residents associated with the project would have a negligible effect on the demand for library services. Therefore, the project would not result in substantial adverse physical impacts associated with the provision of, or the need for, new or physically altered library facilities.

The closest hospital to the project site, Placentia-Linda Hospital, is located at 1301 North Rose Drive approximately 1.0-mile northeast of the project site. The Placentia-Linda Hospital is a 114-bed acute-care facility that provides senior health, emergency room, physical therapy, wound care, diagnostic imaging, pulmonary care, orthopedics and various types of surgery (Placentia-Linda Hospital, 2020).

As detailed in **Section 4.14**, Population and Housing, the proposed project would increase the city's population by between 71 to 207 residents. It is unlikely that the entire project's population would need medical assistance at the same time, but in the case that Placentia-Linda Hospital reaches its patient capacity, other medical services are available in the City. Yorba Linda Medical Center, which provides primary care, urgent care and telemedicine services, is approximately one mile northeast of the project site at 1041 East Yorba Linda Boulevard #209 (Yorba Linda Medical Center, 2020). This facility could also serve the population generated by the proposed project. Therefore, there would be less than significant impacts in regard to hospitals.

## 4.16 Recreation

| Would the project: | Potentially Significant Impact | Less than Significant Impact with Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| a) 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? | | | X | |
| b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment? | | | | X |

### a) 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?

**Less than Significant Impact**

The project involves the construction of two residential buildings with 65 units and a senior-oriented community center on the ground floor of Building 2. The project also proposes a community garden and a set of bike racks outside of each of the residential buildings. The project proposes approximately 72,000 square feet (i.e. 43% of the net lot area of 167,536 square feet) of open space area. The layout of the buildings on the site would create several unique landscaped areas that include passive outdoor spaces including a community garden and a courtyard gathering space. The project also proposes an outdoor terrace fronting North Angelina Drive, and a memorial garden with accent trees between the existing Church building and the proposed new Parish Hall. New courtyard with outdoor seating is proposed north of the Church, adjacent to the proposed memorial garden. A new courtyard area is proposed west of the existing Church.

The City of Placentia has approximately 224.2 acres of public park and recreation facilities (City of Placentia General Plan, 2019, p. 6-5). The City has a standard of approximately four acres of open space per 1,000 residents (City of Placentia General Plan, 2019, pg. 6-20). The project is estimated to have a population between 71 persons and 207 persons. Based on the City's standard four acres of open space per 1,000 residents to be devoted to public recreation and park purposes, and using the high end of estimated project occupancy for a conservative estimate, the project's estimated population would create demand for approximately 90,169 square feet (0.71 to 2.07 acres) of open space. Approximately 72,000 square feet of open space is provided in project plans, as well as a 1,500-square-foot community center on the first floor of Building 2.

There are multiple parks within one mile of the project site. Bradford Park, approximately 0.25 miles northwest of the project site, Goldenrod Park, approximately 0.4 miles southeast of the project site, Bradford Stadium, approximately 0.5 miles southwest of the project site, Richard Samp Park, approximately 0.75 miles southeast of the project site, Parque Del Arroyo Verde, approximately

0.85 miles east of the project site, and Kraemer Memorial Park, approximately 0.95 miles southwest of the project site. The addition of 71 to 207 persons to the city is expected to marginally increase the use of existing neighborhood and regional parks, but this increased use would be partially offset by the proposed open space on the project site as described above. The project's proposed 1,500 square foot senior-oriented community center would also offset demand on existing city recreational facilities. **Figure 4.16-1** shows the landscape plan for the project. The provision of open space and amenities onsite would reduce impacts to existing recreational facilities. Additionally, the project applicant would pay any applicable park or recreational impact fees required by the city. Therefore, the project would have a less than significant impact on parks or other recreational facilities.

**b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?**

**Less Than Significant Impact**

As described above, the project includes recreational facilities for residents. Furthermore, the project would not require the construction or expansion of recreational facilities outside the limits of the project site. Therefore, there would be no significant adverse physical effect on the environment, and less than significant impacts would occur with project implementation.

## 4.17 Transportation

| Would the project: | Potentially Significant Impact | Less than Significant Impact with Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities? | | | **X** | |
| b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)? | | | **X** | |
| c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? | | | **X** | |
| d) Result in inadequate emergency access? | | | **X** | |

The following analysis is based upon the Transportation Assessment conducted by Fehr & Peers dated September 21, 2020 for the proposed project (Fehr & Peers, 2020) (refer to **Appendix M**) and the Reduced Parking Justification Memorandum (refer to **Appendix K**) dated September 24, 2020 from the project applicant (National Community Renaissance of California).

### a) Would the project conflict with a program plan, ordinance or policy addressing circulation system, including transit, roadway, bicycle and pedestrian facilities?

**Less than Significant Impact**

**Applicable Plans, Ordinances, and Policies**

**Statewide Transportation Improvement Program (STIP)**

The Statewide Transportation Improvement Program (STIP) is a multi-year capital improvement program of transportation projects on and off the State Highway System, funded with revenues from the State Highway Account and other funding sources. The proposed project development is not a transportation project and would not conflict with the STIP.

**Orange County Congestion Management Plan**

The Congestion Management Plan (CMP) requires that a traffic impact analysis be conducted for any project generating 2,400 or more daily trips, or 1,600 or more daily trips for projects that directly access the CMP Highway System (CMPHS). The CMPHS includes specific roadways, which include State Highways and Super Streets, which are now known as Smart Streets, and CMP arterial monitoring locations/intersections). As discussed below, the senior housing community and Church expansion project will generate an approximately net new external 245 daily trips (inbound and

outbound (Fehr and Peers, 2020, p. 2), which is far fewer than the 2,400 daily trips or 1,600 daily trips that directly access the CMPHS threshold. Furthermore, none of the study intersections are part of the 2018 Orange County Congestion Management Program (OCTA, 2019a). Therefore, the project would not conflict with the Orange County Congestion Management Plan.

**The Orange County Master Plan of Arterial Highways (MPAH)**

The Orange County Master Plan of Arterial Highways (MPAH) establishes a countywide surface roadway network intended to provide a guideline for the development of an inter-community arterial highway system to effectively serve existing and future land uses in the County. The MPAH provides a tool for coordination of the transportation and land use planning and implementation processes engaged in by the various cities, the County, and adjacent jurisdictions. Consistency with the MPAH ensures that each city and the County implement the same base transportation network using similar standards and assumptions. The proposed project would not permanently alter or affect arterial highway systems. Therefore, there would not conflict with the OC MPAH (OCTA, 2019b).

**Measure M/OC Go**

Measure M, approved by Orange County voters in November 1990, and re-approved in 2006, authorizes a sales tax to fund a variety of transportation projects in the County. The measure, which is now called OC Go, would create transportation improvement projects in regard to freeways, streets and roads, transit, and environmental programs (OCTA, 2020). The proposed project would not impede any OC Go projects and would not conflict with OC Go.

**City of Placentia General Plan—Mobility Element**

The City's mobility element has several goals and policies that are applicable to the proposed project. Refer to **Table 4.17-1** below which lists the applicable policies and how the proposed project would comply.

**Table 4.17-1**
**PROJECT COMPLIANCE WITH CITY OF PLACENTIA GENERAL PLAN POLICIES REGARDING MOBILITY AND TRANSPORTATION**

| General Plan Element | Project Compliance |
|---|---|
| **Mobility Element: Goal MOB-1 Provide adequate transportation facilities for existing and future inhabitants of the City, maximizing use of existing facilities and enhancing those facilities as growth occurs.** | |
| **Policy MOB-1.1:** Developments that are under the City's jurisdiction are to provide improvements needed to maintain LOS D or better with existing plus new development traffic. | The project would generate fewer than 50 peak hour trips. The Transportation Assessment prepared for the project concludes that the amount of traffic added to the street network by the project would result in less than significant transportation impacts in the vicinity of the project (Fehr and Peers, 2020, p. 4). Therefore, the proposed project would not conflict with this policy. |

| General Plan Element | Project Compliance |
|---|---|
| **Policy MOB-1.2:** Assure all new development pays its fair share of costs associated with that development including regional traffic mitigation. The City adopted a revised and updated Citywide Traffic Impact Development Fee as well as a TOD Traffic Development Impact Fee in 2017. | The project Applicant would pay any applicable fees, per the City's fee schedule. Therefore, the project would comply with this policy. |
| **Policy MOB-1.3:** For development projects, an approved phasing program (if applicable) is required that identifies phases of the proposed development that also corresponds to required improvements to roadway capacities. The phasing program must demonstrate the adequacy of the infrastructure to support the proposed project as well as a financing source to fund the improvements. | The project would generate fewer than 50 peak hour trips. The Transportation Assessment prepared for the project concludes that the amount of traffic added to the street network by the project would result in less than significant transportation impacts in the vicinity of the project (Fehr and Peers, 2020, p. 4). Therefore, the proposed project would not conflict with this policy. |
| **Mobility Element: Goal MOB-2 Maintain a safe, efficient, economical, and aesthetically pleasing transportation system providing for the movement of people, goods, and services to serve the existing and future needs of the City of Placentia.** | |
| **Policy MOB-2.5:** Encourage development which contributes to a balanced land use, which in turn serves to reduce overall trip lengths (i.e., locate retail in closer proximity to residents). | The project site would be within walking distance of a commercial shopping center approximately 45 feet west of the project site (Google Earth Pro, 2020). Additionally, the project site would be within a quarter mile of 4 bus stops. Therefore, the proposed project would not conflict with this policy. |
| **Policy MOB-2.6:** Require new development to conform to the standards and criteria of the City of Placentia and other mandated programs. This includes mitigation of traffic impacts to the surrounding street system as well as ensuring new developments manage their parking onsite with no impact to surrounding public streets. | The proposed project would adhere to all applicable regulations and City policies. Therefore, the proposed project would not conflict with this policy. |
| **Mobility Element: Goal MOB-3 Encourage transit and active transportation modes, including public transportation, bicycles, ridesharing, and walking, and other alternative modes of transportation to support land use plans and related transportation needs.** | |
| **Policy MOB-3.6:** Install handicap access ramps to improve disabled access. | The proposed project would be designed for seniors, some of whom may have disabilities. The proposed project would comply with all applicable City Americans with Disabilities Act (ADA) requirements. Therefore, the proposed project would not conflict with this policy. |
| **Policy MOB-3.10:** Continue to support the accessibility and accommodation of all transit users. | The proposed project would comply with all applicable City Americans with Disabilities Act (ADA) requirements. Additionally, the project site would be within a quarter mile of 4 bus stops. Therefore, the proposed project would not conflict with this policy. |

| General Plan Element | Project Compliance |
|---|---|
| **Policy MOB-3.11:** Continue to develop and improve access to and from transit routes by walking and bicycling and by people with disabilities. | The project site would be within a quarter mile of 4 bus stops. Additionally, the proposed project includes bike racks adjacent to buildings 1 and 2 for use by residents. Therefore, the proposed project would not conflict with this policy. |

**Source**: (City of Placentia, 2019, p. 3-46 to 3-49)

As detailed above, the proposed project would not conflict with any policies from the City's General Plan addressing circulation system, including transit, roadway, bicycle and pedestrian facilities. Therefore, the project would have a less than significant impact in this regard.

**City of Placentia Municipal Code**

Article XIII of Chapter 13 of the Placentia Municipal Code has a set of transportation management requirements for development projects in the City. However, none of these provisions apply to the proposed project.

**AB 744**

In October 2015, the California legislature passed Assembly Bill No. 744 to address the discrepancy between minimum parking standards and the actual demand from tenants for parking in developments that are in close proximity transit or serve individuals who have fewer cars, including seniors. Specifically, AB 744 allows a developer that is proposing a seniors-only project in proximity to transit that includes 100% affordable rental units to request that the jurisdiction reduce the minimum parking requirements for the development to 0.5 spaces per bedroom. The passage of AB 744 is intended to support the development of affordable housing in three ways (National Community Renaissance of California, 2020, p. 2):

1. Enables developers to invest in building more affordable dwelling units and not waste public subsidies and land on unneeded parking spaces.
2. Provides developers flexibility to include as much parking as necessary to meet actual demand.
3. Reduces construction costs and encourages building of urban infill, transit-oriented development, senior, and special needs housing.

The proposed project is located within 0.1 mile of OCTA Route 26 that provides service with 15-minute headways during peak travel times. The project is proposed to be 100 percent affordable to households earning less than 60 percent of the area median income for Anaheim-Santa Ana-Irvine metropolitan statistical area (MSA), which equates to households earning $40,620 or less annually. Based on AB 744 the proposed project would be required to provide 32.5 parking spaces. While the project qualifies for the full parking reduction allowed by AB 744, there is a need to find a balance that ensures livability and mobility for residents. Consequently, the project is not asking to reduce parking to the 0.5 spaces per unit minimum requirement as allowed by AB 744, but rather reduced number of spaces from the 134 spaces as required based on City zoning standards to 45 spaces (0.7 spaces per unit). In providing a ratio of 0.7 spaces per unit the project can meet the needs of residents, while encouraging alternative forms or transportation, reducing vehicle trips and

highlighting the City's commitment to sustainability (National Community Renaissance of California, 2020, p. 2).

The City of Placentia has established parking requirements based on the use and intensity of development. For a residential multifamily development in the R-3 High Density Multiple-Family District, the Placentia Zoning Code states that 1.75 spaces per one-bedroom unit and 2 spaces per two-bedroom unit are required plus an additional ten percent of said total for guest parking. One space per unit must be in a garage; however, carports may be allowed for multifamily developments. Based on these standards the proposed 65-unit project would be required to provide 134 parking spaces. This equates to more than 0.5 acres of land allocated to the storage of vehicles, not including drive aisles and access points (National Community Renaissance of California, 2020, p. 1).

National Community Renaissance of California requests a reduction in parking for the proposed senior housing community project. The proposed project would create 45 new onsite parking spaces including two accessible spaces and four electric vehicle spaces with charging stations to accommodate residents, visitors and staff in addition to the 85 existing parking spaces provided for the Church of the Blessed Sacrament. With the existing Church parking there are a total of 130 parking spaces on the 3.85-acre parcel. The parking ratio for the new parking spaces dedicated to the residential development is proposed at 0.7 spaces per unit. Based on parking utilization rates for similar senior rental projects within the region and the availability of public transportation options at the site, the Applicant feels that the proposed parking ratio is appropriate for an income-restricted, senior rental development (National Community Renaissance of California, 2020, p. 1).

Within the City of Placentia, there are a number of alternative transportation options for residents living in the city without a car or those who prefer not to drive. Within a quarter mile of the proposed Project there are four bus routes operated by the Orange County Transportation Authority (OCTA), including (National Community Renaissance of California, 2020, pp. 3-4):

- Route 26: Fullerton - Placentia via Commonwealth, Yorba Linda Ave. There is a bus stop roughly 0.1 mile from the proposed project on Yorba Linda Boulevard. Popular destinations include Downtown Fullerton, CSU Fullerton, Fullerton Crossroads, and Placentia Linda Hospital. This line also stops at the Fullerton Transportation Center which is also an access point for Metrolink and Amtrak. Headways for Route 26 are every 15 minutes.

- Route 129: La Habra - Anaheim via La Habra Boulevard, Beach Boulevard, Birch Street and Kraemer Boulevard. There is a bus stop less than 0.1 mile from the proposed project on Kraemer Boulevard. Popular destinations include Kindred Hospital Brea, Brea Gateway/Downtown, Brea Mall, Brea Union Plaza Center, Fullerton Crossroads. Headways for Route 129 are every 45 minutes.

- Route 153: Brea - Anaheim Regional Transportation Intermodal Center (ARTIC) via Placentia Avenue. There is a bus stop less than 0.75 mile from the proposed project on Placentia Avenue. Popular destinations include Brea Mall, CSU Fullerton, Fullerton Crossroads, East Anaheim Shopping Center, and Stadium Promenade. This line also stops at ARTIC which is also an access point for Metrolink and Amtrak. Headways for Route 26 are every hour.

- Route 71: Yorba Linda to Newport Beach via Tustin Avenue/Red Hill Avenue/Newport Boulevard. There is a bus stop roughly one mile from the proposed project on Rose Drive. Popular destinations include Placentia Linda Hospital, The Village at Orange, Tuskatella

Shopping Center, Orange Square, Center on Seventeenth, Western Medical Center, Tustin Heights Center, Larwin Square, Redhill Shopping Village, Marconi Automotive Museum, Lyon Air Museum, Pacific Amphitheatre/Orange County Fairgrounds, College Hospital Costa Mesa, Triangle Square and Hoag Hospital. This line also stops at the Anaheim Canyon Station which is also an access point for Metrolink. Headways for Route 71 are every 30 minutes.

In addition to local bus routes, in 2016, OCTA approved a Metrolink commuter rail station along the Orangethorpe rail corridor, to serve the Metrolink 91 – Perris Valley - line. The 91 lines offers service from Los Angeles Union Station to Riverside with connections to Buena Park, Norwalk and Santa Fe Springs, and Fullerton. Operational by 2020, the proposed Station will be located in Placentia's Packing House District (near Melrose Street and Crowther Avenue) which the City hopes will transform into an active, vibrant destination. The proposed Placentia Metrolink station is approximately 1.7 miles from the proposed project site and is easily accessible via bus on Routes 129 or 26 (National Community Renaissance of California, 2020, p. 4).

The location of the proposed project is considered "Very Walkable" (meaning that most errands can be accomplished on foot and do not require a car) with a walk score of 75. Within a quarter mile there are more than 15 restaurants, several grocery stores, and a variety of retail stores and services, a pharmacy, financial institutions, and several parks. It is entirely feasible for residents at the Development site to complete errands on foot if desired (National Community Renaissance of California, 2020, p. 2).

In conclusion, the proposed project would not conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system. Impacts would be less than significant.

**a) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?**

**Less than Significant Impact**

Senate Bill 743 (SB 743), signed by the Governor in 2013, changed the way transportation impacts are identified. Specifically, the legislation has directed the Office of Planning and Research (OPR) to look at different metrics for identifying transportation as an impact in the California Environmental Quality Act (CEQA). The Final OPR guidelines, released in November 2017, identify Vehicle Miles Traveled (VMT) as the preferred metric for traffic impact analysis moving forward (Fehr and Peers, 2020, p. 3).

The City of Placentia is currently in the process of updating their Traffic Impact Study Guidelines and adopting thresholds of significance related to VMT. The City's Draft Guidelines include screening criteria for project types that can be presumed to result in a less-than-significant transportation impact. Specific project types, such as affordable housing projects and senior housing projects, are presumed to have a less-than-significant impact and can be screened from VMT analysis. This is also consistent with the recommendations in OPR's Technical Advisory. Based on the City's Draft Guidelines and recommendations in the Technical Advisory, the project can be screened out from a full VMT assessment as it is presumed to result in a less-than-significant transportation impact (Fehr and Peers, 2020, pp. 3-4).

Section 15064.3 describes "specific considerations for evaluating a project's transportation impacts. Generally, vehicle miles traveled is the most appropriate measure of transportation impacts. For the

purposes of this section, 'vehicle miles traveled' refers to the amount and distance of automobile travel attributable to a project."

Senate Bill (SB) 743 was signed into law in 2013 and initiated an update to the CEQA Guidelines to change how lead agencies evaluate transportation impacts under CEQA, with the goal of better measuring the actual transportation-related environmental impacts of projects. As of July 1, 2020, agencies analyzing the transportation impacts of new projects must now look at a metric known as vehicle miles traveled (VMT) instead of Level of Service (LOS). VMT measures how much actual auto travel (additional miles driven) a proposed project would create on California roads. Under SB 743, over 50 percent of development within the state could forego transportation analysis and mitigation entirely. This includes affordable housing, housing within 0.5 mile of transit, housing projects generating fewer than 110 trips per day, and new housing in existing low-VMT neighborhoods (Governor's Office of Planning and Research, 2020).

OPR's Technical Advisory on Evaluating Transportation Impacts in CEQA includes a section titled "Presumption of Less Than Significant Impact for Affordable Residential Development." This section states that adding affordable housing to infill locations generally improves jobs-housing match, in turn shortening commutes and reducing VMT. Additionally, this document also states: "Evidence supports a presumption of less than significant impact for a 100 percent affordable residential development (or the residential component of a mixed-use development) in infill locations. Lead agencies may develop their own presumption of less than significant impact for residential projects (or residential portions of mixed use projects) containing a particular amount of affordable housing, based on local circumstances and evidence (OPR, 2018, pp. 14-15). Therefore, the project would have a less than significant impact regarding conflict or inconsistency with CEQA Guidelines section 15064.3.

**Table 4.17-2**
**TRIP GENERATION ESTIMATE**

| Land Use | ITE Land Use Code | Size | | Trip Generation Rates | | | | | | | Trip Rate | Daily Trips | Estimated Trip Generation | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Daily Rate | AM Peak Hour | | | PM Peak Hour | | | | | AM Peak Hour | | | PM Peak Hour | | |
| | | | | | Rate | %In | %Out | Rate | %In | %Out | | | In | Out | Total | In | Out | Total |
| Senior Adult Housing - Attached | 252 | 65 | Units | 3.7 | 0.20 | 35% | 65% | 0.26 | 55% | 45% | Per du[1] | 241 | 5 | 8 | 13 | 9 | 8 | 17 |
| Church | 560 | 0.6 | ksf[1] | 6.95 | 0.33 | 60% | 40% | 3.81 | 45% | 55% | Per ksf[2] | 4 | 0 | 0 | 0 | 1 | 1 | 2 |
| **External Total Project Trips** | | | | | | | | | | | | **245** | 5 | 8 | 13 | 10 | 9 | 19 |

**Source**: Fehr and Peers, 2020
[1] du = dwelling unit
[2]ksf = 1,00 square feet

**b) Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?**

**Less than Significant Impact**

**Construction**

During the construction phase, the project could temporarily impact street traffic adjacent to the project due to construction activities in the right-of-way (ROW). Project construction could reduce the number of lanes or temporarily close a portion of North Angelina Drive and Morse Avenue. The City requires preparation and implementation of a Traffic Management Plan (TMP) for all projects that require construction in the public ROW (Tom Dodson & Associates, 2019, p. 4.18-45). Therefore, the proposed project shall implement a TMP; the TMP must be reviewed and approved by the City's Traffic Engineer prior to the start of construction activity in the public ROW, which would ensure that the project would have less than significant impacts during the construction phase.

**Operation**

The proposed project would not alter the surrounding roadways. Vehicular access to the project site is currently provided via driveways on Morse Avenue and North Angelina Drive. A new driveway would be added along North Angelina Drive, near the northwest corner of the project site to provide access for residents to a designated parking area. A firetruck turnaround would be located at the northeast corner of the project site. The project's circulation system, including driveways and parking areas, would be designed to meet the development standards of the City and would not result in uses or design features that would create traffic hazards. Therefore, impacts regarding increases in hazards due to geometric design features or incompatible uses would be less than significant.

**c) Would the project result in inadequate emergency access?**

**Less than Significant Impact**

**Construction**

Project construction could temporarily close sidewalks and street lane(s) along Morse Avenue and/or North Angelina Drive, which could temporarily impact emergency access. However, implementation of the TMP would ensure that traffic circulation during construction would be less than significant.

**Operation**

The project would comply with applicable City regulations, such as the requirement to comply with the City's fire code to provide adequate emergency access, as well as the California Building Standards Code. Prior to the issuance of building permits, the City of Placentia would review project site plans, including location of all buildings, fences, access driveways and other features that may affect emergency access. The site design includes access and fire lanes that would accommodate emergency ingress and egress by fire trucks, police units, and ambulance/paramedic vehicles. All onsite access and sight-distance requirements would be in accordance with all applicable design requirements. The City's review process and compliance with applicable regulations and standards would ensure that adequate emergency access would be provided. Therefore, the project would not result in inadequate emergency access and there would be less than significant impacts.

## 4.18 Tribal Cultural Resources

| Would the project: | Potentially Significant Impact | Less than Significant Impact with Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| a) Cause a substantial adverse change in the significance of a tribal cultural resource that is listed or eligible for listing in the California Register of Historical Resources or in a local register of historical resources as defined in Public Resources Code § 5020.1(k)? | | | | **X** |
| b) Cause a substantial adverse change in the significance of a tribal cultural resource that is determined to be a significant resource to a California Native American tribe pursuant to the criteria set forth in subdivision (c) of Public Resource Code § 5024.1(c)? | | **X** | | |

Information from the Phase I Cultural Resources Inventory, dated January 16, 2020 (see **Appendix D1**), prepared for the Santa Angelina Senior Apartment Homes project by UltraSystems has been included in this section.

**a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource that is listed or eligible for listing in the California Register of Historical Resources or in a local register of historical resources as defined in Public Resources Code § 5020.1(k)?**

**No Impact**

No traditional cultural sites within a half-mile buffer of the project boundary were documented in the Native American Heritage Commission's (NAHC) Sacred Lands File (SLF) search. No resources as defined by Public Resources Code § 21074 have been identified (refer to **Attachment C**: "Native American Heritage Commission Records Search and Native American Contacts" in **Appendix D1** to this IS/MND). Additionally, the project site has not been recommended for historic designation for prehistoric and tribal cultural resources (TCRs). No specific tribal resources have been identified by local tribes responding to inquiries for the Cultural Resources Inventory.

No prehistoric archaeological resources were observed during the field survey. No historic archaeological resources were observed during the field survey. The Blessed Sacrament Episcopal Church, constructed circa 1957, and thus is approximately 63 years old, was observed and recorded. The previous cultural resources surveys within the half-mile buffer zone resulted in no archaeological sites or isolates being recorded. Six historic properties were identified within the half-mile buffer zone; however, none are within the area of potential effect. The results of the pedestrian assessment indicate it is unlikely that buildings on the project site would be adversely affected by construction of the project taking place on portions of the Blessed Sacrament Church campus (which date to the 1970s, but not the 1950s Church building itself). The cultural resource

study findings at the South Central Coast Information Center (the local California Historic Resources Information System facility) indicate that there is a low potential for finding tribal resources (See **Appendix D1.**).

No tribal cultural resources are listed or eligible for listing in the California Register of Historical Resources or in a local register of historical resources as defined in Public Resources Code § 5020.1(k). Therefore, there will be no impacts as a result of the project.

**b) Would the project cause a substantial adverse change in the significance of a tribal cultural resource that is determined to be a significant resource to a California Native American tribe pursuant to the criteria set forth in subdivision (c) of Public Resource Code § 5024.1(c)?**

**Less than Significant Impact with Mitigation Incorporated**

Assembly Bill 52 (AB 52) requires meaningful consultation with California Native American Tribes on potential impacts on TCRs, as defined in Public Resources Code § 21074. TCRs are sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either eligible or listed in the California Register of Historical Resources or local register of historical resources (CNRA, 2007).

As part of the AB 52 process, Native American tribes must submit a written request to the lead agency to be notified of projects within their traditionally and culturally affiliated area. The lead agency must provide written, formal notification to those tribes within 14 days of deciding to undertake a project. The tribe must respond to the lead agency within 30 days of receiving this notification if they want to engage in consultation on the project, and the lead agency must begin the consultation process within 30 days of receiving the tribe's request. Consultation concludes when either (1) the parties agree to mitigation measures to avoid a significant effect on a tribal cultural resource, or (2) a party, acting in good faith and after reasonable effort, concludes mutual agreement cannot be reached.

The City of Placentia (the lead agency) has initiated AB 52 outreach to local tribes for the Santa Angelina Senior Apartment Homes Project. The City prepared letters to the three tribes on their list for AB 52 contact, informing them of the project. The letters were sent by Joseph M. Lambert, Director of Development Services, City of Placentia, and were prepared by Andrew A. Gonzales, Senior Planner, on June 3, 2020. The letters were sent via certified mail to: Joyce Stanfield Perry, Tribal Manager, Juaneño Band of Mission Indians – Acjachemen Nation; Andrew Salas, Chairman, Gabrieleño Band of Mission Indians – Kizh Nation (Gabrieleño – Kizh Nation); and Sam Dunlap, Cultural Resources Director, Gabrielino-Tongva Tribe (Sarah Walker, personal communication; June 3, 2020). The letters conveyed that the recipient had 30 days from the receipt of the letter to request AB 52 consultation regarding the project.

On June 10, 2020, Ms. Perry replied to the City by email for the Juaneño Band of Mission Indians requesting consultation and asking for information on the Blessed Sacrament Church's date of construction and for results of any Native American Heritage Commission's SLF records search. Mr. Gonzalez replied June 11, 2020 that the Church had been built prior to 1963 and that, to his knowledge, there had not been a SLF record search. The same day Sarah Walker, Project Applicant, inquired with UltraSystems regarding these two issues. UltraSystems replied the same day to Ms. Walker with information on the construction of the Church (in approximately 1957) and the results of its SLF records search that had been conducted November 26, 2019 (negative results) to convey to the City.

An AB 52 consultation meeting was held between the Gabrielino – Kizh Nation and Andrew Gonzales, Senior Planner with the City of Placentia on August 18, 2020. The City agreed to mitigation measure language for tribal cultural resources and paleontological resources provided by the Gabrielino – Kizh Nation the same day (Alexa Washington, personal communication; August 25, 2020). This mitigation language has been adapted as **MM TCR-1** and **MM TCR-2** below.

To date, there have been no responses from the remaining tribe. The response period having been passed, the City has determined that the AB 52 consultation process has concluded (Joseph Lambert, personal communication; July 7, 2020).

No sites were documented in the Native American Heritage Commission's SLF search. No resources as defined by Public Resources Code § 21074 have been identified (refer to **Attachment C**: "Native American Heritage Commission Records Search and Native American Contacts" in **Appendix D1** to this IS/MND). Additionally, the project site has not been recommended for historic designation for prehistoric and TCRs. No specific tribal resources have been identified.

No prehistoric or historic archaeological resources were observed during the field survey. The previous cultural resources surveys within the half-mile buffer zone resulted in no archaeological sites or isolates being recorded. The cultural resource study findings at the South Central Coastal Information Center indicate that there is a low potential for finding tribal resources.

A mitigation measure for minimizing impacts on potential TCRs is applicable to the project site because the land at the site remained relatively undisturbed due to use for orchard farming into the mid-20th century, and the immediate area has been urban with residential and civic buildings since the 1960s. Therefore, while the potential for subsurface prehistoric cultural deposits is considered to be low, most construction work on the Church campus was completed prior to implementation of CEQA guidelines.

Mitigation measure **TCR-1** described below requires consultation of a qualified archaeologist and the local Native American representative, if unanticipated discoveries are made during construction activities. With implementation of **MM TCR-1,** potential project impacts on TCRs would be less than significant.

**Mitigation Measure**

**MM TCR-1:** Prior to the issuance of a grading permit, the project applicant shall communicate with representatives of the Gabrieleño Band of Mission Indians – Kizh Nation and present evidence of such communication to the City of Placentia Community Development Department Director, or designee, demonstrating the following shall occur:

- On-call monitoring services by a qualified Native American Monitor to address unanticipated prehistoric or tribal resources. The Native American Monitor shall be present at the pre-grading conference to establish procedures for tribal cultural resource surveillance.

- Native American Indian Sensitivity Training by a qualified Native American Monitor for construction personnel. The training session shall include a handout and focus on how to identify Native American resources encountered during earthmoving activities and the procedures followed if resources are discovered,

the duties of the Native American Monitor of Gabrieleño Ancestry, and the general steps the Monitor would follow in conducting a salvage investigation.

- Construction Monitoring by a qualified Native American Monitor for ground-disturbing construction activities, as follows:
    - Initial clearing and rough grading activities (e.g., pavement removal, auguring, boring, grading, excavation, potholing, and trenching);
    - Spot checking of previously disturbed soils that have not been previously monitored; and
    - Monitoring previously undisturbed native soils.
- The Native American Monitor(s) shall complete monitoring logs on a daily basis when onsite. The logs shall provide descriptions of the daily activities, including construction activities, locations, soil, and any cultural materials identified. The onsite monitoring shall end when the project site grading and excavation activities of previously undisturbed native soils are completed, or when the Tribal Representatives and Monitor have indicated that the site has a low potential for tribal cultural resources. The Tribal Monitor shall provide a monitoring final report, with daily logs, to the project applicant.

**Level of Significance After Mitigation**

**MM TCR-1** requires monitoring of grading and other subsurface disturbance by a local Gabrieleño Native American monitor. With implementation of **MM TCR-1**, potential project impacts on TCRs would be less than significant.

As previously discussed**,** the project would be built on relatively undisturbed land, within a developed suburban setting. No human remains have been previously identified or recorded onsite.

The project proposes grading activities for the implementation of infrastructure that includes water, sewer, and utility lines. Grading activities associated with development of the project would involve new subsurface disturbance and could result in the unanticipated discovery of unknown human remains, including those interred outside of formal cemeteries. In the unlikely event of an unexpected discovery, implementation of mitigation measures **TCR-2** dealing with associated funerary objects, and **TCR-3** dealing with human remains would ensure that impacts related to the accidental discovery of human remains would be less than significant.

**Mitigation Measures**

**MM TCR-2:** Associated funerary objects are objects that, as part of the death rite or ceremony of a culture, are reasonably believed to have been placed with individual human remains either at the time of death or later; other items made exclusively for burial purposes or to contain human remains can also be considered as associated funerary objects. If funerary objects are discovered during grading or archeological excavations, they shall be treated in the same manner as bone fragments that remain intact and the construction contractor and/or qualified archeologist shall consult with the Gabrieleño Band of Mission Indians – Kizh Nation (Tribe).

**MM TCR-3:** As specified by California Health and Safety Code Section 7050.5, if human remains are found on the project site during construction or during archaeological work, the Orange County Coroner's office shall be immediately notified and no further excavation or disturbance of the discovery or any nearby area reasonably suspected to overlie adjacent remains shall occur until the Coroner has made the necessary findings as to origin and disposition pursuant to Public Resources Code 5097.98. The Coroner would determine within two working days of being notified, if the remains are subject to his or her authority. If the Coroner recognizes the remains to be Native American, he or she shall contact the Native American Heritage Commission (NAHC) within 24 hours. The NAHC would make a determination as to the Most Likely Descendent.

In the case where discovered human remains cannot be fully documented and recovered on the same day, the remains shall be covered with muslin cloth and a steel plate that can be moved by heavy equipment placed over the excavation opening to protect the remains. If this type of covering is not available, a 24-hour guard shall be posted outside of working hours. If the remains are Native American, the Tribe shall make every effort to recommend diverting the project and keeping the remains in situ and protected. If the project cannot be diverted, it may be determined that burials shall be removed and the project applicant shall arrange a designated site location within the footprint of the project for the respectful reburial of the human remains and/or ceremonial objects, if possible. The Tribe shall work closely with the qualified archaeologist to ensure that the excavation is treated carefully, ethically and respectfully. If data recovery is approved by the Tribe, documentation shall be taken which includes, at a minimum, detailed descriptive notes and sketches. Additional types of documentation shall be approved by the Tribe for data recovery purposes. Cremations shall either be removed in bulk or by means as necessary to ensure complete recovery of all material. If the discovery of human remains includes four (4) or more burials, the location shall be considered a cemetery and a separate treatment plan shall be created. The project applicant shall consult with the Tribe regarding avoidance of cemetery sites.

Once complete, a final report of all activities shall be submitted to the NAHC. The Tribe does not authorize any scientific study or the utilization of any invasive diagnostics on human remains without prior review and approval of study plans.

Each occurrence of human remains and associated funerary objects shall be stored using opaque cloth bags. All human remains, funerary objects, sacred objects and objects of cultural patrimony shall be removed to a secure container onsite if possible. These items shall be retained and reburied within six months of recovery. The site of reburial/repatriation shall be on the project site but at a location mitigated between the Tribe and the landowner at a site to be protected in perpetuity. There shall be no publicity regarding any cultural materials recovered.

**Level of Significance After Mitigation**

With implementation of mitigation measures **TCR-2** and **TCR-3** above, the Santa Angelina Senior Apartment Homes project would result in less than significant impacts to human remains and associated funerary objects.

## 4.19 Utilities and Service Systems

| Would the project: | Potentially Significant Impact | Less than Significant Impact with Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| a) Require or result in the relocation or construction of new or expanded water wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects? | | | **X** | |
| b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years? | | | **X** | |
| c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments? | | | **X** | |
| d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals? | | | **X** | |
| e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste? | | | | **X** |

This section was prepared using the Sewer Analysis Report prepared by Fuscoe Engineering dated July 2020 (**Appendix I3**).

**a) Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?**

**Less than Significant Impact**

As discussed in **Section 3.0** the proposed project would require offsite improvements including sewer, domestic water, fire water, irrigation, and dry utilities connections to existing utility infrastructure in Morse Avenue and/or North Angelina Drive.

**Wastewater Treatment** – The project proposes offsite sewer improvements to connect the sewer lines from the project site to the existing sewer network under streets located adjacent to the site. As detailed in the City's General Plan EIR, the City of Placentia provides wastewater collection service to the majority of parcels within the City limits through approximately 84 miles of gravity sanitary sewer pipelines owned and operated by the City. The City's system has no lift stations or force mains but includes eleven inverted siphons. The wastewater collection system conveys untreated wastewater to Orange County Sanitation District (OCSD) trunk sewer system via 35 separate connections. OCSD operates wastewater treatment and water reclamation facilities (OCSD Wastewater Treatment Plant No. 1 and OCSD Wastewater Treatment Plant No. 2) with a combined capacity of 332 million gallons per day (mgd) that treat an average daily flow of 184 mgd of wastewater from residential, commercial and industrial sources (Tom Dodson & Associates, 2019, p. 4.20-4).

***Project Wastewater Generation*** – The project is estimated to generate 100 gallons per day (gpd) of wastewater per unit, or a total of 6,500 gpd (Fuscoe Engineering, 2020c, p. 6). Sufficient wastewater treatment capacity is available in the region, and project development would not require construction of new or expanded wastewater treatment facilities. Impacts would be less than significant.

**Sanitary Sewer –** Information on sanitary sewers serving the project site is based on the Sewer Analysis Report: Placentia Senior Housing completed by Fuscoe Engineering in July 2020; a copy of this report is included as **Appendix I3**.

Wastewater from the project site is currently discharged into a City-owned eight-inch-diameter vitrified clay pipe (VCP) sewer main in Morse Avenue, which conveys wastewater southeast to a City-owned manhole in the intersection of Morse Avenue and Cypress Point Drive. Wastewater continues flowing south in a sewer main in Cypress Point Drive (Fuscoe, 2020c, p. 3). Existing sewer flows were monitored for two weeks from June 9 to June 24, 2020. Existing sewer flows and depths in dry and wet weather are shown below in **Table 4.19-1**.

***Project Wastewater Flow*** – Project wastewater flow is estimated at 0.0101 cubic foot per second (cfs) in dry weather and 0.0445 cfs in wet weather (Fuscoe, 2020c, p. 6). Sewer flows and depths in post-project conditions were estimated by adding estimated project wastewater flows and depths to existing conditions. The sewers in Morse Avenue and Cypress Point Drive have capacities to accommodate post-project wastewater flows and depths, and no new or expanded sewers would be required to accommodate the proposed project. Therefore, project impacts on sanitary sewers would be less than significant.

**Domestic/Fire Water** – As detailed in Threshold 4.19 b) below, the City relies on imported water and local groundwater. The project would extend existing water mainlines in Morse Avenue and/or North Angelina Drive to the project site. As analyzed in Threshold 4.19 b), the project would result in a nominal increase in water demand compared to existing conditions and therefore, the project would have a less than significant impact regarding domestic water supplies.

**Fire Water -** The project proposes new fire water lines to the project site via installation of fire water laterals from the street to the project site. As analyzed in Threshold 4.19 b), the project would result in a nominal increase in water demand compared to existing conditions and therefore, the project would have a less than significant impact regarding fire water supplies.

**Table 4.19-1**
**EXISTING AND PROPOSED SEWER DEPTHS AND FLOWS**

| | | Dry Weather | | | | Wet Weather | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Average | | Peak | | Average | | Peak | |
| | | Flows, cfs | Depth, inches | Flows, cfs | Depth, inches | Flows, cfs | Depth, inches | Flows, cfs | Depth, inches |
| Site 1: Cypress Point Drive at Morse Avenue 8-inch VCP sewer | Existing Condition | 0.0285 | 0.86 | 0.0706 | 1.29 | 0.1140 | 1.60 | 0.2824 | 2.49 |
| | Project WW generation | 0.0101 | NA | 0.0455 | NA | 0.0101 | NA | 0.0455 | NA |
| | Proposed Condition Flows | 0.0386 | 0.98 | 0.1161 | 1.61 | 0.1241 | 1.66 | 0.3279 | 2.65 |
| Site 2: Cypress Point Drive at Hillcrest Avenue 8-inch VCP sewer | Existing Condition | 0.0345 | 1.24 | 0.0694 | 1.71 | 0.1380 | 2.36 | 0.2776 | 3.36 |
| | Project WW generation | 0.0101 | NA | 0.0445 | NA | 0.0101 | NA | 0.0445 | NA |
| | Proposed Condition Flows | 0.0446 | 1.39 | 0.1149 | 2.16 | 0.1481 | 2.45 | 0.3231 | 3.65 |

Note: Project-generated net increases in depths are not provided in the Sewer Analysis Report, and those depths are not estimated here.
**Source**: Fuscoe. 2020. Sewer Analysis Report: Placentia Senior Housing, p. 6.

**Stormwater** - The proposed development would maintain existing drainage patterns and discharge locations. In addition, the proposed project is greater than one acre and is therefore required to obtain a National Pollutant Discharge Elimination System permit and consequently develop and implement a Storm Water Pollution Prevention Plan (SWPPP). Therefore, impacts regarding stormwater would be less than significant. Refer to **Section 4.10** of this document for a discussion of the proposed project impacts regarding hydrology and water quality.

**Electric Power:** Electric power for the City of Placentia is provided by Southern California Edison (SCE) (City of Placentia New Resident Guide, 2019). The proposed project is located in a developed area, and infrastructure for providing electric power to the area is well established. SCE typically utilizes existing utility corridors to reduce environmental impacts, and has energy-efficiency programs to reduce energy usage and maintain reliable service throughout the year (Southern California Edison, 2018, p. 45). The project proposes a new transformer to be located north of the existing Church. The project would be constructed in accordance with all applicable Title 24 regulations, and would not necessitate the construction or relocation of electric power facilities. Therefore, a less than significant impact would occur.

**Natural Gas:** The Southern California Gas Company (SoCalGas) is the primary distributor of retail and wholesale natural gas across Southern California, including the City of Placentia (City of Placentia New Resident Guide, 2019). SoCalGas provides services to residential, commercial, and industrial consumers, and also provides gas for electric generation customers. In its 2018 California Gas Report, SoCalGas analyzed an 18-year demand period, from 2018-2035, to determine its ability to meet projected demand (California Gas and Electric Utilities, 2018, p. 63). SoCalGas expects total gas

demand to decline 0.74 percent annually from 2018 to 2035 as a result of energy-efficiency standards and programs, renewable electricity goals, modest economic growth in its service region, and advanced metering infrastructure (California Gas and Electric Utilities, 2018, p. 66). Transportation-related industrial uses account for 2.7 percent of total industrial gas demand (California Gas and Electric Utilities, 2018, p. 73), and the proposed project is not of the size or scope to increase this demand. Moreover, SoCalGas plans on implementing aggressive energy-efficiency programs that will result in natural gas savings across all sectors that will ensure longevity of its natural gas supplies and adequate generation rates (California Gas and Electric Utilities, 2018, p. 78). Therefore, anticipated natural gas supply is adequate to meet demand in the SoCalGas region, and the proposed project is not expected to impact this determination. Thus, no natural gas facilities would have to be constructed or relocated as a result of the proposed project, and a less than significant impact would occur.

**Telecommunications Facilities:** Cable services, including internet, phone, and television, are provided in the City of Placentia by Spectrum Cable and AT&T U-Verse (City of Placentia New Resident Guide, 2019). The proposed project would not interfere with operation of Spectrum or AT&T's facilities, and a less than significant impact would occur.

**b) Would the project have sufficient water supplies available to serve the and reasonably foreseeable future development during normal, dry and multiple dry years?**

**Less than Significant Impact**

City of Placentia water service primarily comes from Golden State Water Company (GSWC), with a portion of the City of Placentia served by Yorba Linda Water District (YLWD). Three water systems serve the Golden State Water Placentia Customer Service Area. Water delivered to Placentia customers is a blend of groundwater pumped by six active GSWC-owned wells from the Orange County Groundwater Basin and imported water from the Colorado River Aqueduct and State Water Project (imported and distributed by Metropolitan Water District of Southern California) (Tom Dodson & Associates, 2019, p. 4.20-15).

The groundwater wells have a combined design well capacity to produce 9,689 acre-feet per year (AFY) of groundwater. Total groundwater pumping for the Placentia-Yorba Linda System ranged from 2,529 AFY to 4,046 AFY over the five years from 2011 to 2015 (Kennedy/Jenks Consultants, 2016, p. 6.6). The proposed project would result in the construction of 65 residential units with an associated population range of 71-207 residents. **Table 4.19-2** shows the estimated water demand for the project.

**Table 4.19-2**
**ESTIMATED PROJECT WATER DEMAND**

| Unit Water Demand Factor Gallons Per Day (GDP)/per person[1] | Estimated Water Demand in gallons per day[2] | Estimated Water Demand (gallons per year) [2] | Estimated Water Demand (acre-feet per year) |
|---|---|---|---|
| 157 | 11,147 to 32,499 | 4,068,655 to 11,862,135 | 12.49 to 36.4 |

[1] 157 gallons per capita per day (i.e. per person) (Kennedy/Jenks Consultants, 2015 Urban Water Management Plan-Placentia-Yorba Linda, p. 5-4)

[2] The estimated population range for the project is between 71 and 207 persons. Therefore, to calculate the estimated annual water demand of the project, we multiply the 157 gallons per day per person by the estimated population range to give us the estimated range of daily water use (157 x 71) – (157 x 207), which results to a range of 11,147-32,499 gallons per day. Lastly, we take the estimated range of daily water use and multiply it by 365 days to give us an estimated range of annual water use for the proposed project which would result to 4,068,655 to 11,862,135 gallons per year.

**Source**: UltraSystems, 2020.

The Placentia-Yorba Linda System's water usage in 2015 was 105 gallons per capita per day (GPCD) (Kennedy Jenks Consultants, 2015. p. 5-8). However, as a worst-case analysis for project estimated water demand, the City of Placentia's 10-year average (1997-2006) of 157 GPCD is used in the analysis for the proposed project. The de minimus increase in the demand for domestic water would occur as a result of the project and this increase would not be significant. Adequate water supplies and facilities are available to serve the proposed project. Additionally, the YLWD determined that it is capable of meeting all customers' demands with significant reserves held by Metropolitan, local groundwater supplies, and conservation in multiple dry years from 2020 through 2040 (Tom Dodson & Associates, 2019, p. 4.20-18). Therefore, less than significant impacts are anticipated.

**c) Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?**

**Less than Significant Impact**

As described under Threshold 4.19a, there would be sufficient capacity available at OCSD Wastewater Treatment Plants No. 1 and No. 2 to meet the wastewater treatment demands of the project. The existing wastewater treatment facilities would be able to handle the additional wastewater estimated to be generated by the proposed project. Therefore, the project would have a less than significant impact in this regard and no mitigation is necessary.

**d) Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?**

**Less than Significant Impact**

The City contracts with Republic Services for collection and disposal of the City's solid waste. Through a contract with the City, Republic Services provides weekly residential, commercial and industrial refuse services. The primary solid waste disposal locations for the City are Frank R. Bowerman Landfill in Irvine or the Olinda Alpha Landfill in Brea. The Bowerman landfill is 725 acres and has a daily maximum permitted capacity of 11,500 tons per day (CalRecycle, 2020a).

This landfill is expected to close in December 2053. The Olinda Alpha landfill is 420 acres and has a maximum permitted capacity of 8,000 tons per day. This landfill is expected to close in December 2030 (CalRecycle, 2020b).

**Construction**

Project construction would generate solid waste requiring disposal at local landfills. Materials generated during construction of the project would include paper, cardboard, metal, plastics, glass, concrete, lumber scraps and other materials. During construction, bulk solid waste, excess building material, fill, etc., would be disposed of in a manner consistent with State of California Integrated Waste Management Act of 1989.

**Operation**

The City of Placentia Source Reduction and Recycling Element (SRRE) regulates recycling during project operation. Pursuant to the California Integrated Waste Management Act (AB 939), which was passed in 1989, the California Integrated Waste Management Board required all cities and counties within the State to prepare integrated waste management plans to attain solid waste reduction of 50 percent by the end of year 2000. In 1995, the City of Placentia adopted a SRRE, in compliance with the requirements of AB 939. The SRRE describes policies and programs that will be implemented by the City to achieve the State's mandate of 50 percent waste disposal reductions by the year 2000. (Tom Dodson & Associates, 2019, p. 4.20-23). As shown in **Table 4.19-3**, occupancy of the 65 residential units would generate an estimated 145 tons of waste annually, based on standard solid waste generation rates. This estimate does not account for diversion from landfills.

**Table 4.19-3**
**ESTIMATED PROJECT-GENERATED SOLID WASTE**

| Land Use | Generation Rate* | Approximate Waste (pounds/year) | Approximate Waste (tons/year) |
|---|---|---|---|
| Residential | 12.23 pounds per dwelling unit per day | 290,157 | 145.08 |

*(RBF Consulting, 2010b, p. 5.17-6).

As discussed above, the current permitted solid waste disposal is 11,500 tons per day at Bowerman Landfill and 8,000 tons per day at Olinda Alpha Landfill. The project's estimated generation of approximately 12.23 pounds per dwelling unit per day (or a total of approximately 795 pounds per day) during project operation represents a fraction of the daily capacity at the two landfills. Since sufficient permitted landfill capacity exists to support the project, no adverse impact on either solid waste collection service or the landfill disposal system would occur. Therefore, project impacts on existing solid waste disposal facilities would be less than significant.

**e) Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?**

**Less Than Significant Impact**

In 1989, the California Legislature enacted the California Integrated Waste Management Act (AB 939), in an effort to address solid waste problems and capacities in a comprehensive manner. The law required each city and county to divert 50 percent of its waste from landfills by the year 2000. The City developed a SRRE in 1995 that aims at recycling, composting, special waste disposal, and education and public information programs. In addition, the City has a purchasing policy that gives preferential credit for those vendors using or providing recycled material (10% minimum) (City of Placentia General Plan, 2019, p. 5-34). The City has established a number of programs in partnership with Republic Services that promote recycling, composting, and waste reduction, all of which have contributed to the City's increasing diversion rate and decreasing disposal rate in recent years. The programs include bulky item and E-waste collection services, commercial recycling program, commercial organics recycling program, residential curbside recycling program, recycle Placentia teen team, and outreach and education (City of Placentia General Plan, 2019, pp. 5-35 to 5-37). The proposed project would comply with applicable local, state and federal solid waste disposal standards, as well as create business incentives and programs to reduce the amount of solid waste. Therefore, there would be less than significant impacts.

## 4.20 Wildfire

| If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project: | Potentially Significant Impact | Less than Significant Impact with Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| a) Substantially impair an adopted emergency response plan or emergency evacuation plan? | | | | **X** |
| b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire? | | | | **X** |
| c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment? | | | | **X** |
| d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes? | | | | **X** |

**a) If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project substantially impair an adopted emergency response plan or emergency evacuation plan?**

**No Impact**

As demonstrated in **Figure 4.9-3 in Section 4.9 of this IS/MND**, the project site is not located in a Fire Hazard Severity Zone Local Responsibility Area (LRA). Review of the CAL FIRE Fire Resource and Assessment Program (FRAP) maps for state responsibility areas (SRAs) indicates that the project site is not located in an SRA (CAL FIRE, 2019). Moreover, the City of Placentia does not contain any areas classified as very high fire hazard severity zones (VHFHSZs) in state responsibility areas. The nearest VHFHSZ is located in the City of Brea over 2.5 miles north of the project site. Therefore, the project would have no impact in this regard.

**b) If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?**

**No Impact**

The project site is not located in or near areas or lands classified as VHFHSZs. No slopes are located on the project site which could exacerbate wildfire risks. Therefore, the project would not expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. Therefore, the proposed project would have a no impact in this regard.

**c) If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?**

**No Impact**

The project site is not located in the project site is not located in a SRA (CAL FIRE, 2019), nor is the project site in or near areas or lands classified as VHFHSZs. The project would not require the installation or maintenance of infrastructure that may exacerbate fire risk. Therefore, the proposed project would have no impact in this regard.

**d) If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?**

**No Impact**

The project site is not located in or near areas state responsibility areas or lands classified as having a very high fire hazard severity zone. The proposed project would not expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes. The project site is flat, is not located in an area with high slopes or unstable ground conditions, and is not within a landslide hazard zone. Therefore, the proposed project would have no impact in this regard.

## 4.21 Mandatory Findings of Significance

| Would the project have: | Potentially Significant Impact | Less than Significant Impact with Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory? | | **X** | | |
| b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)? | | | **X** | |
| c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly? | | **X** | | |

**a) Would the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?**

**Less Than Significant Impact with Mitigation Incorporated**

The project site is located in a highly-urbanized area, which provides low habitat value for special-status plant and wildlife species. No special-status plants or wildlife[34] were observed within the project site. Additionally, as detailed in City of Placentia General Plan Draft EIR, the City is almost completely urbanized and landscaped with mostly non-native species. No known rare or endangered plant or animal species have been identified within the City based on a review of State and Federal

34 Special-status species include candidate and sensitive species.

data bases (General Plan Draft EIR, 2019, p 4.5-4). Therefore, there are no endangered, rare, threatened, and few special-status plant species (or associated habitats) or wildlife species designated by the United States Fish and Wildlife Service, California Department of Fish and Game, or California Native Plant Society that are known to occur within the City of Placentia. For this reason, no direct or indirect impacts on special-status plant or wildlife species would occur as a result of project activities.

Nesting migratory species protected by the Migratory Birds Treaty Act may be disturbed by various construction activities. With implementation of mitigation measures **BIO-1** and **BIO-2**, the proposed project would have less than significant impacts, either directly or through habitat modifications, to special-status plant and wildlife species.

As detailed in **Section 4.5**, Cultural Resources, in the event of an unanticipated discovery, implementation of mitigation measures **CUL-1** and **CUL-2** would ensure that impacts on archeological resources would be less than significant. Implementation of mitigation measure **CUL-3** would ensure that impacts related to the accidental discovery of human remains would be less than significant.

**b) Would the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?**

**Less than Significant Impact**

In the short term, there would be a potential for cumulative effects on traffic, air quality, and noise if other development projects were implemented concurrently with the project. However, a review of current and near-term future development activity indicates that no other projects are proposed within the immediate vicinity of the project.[35] Therefore, cumulative impacts would be less than significant.

**c) Would the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?**

**Less than Significant Impact with Mitigation Incorporated**

As detailed in **Section 4.8**, Hazards and Hazardous Materials, after implementation of **MM HAZ-1**, potential impacts from ACMs, LBP, and methane during project construction would be less than significant.

Regarding Noise, as detailed in **Section 4.13**, with implementation of Mitigation Measures **N-1** and **N-2**, the proposed project would result in less than significant impacts to sensitive receivers. Noise levels associated with operation of the project are expected to be comparable to those of nearby residential areas. In addition, noise from activities associated with the new Church facilities would be similar to that occurring now. Therefore, noise from onsite sources would be less than significant.

35 This is based on the City of Placentia Pending Development Project List accessed online at: https://www.placentia.org/DocumentCenter/View/8519/Pending-Development-Projects-12-12-2016, on January 6, 2020.

Regarding emergency services such a police and fire, the project is anticipated to generate between 71 and 207 residents, which would have a minimal impact on demand for fire services. Additionally, the project applicant would pay any applicable fire/development fees, per the City's fee schedule. Thus, the project's impacts on fire protection services would be less than significant. An information request letter was sent to the Police Department asking about the potential impacts of the project to law enforcement services (refer to **Appendix L** of this document). As detailed in the response from Captain Eric Point, the proposed project is under the jurisdiction of the Placentia Police Department (Point, 2020). Captain Point stated that as with the other senior apartments in the City, the most common call for service would likely be for medical aid. Other calls for service may include traffic accidents and occasional auto burglaries in the parking area. Due to the project's potential to result in additional calls for service to the project site, compared to existing conditions, the Police Department made recommendations for the proposed project. To reduce potential project impacts on law enforcement services, mitigation measures **PS-1** and **PS-2** are recommended. With implementation of **MMs PS-1** and **PS-2**, impacts to law enforcement services in the City of Placentia would be less than significant.

During the construction phase, the project could temporarily impact street traffic adjacent to the project site during the construction phase due to roadway improvements and potential extension of construction activities into the right-of-way. Project construction could reduce the number of lanes or temporarily close a portion of adjacent roads. Traffic impacts are anticipated during the construction phase of the project and would only impact the adjacent streets/intersections. As detailed in **Section 4.16**, Transportation, the project would have less than significant traffic impacts both during project construction and operation, and no mitigation is warranted.

As discussed in **Sections 4.1** through **4.20** of this document, after the implementation of mitigation measures, potential adverse environmental effects were found to be less than significant on human beings, either directly or indirectly. Therefore, less than significant impacts would occur.

## 5.0 REFERENCES

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# 7.0 MITIGATION MONITORING AND REPORTING PROGRAM

The Mitigation Monitoring and Reporting Program (MMRP) has been prepared in conformance with § 21081.6 of the Public Resources Code and § 15097 of the CEQA Guidelines, which requires all state and local agencies to establish monitoring or reporting programs whenever approval of a project relies upon a MND or an EIR. The MMRP ensures implementation of the measures being imposed to mitigate or avoid the significant adverse environmental impacts identified through the use of monitoring and reporting. Monitoring is generally an ongoing or periodic process of project oversight; reporting generally consists of a written compliance review that is presented to the decision-making body or authorized staff person.

It is the intent of the MMRP to: (1) provide a framework for document implementation of the required mitigation; (2) identify monitoring/reporting responsibility; (3) provide a record of the monitoring/reporting; and (4) ensure compliance with those MM that are within the responsibility of the City and/or Applicant to implement.

The following table lists impacts, mitigation measures adopted by the City of Placentia in connection with approval of the proposed project, level of significance after mitigation, responsible and monitoring parties, and the project phase in which the measures are to be implemented.

Only those environmental topics for which mitigation is required are listed in this Mitigation Monitoring and Reporting Program.

## Table 7.0-1
## MITIGATION MONITORING AND REPORTING PROGRAM

| TOPICAL AREA IMPACT | MITIGATION MEASURE | RESPONSIBLE PARTY | MONITORING ACTION | 1. ENFORCEMENT AGENCY<br>2. MONITORING AGENCY<br>3. MONITORING PHASE |
|---|---|---|---|---|
| **4.1 Aesthetics** | | | | |
| **Threshold 4.1 d)** Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area? | **MM AES-1**<br>During project construction the project applicant shall place construction staging areas as far away as possible from adjacent residences so as to minimize, to the maximum extent possible, any potential lighting and/or glare impacts to nearby residences. The lighting used during project construction shall consist of the minimum amount of light necessary for safety and security on the project site. | Project Applicant | Field Verification | 1. City of Placentia<br>2. City of Placentia<br>3. During Construction |
| **4.4 Biological Resources** | | | | |
| **Threshold 4.4 a):** Cause a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service. | **MM BIO-1 Pre-Construction Breeding Bird Survey**<br>If construction is anticipated to commence during the nesting season (between February 1 and August 31 of any given year, or as determined by a local CDFW office), a qualified avian biologist shall conduct a pre-construction nesting bird survey no earlier than one week prior to construction.<br>In accordance with the MBTA and California Fish and Game Code (CFGC) (3503, 3503.5, 3513), if an active bird nest of a protected species is located during the pre-construction survey and potentially will be affected, a no-activity buffer zone shall be delineated on maps and marked in the field by fencing, stakes, flagging, or other means up to 500 feet for raptors, or 100 feet for non-raptors. Materials used to demarcate the nests will be removed as soon as work is complete or the fledglings have left the nest. The qualified avian biologist will determine the appropriate size of the buffer zone based on the type of activities planned near the nest and bird species.<br>Buffer zones will not be disturbed until the qualified avian biologist determines that the nest is inactive, the young have fledged, the young are no longer being fed by the parents, the young have left the area, or the young will no longer be affected by project activities. Periodic monitoring by the qualified avian biologist will be performed to determine when nesting is complete. After the nesting cycle is complete, project activities may begin within the buffer zone. | Project Applicant | Field Verification | 1. City of Placentia<br>2. City of Placentia<br>3. Prior to and during construction. |

| TOPICAL AREA IMPACT | MITIGATION MEASURE | RESPONSIBLE PARTY | MONITORING ACTION | 1. ENFORCEMENT AGENCY<br>2. MONITORING AGENCY<br>3. MONITORING PHASE |
|---|---|---|---|---|
| **Threshold 4.4 a):** Cause a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service. | **MM BIO-2 Biological Monitor for Nesting Birds**<br>If special-status wildlife species or nesting bird species are observed and determined present within the project site during the pre-construction breeding bird surveys, then a biological monitor shall be onsite to monitor throughout activities that result in tree or vegetation removal to minimize the likelihood of inadvertent impacts on nesting birds and other wildlife species. Monitoring shall also be conducted periodically during construction activities to ensure no new nests occur during any vegetation removal or building demolition activities between February 1 and August 31. The biological monitor shall ensure that all best management practices, avoidance, protection and mitigation measures described in the relevant project permits and reports are in place and are adhered to.<br>The biological monitor shall have the authority to temporarily halt all construction activities and all non-emergency actions if sensitive species and/or nesting birds are identified and would be directly affected. The monitor shall notify the appropriate resource agency and consult if needed. If necessary, the biological monitor shall relocate the individual outside of the work area where it will not be harmed. Work can continue at the location if the applicant and the consulted resource agency determine that the activity will not result in adverse effects on the species.<br>The appropriate agencies shall be notified if a dead or injured protected species is located within the project site. Written notification shall be made within 15 days of the date and time of the finding or incident (if known) and must include; location of the carcass, a photograph, cause of death (if known), and other pertinent information. | Project Applicant | Field Verification | 1. City of Placentia<br>2. City of Placentia<br>3. Prior to construction. |

| TOPICAL AREA IMPACT | MITIGATION MEASURE | RESPONSIBLE PARTY | MONITORING ACTION | 1. ENFORCEMENT AGENCY<br>2. MONITORING AGENCY<br>3. MONITORING PHASE |
|---|---|---|---|---|
| **4.5 Cultural Resources** | | | | |
| **Threshold 4.5 b)** Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5. | **MM CUL-1** If archaeological resources are discovered during construction activities, the contractor will halt construction activities in the immediate area and notify the City. The project applicant shall retain an archaeologist who meets the Secretary of the Interior's Professional Qualifications Standards for Archaeology who will be notified and afforded the necessary time to recover, analyze, and curate the find(s). The qualified archaeologist will recommend the extent of archaeological monitoring necessary to ensure the protection of any other resources that may be in the area and afforded the necessary time and funds to recover, analyze, and curate the find(s). Construction activities may continue on other parts of the building site while evaluation and treatment of archaeological resources takes place. | Project Contractor | Field Verification | 1. City of Placentia Planning Department<br>2. City of Placentia Planning Department<br>3. During construction activities |
| **Threshold 4.5 b)** Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5. | **MM CUL-2** If evidence of an archaeological site or other suspected historical resource as defined by CEQA Guidelines § 15064.5, including darkened soil representing past human activity ("midden"), that could conceal material remains (e.g., worked stone, fired clay vessels, faunal bone, hearths, storage pits, or burials) are discovered during any project related earth disturbing activities, all earth disturbing activities within 100 feet of the find shall be halted until the City of Placentia is notified. The project applicant shall retain an archaeologist who meets the Secretary of the Interior's Professional Qualifications Standards for Archaeology to assess the significance of the find. Impacts on any significant resources shall be mitigated to a less than significant level through data recovery or other methods determined adequate by the archaeologist and that are consistent with the Secretary of the Interior's Standards for Archaeological Documentation. Any identified cultural resources shall be recorded on the appropriate DPR 523 (A L) form and filed with the SCCIC. Construction activities may continue on other parts of the project site while evaluation and treatment of prehistoric archaeological resources takes place. | Project Contractor | Field Verification | 1. City of Placentia Planning Department<br>2. City of Placentia Planning Department<br>3. During project related earth disturbing activities |

| TOPICAL AREA IMPACT | MITIGATION MEASURE | RESPONSIBLE PARTY | MONITORING ACTION | 1. ENFORCEMENT AGENCY<br>2. MONITORING AGENCY<br>3. MONITORING PHASE |
|---|---|---|---|---|
| **Threshold 4.5 c):** Disturb any human remains, including those interred outside of formal cemeteries. | **MM CUL-3**<br>If human remains are encountered during excavations associated with this project, all work will stop within a 30-foot radius of the discovery and the Orange County Coroner will be notified (§ 5097.98 of the Public Resources Code). The Coroner will determine whether the remains are recent human origin or older Native American ancestry. If the coroner, with the aid of the supervising archaeologist, determines that the remains are prehistoric, they will contact the NAHC. The NAHC will be responsible for designating the Most Likely Descendant (MLD). The MLD (either an individual or sometimes a committee) will be responsible for the ultimate disposition of the remains, as required by § 7050.5 of the California Health and Safety Code. The MLD will make recommendations within 24 hours of their notification by the NAHC. These recommendations may include scientific removal and nondestructive analysis of human remains and items associated with Native American burials (§ 7050.5 of the Health and Safety Code). | Project Construction Foreman | Field Verification | 1. City of Placentia Planning Department<br>2. City of Placentia Planning Department<br>3. During project construction activities |
| **4.7 Geology and Soils** | | | | |
| **Threshold 4.7 c):** Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on or off-site landslide, lateral spreading, subsidence, liquefaction or collapse? | **MM GEO-1**<br>To minimize potential impacts resulting from unstable soils, prior to the issuance of a certificate of occupancy, the project applicant shall implement applicable recommendations provided in Section 6.0 of the Preliminary Geotechnical Investigation Report dated January 10, 2020 for the proposed project prepared by Albus Keefe & Associates. | Project Applicant | Implement Recommendations | 1. City of Placentia Planning Department<br>2. City of Placentia Planning Department<br>3. During project construction activities |
| **Threshold 4.7 f):** Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature. | **MM GEO-2**<br>Prior to the issuance of the grading permit, the applicant shall provide a letter to the City of Placentia Planning Department, or designee, from a qualified paleontologist stating that the paleontologist has been retained to provide services for the project. The paleontologist shall develop, as needed, a Paleontological Resources Impact Mitigation Plan (PRIMP) to mitigate the potential impacts to unknown buried paleontological resources that may exist onsite for the review and approval by the | Project Construction Contractor | Field Verification | 1. City of Placentia Planning Department<br>2. City of Placentia Planning Department |

| TOPICAL AREA IMPACT | MITIGATION MEASURE | RESPONSIBLE PARTY | MONITORING ACTION | 1. ENFORCEMENT AGENCY<br>2. MONITORING AGENCY<br>3. MONITORING PHASE |
|---|---|---|---|---|
| | City. The PRIMP shall require that the paleontologist perform paleontological monitoring of any ground disturbing activities within undisturbed native sediments during mass grading, site preparation, and underground utility installation. The project paleontologist may reevaluate the necessity for paleontological monitoring after 50 percent or greater of the excavations have been completed. In the event paleontological resources are encountered, ground-disturbing activity within 50 feet of the area of the discovery shall cease. The paleontologist shall examine the materials encountered, assess the nature and extent of the find, and recommend a course of action to further investigate and protect or recover and salvage those resources that have been encountered. Criteria for discard of specific fossil specimens will be made explicit. If the qualified paleontologist determines that impacts to a sample containing significant paleontological resources cannot be avoided by project planning, then recovery may be applied. Actions may include recovering a sample of the fossiliferous material prior to construction, monitoring work and halting construction if a significant fossil needs to be recovered, and/or cleaning, identifying, and cataloging specimens for curation and research purposes. Recovery, salvage and treatment shall be done at the Applicant's expense. All recovered and salvaged resources shall be prepared to the point of identification and permanent preservation by the paleontologist. Resources shall be identified and curated into an established accredited professional repository. The paleontologist shall have a repository agreement in hand prior to initiating recovery of the resource. | | | 3. During project construction activities |
| **4.8 Hazards and Hazardous Materials** | | | | |
| **Threshold 4.8 a):** Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials | **MM HAZ-1**<br>Due to the age of the existing buildings and the potential presence of asbestos containing materials (ACMs) and lead-based paint (LBP), prior to the commencement of demolition, the project proponent shall retain a qualified environmental consultant to conduct a comprehensive survey of the existing building to be demolished (i.e., the Parish Hall) to confirm the presence or absence of ACMs and LBP. A comprehensive survey of ACMs and a comprehensive LBP survey of painted surfaces in the Parish Hall shall occur prior to any demolition activities to confirm the presence or absence of ACMs or LBP to prevent potential exposure to workers and/or building occupants. | Project Applicant | Field Verification | 1. City of Placentia Planning Department<br>2. City of Placentia Planning Department<br>3. Prior to demolition |

| TOPICAL AREA IMPACT | MITIGATION MEASURE | RESPONSIBLE PARTY | MONITORING ACTION | 1. ENFORCEMENT AGENCY<br>2. MONITORING AGENCY<br>3. MONITORING PHASE |
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| | • If the existing buildings are found to contain any ACMs or LBP, a detailed Hazardous Material Abatement Plan shall be prepared, approved, and implemented. The Hazardous Material Abatement Plan shall include a site-specific scope of work and specifications for the proper disposal of hazardous materials. The Hazardous Material Abatement Plan shall be prepared and implemented in accordance with the Asbestos National Emission Standards for Hazardous Air Pollutants (NESHAP) and all other federal and state standards and regulations.<br>• The Hazardous Material Abatement Plan shall require that all ACMs and LBP be removed and properly disposed of in accordance applicable laws.<br>• The Hazardous Material Abatement Plan shall be implemented prior to demolition activities to ensure that any hazardous materials are properly identified, removed, and disposed of offsite at a landfill that can accept asbestos and any other hazardous materials removed from the site.<br>• A qualified environmental consultant shall be present on the project site during demolition activities and shall monitor compliance with the Hazardous Material Abatement Plan. | | | |
| **Threshold 4.8 b):** Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment | Refer to Mitigation Measures **HAZ-1** above. | Refer to Mitigation Measure **HAZ-1** above | Refer to Mitigation Measures **HAZ-1** above | Refer to Mitigation Measure **HAZ-1** above |

| TOPICAL AREA IMPACT | MITIGATION MEASURE | RESPONSIBLE PARTY | MONITORING ACTION | 1. ENFORCEMENT AGENCY<br>2. MONITORING AGENCY<br>3. MONITORING PHASE |
|---|---|---|---|---|
| **4.12 Noise** | | | | |
| **Threshold 4.12 a):** Exposure of persons to or generation of noise level in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. | **MM N-1**<br>Project applicants shall require by contract specifications that the following construction best management practices (BMPs) be implemented by contractors to reduce construction noise levels:<br>• Ensure that construction equipment is properly muffled according to industry standards and in good working condition.<br>• Place noise-generating construction equipment and locate construction staging areas away from sensitive uses, where feasible.<br>• Schedule high noise-producing activities between the hours of 8:00 AM and 7:00 PM to minimize disruption on sensitive uses.<br>• Implement noise attenuation measures to the extent feasible, which may include, but are not limited to, temporary noise barriers or noise blankets around stationary construction noise sources.<br>• Use electric air compressors and similar power tools rather than diesel equipment, where feasible.<br>• Construction-related equipment, including heavy-duty equipment, motor vehicles, and portable equipment, shall be turned off when not in use for more than 30 minutes.<br>• Construction hours, allowable workdays, and the phone number of the job superintendent shall be clearly posted at all construction entrances to allow for surrounding owners and residents to contact the job superintendent. If the City or the job superintendent receives a complaint, the superintendent shall investigate, take appropriate corrective action, and report the action taken to the reporting party. Contract specifications shall be included in the proposed project construction documents, which shall be reviewed by the City prior to issuance of a grading permit. | Project Applicant | Field Verification | 1. City of Placentia Planning Department<br>2. City of Placentia Planning Department<br>3. During construction |

| TOPICAL AREA IMPACT | MITIGATION MEASURE | RESPONSIBLE PARTY | MONITORING ACTION | 1. ENFORCEMENT AGENCY<br>2. MONITORING AGENCY<br>3. MONITORING PHASE |
|---|---|---|---|---|
| **Threshold 4.12 a):** Exposure of persons to or generation of noise level in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. | **MM N-2**<br>Project applicants shall require by contract specifications that heavily loaded trucks used during construction would be routed away from residential streets to the extent feasible. Contract specifications shall be included in the proposed project construction documents, which shall be reviewed by the City prior to issuance of a grading permit. | Project Applicant | Field Verification | 1. City of Placentia Planning Department<br>2. City of Placentia Planning Department<br>3. During construction |
| **4.14 Public Services** | | | | |
| **Threshold 4.14 b):** Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the need for new or physically altered governmental facilities, construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for police protection. | **MM PS-1**<br>The project applicant, with approval from with City of Placentia Planning Department, shall install large visible numbers on buildings and apartments to aid police officers in quickly identifying calls for service locations from a distance. | Project Applicant | Field Verification | 1. City of Placentia Planning Department<br>2. City of Placentia Planning Department<br>3. Prior to the issuance of a certificate of occupancy |

| TOPICAL AREA IMPACT | MITIGATION MEASURE | RESPONSIBLE PARTY | MONITORING ACTION | 1. ENFORCEMENT AGENCY<br>2. MONITORING AGENCY<br>3. MONITORING PHASE |
|---|---|---|---|---|
| **Threshold 4.14 b):** Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the need for new or physically altered governmental facilities, construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for police protection. | **MM PS-2**<br>The project applicant shall restrict residents from having long term guests reside at the project site. | Project Applicant | Field Verification | 1. City of Placentia Planning Department<br>2. City of Placentia Planning Department<br>3. Prior to the issuance of a certificate of occupancy |
| **4.17 Tribal Cultural Resources** | | | | |
| **Threshold 4.17 a):** Cause a substantial adverse change in the significance of a tribal cultural resource that is listed or eligible for listing in the California Register of Historical Resources or in a local register of historical resources as defined in Public Resources Code § 5020.1(k). | **MM TCR-1**<br>Prior to the issuance of a grading permit, the project applicant shall communicate with representatives of the Gabrieleño Band of Mission Indians Kizh-Nation and present evidence of such communication to the City of Placentia Community Development Department Director, or designee, demonstrating the following shall occur:<br>• On-call monitoring services by a qualified Native American Monitor to address unanticipated prehistoric or tribal resources. The Native American Monitor shall be present at the pre-grading conference to establish procedures for tribal cultural resource surveillance.<br>• Native American Indian Sensitivity Training by a qualified Native American Monitor for construction personnel. The training session shall include a handout and focus on how to identify Native American resources | Project Applicant | Field Verification | 1. City of Placentia Planning Department<br>2. City of Placentia Planning Department<br>3. During construction |

| TOPICAL AREA IMPACT | MITIGATION MEASURE | RESPONSIBLE PARTY | MONITORING ACTION | 1. ENFORCEMENT AGENCY<br>2. MONITORING AGENCY<br>3. MONITORING PHASE |
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| | encountered during earthmoving activities and the procedures followed if resources are discovered, the duties of the Native American Monitor of Gabrieleño Ancestry, and the general steps the Monitor would follow in conducting a salvage investigation.<br>• Construction Monitoring by a qualified Native American Monitor for ground-disturbing construction activities, as follows:<br>o Initial clearing and rough grading activities (e.g., pavement removal, auguring, boring, grading, excavation, potholing, and trenching);<br>o Spot checking of previously disturbed soils that have not been previously monitored; and<br>o Monitoring previously undisturbed native soils.<br>• The Native American Monitor(s) shall complete monitoring logs on a daily basis when onsite. The logs shall provide descriptions of the daily activities, including construction activities, locations, soil, and any cultural materials identified. The on-site monitoring shall end when the project site grading and excavation activities of previously undisturbed native soils are completed, or when the Tribal Representatives and Monitor have indicated that the site has a low potential for tribal cultural resources. The Tribal Monitor shall provide a monitoring final report, with daily logs, to the project applicant. | | | |
| **Threshold 4.17 b):** Would the project cause a substantial adverse change in the significance of a tribal cultural resource that is determined to be a significant resource to a California Native | **MM TCR-2**<br>Associated funerary objects are objects that, as part of the death rite or ceremony of a culture, are reasonably believed to have been placed with individual human remains either at the time of death or later; other items made exclusively for burial purposes or to contain human remains can also be considered as associated funerary objects. If funerary objects are discovered during grading or archeological excavations, they shall be treated in the same manner as bone fragments that remain intact and the construction contractor and/or qualified archeologist shall consult with the Gabrieleno Band of Mission Indians – Kizh Nation (Tribe). | Project Applicant | Field Verification | 1. City of Placentia Planning Department<br>2. City of Placentia Planning Department<br>3. During construction |

| TOPICAL AREA IMPACT | MITIGATION MEASURE | RESPONSIBLE PARTY | MONITORING ACTION | 1. ENFORCEMENT AGENCY<br>2. MONITORING AGENCY<br>3. MONITORING PHASE |
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| American tribe pursuant to the criteria set forth in subdivision (c) of Public Resource Code § 5024.1(c)? | **MM TCR-3**<br>As specified by California Health and Safety Code Section 7050.5, if human remains are found on the project site during construction or during archaeological work, the Orange County Coroner's office shall be immediately notified and no further excavation or disturbance of the discovery or any nearby area reasonably suspected to overlie adjacent remains shall occur until the Coroner has made the necessary findings as to origin and disposition pursuant to Public Resources Code 5097.98. The Coroner would determine within two working days of being notified, if the remains are subject to his or her authority. If the Coroner recognizes the remains to be Native American, he or she shall contact the Native American Heritage Commission (NAHC) within 24 hours. The NAHC would make a determination as to the Most Likely Descendent.<br><br>In the case where discovered human remains cannot be fully documented and recovered on the same day, the remains shall be covered with muslin cloth and a steel plate that can be moved by heavy equipment placed over the excavation opening to protect the remains. If this type of covering is not available, a 24-hour guard shall be posted outside of working hours. If the remains are Native American, the Tribe shall make every effort to recommend diverting the project and keeping the remains in situ and protected. If the project cannot be diverted, it may be determined that burials shall be removed and the project applicant shall arrange a designated site location within the footprint of the project for the respectful reburial of the human remains and/or ceremonial objects, if possible. The Tribe shall work closely with the qualified archaeologist to ensure that the excavation is treated carefully, ethically and respectfully. If data recovery is approved by the Tribe, documentation shall be taken which includes at a minimum detailed descriptive notes and sketches. Additional types of documentation shall be approved by the Tribe for data recovery purposes. Cremations shall either be removed in bulk or by means as necessary to ensure completely recovery of all material. If the discovery of human remains includes four (4) or more burials, the location shall be considered a cemetery and a separate treatment plan shall be created. The project applicant shall consult with the Tribe regarding avoidance of cemetery sites. Once complete, a final report of all activities shall be submitted to the NAHC. The Tribe does not | Project Applicant | Field Verification | 1. City of Placentia Planning Department |

| TOPICAL AREA IMPACT | MITIGATION MEASURE | RESPONSIBLE PARTY | MONITORING ACTION | 1. ENFORCEMENT AGENCY<br>2. MONITORING AGENCY<br>3. MONITORING PHASE |
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| | authorize any scientific study or the utilization of any invasive diagnostics on human remains with prior review and approval of study plans.<br><br>Each occurrence of human remains and associated funerary objects shall be stored using opaque cloth bags. All human remains, funerary objects, sacred objects and objects of cultural patrimony shall be removed to a secure container on site if possible. These items shall be retained and reburied within six months of recovery. The site of reburial/repatriation shall be on the project site but at a location mitigated between the Tribe and the landowner at a site to be protected in perpetuity. There shall be no publicity regarding any cultural materials recovered. | | | |