

8151 Sheldon Road Apartments Project

Final Initial Study/ Mitigation Negative Declaration

June 2016



Prepared for:

City of Sacramento
Community Development Department

300 Richards Boulevard, 3rd Floor
Sacramento, CA 95811

Prepared by:

HELIX Environmental Planning, Inc.

11 Natoma Street, Suite 155
Folsom, CA 95630

MITIGATED NEGATIVE DECLARATION

The City of Sacramento, California, a municipal corporation, does hereby prepare, declare, and publish this Mitigated Negative Declaration for the following described project:

8151 Sheldon Road Apartments (P16-007) - The proposed project includes the construction of a 324-unit apartment project on an approximately 19.7-acre site. The proposed apartment development would feature two-story, garden style Class A apartments with fully furnished 1-, 2-, and 3-bedroom units with resort style amenities. Additional proposed improvements include a clubhouse/leasing building, the extension of Masters Street through the project site, underground utilities, 551 on-site parking spaces.

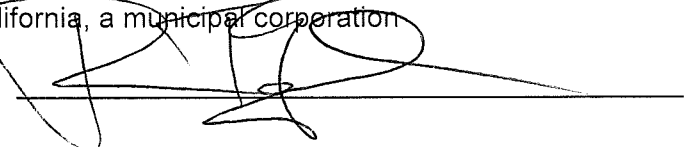
The Lead Agency is the City of Sacramento. The City of Sacramento, Community Development Department, has reviewed the proposed project and, on the basis of the whole record before it, has determined that there is no substantial evidence that the project, with mitigation measures as identified in the attached Initial Study, will have a significant effect on the environment. This Mitigated Negative Declaration reflects the lead agency's independent judgment and analysis. An Environmental Impact Report is not required.

This Mitigated Negative Declaration has been prepared pursuant to the California Environmental Quality Act (Public Resources Code Sections 21000 et seq.), CEQA Guidelines (Title 14, Sections 15000 et seq. of the California Code of Regulations), the Sacramento Local Environmental Regulations (Resolution 91-892), and the Sacramento City Code.

A copy of this document and all supportive documentation may be reviewed or obtained at the City of Sacramento, Community Development Department, 300 Richards Boulevard, 3rd Floor, Sacramento, CA 95811 from 9:00 a.m. to 4:00 p.m. The document is also available on the CDD website at: <http://portal.cityofsacramento.org/Community-Development/Planning/Environmental/Impact-Reports>

Environmental Services Manager, City of Sacramento,
California, a municipal corporation

By: _____



8151 SHELDON ROAD APARTMENTS [P16-007]

INITIAL STUDY/ MITIGATED NEGATIVE DECLARATION FOR ANTICIPATED SUBSEQUENT PROJECTS UNDER THE 2035 GENERAL PLAN MASTER EIR

This Initial Study has been prepared by the City of Sacramento, Community Development Department, 300 Richards Boulevard, Third Floor, Sacramento, CA 95811, pursuant to the California Environmental Quality Act (Public Resources Code Sections 21000 *et seq.*), CEQA Guidelines (Title 14, Section 15000 *et seq.* of the California Code of Regulations) and the Sacramento Local Environmental Regulations (Resolution 91-892) adopted by the City of Sacramento.

ORGANIZATION OF THE INITIAL STUDY

This Initial Study is organized into the following sections:

SECTION I - BACKGROUND: Provides summary background information about the project name, location, sponsor, and the date this Initial Study was completed.

SECTION II - PROJECT DESCRIPTION: Includes a detailed description of the proposed project.

SECTION III - ENVIRONMENTAL CHECKLIST AND DISCUSSION: Reviews proposed project and states whether the project would have additional significant environmental effects (project-specific effects) that were not evaluated in the Master EIR for the 2035 General Plan.

SECTION IV - ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED: Identifies which environmental factors were determined to have additional significant environmental effects.

SECTION V - DETERMINATION: States whether environmental effects associated with development of the proposed project are significant, and what, if any, added environmental documentation may be required.

REFERENCES CITED: Identifies source materials that have been consulted in the preparation of the Initial Study.

APPENDICES

Appendix A: Figures

Appendix B: Climate Action Plan Consistency Checklist and CalEEMod Results

Appendix C: Biological Resources Assessment

Appendix D: Jurisdictional Determination/Wetland Delineation

Appendix E: Hazardous Materials Site Assessment (Phase 1)

Appendix F: Noise Analysis

Appendix G: Transportation Analysis and Caltrans Response Memorandum

Appendix H: Errata and Response to Comments

SECTION I – BACKGROUND

Project Name and File Number: 8151 Sheldon Road Apartments (P16-007)

Project Location: 8151 Sheldon Road (APNs 117-0220-023, -024, -038, -039, -040)

Project Applicant: Rich Alexander
985 Pearce Street
Folsom, CA 95630

Project Planner: Garrett Norman, Assistant Planner

Environmental Planner: Dana Mahaffey, Associate Planner

Environmental Consultant: HELIX Environmental Planning, Inc.

Date Initial Study Completed: June 2016

This Initial Study was prepared in accordance with the California Environmental Quality Act (CEQA) (Public Resources Code Sections 1500 *et seq.*). The Lead Agency is the City of Sacramento.

The City of Sacramento, Community Development Department, has reviewed the proposed project and, on the basis of the whole record before it, has determined that the proposed project is an anticipated subsequent project identified and described in the 2035 General Plan Master Environmental Impact Report (MEIR) and is consistent with the land use designation and the permissible densities and intensities of use for the project site as set forth in the 2035 General Plan. See CEQA Guidelines Section 15176 (b) and (d).

The City has prepared the attached Initial Study to: (a) review the discussions of cumulative impacts, growth inducing impacts, and irreversible significant effects in the 2035 General Plan MEIR to determine their adequacy for the project (see CEQA Guidelines Section 15178(b),(c)); and, (b) identify any potential new or additional project-specific significant environmental effects that were not analyzed in the Master EIR and any mitigation measures or alternatives that may avoid or mitigate the identified effects to a level of insignificance, if any.

As part of the MEIR process, the City is required to incorporate all feasible mitigation measures or feasible alternatives appropriate to the project as set forth in the MEIR (CEQA Guidelines Section 15177(d)). The MEIR mitigation measures that are identified as appropriate are set forth in the applicable technical sections below. Policies included in the 2035 General Plan that reduce significant impacts identified in the MEIR are identified and discussed in the MEIR.

This analysis incorporates by reference the general discussion portions of the 2035 General Plan MEIR (CEQA Guidelines Section 15150(a)). The MEIR is available for public review at the City of Sacramento, Community Development Department, 300 Richards Boulevard, Third Floor, Sacramento, CA 95811, and on the City's web site at:

[\[http://portal.cityofsacramento.org/Community-Development/Planning/Environmental/Impact-Reports\]](http://portal.cityofsacramento.org/Community-Development/Planning/Environmental/Impact-Reports).

The City solicited views of interested persons and agencies on the content of the environmental information presented in this document from April 18, 2016 to May 17, 2016, as stated on the Notice of Completion (NOC). All comments received during this time period are addressed in the Errata and Response to Comments.

PREVIOUSLY APPROVED DOCUMENTS

An Initial Study and Mitigated Negative Declaration were issued for the 8151 Sheldon Subdivision Project (P05-044) on December 26, 2006. The project footprint for the previously

approved project was 18.7 acres (the currently proposed project has been expanded to 19.7 acres). The approved initial study identified potentially significant impacts associated with biological resources, cultural resources, hazardous materials, noise, and traffic and circulation.

SECTION II – PROJECT DESCRIPTION

PROJECT LOCATION

The proposed project is located at the northwest corner of Sheldon Road with West Stockton Boulevard at the southern City of Sacramento boundary. The project site is located at 8151 Sheldon Road, and the parcels are identified as Assessor's Parcel Numbers (APN) 117-0220-023, -024, -038, -039, -040. Refer to Figure 1 for the project location and Figure 2 for the APNs and lot boundaries on an aerial image (both included in Appendix A).

PROJECT SETTING AND SURROUNDING LAND USES

The project site is within a partially urbanized, mixed-use area of the community, consisting of patchy residential developments, commercial business centers, industrial uses, and undeveloped parcels. The project site is bound by Sheldon Road to the south; West Stockton Boulevard, undeveloped land, commercial businesses, and a recreational vehicle park to the east; commercial businesses and single-family residential development to the north, and single-family residential development to the west. A retail center is located across Sheldon Road from the project site, with various shops and restaurants, including a grocery store.

The project site is currently vacant with remnant features associated with past land uses (described below). State Route 99 (SR 99; South Sacramento Freeway) is located east of West Stockton Boulevard. Masters Street is a local east-west residential street northwest of the project site which currently terminates at Melville Drive at the western site boundary. It provides access to Bruceville Road indirectly via Damascas Drive. Melville Drive, a residential street northwest of the project site, begins at Masters Street and continues north and then east to West Stockton Boulevard. Additional residential streets that terminate at the western edge of the project site include Splendid Way and Praline Way. These streets provide local pedestrian access to the residential neighborhood west of the project site.

Terrain in the immediate vicinity and the project site is primarily flat. Elevations on the project site range from approximately 25 to 30 feet above mean sea level (amsl).

Foundation remnants and a concrete slab-on-grade driveway associated with a former residential structure are present in the southern portion of the site, adjacent to Sheldon Road. Evidence of a backfilled swimming pool is located north of the previous structure. Remnant landscaping (i.e., palm trees) are located north of the backfilled swimming pool.

Stockpiles containing soil, vegetation, concrete piping, and other debris were observed in the southwestern portion of the site. Two wood power poles and two above-ground tanks with associated water wells are located in the central portion of the property. An unpaved gravel road originating from Sheldon Road, and other gravel paved areas were observed in the southeastern portion of the site. Encroachments from the adjacent commercial uses include vehicle and scrap metal storage in the northeastern portion of the project site.

The far eastern portion of the project site contains foundation remnants and a concrete slab-on-grade associated with a previously removed commercial building located adjacent to West Stockton Boulevard.

According to the project applicant, three wells are located on the project site – all three wells are capped in place, and will be abandoned prior to project construction. One water well associated with an above-ground pressure tank is located east of the former residential structure in the southern portion of the site. Two above-ground tanks, with associated water wells, are located in the central portion of the property near two wood power poles.

SITE PLANNING AND ZONING DESIGNATION

The project site is located in the Valley Hi/North Laguna Subarea of the South Area Community Plan area. The subarea is generally bounded by Mack Road on the north, the City limits

(Sheldon Road) on the south, SR 99 on the east, and the Union Pacific tracks and the city limits on the west. The City uses community plans to provide policy direction for various areas of the City based on conditions or issues unique to each community plan area. The subareas allow for more focused policy and direction within the community plan area.

The project site is located in the Jacinto Creek Planning Area for which there is a drainage master plan and a fee district (Jacinto Creek Planning Fee District; Municipal Code §18.28). The fee district was formed to provide financing for the backbone infrastructure required to support development in the area. The facilities include a storm drainage channel and detention basins, major roadways, traffic signals, and water conveyance pipelines.

The project site is currently comprised of five APNs (see Figure 2). Based on the City's Zoning Map Book, APN 117-0220-038 is Multi-Family, 21 units per acre (R-2B), and the remaining four parcels are zoned General Commercial (C-2).

PROJECT COMPONENTS

The proposed project includes the construction of a 324-unit apartment project on an approximately 19.7-acre site. The proposed apartment development would feature two-story, garden style Class A apartments with fully furnished 1-, 2-, and 3-bedroom units with resort style amenities. Additional proposed improvements include a clubhouse/leasing building, the extension of Masters Street through the project site, underground utilities, 551 on-site parking spaces, driveways, drive aisles, sidewalks and walkways, fencing, lighting, outdoor use areas, landscaping, and trash/recycling enclosures. Refer to Figure 3 in Appendix A for the Site Plan.

RESIDENTIAL AND COMMUNITY BUILDINGS

The proposed development includes a total of 22 buildings including 14 fourteen-unit buildings, and 8 sixteen-unit buildings.^a A unit mix consisting of 33 percent one-bedroom, 50 percent two-bedroom and 17 percent three-bedroom would be constructed, with the units averaging 1,047 square feet, per unit (ranging from 720 to 1,410 square feet). All residential buildings would be two stories in height. The total area of the structures being constructed would be approximately 363,740 square feet (includes the multiple stories). The building set back from the neighborhood to the west exceeds the City's minimum requirement of 10 feet.

The clubhouse would be an estimated 6,250-square foot building located near the Sheldon Road entrance. The clubhouse would be constructed with materials and a color palate to match the residential buildings. The clubhouse would feature a variety of amenities (e.g., swimming pool, business center, fitness center, pet spa, entertaining areas, etc.) to serve the residents.

MASTERS STREET EXTENSION

Masters Street is proposed to be extended from its current terminus at the western boundary of the project site, through the project site to the eastern project site boundary (Figure 1). The roadway extension would be located within a 69-foot-wide right-of-way (ROW), with 12.5-foot-wide public utility easements along either side of the extension, all to be dedicated to the City. The future roadway extension from the eastern project site boundary to West Stockton Boulevard would be constructed by others, as a separate project.

PARKING AND CIRCULATION

The development would include three vehicular access points: the main entrance would be from Sheldon Road, with secondary entrances at West Stockton Boulevard and the Masters Street extension through the northern portion of the project site. Two existing off-site neighborhood

^a Architectural Site Plan prepared by BSB dated 2/22/2016.

streets (Praline Way and Splendid Way) currently terminate at the project site's western boundary. The project would not include vehicular connections at these locations but would provide private gated pedestrian access to Praline Way. A similar gate would be used for maintenance access only at the Splendid Way terminus. Existing sidewalks along the north and south sides of Praline and Splendid Ways would connect to sidewalks on the project site. A walking trail would follow the perimeter of the project site with continuous pedestrian connectivity to all building entrances in the development.

In order to meet City requirements of 1.5 parking spaces per unit, the proposed project would require 486 parking spaces. The project proposes to provide 551 parking spaces, resulting in 1.7 parking spaces per unit, and exceeding the parking requirements by 65 spaces. Parking would be comprised of 111 surface parking spaces, 272 carport spaces, 84 garage spaces, and 84 tandem spaces. Twelve of the spaces would be disability accessible spaces. At least one garage or covered carport space would be provided for each unit. Bicycle storage would be available at patios, balconies, or under the private stairways. Additionally, bicycle racks would be installed near each building to provide short-term bicycle parking areas to provide one space for every two units. A total of 486 bicycle spaces would be provided (one long-term storage, and 0.5 short-term storage space per unit).

GRADING AND DRAINAGE

The entire 19.7-acre project site would be disturbed during site preparation and grading. The parcel is currently graded and is relatively flat. Approximately 15,000 cubic yards of soil are anticipated to be moved during cut/fill operations. Building foundations for two previously removed structures on the project site would be removed, along with the associated driveways and a parking lot. Approximately 492,446 square feet of impervious surfaces would be constructed on the project site (209,000 square feet of buildings, 20,500 square feet of enhanced vehicular concrete, 202,946 square feet of asphalt, and 60,000 square feet of concrete pedestrian sidewalks).

UTILITIES

The project includes the installation of an underground storm drain system with inlets throughout the project site. Storm water from the project site would be collected by the project's storm drain system and directed to existing storm drains in Masters Street and Praline Way west of the project site. A 4.4-acre detention basin would be installed in the northern portion of the project site, north of the Masters Street Extension through the project site, for water quality purposes. Overflows from the basin would enter the existing storm drain in Melville Drive west of the project site. Refer to Figure 4 in Appendix A for the grading and drainage plans.

The project site is served by the City of Sacramento, Department of Utilities District for water, and the Sacramento Area Sewer District (SASD) for sanitary sewer. The project's water supply network would tie-in to existing water lines in Masters Street, Splendid Way, and Praline Way. The project's sewer network would tie-in to an existing sewer line in Praline Way.

TRASH/RECYCLING ENCLOSURES

A total of 11 trash/recycling enclosures would be provided throughout the development, near buildings and along main driveways through the development.

OUTDOOR AMENITIES

The project proposes 368.8 square feet of open space/outdoor use area per unit (119,500 square feet of open space), which exceeds the City's requirements of 100 square feet of open space per unit. Open space (Open Space 1) would be provided at the clubhouse, with a resort style pool furnished with cabanas and landscaped seating areas associated with the clubhouse. A second area of open space (Open Space 2) would be provided near the center of the development, and would feature bocce ball courts, a gazebo, fire pits, barbecue areas, and turf

areas. The third outdoor use area (Open Space 3) would be located in the northern portion of the site, where additional fire pits and seating areas would be provided. A 0.1-acre dog park would be established in the northwest portion of the project site, adjacent to the proposed retention basin north of the Masters Street Extension.

As previously described, a pedestrian trail would follow the perimeter of the development, and would provide a pedestrian route to all amenity areas within the development, including the clubhouse. The trail would also provide access to the school and park north of the project site, and the neighborhood to the west. Benches would be provided along the trail.

FENCING AND GATES

Concrete masonry walls, would be constructed along the western, southern, and eastern perimeters of the development. The wall along the frontage for Sheldon Way (the southern perimeter) would be 6 feet high, constructed of 3 feet of masonry wall topped with 3 feet of metal picket fence. The wall along the western perimeter would match the existing wall around the development west of the project site. Openings in the wall along the western boundary at Praline Way and Splendid Way would feature 6-foot-high metal picket fences with pedestrian gates. The fence and gates would control vehicular traffic, but would allow pedestrian access between the neighborhoods. A 6-foot-high metal picket fence would be constructed along the frontages for the West Stockton Boulevard and Masters Street Extension. The dog park would also be enclosed by a 6-foot-high metal picket fence, and a post and cable fence would surround the water quality basin. All three entrances would be gated with metal picket gates.

LANDSCAPING

Landscaping would feature a variety of xeriscape landscaping to reduce water demand and usage. Various shade trees would be planted along the interior roads and on-street parking areas of the development. Street trees would be planted along the Sheldon Road and West Stockton Boulevard frontages. Screen trees would be planted around the perimeter of the development. Landscaping within the development would feature ornamental trees, and additional plantings would include masses of shrubs and groundcovers of varying sizes and colors. Refer to Figure 5 in Appendix A for the preliminary landscape design.

CONSTRUCTION AND PHASING

The project would be constructed in one phase. Initial grading activities are anticipated to begin in June 2016, with initial grading and underground infrastructure/utility installations lasting four weeks. Building construction is anticipated to begin in August, and construction is anticipated to last for approximately 16 weeks. Final buildout is anticipated to conclude by the end of 2016.

TENTATIVE PARCEL MAP LOT LINE ADJUSTMENT

The project site is currently comprised of five APNs (see Figure 2). Based on the City's Zoning Map Book, APN 117-0220-038 is Multi-Family, 21 units per acre (R-2B), and the remaining four parcels are zoned General Commercial (C-2). Under the proposed project, the existing parcel boundaries would be revised to achieve three parcels for the project site – Parcel 1 would consist of the multi-family development; Parcel 2 would consist of the private dog park; and Parcel 3 would consist of the water quality basin.

ENTITLEMENTS

The project would require the following entitlements:

- Tentative Map
- Site Plan and Design Review

SECTION III – ENVIRONMENTAL CHECKLIST

LAND USE, POPULATION AND HOUSING, AGRICULTURAL RESOURCES AND ENERGY

INTRODUCTION

The California Environmental Quality Act (CEQA) requires the Lead Agency to examine the effects of a project on the physical conditions that exist within the area that would be affected by the project. CEQA also requires a discussion of any inconsistency between the proposed project and applicable general plans and regional plans.

An inconsistency between the proposed project and an adopted plan for land use development in a community would not constitute a physical change in the environment. When a project diverges from an adopted plan, however, it may affect planning in the community regarding infrastructure and services, and the new demands generated by the project may result in later physical changes in response to the project.

In the same manner, the fact that a project brings new people or demand for housing to a community does not, by itself, change the physical conditions. An increase in population may, however, generate changes in retail demand or demand for governmental services, and the demand for housing may generate new activity in residential development. Physical environmental impacts that could result from implementing the proposed project are discussed in the appropriate technical sections.

This section of the initial study identifies the applicable land use designations, plans and policies, and permissible densities and intensities of use, and discusses any inconsistencies between these plans and the proposed project. This section also discusses agricultural resources and energy and the effect of the project on these resources.

DISCUSSION

Land Use

The project site has been designated as Suburban Center (Density 15-36 units per acre) and Suburban Neighborhood High (Density 15-30 units per acre) in the 2035 General Plan. Both land use designations provide for residential land uses within the allowable densities. The proposed project would result in a net density of 17.7 units per acre, which is within the allowable density for both land use designations. The proposed project is consistent with the 2035 General Plan and the Jacinto Creek Planning Area (JCPA).

Based on the City's Zoning Map Book, APN 117-0220-038 is Multi-Family, 21 units per acre (R-2B), and the remaining four parcels are zoned General Commercial (C-2). Chapter 17.208 of the Planning and Development Code (Title 17) defines R-2B as a maximum density of 21 units per acre, and a maximum height of 35 feet. The maximum lot coverage is 50 percent, with a minimum lot size of 2,000 square feet. Chapter 17.216 of the Planning and Development Code identifies that the C-2 zone allows for residential land use. The proposed project is consistent with the zoning designations of the parcels.

While the proposed land uses are consistent with the current land use and zoning designations, the project includes a lot line adjustment. Parcel 1 would consist of the multi-family development; Parcel 2 would consist of the private dog park; and Parcel 3 would consist of the detention basin.

The proposed project would alter the current land uses of the project site, but the proposed project is designated for urban development in the 2035 General Plan and Planning and Development Code. The proposed project would be consistent with the 2035 General Plan and the Planning and Development Code (Title 17) planning designations.

Population and Housing

The 2035 General Plan Master Environmental Impact Report (MEIR) identifies, estimates, and evaluates population and housing changes caused by development of the 2035 General Plan, which have the potential to cause environmental effects (see MEIR, Chapter 4). The 2035 General Plan includes assumptions for the amount of growth that will occur within the Policy Area over the next 25 years. The General Plan assumes the City will grow by approximately 170,000 new residents, 86,000 new jobs, and 68,000 new housing units. The Population, Employment, and Housing analysis in the 2035 General Plan MEIR (Chapter 3) provides a detailed discussion of how the City reached these assumptions and the methodology used to determine a realistic level of growth for the City.

Implementation of the proposed project would result in the construction of 324 residential units. According to the 2035 General Plan, the City's average household size was 2.62 persons in 2010. While the proposed project would construct new residences and provide new job opportunities, the residential land use was envisioned in the General Plan, and the infrastructure envisioned in the plan considered development of the proposed project. The proposed project would not induce substantial growth in the City that was not already envisioned in the 2035 General Plan. The existing structures on the project site include a vacant house and a liquor store. There are no occupied residences on the project site; therefore, neither occupied housing units nor people would be displaced by the proposed project, and no replacement housing would be required. The project would construct new housing that would replace the single home being removed for the project.

Agricultural Resources

The MEIR discussed the potential impact of development under the 2035 General Plan on agricultural resources (see MEIR, Chapter 4.1). In addition to evaluating the effect of the general plan on sites within the City, the MEIR noted that, to the extent the 2035 General Plan accommodates future growth within the City limits, the conversion of farmland outside the City limits is minimized (see MEIR, Chapter 4.1). The MEIR concluded that the impact of the 2035 General Plan on agricultural resources within the City was less than significant.

The project site does not contain soils designated as Important Farmland (i.e., Prime Farmland, Unique Farmland or Farmland of Statewide Importance) (NRCS 2016). The California Important Farmland Finder map identified the site as "Urban and Built-Up Land" (California Department of Conservation 2016) which is land used for a variety of developed purposes. The site is not zoned for agricultural uses. The project site is not identified as a Williamson Act Land on Figure 6.2 of the General Plan Environmental Resources Background Report. There are no known Williamson Act contracts that affect the project site. No existing agricultural or timber-harvest uses are located on or in the vicinity of the project site. Development of the site would result in no impacts on agricultural resources.

Energy

Structures built as part of the project would be subject to Titles 20 and 24 of the California Code of Regulations, which serve to reduce demand for electrical energy by implementing energy-efficient standards for residential and non-residential buildings. The 2035 General Plan includes Policies 6.1.10 through 6.1.13 to encourage the use of energy-efficient technology by offering rebates and other incentives to commercial and residential developers, and recruiting businesses that research and promote energy conservation and efficiency.

Policies 6.1.6 through 6.1.8 focus on promoting the use of renewable resources, which would reduce the cumulative impacts associated with use of non-renewable energy sources. In addition, Policies 6.1.5 and 6.1.12 call for the City to work closely with utility providers and industries to promote new energy conservation technologies.

The MEIR evaluated the potential impacts on energy and concluded that the effects would be less than significant (see Impact 4.11-6). The proposed project would result in no new impacts not previously identified and evaluated in the MEIR.

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AESTHETICS

Issues:	Effect will be studied in the EIR	Effect can be mitigated to less than significant	No additional significant environmental effect
<p>1 <u>AESTHETICS, LIGHT AND GLARE</u></p> <p>Would the proposal:</p> <p>A) Create a source of glare that would cause a public hazard or annoyance?</p> <p>B) Create a new source of light that would be cast onto oncoming traffic or residential uses?</p> <p>C) Substantially degrade the existing visual character of the site or its surroundings?</p>			<p align="center">X</p> <p align="center">X</p> <p align="center">X</p>

ENVIRONMENTAL SETTING

The project site is within a partially urbanized, mixed-use area of the community, consisting of patchy residential developments, commercial business centers, industrial uses, and undeveloped parcels. The project site is bound by Sheldon Road to the south; West Stockton Boulevard, undeveloped land, commercial businesses, and a recreational vehicle park to the east; commercial businesses and single-family residential development to the north, and single-family residential development to the west. A retail center is located across Sheldon Road from the project site, with various shops and restaurants, including a grocery store.

The project site is currently undeveloped with the exception of an existing vacant house in the southern portion of the site (near Sheldon Road), and a small retail building in the eastern portion of the site (near West Stockton Boulevard). SR 99 is located east of West Stockton Boulevard.

Terrain in the immediate vicinity and the project site is primarily flat and is similar in elevation

SUMMARY OF ANALYSIS UNDER THE 2035 GENERAL PLAN MASTER EIR AND APPLICABLE GENERAL PLAN POLICIES

The MEIR describes the existing visual conditions in the general plan policy area, and the potential changes to those conditions that could result from development consistent with the 2035 General Plan (see MEIR, Chapter 4.13, Visual Resources). The MEIR identified potential impacts for glare (Impact 4.13-1), and concluded that impacts would be less than significant.

MITIGATION MEASURES FROM 2035 GENERAL PLAN MASTER EIR THAT APPLY TO THE PROJECT

None.

GENERAL PLAN POLICIES CONSIDERED MITIGATION

The following General Plan policies would avoid or lessen environmental impacts as identified in the MEIR, and are applicable to the proposed project:

- Policy LU 6.1.12 (Compatibility with Adjoining Uses)
- Policy ER 7.1.3 (Lighting)
- Policy ER 7.1.4 (Reflective Glass)

STANDARDS OF SIGNIFICANCE

The significance criteria used to evaluate the project impacts to aesthetics are based on Appendix G of the California Environmental Quality Act (CEQA) Guidelines, thresholds of

significance adopted by the City in applicable general plans and previous environmental documents, and professional judgment. A significant impact related to aesthetics would occur if the project would:

- substantially degrade the existing visual character or quality of the site and its surroundings; or,
- create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

ANSWERS TO CHECKLIST QUESTIONS

Questions A and B: Less than Significant

While the project site is currently undeveloped, it is largely surrounded by developed land uses, with residential developments to the west and north, and commercial/retail developments to the north, east, and south. A small, vacant lot is located between the southeast portion of the project site, and West Stockton Boulevard. Development of the currently undeveloped project site would result in new sources of light and glare that could affect the surrounding areas. However, the proposed project would be required to adhere to the City's lighting standards and Policy LU 6.1.14 (Compatibility with Adjoining Uses) that ensures that the introduction of higher density mixed-use development along major arterial corridors is compatible with adjacent land uses by requiring specific design features. Policy ER 7.13 specifically addresses lighting spillover. Both policies require outdoor lighting to be shielded and cast downward to reduce light spillover on adjacent properties and glare from the area. Additionally, the project site's residential lighting would be consistent with the surrounding land uses. Thus, lighting from the project site would not be expected to cause a public annoyance, and with adherence to the applicable design standards, would not adversely affect day or nighttime views in the area.

Policy ER 7.1.4 contains restrictions on the use of reflective materials that may be a source of glare. The project would not result in a substantial amount of glare – the buildings are single family homes and a clubhouse that would not be constructed with: reflective glass that exceeds 50 percent of any building surface (and on the ground three floors); mirrored glass; black glass that exceeds 25 percent of any surface of a building, or; metal building materials that exceed 50 percent of any street-facing surface of a primarily residential building. Impacts related to light and glare as a result of the proposed project would be **less than significant**. Further, the proposed project would be consistent with existing land use and zoning designations, and would not require an amendment to the General Plan. The project's potential impacts related to light and glare have already been anticipated in the 2035 General Plan, the proposed project would not result in potential impacts in addition to or greater than the impacts already identified in the MEIR. No additional significant environmental effects would occur.

Question C: Less than Significant

The project site is located within a partially developed area of the City that features a variety of uses ranging from patchy residential developments, commercial business centers, industrial uses, and undeveloped parcels. Development of the project site would change views of the project site from undeveloped to developed. Residents of the adjacent residential properties and motorists traveling through the area may be affected by development of the parcels, particularly because the site is currently undeveloped. The development on the project site has been designed to tie in to the adjacent residential developments. The character of the homes and clubhouse would be consistent with the general character of the existing adjacent residential developments, including the pitched and tiled roofs, and neutral color palettes. A 6-foot-high concrete masonry wall is proposed to surround the development along its southern and eastern boundaries. The style of the wall is a continuation of an existing wall around the residential development west of the project site; thereby providing a visual continuation of the most visually prominent feature from the major roadways.

While the proposed project would result in a change in visual character on the site, the proposed land uses are consistent with the overall urban development of the vicinity, and the proposed development is expected to integrate into the existing and planned development in the area. A **less than significant** impact to visual character would occur. Further, because the proposed project is consistent with the 2035 General Plan, impacts have already been analyzed and anticipated in the MEIR. The proposed project would not result in potential impacts in addition to or greater than the impacts already identified in the MEIR. No additional significant environmental effects would occur.

MITIGATION MEASURES

None

FINDINGS

The proposed project would have no additional project-specific environmental effects relating to aesthetics.

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AIR QUALITY

Issues:	Effect will be studied in the EIR	Effect can be mitigated to less than significant	No additional significant environmental effect
2. AIR QUALITY			
Would the project:			
A) Result in construction emission of NOx above 85 pounds per day?			X
B) Result in operational emissions of NOx or ROG above 65 pounds per day?			X
C) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?			X
D) Result in PM10 concentrations equal to or greater than five percent of the State ambient air quality standard (i.e., 50 micrograms/cubic meter for 24 hours) in areas where there is evidence of existing or projected violations of this standard?			X
E) Result in CO concentrations that exceed the 1-hour state ambient air quality standard (i.e., 20.0 ppm) or the 8-hour state ambient standard (i.e., 9.0 ppm)?			X
F) Result in exposure of sensitive receptors to substantial pollutant concentrations?			X
G) Result in TAC exposures that create a risk of 10 in 1 million for stationary sources, or substantially increase the risk of exposure to TACs from mobile sources?			X
H) Conflict with the Climate Action Plan?			X

ENVIRONMENTAL SETTING

Regional Setting

The project site is located in the City of Sacramento, within Sacramento County, California, which is within the Sacramento Valley Air Basin (SVAB).

Concentrations of emissions from criteria air pollutants (the most prevalent air pollutants known to be harmful to human health) are used to indicate the quality of the ambient air. Criteria air pollutants include ozone, particulate matter (including respirable particulate matter with an aerodynamic diameter of 10 micrometers or less [PM₁₀] and fine particulate with an aerodynamic diameter of 2.5 micrometers or less [PM_{2.5}]), and carbon monoxide. Ozone is not directly emitted into the air but is formed through complex chemical reactions between precursor emissions of reactive organic gases (ROG) and oxides of nitrogen (NO_x) in the presence of sunlight. ROG are volatile organic compounds that are photochemically reactive. ROG emissions result primarily from incomplete combustion and the evaporation of chemical solvents and fuels. NO_x are a group of gaseous compounds of nitrogen and oxygen that result from the combustion of fuels. Carbon monoxide is also emitted by automobiles and other vehicles. PM₁₀ and PM_{2.5} consist of particulate matter emitted directly into the air, such as fugitive dust, soot,

and smoke from mobile and stationary sources, construction operations, fires and natural windblown dust, and particulate matter formed in the atmosphere by reaction of gaseous precursors (ARB 2009).

The U.S. Environmental Protection Agency established the National Ambient Air Quality Standards (NAAQS) for criteria air pollutants. California has also established its own California Ambient Air Quality Standards (CAAQS) that are at least as stringent as the NAAQS. The SVAB is designated as nonattainment with respect to the NAAQS and CAAQS for ozone, PM₁₀, and PM_{2.5}.

The Sacramento Metropolitan Air Quality Management District (SMAQMD) attains and maintains air quality conditions in Sacramento County through a comprehensive program of planning, regulation, enforcement, technical innovation, and promotion of the understanding of air quality issues. The clean air strategy of SMAQMD includes the preparation of plans and programs for the attainment of ambient-air quality standards, adoption and enforcement of rules and regulations, and issuance of permits for stationary sources. SMAQMD also inspects stationary sources, responds to citizen complaints, monitors ambient air quality and meteorological conditions, and implements other programs and regulations required by the Clean Air Act, its amendments, and the California Clean Air Act.

Note that all construction projects are required to implement the SMAQMD's Basic Construction Emission Control Practices.

The Basic Emission Control Practices

The following practices are considered feasible for controlling fugitive dust from a construction site. Control of fugitive dust is required by Sacramento Metropolitan Air Quality Management District Rule 403 and enforced by SMAQMD staff (SMAQMD 2014).

- Water all exposed surfaces two times daily. Exposed surfaces include, but are not limited to soil piles, graded areas, unpaved parking areas, staging areas, and access roads.
- Cover or maintain at least two feet of free board space on haul trucks transporting soil, sand, or other loose material on the site. Any haul trucks that would be traveling along freeways or major roadways should be covered.
- Use wet power vacuum street sweepers to remove any visible trackout mud or dirt onto adjacent public roads at least once a day. Use of dry power sweeping is prohibited.
- Limit vehicle speeds on unpaved roads to 15 miles per hour (mph).
- All roadways, driveways, sidewalks, parking lots to be paved should be completed as soon as possible. In addition, building pads should be laid as soon as possible after grading unless seeding or soil binders are used.

The following practices describe exhaust emission control from diesel powered fleets working at a construction site. California regulations limit idling from both on-road and off-road diesel powered equipment. The California Air Resources Board enforces the idling limitations.

- Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to 5 minutes [required by California Code of Regulations, Title 13, sections 2449(d)(3) and 2485]. Provide clear signage that posts this requirement for workers at the entrances to the site.

Although not required by local or state regulation, many construction companies have equipment inspection and maintenance programs to ensure work and fuel efficiencies.

- Maintain all construction equipment in proper working condition according to manufacturer's specifications. The equipment must be checked by a certified mechanic and determine to be running in proper condition before it is operated.

Lead agencies may add these emission control practices as Conditions of Approval or include in a Mitigation Monitoring and Reporting Program.

SUMMARY OF ANALYSIS UNDER THE 2035 GENERAL PLAN MEIR, INCLUDING CUMULATIVE IMPACTS, GROWTH INDUCING IMPACTS, AND IRREVERSIBLE SIGNIFICANT EFFECTS

The MEIR addressed the potential effects of the 2035 General Plan on ambient air quality and the potential for exposure of people, especially sensitive receptors such as children or the elderly, to unhealthful pollutant concentrations (see MEIR, Chapter 4.2).

Policies in the 2035 General Plan (Environmental Resources) were identified as mitigating potential effects of development that could occur under the 2035 General Plan. For example, Policy Environmental Resources 6.1.1 calls for the City to work with the California Air Resources Board and the SMAQMD to meet state and federal air quality standards; Policy Environmental Resources 6.1.2 requires the City to review proposed development projects to ensure that the projects incorporate feasible measures that reduce construction and operational emissions; Policy ER 6.1.4 calls for coordination of City efforts with SMAQMD; and Policy ER 6.1.15 requires the City to give preference to contractors using reduced-emission equipment. The MEIR found that these policies would lessen impacts on air quality, but the long-term operational emissions of ozone precursors and particulate matter would remain significant (Impact 4.2-3).

The MEIR identified exposure to sources of toxic air contaminants (TAC) as a potential effect. Policies in the 2035 General Plan would reduce the effect to a less-than-significant level. The policies include Land Use 2.7.5, regarding development along freeways, and Policies Environmental Resources 6.1.1 and 6.1.4, referred to above.

The MEIR found that greenhouse gas emissions that would be generated by development consistent with the 2035 General Plan would be a less than significant impact (see Impact 4.14-1). The Master EIR identified numerous policies included in the 2035 General Plan that addressed greenhouse gas emissions and climate change, including Policies Environmental Resources 6.1.5 – 6.1.9 (see Draft MEIR, Chapter 14). Policies identified in the 2035 General Plan include directives relating to sustainable development patterns and practices, and increasing the viability of pedestrian, bicycle, and public transit modes. A complete list of policies addressing climate change is included in the MEIR in Table 4.14-3.

MITIGATION MEASURES FROM 2035 GENERAL PLAN MEIR THAT APPLY TO THE PROJECT

None.

GENERAL PLAN POLICIES CONSIDERED MITIGATION

The following General Plan policies would avoid or lessen environmental impacts as identified in the MEIR, and are applicable to the proposed project:

- Policy LU 2.7.5 (Development along Freeways)
- Policy ER 6.1.1 (Maintain Ambient Air Quality Standards)
- Policy ER 6.1.2 (New Development)
- Policy ER 6.1.3 (Emissions Reduction)
- Policy ER 6.1.4 (Sensitive Uses)

STANDARDS OF SIGNIFICANCE

For purposes of this Initial Study, air quality impacts may be considered significant if construction and/or implementation of the proposed project would result in the following impacts that remain

significant after implementation of General Plan policies or mitigation from the General Plan MEIR:

- construction emissions of NO_x above 85 pounds per day;
- operational emissions of NO_x or ROG above 65 pounds per day;
- violation of any air quality standard or contribute substantially to an existing or projected air quality violation;
- PM₁₀ concentrations equal to or greater than five percent of the State ambient air quality standard (i.e., 50 micrograms/cubic meter for 24 hours) in areas where there is evidence of existing or projected violations of this standard. However, if project emissions of NO_x and ROG are below the emission thresholds given above, then the project would not result in violations of the PM₁₀ ambient air quality standards;
- CO concentrations that exceed the 1-hour state ambient air quality standard (i.e., 20.0 ppm) or the 8-hour state ambient standard (i.e., 9.0 ppm); or,
- exposure of sensitive receptors to substantial pollutant concentrations.

Ambient air quality standards have not been established for toxic air contaminants (TAC). TAC exposure is deemed to be significant if:

- TAC exposures create a risk of 10 in 1 million for stationary sources, or substantially increase the risk of exposure to TACs from mobile sources.

A project is considered to have a significant effect relating to greenhouse gas emissions if it fails to satisfy the requirements of the City's Climate Action Plan.

ANSWERS TO CHECKLIST QUESTIONS

Question A: Less than Significant

Construction of the proposed project would include demolition of the existing structures, and would include the construction of 22 multi-family residential buildings, including 14 fourteen-unit buildings and 8 sixteen unit buildings. Construction activities could commence as early as the June 2016 and would likely be completed within approximately 6 months. NO_x emissions would be generated by demolition and associated on-site equipment and truck activity associated with hauling materials, off-road construction equipment (e.g., dozers, excavators), truck activity associated with hauling materials to and from the site (although cut and fill would be balanced on site), and worker vehicle trips.

SMAQMD has developed a screening level to assist a project proponent or lead agency in determining if NO_x emissions from constructing a project in Sacramento County will exceed the SMAQMD's construction significance threshold for NO_x. Construction of a project that does not exceed the screening level and meets all the screening parameters would be considered to have a less-than-significant impact on air quality. However, all construction projects regardless of the screening level are required to implement the SMAQMD's Basic Construction Emission Control Practices. The Basic Emission Control Practices are discussed above in the Environmental Setting section.

Projects that are 35 acres or less in size generally will not exceed the SMAQMD's construction NO_x threshold of significance (SMAQMD 2014). This screening level was developed using default construction inputs in the California Emissions Estimator Model (CalEEMod). Lead agencies cannot use the screening level to determine a project's construction emissions would have a less-than significant impact on air quality unless all of the following parameters are met.

The project does not:

- Include buildings more than 4 stories tall;
- Include demolition activities;

- Include significant trenching activities;
- Have a construction schedule that is unusually compact, fast-paced, or involves more than 2 phases (i.e., grading, paving, building construction, and architectural coatings) occurring simultaneously;
- Involve cut-and-fill operations (moving earth with haul trucks and/or flattening or terracing hills);
- Require import or export of soil materials that will require a considerable amount of haul truck activity; and
- Involve soil disturbance activity (i.e., grading) that exceeds 15 acres per day. Note that 15 acres is a screening level and shall not be used as a mitigation measure

As the project proposes demolition activities, cut-and-fill operations equaling approximately 15,000 cubic yards of soil, and simultaneous phases, the NO_x construction screening level is not recommended for use. As such, the California Emissions Estimator Model (CalEEMod) version 2013.2.2 was used to quantify project-generated construction emissions. The analysis methodology, assumptions, and CalEEMod output are provided in Appendix B.

As shown in Table 1, the proposed project would generate less than significant levels of the ozone precursor NO_x. Project impacts related to construction NO_x emissions would be **less than significant**.

Table 1	
Estimated Project Construction NO_x Emissions	
Construction Year	NO_x (lbs./day)
2016	47
SMAQMD Threshold	85
Threshold exceeded?	No

Source of emissions: CalEEMod output (Appendix B)
Source of Threshold: SMAQMD 2014

Question B: Less than Significant

SMAQMD provides screening levels to identify when additional analysis is necessary to determine potential significance for operational ROG and NO_x emissions. The operational screening levels represent the development size at which the operational emissions thresholds of significance would not be exceeded. The ROG and NO_x screening level for multi-family housing is 460 dwelling units. The proposed project includes 324 multi-family dwelling units, which is less than the screening level. Therefore, the proposed project would generate less than significant quantities of operational ROG and NO_x, and project-specific modeling for operational emissions is not required. Therefore, this impact would be **less than significant** for the proposed project.

Question C: Less than Significant

As described in the response to Question A, construction-related emissions of NO_x would not exceed SMAQMD's recommended mass emission thresholds of 85 pounds per day. Therefore, project-related construction emissions of ozone precursors, including NO_x, would not violate or contribute to a violation of the ambient air quality standards for ozone.

As described in the response to Question B, operational emissions of ozone precursors (i.e., ROG and NO_x) would not exceed SMAQMD’s recommended mass emission thresholds of 65 pounds per day for NO_x or 65 pounds per day of ROG. Therefore, operation of the proposed project would not violate or contribute to a violation of the ambient air quality standards for ozone.

As described in the response to Question C, construction-related and operational emissions of PM₁₀ and PM_{2.5} would not exceed the SMAQMD’s recommended mass emission thresholds of 80 pounds per day of PM₁₀ and 82 pounds per day of PM_{2.5}. Therefore, the proposed project would not violate or contribute to a violation of the ambient air quality standards for PM₁₀ or PM_{2.5}.

As discussed in the response to Question E, the proposed project would not result in CO concentrations that exceed the 1-hour state ambient air quality standard (i.e., 20.0 ppm) or the 8-hour state ambient standard (i.e., 9.0 ppm).

For these reasons, project-generated emissions of criteria air pollutants and precursors, including ozone, ROG, NO_x, PM₁₀, and PM_{2.5} would not violate any air quality standard or contribute substantially to an existing or projected air quality violation. This impact would be **less than significant**.

Question D: Less than Significant

The SMAQMD utilizes the same screening level as the NO_x emission screening level to assist a project proponent or lead agency in determining if PM₁₀ or PM_{2.5} emissions from constructing a project in Sacramento County will exceed the SMAQMD’s construction significance thresholds. As with the NO_x screening presented above, because the proposed project includes demolition activities, cut-and-fill operations, and multiple phases of overlapping activity, the PM₁₀ and PM_{2.5} construction screening level is not recommended for use. As such, CalEEMod was used to quantify project-generated construction emissions as discussed previously. The analysis methodology, assumptions, and CalEEMod output are provided in Appendix B.

The maximum daily emissions of PM₁₀ and PM_{2.5} are analyzed below. As shown in Table 2, the proposed project would generate less than significant levels of PM₁₀ and PM_{2.5}. Impacts related to construction-generated PM₁₀ and PM_{2.5} emissions would be **less than significant**.

Table 2		
Estimated Project Construction PM Emissions		
Construction Year	PM₁₀ (lbs./day)	PM_{2.5} (lbs./day)
2016	3	1
SMAQMD Threshold	80	82
Threshold exceeded?	No	No

Source of emissions: CalEEMod output (Appendix B)
 Source of Threshold: SMAQMD 2014

Question E: Less than Significant

Local mobile-source CO emissions near roadway intersections are a direct function of traffic volume, speed, and delay. Long-distance transport of CO is extremely limited because it disperses rapidly with distance from the source under normal meteorological conditions. Under specific meteorological conditions and traffic conditions, CO concentrations at receptors located

near roadway intersections may reach unhealthy levels, when combined with background CO levels.

The SMAQMD's two-tiered screening criteria identifies when a project has the potential to contribute to a CO hotspot and if CO dispersion modeling is necessary. According to the first screening tier, the proposed project will result in a less-than-significant impact to air quality for local CO if:

1. Traffic generated by the proposed project will not result in deterioration of intersection level of service (LOS) to LOS E or F; and
2. The project will not contribute additional traffic to an intersection that already operates at LOS E or F.

As detailed in the Transportation Analysis prepared for the project (DKS 2015; Attachment G), the proposed project will contribute additional traffic to the intersections of Lewis Stein Road with Jocelyn Way that is projected to operate at LOS F during the p.m. peak hour under existing plus project condition and West Stockton Boulevard with SR 99 Southbound Ramps that is projected to operate at LOS E during the p.m. peak hour under the existing plus project condition (DKS 2015). Because the first tier of screening criteria is not met, the second tier of screening criteria shall be examined. According to the second tier, if all of the following criteria are met, the proposed project will result in a less than significant impact to air quality for local CO.

1. The project will not result in an affected intersection experiencing more than 31,600 vehicles per hour;
2. The project will not contribute traffic to a tunnel, parking garage, bridge underpass, urban street canyon, or below-grade roadway; or other locations where horizontal or vertical mixing of air will be substantially limited; and
3. The mix of vehicle types at the intersection is not anticipated to be substantially different from the County average (as identified by the EMFAC or CalEEMod models).

The highest existing plus project traffic volume is expected to occur at the West Stockton Boulevard intersection with SR 99 Southbound Ramps during the p.m. peak hour, and is forecasted to be 4,084 vehicles (DKS 2015). The intersection is not located in a tunnel, urban canyon, or similar area where mixing of air would not be limited, nor is the vehicle mix anticipated to be substantially different than the County average. There would be no potential for a CO hotspot or exceedance of State or federal CO ambient air quality standard because the maximum traffic volume would be substantially less than the 31,600 vehicles per hour screening level; because the congested intersection is located where mixing of air would not be limited; and because the vehicle mix would not be uncommon. The impact would be **less than significant** and no mitigation measures are required.

Question F: Less than Significant

As explained in the response to Questions A through E, construction-related emissions of NO_x would not exceed SMAQMD's mass emission threshold of 85 lb/day, operational emissions of ROG and NO_x would not exceed SMAQMD's recommended emission thresholds of 65 pounds per day, construction emissions of PM₁₀ would not be less than the SMAQMD's mass emission thresholds of 80 lb/day, and CO concentrations would not exceed the 1-hour state ambient air quality standard (i.e., 20.0 ppm) or the 8-hour state ambient standard (i.e., 9.0 ppm). For these reasons, construction- and operation operation-related emissions of criteria air pollutants and precursors would not result in exposure of sensitive receptors to substantial pollutant concentrations. Moreover, as explained in the response to Question G, the level of TAC concentrations and related health risk exposure to residents of the proposed project from

nearby sources of TACs, including area roadways, would not be substantial. As a result, this impact would be **less than significant**.

Question G: Less than Significant

Construction activities would result in short-term, project-generated emissions of diesel particulate matter (DPM) from the exhaust of off-road, heavy-duty diesel equipment. CARB identified DPM as a Toxic Air Contaminant (TAC) in 1998. The dose to which receptors are exposed is the primary factor used to determine health risk. Dose is a function of the concentration of a substance or substances in the environment and the duration of exposure to the substance. Thus, the risks estimated for a maximally exposed individual (MEI) are higher if a fixed exposure occurs over a longer time period. Health risk assessments, which determine the exposure of sensitive receptors to TAC emissions, are typically based on a 70-year exposure period; however, such assessments should be limited to the period/duration of activities associated with the proposed project.

As presented earlier in Table 2, maximum daily particulate emissions, which include DPM, would be relatively low when compared to the SMAQMD thresholds. Additionally, the construction period would be relatively short (less than 1 year), especially when compared to 70 years. Combined with the highly dispersive properties of DPM, construction-related emissions of TACs would not expose sensitive receptors to substantial emissions of TACs. The impact would be **less than significant**.

As the proposed project would involve the development of multi-family residential uses, project operation would not introduce any new stationary sources of TACs such as diesel-fueled backup generators that are more commonly associated with large commercial and industrial uses. In addition, the project would not result in a significant increase to the number of diesel fueled vehicles on the road. As such, the proposed project would not have the potential to expose sensitive receptors to TACs from mobile sources to an extent that health risks could result. This impact would be **less than significant**.

Projects of concern for DPM exposure to proposed sensitive land uses, such as the proposed multi-family residential units, are typically those located near high traffic freeways, urban roads with more than 100,000 vehicles per day, a high heavy truck concentration, rail yards, ports, and/or distribution centers, all of which emit significant quantities of DPM (CARB 2005). The project's eastern boundary is approximately 100 feet west of SR 99. Occupied buildings will be located approximately 150 feet west of SR 99. With 164,000 average daily trips, SR 99 experiences more traffic than the CARB criterion of 100,000 vehicles/day for urban roads (Caltrans 2016). Therefore, the project would have the potential to expose sensitive receptors to substantial amounts of TACs. The *SMAQMD Protocol for Evaluating the Location of Sensitive Land Uses Adjacent to Major Roadways* includes a screening process to determine if the nearest sensitive receptor's increase in individual cancer risk is lower than the evaluation criterion of 276 per million. If lower, then no further roadway-related air quality evaluation is recommended under the Protocol.

Table 3 shows the Protocol's screening table for projects located east or west of a north-south roadway. As discussed previously, occupied building will be located approximately 150 feet west of SR 99. The most recent Caltrans traffic data available lists this segment of SR 99 as carrying a peak hour volume of 11,500 vehicles. The Protocol requires an analysis to round values for the most conservative analysis. Therefore, we find a project locating sensitive receptors 100 feet west of a roadway carrying 12,000 vehicles per hour results in an incremental cancer risk of 169 per million. As this value is less than the evaluation criterion of 276 per million, no further roadway-related air quality evaluation is recommended. This impact would be **less than significant**.

Table 3								
Potential Incremental Diesel-Related Cancer Risk East and West of a North-South Roadway Version 2.4 EMFAC 2007 (Analysis Year 2011)								
Peak Hour Traffic Volumes (vehicle/hr)	Receptor Distance from Edge of Nearest Travel Lane (ft)							
	10	25	50	100	200	300	400	500
Incremental Cancer Risk Per Million People: East (downwind)								
4,000	219	188	149	105	67	51	38	32
8,000	442	378	299	210	134	99	80	67
12,000	677	579	458	324	207	153	121	102
16,000	900	773	611	429	273	204	162	134
20,000	1126	964	766	537	343	254	204	169
24,000	1352	1158	919	646	413	305	242	200
Incremental Cancer Risk Per Million People: West (upwind)								
4,000	140	108	83	54	35	25	19	16
8,000	280	223	162	111	70	51	41	32
12,000	429	340	248	169	105	76	60	51
16,000	572	452	331	226	143	105	83	67
20,000	716	566	417	283	178	130	102	83
24,000	859	677	499	340	213	156	124	102

Source: SMAQMD 2011

Note: Highlighted cell indicates the potential incremental cancer chances per million people from diesel for the proposed project based on the peak hour traffic and the distance from the edge of the nearest travel lane.

Question H: Less than Significant

In 2012, the City adopted a communitywide Climate Action Plan (CAP) which was incorporated into the 2035 General Plan. The CAP identified a greenhouse gas (GHG) emissions reduction target of 15 percent below 2005 levels by 2020 for communitywide emission sources, and also set longer term communitywide GHG emission reduction goals of 38 percent below 2005 levels by 2030 and 83 percent below 2005 levels by 2050. The CAP contains a comprehensive set of strategies, measures and implementing actions to achieve the 2020 GHG reduction target. The GHG reduction measures and actions apply to both existing sources within the City as of the 2005 baseline as well as projected emissions from new growth and development anticipated in the 2035 General Plan. The CAP also identifies potential adverse physical effects related to climate change on the community, and includes specific adaptation measures to address and mitigate such effects.

The City has prepared a Climate Action Plan Consistency Checklist for use in determining project consistency with the CAP pursuant to Section 15183.5 (Appendix B; HELIX 2016).

The proposed project has been reviewed against the City's CAP Consistency Review Checklist (see Appendix B of this IS for the completed CAP Checklist and supporting documentation). The

proposed project would be consistent with the following applicable performance standards specified in the CAP Consistency Review Checklist, including:

- Substantial consistency with the 2035 General Plan
 - The project is consistent with the Suburban Center General Plan land use designation, including the goals for land use and urban form, FAR and density requirements;
- Incorporation of pedestrian facilities and connections to transit consistent with the Pedestrian Master Plan
 - Two existing off-site neighborhood streets (Praline Way and Splendid Way) currently terminate at the project site's western boundary. The project would provide gated pedestrian access to Praline Way. A similar gate would be used for maintenance access only at the Splendid Way terminus. Existing sidewalks along the north and south sides of Praline and Splendid Ways would connect to sidewalks on the project site. A walking trail would follow the perimeter of the project site with continuous pedestrian connectivity to all building entrances in the development. The project site is located approximately 500 feet from Elk Grove Transit (e-Tran) routes 160 and 162.
- Incorporation of bicycle facilities consistent with the Bikeway Master Plan and/or CAL Green
 - Bicycle storage would be available at patios, balconies, or under the private stairways. Additionally, bicycle racks would be installed near each building to provide short-term bicycle parking areas to provide one space for every two units. A total of 486 bicycle spaces would be provided (one long-term storage, and 0.5 short-term storage space per unit).
- Energy and water efficiency standards
 - The project shall comply with the adopted CAP by meeting the Tier 1 Voluntary Standards in the 2013 California Green Building Standards Code (CALGreen).

As discussed above, the City of Sacramento adopted a communitywide CAP that contains a comprehensive set of strategies, measures and implementing actions to achieve the 2020 GHG reduction target. The CAP is consistent with elements of a plan for the reduction of GHG emissions, in compliance with Section 15183.5 of the CEQA Guidelines, which provides for tiering and streamlining of GHG emissions analysis for projects consistent with a CAP or other similar programmatic plan for the reduction of GHG emissions. Moreover, no features of the proposed project are inconsistent with the strategies and measures in the CAP that plan for future climate change-related risks, including increases in average temperature, diminished water supply, increased energy demand, and damage to infrastructure. Because the proposed project would be consistent with the CAP, this impact would be considered **less than significant**.

MITIGATION MEASURES

None.

FINDINGS

The proposed project would have no additional project-specific environmental effects relating to air quality.

BIOLOGICAL RESOURCES

Issues:	Effect will be studied in the EIR	Effect can be mitigated to less than significant	No additional significant environmental effect
3. <u>BIOLOGICAL RESOURCES</u>			
Would the project:			
A) Create a potential health hazard, or use, production or disposal of materials that would pose a hazard to plant or animal populations in the area affected?		X	
B) Result in substantial degradation of the quality of the environment, reduction of the habitat, reduction of population below self-sustaining levels of threatened or endangered species of plant or animal species?		X	
C) Affect other species of special concern to agencies or natural resource organizations (such as regulatory waters and wetlands)?		X	

The discussion of biological resources is based on a Biological Resources Assessment prepared for the project (Foothill Associates 2016), which is included as Appendix C.

ENVIRONMENTAL SETTING

Regional

The project site is located within the City of Sacramento. The regional setting is mainly urban with the Sacramento River corridor supporting riparian woodlands composed of cottonwood, willow, sycamore, and valley oak. Agricultural and grassland areas dominate the unincorporated areas of Sacramento County. Native habitats are located primarily outside the city boundaries, but also occur along river and stream corridors and on a number of undeveloped parcels. Native habitats in the region include oak woodlands, riparian woodlands, wetlands, and annual grasslands. These native areas provide homes for a rich variety of wildlife including migratory birds such as ducks and raptors as well as larger native fauna such as deer and coyote.

Local

The project site consists of an undeveloped site in a partially urbanized, mixed-use area of the community. The project site is characterized by relatively level topography, featuring disturbed, non-native annual grassland and disturbed/developed areas associated with graded roads, a cargo container storage lot, and the foundations and pavement associated with the previously removed single family home and the commercial building. The disturbed non-native annual grassland is regularly tilled as normal maintenance of the project site. A manmade roadside ditch flows north to south along the western edge of a graded road through the site. One mature tree near the eastern portion of the project site was observed during a site visit on February 5, 2016. Numerous palm trees near the previous residence in the southern portion of the project site are noted. Commonly occurring wildlife observed within the project site included: western scrub jay, mourning dove, black phoebe, and black-tailed jackrabbit.

Regulatory Background

Clean Water Act (33 USC 1252-1376)

Any person, firm, or agency planning to alter or work in “waters of the U.S.” including the discharge of dredged or fill material, must first obtain authorization from the USACE under Section 404 of the Clean Water Act (CWA) (33 USC 1344). Permits, licenses, variances, or similar authorization may also be required by other federal, state, and local statutes. Section 10 of the Rivers and Harbors Act of 1899 prohibits the obstruction or alteration of navigable waters of the U.S. without a permit from USACE (33 USC 403). The CWA provides guidance for the restoration and maintenance of the chemical, physical, and biological integrity of the nation’s waters.

Section 401 of the CWA requires that an applicant for a federal license or permit that allows activities resulting in a discharge to waters of the U.S. must obtain a state certification that the discharge complies with other provisions of CWA. The Regional Water Quality Control Board (RWQCB) administers the certification program in California, and may require State Water Quality Certification before other permits are issued.

Section 402 of the CWA establishes a permitting system for the discharge of any pollutant (except dredged or fill material) into waters of the U.S. Section 404 of the CWA establishes a permit program administered by USACE regulating the discharge of dredged or fill material into waters of the U.S. (including wetlands). Implementing regulations by USACE are found at 33 CFR Parts 320-332.

The Section 404 (b)(1) Guidelines were developed by the USEPA in conjunction with USACE (40 CFR Part 230), allowing the discharge of dredged or fill material for non-water dependent uses into special aquatic sites only if there is no practicable alternative that would have less adverse impacts.

California Environmental Quality Act

Under the CEQA of 1970 (PRC Section 21000 et seq.), lead agencies analyze whether projects would have a substantial adverse effect on a candidate, sensitive, or special status species (Public Resources Code Section 21001(c)). These “special-status” species generally include those listed under federal and state endangered species acts (FESA and CESA, respectively), and species that are not currently protected by statute or regulation, but would be considered rare, threatened, or endangered under the criteria included State CEQA Guidelines Section 15380. Therefore, species that are considered rare are addressed in this study regardless of whether they are afforded protection through any other statute or regulation. The CNPS inventories the native flora of California and ranks species according to rarity; plants ranked as 1A, 1B, and 2 are generally considered special-status species under CEQA.1

Although threatened and endangered species are protected by specific federal and state statutes, State CEQA Guidelines Section 15380(d) provides that a species not listed on the federal or state list of protected species may be considered rare if it can be shown to meet certain specified criteria. These criteria have been modeled after the definition in FESA and the section of the California Fish and Game Code dealing with rare or endangered plants and animals. Section 15380(d) of the State CEQA Guidelines allows a public agency to undertake a review to determine if a significant effect on species that have not yet been listed by either the USFWS or CDFW (i.e., candidate species) would occur. Thus CEQA provides an agency with the ability to protect a species from the potential impacts of a project until the respective government agency has an opportunity to designate the species as protected, if warranted.

California Department of Fish and Wildlife

The CDFW is responsible for issuing permits for impacts to state-listed plant and animal species under the state ESA. No state-listed species were observed within the project area.

The CDFW is also responsible for issuing permits for impacts to streambeds and wetlands under its jurisdiction as described above. Any impacts to CDFW jurisdictional areas are regulated under California Fish and Game Code Section 1602 and would require a Streambed/Lake Alteration Agreement.

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act (Porter-Cologne Act, Water Code Section 13000 et seq.) is California's statutory authority for the protection of water quality in conjunction with the federal CWA. The Porter-Cologne Act requires the State Water Resources Control Board (SWRCB) and Regional Water Quality Control Boards (RWQCB) under the Clean Water Act (CWA) to adopt and periodically update water quality control plans, or basin plans. Basin plans are plans in which beneficial uses, water quality objectives, and implementation programs are established for each of the nine regions in California. The Porter-Cologne Act also requires dischargers of pollutants or dredged or fill material to notify the RWQCBs of such activities by filing Reports of Waste Discharge and authorizes the SWRCB and RWQCBs to issue and enforce waste discharge requirements, national pollutant discharge elimination system (NPDES) permits, Section 401 water quality certifications, or other approvals.

City and Heritage Trees

The City adopted a Tree Preservation Ordinance to protect trees as an important resource for the community. When circumstances do not allow for retention of trees, permits are required to remove heritage trees that are within the City's jurisdiction. Chapter 12.64 of the Sacramento Municipal Code regulates the cutting or modification of heritage trees; requires a Tree Permit prior to cutting or modification; and establishes protection standards during construction activities. Heritage trees include:

- Any tree of any species with a trunk circumference of one hundred (100) inches or more, which is of good quality in terms of health, vigor of growth, and conformity to generally accepted horticultural standards of shape and location for its species.
- Any native *Quercus* species, *Aesculus californica* or *Plantanus racemosa*, having a circumference of 36 inches or greater when a single trunk, or a cumulative circumference of 36 inches or greater when a multi-trunk, which is of good quality in terms of health, vigor of growth and conformity to generally accepted horticultural standards of shape and location for its species.
- Any tree 36 inches in circumference or greater in a riparian zone. The riparian zone is measured from the centerline of the water course to 30 feet beyond the high water line.
- Any tree, grove of trees or woodland trees designated by resolution of the City Council to be of special historical or environmental value or of significant community benefit.

In addition, the Street Tree Ordinance (Chapter 12.56 of the Sacramento Municipal Code) states that "No person shall remove, trim, prune, cut or otherwise perform any maintenance on any city street tree without first obtaining a permit from the director pursuant to Section 12.56.070." Any non-heritage street tree planned for cutting or modification would require a permit from the City.

Sensitive Biological Resources

As described in the Biological Resources Assessment (Foothill Associates 2016; Appendix C), the following sources were used in preparation of the biological report and are summarized here:

- Biological reconnaissance survey conducted December 3, 2015.
- Biological Resources Assessment prepared by Foothill Associates, Inc. for a portion of the project site in 2006.
- Wetland delineation verified September 11, 2007, and delineation subsequently verified October 16, 2012, both delineations prepared by Foothill Associates, Inc. The 2012 verification letter determined no waters of the U.S. were present on the project site.
- California National Diversity Database (CNDDDB) record search for project topographic quadrangle, and eight surrounding quadrangles (accessed 11/30/2015).
- California Native Plant Society Inventory of Rare and Endangered Plants for the Bruceville, Carmichael, Clarksburg, Courtland, Elk Grove, Florin, Galt, Sacramento East, and Sacramento West topographic quadrangles (accessed 11/30/2015).
- USFWS Information for Planning and Conservation (IPaC) Trust Resources Report for the proposed project (accessed 11/30/2015).
- U.S. Department of Agriculture Natural Resource Conservation Service. 1993. Soil Survey of Sacramento County.
- Protocol-level invertebrate surveys conducted during the dry season in 2006 by EcoAnalysis, Inc., and during the wet season from 2006 to 2007 by Foothill Associates. The surveys resulted in negative findings.

Sensitive biological resources evaluated as part of this analysis include special-status species and sensitive natural communities. The California Natural Diversity Database (CNDDDB) was used as a primary source to identify previously reported occurrences of special-status species and sensitive natural communities in the project vicinity. The CNDDDB is a statewide database, managed by the California Department of Fish and Wildlife (CDFW) that is continually updated with the location and condition of the state's rare and declining species and habitats. Although the CNDDDB is the most current and reliable tool available for tracking occurrences of special-status species, it contains only those records that have been reported to CDFW.

Special Status Species

Special status species are plants and animals in the following categories:

- Listed or proposed for listing as threatened or endangered under the federal Endangered Species Act (ESA) or candidates for possible future listing;
- Listed or candidates for listing by the State of California as threatened or endangered under the California Endangered Species Act (CESA);
- Listed as fully protected under the California Fish and Game Code;
- Animals identified by CDFW as species of special concern;
- Taxa considered by CDFW to be "rare, threatened, or endangered in California" and assigned a California Rare Plant Rank (CRPR). The CDFW system includes five rarity and endangerment ranks for categorizing plant species of concerns, which are summarized below. CRPR List 1 and 2 are considered special status species.
 - CRPR List 1 A: Plants presumed extinct in California.
 - CRPR List 1 B: Plants rare, threatened, or endangered in California and elsewhere.

- CRPR List 2: Plants rare, threatened, or endangered in California, but more common elsewhere.
- CRPR List 3: Plants about which more information is needed (a review list); and
- CRPR List 4: Plants of limited distribution (a watch list).
- Considered a locally significant species, that is, a species that is not rare from a statewide perspective, but is rare or uncommon in a local context such as within a county or region (CEQA Section 15125 (c)) or is so designated in local or regional plans, policies, or ordinances (State CEQA Guidelines, Appendix G); or otherwise meets the definition of rare or endangered under CEQA Section 15380(b) and (d).

The CDFW, USFWS, and CNPS lists included a total of 26 regionally occurring special status plant species and 31 regionally occurring special status wildlife species that were reviewed for the potential to occur on the project site or otherwise be impacted by the proposed project. Refer to Table 1 in Appendix C of the Biological Resources Assessment prepared for the project (Appendix C; Foothill Associates 2016) for the regionally occurring special status species, their habitats, and potential to occur.

Special Status Plants

No protocol-level botanical surveys for any special-status species were conducted on the project site. None of the 26 regionally occurring special status plant species have the potential to occur in the project site. Individual species were determined to have no potential to occur if: 1) the proposed project is outside of the elevational range for the species, or 2) no potentially suitable habitat is present in the project site. The project site lacks aquatic habitat so would not support aquatic plant species. The site is also heavily disturbed which reduces habitat suitability for most upland special status plant species.

Special Status Wildlife

Five of the 31 regionally occurring special status wildlife species that were reviewed were determined to have the potential to occur in the project site or otherwise be impacted by the proposed project. Individual species were determined to have no potential to occur as the project site lacked potentially suitable habitat for the species. Aquatic special status species, including fish and vernal pool invertebrates (i.e., vernal pool fairy shrimp and vernal pool tadpole shrimp) have no potential to occur in the project site due to the lack of aquatic habitat and results of the invertebrate surveys conducted in 2006 and 2007. The site lacks suitable aquatic habitat to support fish or special status semiaquatic reptiles and amphibians. No elderberry shrubs were observed on the project site; therefore, valley elderberry longhorn beetle were determined to have no potential to occur.

Based on the results of the evaluation, Swainson's hawk has the potential to occur in the project site. The following special status species have a low potential to occur within the project site: burrowing owl, loggerhead shrike, short-eared owl, and white-tailed kite. Wildlife species with the potential to occur are discussed individually below.

Swainson's Hawk

Swainson's hawk is state listed as threatened. Swainson's hawks breed in California and winter in Mexico and South America. The hawks usually arrive in the Central Valley between March 1 and April 1, and migrate south between September and October. Nests are placed in trees adjacent to suitable foraging habitat, which may include trees near the edges of riparian stands, in lone trees or groves of trees in agricultural fields, and in mature roadside trees. Valley oak, Fremont cottonwood, walnut, and large willow with an average height of about 58 feet, and ranging from 41 to 82 feet, are the most commonly used nest trees in the Central Valley. Suitable foraging areas for Swainson's hawk include native grasslands or lightly grazed pastures, alfalfa and other hay crops, idle land, certain grain and row croplands, and ruderal

lands. Swainson's hawks primarily feed on voles; however, they will feed on a variety of prey including small mammals, birds, and insects.

There are 162 records of the species in the vicinity of the project site, including a nest documented approximately 3.52 miles from the project site in 2011. The project site does not provide nesting habitat since it does not contain tall mature trees. The bird may nest in mature trees near the project site. Due to the high use of the area by the species, there is the potential for this species to forage in the non-native annual grassland within the project site.

Burrowing Owl

Burrowing owl is listed as a species of special concern. Burrowing owls are often found in open, dry grasslands, agricultural and range lands, and desert habitats. They can also inhabit grass, forb, and shrub stages of pinyon and ponderosa pine habitats. In addition to natural habitats, burrowing owls can be found in urban habitats such as at the margins of airports and golf courses and in vacant urban lots. Burrowing owls nest in underground burrows and commonly perch on nearby fence posts or mounds. The owls also use ground squirrel burrows, badger dens or artificial burrows such as abandoned pipes or culverts. The breeding season for burrowing owls occurs from March to August, peaking in April and May.

There are nine records of this species within 5 miles of the project site. The annual grassland on the project site provides low potential nesting, wintering, and forage habitat for the species; however, no burrows or potential burrow sites were observed on the site during site visits in December 2015.

Loggerhead Shrike

Loggerhead shrike is listed as a species of special concern. Loggerhead shrike is a common resident and winter visitor of valleys and foothills throughout California. This species utilizes open habitats with scattered shrubs and trees, posts, fences, utility lines, and occurs often in cropland. This species nests from March to May, building twig nests within the dense foliage of shrubs or trees that conceal the nest.

There are no records of this species within 5 miles of the project site. Trees present in the project site have been removed; however, the remaining shrubs within the non-native annual grassland and trees on adjacent properties provide low potential nesting habitat for this species. The species has not been observed in the project site, but site visits were conducted outside of the nesting season for this species.

Short-Eared Owl

Short-eared owl is listed as a species of special concern. This owl is a ground-nesting species found in open areas with few trees, such as marshes, annual and perennial grasslands, prairies, dunes, meadows, irrigated lands, and saline and fresh emergent wetlands. This species breeds and nests from early March through mid-August. The nests are usually located on dry sites with enough vegetation to conceal incubating females.

There are no records of this species within 5 miles of the project site. The annual grassland provides potential nesting and foraging habitat for this species. The species has not been observed in the project site, but site visits were conducted outside of the nesting season for this species.

White-Tailed Kite

White-tailed kite is a fully protected species. This raptor is a yearlong resident of California, and breeds from February to October, peaking from May to August. This species nests near the top of dense oaks, willows, or other large trees.

There are 14 records of this species documented within 5 miles of the project site, with the nearest record one mile north of the project site. The annual grassland provides marginal

potentially suitable nesting and foraging habitat for this species because this species typically uses dense-topped trees where the nests can be obscured, especially when nesting in urban areas. The project site lacks dense vegetation. This species has not been observed in the project site, but site visits were conducted outside of the nesting season for this species.

Other Migratory and Nesting Birds

A variety of bird species may use the trees and shrubs in and adjacent to the project site for nesting. No bird nests were observed in the project site; however, site visits were conducted outside of the generally accepted nesting season from February 1 through August 31. Birds could occupy the project site prior to construction.

Sensitive Habitats and Special-Status Plant Communities

Sensitive habitats include those that are of special concern to resource agencies or are afforded specific consideration through CEQA, Section 1602 of the California Fish and Game Code, Section 404 of the CWA, and the State's Porter-Cologne Act, as discussed under "Regulatory Background" below. Sensitive natural habitat may be of special concern to these agencies and conservation organizations for a variety of reasons, including their locally or regionally declining status, or because they provide important habitat to common and special-status species.

CDFW maintains a list of plant communities that are native to California. Within that list, CDFW identifies special-status plant communities (a.k.a. sensitive natural communities), which they define as communities that are of limited distribution statewide or within a county or region and often vulnerable to environmental effects of projects (CDFW 2015b). These communities may or may not contain special-status species or their habitat. Special-status plant communities are tracked in the CNDDDB, a statewide inventory of the locations and conditions of the state's rarest plant and animal taxa and vegetation types.

No native plant communities on CDFW's list of special-status plant communities are present on the project site.

Waters of the U.S./Waters of the State

A total of 0.195 acres of aquatic features occur within the project site. A wetland delineation was prepared for the majority of the project site in 2007, which did not include a 0.7-acre portion of the site (APN 117-0220-024). The area not part of the original project footprint was investigated through subsequent field work conducted by Foothill Associates, Inc. and it was determined the portion of the project site does not contain wetland features (Foothill Associates 2016). A delineation of waters of the U.S. was approved for the project site on May 21, 2007 (SPK-2007-00778). A subsequent delineation was approved on October 16, 2012, and verified that 0.195 acre of previously verified waters were intrastate isolated waters with no apparent interstate or foreign commerce connection and are not regulated by the USACE, and additional aquatic resources were no longer present in the project site (refer to Appendix D for the wetland delineation map and the letter from USACE). As a result, the site does not contain waters of the U.S., however, these features may be considered waters of the State.

Protected Trees

An arborist survey was conducted for the project site. No trees meeting the definition of a heritage tree pursuant to Chapter 12.64 of the Municipal Code are present, and no street trees pursuant to Chapter 12.56 of the Municipal Code are present on the project site or would be impacted by the proposed project. Subsequent to the arborist survey, and prior to preparation of this Initial Study, the trees on the project site were removed following issuance of a tree removal permit from the City. During a site visit on February 5, 2016 by HELIX Environmental

Planning, Inc., the remaining tree includes a single, mature tree in the eastern portion of the project site and palm trees around the previous residence.

SUMMARY OF ANALYSIS UNDER THE 2035 GENERAL PLAN MASTER EIR, INCLUDING CUMULATIVE IMPACTS, GROWTH INDUCING IMPACTS, AND IRREVERSIBLE SIGNIFICANT EFFECTS

Chapter 4.3 of the MEIR evaluated the effects of the 2035 General Plan on biological resources within the General Plan policy area. The MEIR identified potential impacts in terms of degradation of the quality of the environment or reduction of habitat or population below self-sustaining levels of special-status birds, through the loss of both nesting and foraging habitat.

Policies in the 2035 General Plan were identified as mitigating the effects of development that could occur under the provisions of the 2035 General Plan. Policy 2.1.5 calls for the City to preserve the ecological integrity of creek corridors and other riparian resources; Policy Environmental Resources 2.1.10 requires the City to consider the potential impact on sensitive plants for each project and to require pre-construction surveys when appropriate; and Policy 2.1.11 requires the City to coordinate its actions with those of the CDFW, USFWS, and other agencies in the protection of resources.

The MEIR concluded that the cumulative effects of development that could occur under the 2035 General Plan would be significant and unavoidable as they related to effects on special-status plant species (Impact 4.3-1), reduction of habitat for special-status invertebrates (Impact 4.3-2), loss of habitat for special-status birds (Impact 4.3-3), loss of habitat for special-status amphibians and reptiles (Impact 4.3-4), loss of habitat for special-status mammals (Impact 4.3-5), special-status fish (Impact 4.3-6) and, in general, loss of riparian habitat, wetlands and sensitive natural communities such as elderberry savannah (Impacts 4.3-7 through 4.3-9).

MITIGATION MEASURES FROM 2035 GENERAL PLAN MASTER EIR THAT APPLY TO THE PROJECT

None.

GENERAL PLAN POLICIES CONSIDERED MITIGATION

The following General Plan policies would avoid or lessen environmental impacts as identified in the MEIR, and are applicable to the proposed project:

- Policy ER 2.1.10 (Habitat Assessments and Impact Compensation)
- Policy ER 2.1.111 (Agency Coordination)

STANDARDS OF SIGNIFICANCE

For purposes of this environmental document, an impact would be significant if any of the following conditions or potential thereof, would result with implementation of the proposed project:

- creation of a potential health hazard, or use, production or disposal of materials that would pose a hazard to plant or animal populations in the area affected;
- substantial degradation of the quality of the environment, reduction of the habitat, reduction of population below self-sustaining levels of threatened or endangered species of plant or animal;
- affect other species of special concern to agencies or natural resource organizations (such as regulatory waters and wetlands); or

For the purposes of this document, “special-status” has been defined to include those species, which are:

- listed as endangered or threatened under the federal Endangered Species Act (ESA) (or formally proposed for, or candidates for, listing);
- listed as endangered or threatened under the California ESA (or proposed for listing);

- designated as endangered or rare, pursuant to CDFW Code (Section 1901);
- designated as fully protected, pursuant to CDFW Code (Section 3511, 4700, or 5050);
- designated as species of concern by USFWS, or as species of special concern to CDFW; and
- plants or animals that meet the definition of rare or endangered under CEQA.

ANSWERS TO CHECKLIST QUESTIONS

Question A: Less than Significant with Mitigation

As described under Questions A and B in Section 6, Hazards, a Hazards Materials Site Assessment/Phase I Report prepared for the proposed project did not include all parcels associated with the proposed project. There is the potential for unknown and/or undocumented hazardous materials to be present, which could adversely affect special-status species. This would be a **potentially significant** impact.

Mitigation Measures HAZ-1 and HAZ-2 would be implemented to ensure all parcels associated with the project site are investigated for hazardous materials, including lead-based paint and asbestos, and the appropriate remediation actions are implemented prior to construction of the proposed project.

Question B: Less than Significant with Mitigation

Based on the review of special status species with the potential to occur, one species that is state-listed as threatened has the potential to occur on the project site (Swainson's hawk).

Swainson's hawk are not expected to use the project site for nesting; however, they may use mature trees in the area for nesting and forage in the project site. Refer to the discussion of impacts to nesting birds under Question C for a discussion of impacts and mitigation related to nesting birds (including raptors).

The proposed project would result in the removal of 15.02 acres of non-native grassland, 4.43 acres of disturbed/developed areas, 0.19 acre of seasonal wetland, and 0.01 acre of ditch/canal (19.7 acres total). The loss of potential forage habitat for the species is a **potentially significant** impact.

CDFW requires mitigation for loss of Swainson's hawk foraging habitat within 5 miles of a project site, as outlined in the *Staff Report Regarding Mitigation for Impacts to Swainson's Hawks in the Central Valley of California* (CDFG 1994). Currently, the CDFW recommends that impacts to suitable Swainson's hawk foraging habitat within 10 miles of an active nest should be mitigated by securing a conservation easement or fee title on suitable Swainson's hawk foraging habitat in the region. The nearest active nest to the project site is approximately 3.5 miles east of the project site. For projects within a 1 to 5-mile radius of an active nest site, 0.75 acre of similar habitat per acre lost should be preserved.

Impacts to Swainson's hawk were considered in the 2006 Initial Study prepared for the previously approved project on the project site, which occurred within an 18.7-acre footprint. Consistent with Mitigation Measure BR-1 contained in the 2006 Initial Study, which required that compensatory foraging habitat be provided at a ratio acceptable to CDFW from an approved mitigation bank or other arrangements acceptable to CDFW, the project applicant purchased 18.7 Swainson's hawk foraging credits in the Bryte Ranch Conservation Bank on November 1, 2006. The credits purchased provided one Swainson's hawk foraging credit per acre impacted by the proposed project (1:1 ratio). The currently proposed project would impact 19.7 acres – 1 acre more than the previously compensated impact area. The compensatory mitigation already provided by the project applicant provides 0.95 acre of credit per acre impacted by the proposed project. To ensure adequate compensatory mitigation is provided for potential

impacts to Swainson's hawk foraging habitat, Mitigation Measure BIO-01 would be implemented.

Question C: Less than Significant with Mitigation

Based on the review of special status species with the potential to occur, four bird species not listed as threatened or endangered, but are of special concern (burrowing owl, loggerhead shrike, short-eared owl, and white-tailed kite) have the potential to occur on the project site. Additional bird species protected by the Migratory Bird Treaty Act (MBTA) and/or Fish and Game Code may nest on the project site. Impacts to special status species and protected birds are discussed individually below.

Additional biological resources of concern to natural resource agencies include waters of the U.S./State. No waters of the U.S. are present on the project site; however, 0.195 acre of waters of the State are present. Impacts to waters of the State are discussed below.

Burrowing Owl

The annual grassland in the project site provides potentially suitable nesting, wintering, and foraging habitat for western burrowing owl. If burrowing owls were to occupy the study area prior to construction, construction activities may result in injury or death of individual birds occupied burrows are removed or damaged, or harassment including nest disturbance resulting in forced fledging or abandonment of young and loss of foraging habitat. The loss of foraging habitat in the vicinity of an active nest may result in the reduced health and vigor of eggs and/or nestlings, resulting in reduced survival rates. Any harassment, injury, or death of nesting owls, their nestlings, or eggs would be considered a **potentially significant** impact.

No potential burrow sites were observed in the project site in December 2015. Due to the low likelihood of the species to occur, pre-construction surveys are considered sufficient. Mitigation Measure BIO-02 would be implemented to avoid and minimize impacts to burrowing owl.

Loggerhead Shrike, Short-Eared Owl, White-Tailed Kite and Other Raptors and Migratory Birds

The annual grassland, remaining trees, and shrubs in the project site, and trees and shrubs in the vicinity of the project site provide potential nesting habitat for various species of birds protected under the MBTA and/or Fish and Game Code, including white-tailed kite, loggerhead shrike, and short-eared owl. Swainson's hawk may nest in mature trees in the vicinity of the project site. If active nests are present at the time of construction, construction activities may result in injury or death of individual birds (e.g., if trees or limbs containing active nests are removed), or harassment which may cause nesting birds to abandon active nests resulting in the loss of eggs or young. The loss of foraging habitat in the vicinity of an active nest may result in the reduced health and vigor of eggs and/or nestlings, resulting in reduced survival rates. Any harassment, injury, or death of nesting birds, their nestlings, or eggs would be considered a **potentially significant** impact. Mitigation Measure BIO-03 would be implemented to avoid and minimize potential impacts to nesting birds.

Waters of the State

A total of 0.195 acre of waters of the State occur within the project site, which would be removed by the proposed project, resulting in a **potentially significant** impact to waters of the State. The project applicant would be responsible for preparing all necessary permits in accordance with Mitigation Measure BIO-04. With implementation of the mitigation measure, impacts to waters of the State would be less than significant with mitigation.

Protected Trees

An arborist survey was conducted for the project site. No trees meeting the definition of a heritage tree pursuant to Chapter 12.64 of the Municipal Code are present, and no street trees pursuant to Chapter 12.56 of the Municipal Code are present on the project site or would be

impacted by the proposed project. Subsequent to the arborist survey, and prior to preparation of this Initial Study, the trees on the project site were removed following issuance of a tree removal permit from the City. During a site visit on February 5, 2016 by HELIX Environmental Planning, Inc., the remaining tree includes a single, mature tree in the eastern portion of the project site and palm trees around the previous residence. These trees will be removed for the proposed project; however, because they are not protected trees, **no impact** to protected trees would occur, and no mitigation would be necessary.

MITIGATION MEASURES

BIO-01: Provide Compensatory Mitigation for Impacts to Swainson's Hawk Foraging Habitat

- The applicant/developer/construction contractor shall submit to the City of Sacramento, Community Development Department, verification from the CDFW that the applicant has satisfied CDFW requirements for mitigation loss of Swainson's hawk foraging habitat. The project applicant shall purchase compensatory Swainson's hawk foraging habitat at a ratio acceptable to CDFW from an approved mitigation bank or develop other arrangements acceptable to the CDFW prior to building/grading permits being issued.

BIO-02: Avoid and Minimize Impacts to Western Burrowing Owl

- Pre-construction surveys shall be conducted within 14 days prior to commencement of construction activities, in accordance with the 2012 CDFW Staff Report. The survey area shall include suitable habitat within an approximately 500-foot-buffer (150 meters) around the project site, where access is permitted.
- If no occupied burrows are found during the survey, a letter report documenting the survey methods and results shall be submitted to CDFW and no further mitigation will be required.
- If active burrows are observed within 500 feet of the project site, an impact assessment shall be prepared and submitted to the CDFW in accordance with the 2012 Staff Report.
- If it is determined that project activities may result in impacts to nesting, occupied, and satellite burrows and/or burrowing owl habitat, the project proponent should delay commencement of construction activities until the biologist determines that the burrowing owls have fledged and the burrow is no longer occupied. If this is infeasible, the project proponent should consult with the CDFW and develop a detailed mitigation plan such that the habitat acreage, number of burrows, and burrowing owls impacted are replaced. The mitigation plan should be based on the requirements set forth in the 2012 Staff Report. No construction can commence until the CDFW has approved the mitigation plan.

BIO-03: Avoid and Minimize Impacts to Nesting Birds

- Vegetation clearing operations, including pruning or removal of the ornamental trees and shrubs shall be completed between September 1 and January 31, if feasible.
- If construction activities occur during the typical bird nesting season (February 1 through August 31), pre-construction nesting bird surveys shall be conducted by a qualified biologist on the project site and within a 500-foot radius of proposed construction areas, where access is available, no more than 14 days prior to the initiation of construction. An additional pre-construction survey shall be conducted within 72 hours of ground-disturbing activities.
- If active nests are identified in these areas, the City shall coordinate with CDFW to develop measures to avoid disturbance of active nests prior to the initiation of any

construction activities, or construction could be delayed until the young have fledged. Avoidance measures may include establishment of a buffer zone and monitoring of the nest by a qualified biologist until the young have fledged the nest and are independent of the site. If a buffer zone is implemented, the size of the buffer zone shall be determined by a qualified biologist in coordination with CDFW and shall be appropriate for the species of bird and nest location.

BIO-04: Obtain Permits for Impacts to Waters of the State

- Prior to issuance of a grading permit, the Developer shall provide verification of the status of the wetlands from the USACE.
- Prior to issuance of a grading permit, the Developer shall submit a wetland mitigation and monitoring plan to the City:
 - The mitigation plan will be prepared in accordance with the RWQCB's Water Quality Order No. 204-004-DWQ wetland mitigation.
 - The mitigation plan will describe how the isolated wetlands will be mitigated. Mitigation may include the purchase of wetland mitigation credits at a mitigation bank.
 - A copy of the bill of sale verifying the purchase will be included in the mitigation plan.
- The grading permit shall be conditioned to not allow grading within 250 feet of the isolated wetlands until the Developer provides the City of Sacramento evidence that the discharge of fill into the isolated wetlands is authorized under the Porter-Cologne Act.
- The grading permit shall be conditions to require temporary fencing to be installed around the isolated wetlands and the buffer to exclude construction equipment until the Developer provides the City of Sacramento evidence that the discharge of fill into the isolated wetlands is authorized under the Porter-Cologne Act.

Hazardous materials Mitigation Measures HAZ-1 and HAZ-2 will also be implemented to reduce potential impacts to special-status species.

FINDINGS

With implementation of the above project-specific mitigation measures, the proposed project would not result in a significant impact on special-status species or other biological resources (including jurisdictional waters) and would have a **less than significant** impact on biological resources. All additional significant environmental effects of the project relating to biological resources are mitigated to a **less than significant** level.

CULTURAL RESOURCES

Issues:	Effect will be studied in the EIR	Effect can be mitigated to less than significant	No additional significant environmental effect
4. <u>CULTURAL RESOURCES</u>			
Would the project:			
A) Cause a substantial adverse change in the significance of a historical or archaeological resource as defined in §15064.5?		X	
B) Directly or indirectly destroy a unique paleontological resource?		X	

ENVIRONMENTAL SETTING

Records Search

To determine the presence of pre-contact and historical resources within the project area and a 0.50-mile radius, HELIX conducted a record search at the North Central Information Center (NCIC) on February 3, 2016. To identify any historic properties or resources, the current inventories of the National Register of Historic Places (NRHP), the California Register of Historic Resources (CRHR), the California Historical Landmarks (CHL) list, the California Points of Historical Interest list, and the California Historic Property Data file for Sacramento County, were reviewed. Historic maps were also examined to gain insights into past developments and changes within the project area and its surroundings. The project site is not identified as an archaeologically sensitive area on the archaeological sensitivity map contained in the General Plan Environmental Resources Background Report (Figure 6.4-1), nor is it identified as a historic district and landmark parcel (Figures 6-9 and 6-10) in the Background Report.

The NCIC results indicate that 32 historic resources have been recorded within the 0.50-mile search radius. The historic resources include foundations and structures, privies, dumps, walls, fences, roads, trails and water conveyance systems. Four of the recorded sites are within the project area; P-34-001406 and P-34-001407, P-34-001416 and P-34-001417. All of these resources were single story residences built between 1945 and 1952; all are demolished. The four residences were recorded on Department of Parks and Recreation (DPR) forms and evaluated for NRHP eligibility in 2002 by Pacific Legacy. None of the residences were considered eligible for listing on the NRHP. Seventeen reports have been prepared for areas within the 0.5-mile search radius, but only one of the reports included the project area.

On January 21, 2016, HELIX sent a request to the Native American Heritage Commission (NAHC) for a search of their Sacred Lands File. A response from the NAHC was received on February 5, 2016 noting that the record search of the sacred lands file failed to indicate the presence of Native American cultural resources in the immediate project area. A list of five Native American representatives who may have additional information about the project site was sent with the results. On February 10, 2016, letters were sent to each of the five representatives requesting further information about the project area. As of this date, no responses have been received from any of the five Native American representatives. This process is not associated with the AB 52 consultation process which would be handled by the City of Sacramento.

On October 28, 2015 the City received an Assembly Bill (AB) 52 consultation request from the United Auburn Indian Community (UAIC) and on November 12, 2015 the City received a request from the Wilton Rancheria. In accordance with Public Resources Code Section 21080,

the City responded to the consultation request and communication is on-going with the UAIC and Wilton Rancheria. The City, at the very least, will submit this draft public comment Initial Study along with information relevant to cultural resources record search and pedestrian survey to the UAIC and Wilton Rancheria for their review and consideration.

Pedestrian Survey

On February 3, 2016, HELIX Senior Archaeologist, Carrie D. Wills, M.A., RPA, conducted a pedestrian survey of the proposed project area. The survey consisted of walking 10- to 15-meter transects within the project area, where possible. Ground surface visibility was poor due to the abundant newly sprouted grasses and weedy vegetation. Roughly, 85-95 per cent of the project area had poor visibility. In addition, the project area was highly disturbed from the previous residences, driveways, outbuildings and a palm tree farm. Review of historic aerial maps indicate there were numerous houses and out buildings within the area dating back to 1947. As mentioned previously, in 2002 all of the residences and associated buildings were evaluated for listing on the NR and none appeared eligible for listing. The 1909 topographic map for the project area doesn't show any homes or structures within the project area but does show the cemetery located to the east of the project.

In the southwest portion of the project area was a large pile of recent age debris that included wire, boards, tires, concrete chunks, pipe and garbage. In the central portion of the project was an area that appeared to be a palm tree farm or garden. It consisted of approximately 50 small palm trees that were loosely enclosed by brick fence posts. Three areas had remnants of driveways with associated foundations and house pads. There were some ornamental trees in the area that had recently been cut down. Adjacent to the entrance driveway to the southernmost home was a large, circular water fountain. There were random remnants of irrigation pipe scattered across the project area.

No pre-contact or historic era resources were discovered during the field survey.

SUMMARY OF ANALYSIS UNDER THE 2035 GENERAL PLAN MASTER EIR, INCLUDING CUMULATIVE IMPACTS, GROWTH INDUCING IMPACTS, AND IRREVERSIBLE SIGNIFICANT EFFECTS

The MEIR evaluated the potential effects of development under the 2035 General Plan on prehistoric and historic resources (see Chapter 4.4). The MEIR identified significant and unavoidable effects on historic resources and archaeological resources (see Impacts 4.4-1 and 4.4-2). The MEIR also addressed the potential destruction of paleontological resources, which was found to be mitigated to a less than significant level with implementation of applicable regulations and policies (see Impact 4.5-5).

General plan policies identified as reducing such effects call for identification of resources on project sites (Policy HCR 2.1.1), implementation of applicable laws and regulations (Policy HCR 2.1.2, HCR 2.1.8, and HCR 2.1.16), consultation with appropriate agencies (Policy HCR 2.1.3), incentives for and enforcements of protection of historic and cultural resources (Policy HCR 2.1.4), early consultation with owners and land developers to minimize effects (Policy HCR 2.1.10) and encouragement of adaptive reuse of historic resources (Policy HCR 2.1.14). Demolition of historic resources is deemed a last resort (Policy HCR 2.1.15).

MITIGATION MEASURES FROM 2035 GENERAL PLAN MASTER EIR THAT APPLY TO THE PROJECT

None available.

GENERAL PLAN POLICIES CONSIDERED MITIGATION

The following General Plan policies would avoid or lessen environmental impacts as identified in the MEIR, and are applicable to the proposed project:

- Policy HCR 2.1.1 (Identification)

- Policy HCR 2.1.2 (Applicable Laws and Regulations)
- Policy HCR 2.1.3 (Consultation)
- Policy HCR 2.1.4 (Incentive and Enforcement)
- Policy HCR 2.1.5 (National, California, and Sacramento Registers)
- Policy HCR 2.1.8 (Historic Preservation Enforcement)
- Policy HCR 2.1.10 (Early Project Consultation)
- Policy HCR 2.1.16 (Archaeological and Cultural Resources)
- Policy HCR 2.1.17 (Preservation Project Review)

STANDARDS OF SIGNIFICANCE

For purposes of this Initial Study, cultural resource impacts may be considered significant if the proposed project would result in one or more of the following:

- cause a substantial change in the significance of a historical or archaeological resource as defined in CEQA Guidelines Section 15064.5 or,
- directly or indirectly destroy a unique paleontological resource.

ANSWERS TO CHECKLIST QUESTIONS

Question A: Less than Significant with Mitigation

The cultural resources assessment consisting of a records search, request for information from the applicable tribes, and a pedestrian survey had negative results for historical or archaeological resources within the project site. The project area appears to have been significantly disturbed over the years with the construction of driveways, irrigation systems, and homes and therefore it seems highly unlikely that intact historic resources would be impacted by project development.

Although the project area does not contain any historical resources and implementation of the proposed project would not be expected to impact any historical resources, construction of the proposed project could result in the inadvertent discovery of undocumented archaeological materials or human remains and the disturbance or destruction of a known historical or archaeological resource. Therefore, the project could result in **potentially significant** impacts related to cultural resources. Implementation of Mitigation Measures CUL-1 through CUL-3 described below would reduce the impacts to a less than significant level.

Question B: Less than Significant with Mitigation

As discussed in Section 6.5, Geology, of the General Plan MEIR, the City of Sacramento is not considered sensitive for paleontological resources, and the likelihood for finding something paleontologically significant would be very low (page 6.5-25). The General Plan Policy HCR 2.1.15 requires compliance with protocols that protect or mitigate impacts to archeological, historic, and cultural resources, including prehistoric resources, should anything be discovered during excavation or construction. The City also interprets this policy to address paleontological resources (MEIR, page 6.5-25).

Although the project area is not considered sensitive for paleontological resources and the likelihood of encountering paleontological resources is considered very low, project-related ground disturbing activities could affect the integrity of a previously unknown paleontological resource, resulting in a substantial change in the significance of the resource. Therefore, project development could result in **potentially significant** impacts to paleontological resources. Implementation of Mitigation Measures CUL-3 and CUL-4 described below would reduce the impacts to less than significant.

MITIGATION MEASURES

CUL-1: Discovery of Historic, Prehistoric Archaeological Features

- In the event that subsurface historic or prehistoric archeological features or deposits are discovered during construction-related ground disturbing activities, all work within 50 meters of the resource shall be halted, and the City shall consult with a qualified archaeologist to assess the significance of the find. If warranted, archaeological test excavations shall be conducted by a qualified archaeologist to aid in determining the nature and integrity of the find. If the find is determined to be significant by the qualified archaeologist, representatives of the City and the qualified archaeologist shall coordinate to determine the appropriate course of action. All significant cultural materials recovered shall be subject to scientific analysis and professional museum curation. In addition, a report shall be prepared by the qualified archaeologist according to current professional standards.

CUL-2: Coordination with Native Americans Regarding Discovered Resources

- If a Native American site is discovered, the evaluation process shall include consultation with the appropriate Native American representatives. If Native American archaeological, ethnographic, or spiritual resources are involved, all identification and treatment shall be conducted by qualified archaeologists, who are listed in the Register of Professional Archaeologists (RPA) and/or meet the Secretary of Interior Standards as stated in the Code of Federal Regulations (36 CFR 61), and Native American representative(s) assigned by the Native American Heritage Commission.

CUL-3: Discovery of Human Remains

- If a human remains are discovered during project development, CEQA Guidelines § 15064.5; Health and Safety Code § 7050.5; Public Resources Code § 5097.94 and § 5097.98 must be followed. If human bone or bone of unknown origin are discovered, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until the Sacramento County Coroner is contacted to determine if the remains are Native American and if an investigation of the cause of death is required. If the coroner determines the remains are Native American, the Coroner shall contact the Native American Heritage Commission (NAHC) within 24 hours, and the NAHC shall identify the person or persons it believes to be the “most likely descendant” (MLD) of the deceased Native American(s). The MLD shall make recommendations to the landowner or the person responsible for the excavation work within 48 hours, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in PRC Section 5097.98.

CUL-4: Discovery of Paleontological Resources

- Should paleontological resources be identified during any phase of project development, the construction manager shall cease operation at the site of the discovery and immediately notify the City of Sacramento, Community Development Department. The project applicant shall retain a qualified paleontologist to provide an evaluation of the find and to prescribe mitigation measures to reduce impacts to a less than significant level. In considering any suggested mitigation proposed by the consulting paleontologist, the Community Development Department shall determine whether avoidance is necessary and feasible in light of factors such as the nature of the find, project design, costs, land

use assumptions, and other considerations. If avoidance is unnecessary or infeasible, other appropriate measures (e.g., data recovery) shall be instituted. Work may proceed on other parts of the project site while mitigation for paleontological resources is carried out.

FINDINGS

With implementation of Mitigation Measures CUL-1 through CUL-4, all potentially significant environmental effects of the project relating to cultural resources will be mitigated to a **less than significant** level.

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GEOLOGY AND SOILS

Issues:	Effect will be studied in the EIR	Effect can be mitigated to less than significant	No additional significant environmental effect
<p><u>5. GEOLOGY AND SOILS</u></p> <p>A) Would the project allow a project to be built that will either introduce geologic or seismic hazards by allowing the construction of the project on such a site without protection against those hazards?</p>			X

ENVIRONMENTAL SETTING

Seismicity

As described in the MEIR, the City is not located within an Alquist-Priolo Earthquake Fault Zone, and there are no known faults within the area. Fault rupture within the City is highly unlikely and, consequently, people or structures within the City would not be exposed to fault rupture. However, the MEIR identifies the entire City as being subject to potential damage from earthquake groundshaking at a maximum intensity of VII on the Modified Mercalli scale. The closest potentially active faults to the project area include the Foothills Fault System, located approximately 23 miles east of the City; the Great Valley fault located 26 miles from the City; and the Hunting Creek-Berryessa Fault located 38 miles from Sacramento. A major earthquake on any of these faults could cause strong groundshaking in the project area.

Topography and Soils

The project site consists of relatively flat terrain. Soils in the project site consist of San Joaquin soils, which are characterized by moderately deep, well-drained soils that are underlain by a cemented hardpan, and have a clay texture (NRCS 2016).

Regional Geology

The project site is located within the Sacramento Valley portion of the Great Valley Geomorphic Province of California. The Great Valley is bordered to the north by the Cascade and Klamath Ranges, to the west by the Coast Ranges, to the east by the Sierra Nevada, and to the south by the Transverse Ranges. The valley was formed by tilting of the Sierra Block with the western side dropping to form the valley and eastern side uplifting to form the Sierra Nevada. The valley is characterized by a thick sequence of sediments derived from erosion of the adjacent Sierra Nevada to the east and the Coast Ranges to the west. These sedimentary rocks are mainly Cretaceous in age. According to U.S. Geological Survey mapping prepared by Helley and Harwood (1985) the surface and near surface deposits are recognized as undivided Holocene basin deposits, as well as levee and channel deposits. These deposits typically consist of silt, sand and clay deposited by drainages similar to present-day stream and river systems.

SUMMARY OF ANALYSIS UNDER THE 2035 GENERAL PLAN MEIR, INCLUDING CUMULATIVE IMPACTS, GROWTH INDUCING IMPACTS, AND IRREVERSIBLE SIGNIFICANT EFFECTS

Chapter 4.5 of the MEIR evaluated the potential effects related to seismic hazards, underlying soil characteristics, slope stability, erosion, existing mineral resources and paleontological resources in the general plan policy area. Implementation of identified policies in the 2035 General Plan reduced all effects to a less than significant level. Policies EC 1.1.1 and 1.1.2

require regular review of the City's seismic and geologic safety standards, and geotechnical investigations for project sites.

MITIGATION MEASURES FROM 2035 GENERAL PLAN MEIR THAT APPLY TO THE PROJECT

None.

GENERAL PLAN POLICIES CONSIDERED MITIGATION

The following General Plan policies would avoid or lessen environmental impacts as identified in the MEIR, and are applicable to the proposed project:

- Policy EC 1.1.1 (Review Standards)
- Policy EC 1.1.2 (Geotechnical Investigations)
- Policy ER 1.1.7 (Construction Site Impacts)
- Policy HCR 2.1.16 (Archaeological and Cultural Resources)

STANDARDS OF SIGNIFICANCE

For the purposes of this Initial Study, an impact is considered significant if it allows a project to be built that will either introduce geologic or seismic hazards by allowing the construction of the project on such a site without protection against those hazards.

ANSWERS TO CHECKLIST QUESTIONS

Question A: Less than Significant

As discussed above, the project would not be subject to fault rupture; however, groundshaking may occur periodically in Sacramento as a result of distant earthquakes. The State of California provides minimum standards for building design through the California Building Standards Code (CBSC) (Title 24 of the California Code of Regulations). The CBSC is based on more the federal Uniform Building Code (UBC) but is more detailed and stringent than the federal UBC. Specific minimum seismic safety requirements are set forth in Chapter 23 of the CBSC. The state earth protection law (California Health and Safety Code Section 191000 et seq.) requires that buildings be designed to resist stresses produced by lateral forces caused by earthquakes. Earthquake resistant design and materials are required to meet or exceed the current seismic engineering standards of the CBSC Seismic Risk Zone 3 improvements. The proposed project would be required to comply with CBSC requirements and the City's 2035 General Plan and MEIR, which require project applicants to prepare site-specific geotechnical evaluations and conformance with Title 24 of the California Code of Regulations.

Soil liquefaction is the loss of strength of low- to no- cohesion soils (usually sands) that occurs when pore water pressure exceeds the confining stress (weight) of the soils. Liquefaction normally occurs only under saturated conditions and in soils with a low relative density. Liquefaction can occur during earthquakes as vibrations induce soils to readjust to a more compact state. Experience has shown that earthquake induced liquefaction normally occurs only within the upper 50 to 60 feet of the soil profile. The test borings at the project site show that the subsurface soils vary from silty clay at the surface underlain by alternating layers of variably cemented, silty sand and clayey and sandy silt soils extending to the maximum depth explored of 15 feet below site grades. The existing on-site soils were considered suitable for use as engineered fill, provided they do not contain significant quantities of organics, rubble, and deleterious debris, and are at a proper moisture content to achieve the desired degree of compaction (WKA 2015).

Per City requirements (2035 MEIR Policy EC 1.1.2), a geotechnical investigation of the site has been completed (WKA 2015) to determine the potential for ground rupture, earth shaking, and liquefaction due to seismic events, as well as expansive soils problems. Construction activities would involve demolition, excavating, filling, moving, grading, and temporarily stockpiling soils onsite, which would remove any vegetative cover and expose site soils to erosion from wind and

surface water runoff. The City has adopted standard measures to control erosion and sediment during construction and all projects in the City are required to comply with the City's Standard Construction Specifications for Erosion and Sediment Control. The proposed project would comply with the City's standards set forth in the "Administrative and Technical Procedures Manual for Grading and Erosion and Sediment Control." The project would also comply with the City's grading ordinance (Chapter 15.88 of Sacramento City Code) which specifies construction standards to minimize erosion and runoff. As required by the City, recommendations identified in the 2015 geotechnical engineering report for the proposed development would also be implemented (WKA 2015).

Because the proposed project would be required to comply with federal, state, and local construction standards, it would not expose people or structures to the risk of loss, injury, or death. In addition, these standards along with recommendations for project construction based on the findings of the investigation provided in the geotechnical engineering report for the site (related to project earthwork, foundations, seismic design, the grade of the floor slabs, and pavements) require the project applicant to identify and protect against potential hazards from ground-shaking, liquefaction, unstable soil conditions, and/or soil erosion problems on the project site. Therefore, a **less than significant** seismic impact would occur.

MITIGATION MEASURES

None.

FINDINGS

The project would have no additional project-specific environmental effects relating to geology and soils.

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HAZARDS

Issues:	Effect will be studied in the EIR	Effect can be mitigated to less than significant	No additional significant environmental effect
6. HAZARDS			
Would the project:			
A) Expose people (e.g., residents, pedestrians, construction workers) to existing contaminated soil during construction activities?		X	
B) Expose people (e.g., residents, pedestrians, construction workers) to asbestos-containing materials or other hazardous materials?		X	
C) Expose people (e.g., residents, pedestrians, construction workers) to existing contaminated groundwater during dewatering activities?			X

The discussion of hazards is based on a Hazards Materials Site Assessment/Phase I Report prepared for APN 117-0220-038 (Westech Company 2015), which is included as Appendix E. APN's 117-0220-023, -024, -039, -040 were not part of the study.

ENVIRONMENTAL AND REGULATORY SETTING

The project site consists of an undeveloped site in a partially urbanized, mixed-use area of the community. The project site is characterized by relatively level topography, featuring disturbed, non-native annual grassland and disturbed/developed areas associated with graded roads, a cargo container storage lot, and the foundations and pavement associated with the previously removed single family home in the southern portion of the project site and the commercial building in the eastern portion of the project site. Three water supply wells are located on the project site – one is located near the center of the project site, and the other two are located in the southern portion of the project site. Encroachments from the adjacent commercial uses include vehicle and scrap metal storage. Additional debris on the project site include tires, scrap metal, treated posts, concrete blocks, fencing, and miscellaneous other debris.

APN 117-0220-038 is not currently listed as potentially having hazardous materials, although it has had a history of hazardous spills. Sometime prior to 1997, a spill or discharge of hydrocarbons was documented on the site. The owners entered into a Voluntary Cleanup Program with Sacramento County which was overseen by the California Environmental Protection Agency - Department of Toxic Substances Control (EPA – DTSC). The site was determined to be cleaned up and subject to a “No Further Action” determination by DTSC in December 1997. Several cubic yards of discolored soils were removed from the site in 2013.

APN 117-0220-039 (the previous commercial property) is 8706 West Stockton Boulevard. This property was listed on the Regional Water Quality Control Board’s Leaking Underground Storage Tank List prior to 1996. During March 1996, the RWQCB issued a “No Further Action” letter for the site.

No additional documented hazardous materials on the project site or surrounding parcels were encountered during records searches of the area. The records search included a review of the Environmental Data Resources (EDR) report, and published and unpublished toxic site lists compiled by the U.S. Environmental Protection Agency (U.S. EPA), and EPA-DTSC EnviroStor and Geotracker databases. A pedestrian reconnaissance survey of APN 117-0220-038 was

conducted in preparation of the Phase I report. APN's 117-0220, -023, 024, -039, -040 have not been pedestrian surveyed for signs of undocumented hazardous materials (the above-described records search was conducted for these parcels, however, and the potential for those areas to contain hazardous materials were evaluated in the Phase I report and considered to be unlikely).

Federal regulations and regulations adopted by the Sacramento Metropolitan Air Quality Management District (SMAQMD) apply to the identification and treatment of hazardous materials during demolition and construction activities. Failure to comply with these regulations respecting asbestos may result in a Notice of Violation being issued by the SMAQMD and civil penalties under state and/or federal law, in addition to possible action by U.S. EPA under federal law.

Federal law covers a number of different activities involving asbestos, including demolition and renovation of structures (40 CFR § 61.145).

SMAQMD RULE 902 AND COMMERCIAL STRUCTURES

The work practices and administrative requirements of Rule 902 apply to all commercial renovations and demolitions where the amount of Regulated Asbestos-Containing Material (RACM) is greater than:

- 260 lineal feet of RACM on pipes, or
- 160 square feet of RACM on other facility components, or
- 35 cubic feet of RACM that could not be measured otherwise.

The administrative requirements of Rule 902 apply to any demolition of commercial structures, regardless of the amount of RACM.

Asbestos Surveys

To determine the amount of RACM in a structure, Rule 902 requires that a survey be conducted prior to demolition or renovation unless:

- the structure is otherwise exempt from the rule, or
- any material that has a propensity to contain asbestos (so-called "suspect material") is treated as if it is RACM.

Surveys must be done by a licensed asbestos consultant and require laboratory analysis. If the survey shows that there are asbestos-containing materials present, the SMAQMD recommends leaving it in place. If it is necessary to disturb the asbestos as part of a renovation, remodel, repair or demolition, Cal OSHA and the Contractors State License Board require a licensed asbestos abatement contractor be used to remove the asbestos-containing material.

There are specific disposal requirements in Rule 902 for friable asbestos-containing material, including disposal at a licensed landfill. If the material is non-friable asbestos, any landfill willing to accept asbestos-containing material may be used to dispose of the material.

SUMMARY OF ANALYSIS UNDER THE 2035 GENERAL PLAN MEIR, INCLUDING CUMULATIVE IMPACTS, GROWTH INDUCING IMPACTS, AND IRREVERSIBLE SIGNIFICANT EFFECTS

The MEIR evaluated effects of development on hazardous materials, emergency response and aircraft crash hazards (see Chapter 4.6). Implementation of the General Plan may result in the exposure of people to hazards and hazardous materials during construction activities, and exposure of people to hazards and hazardous materials during the life of the General Plan. Impacts identified related to construction activities and operations were found to be **less than significant**. Policies included in the 2035 General Plan, including PHS 3.1.1 (investigation of sites for contamination) and PHS 3.1.2 (preparation of hazardous materials actions plans when appropriate) were effective in reducing the identified impacts.

MITIGATION MEASURES FROM 2035 GENERAL PLAN MEIR THAT APPLY TO THE PROJECT

None.

GENERAL PLAN POLICIES CONSIDERED MITIGATION

The following General Plan policies would avoid or lessen environmental impacts as identified in the MEIR, and are applicable to the proposed project:

- Policy PHS 3.1.1 (Investigate Sites for Contamination)
- Policy PHS 3.1.2 (Hazardous Materials Contamination Management Plan)
- Policy PHS 3.1.3 (Household Hazardous Waste Collection Programs)
- Policy PHS 3.1.4 (Transportation Routes)

STANDARDS OF SIGNIFICANCE

For the purposes of this Initial Study, an impact is considered significant if the proposed project would:

- expose people (e.g., residents, pedestrians, construction workers) to existing contaminated soil during construction activities;
- expose people (e.g., residents, pedestrians, construction workers) to asbestos-containing materials or other hazardous materials; or
- expose people (e.g., residents, pedestrians, construction workers) to existing contaminated groundwater during dewatering activities.

ANSWERS TO CHECKLIST QUESTIONS

Question A: Less than Significant with Mitigation

Based on records searches of the project area and pedestrian survey of the majority of the project site, the project site is not currently listed as having hazardous materials. Previously documented hazardous conditions on APN 117-0220-038 and -039 have been determined as “No Further Action” by DTSC and RWQCB, respectively. Discolored soil observed by WKA during pedestrian reconnaissance of APN 117-0220-038 in 2013 was subsequently removed by the project owner, and no soil sampling was conducted.

Implementation of the proposed project includes removing existing building foundations and paved surfaces, as well as the vehicles and materials stored on a portion of the site. Three water supply wells are located on the project site – one is located near the center of the project site, and the other two are located in the southern portion of the project site. The wells are currently capped in place and would be abandoned prior to project construction.

Development of the project site from largely undeveloped and currently vacant to multi-family residential land uses would result in an increase in the generation, storage, and disposal of hazardous wastes. During project construction, oil, gasoline, diesel fuel, paints, solvents, and other hazardous materials may be used. If spilled, these substances could pose a risk to the environment and to human health. Following construction, household hazardous materials such as various cleansers, paints, solvents, pesticides, pool chemicals, and automobile fluids would be expected to be used. If spilled, these substances could pose a risk to the environment and to human health. Following construction, household hazardous materials such as various cleansers, paints, solvents, pesticides, pool chemicals, and automobile fluids would be expected to be used. The routine transport, use, and disposal of hazardous materials are subject to local, state, and federal regulations to minimize risk and exposure. Consequently, use of these materials for their intended purpose would not pose a significant risk to the public or environment; this impact is assessed as less than significant.

Because the entire project site has not been investigated for potentially hazardous materials (i.e., the parcels within the project site with past land uses and remaining building foundations), there is the potential for undocumented hazardous materials to be present in the soils. This would be a **potentially significant** impact. Mitigation Measure HAZ-01 would be implemented to identify potential risks associated with hazardous materials on the previously unevaluated portions of the project site. The project applicant would be required to comply with the requirements outlined in the Hazardous Materials Assessment prepared for the additional areas.

Question B: Less than Significant with Mitigation

Portions of the project site contain building foundations that were not evaluated in the Phase I prepared for the proposed project. The building foundations could contain asbestos or other hazardous materials, including lead-based paint. Exposure pathways by which receptors could be exposed to hazardous materials include: 1) direct contact with hazardous materials; 2) incidental ingestion of hazardous materials (e.g., if workers fail to wash their hands before eating, drinking, or smoking); and 3) inhalation of airborne dust released from dried hazardous materials. This would be a **potentially significant** impact. Mitigation Measure HAZ-02 would be implemented to reduce potential impacts associated with asbestos and lead-based paint to less than significant. The proposed mitigation requires that an asbestos and lead-based paint surveys be completed prior to initiating construction activities. Hazardous material found during the survey would be removed and disposed of in compliance with all applicable regulations and guidelines, including SMAQMD Rule 902.

Once construction is complete, the transport, use, or disposal of hazardous materials would be limited to common hazardous materials typical of any residences or place of employment (e.g., cleaning agents, paints and thinners, fuels, insecticides, herbicides, etc.). Although limited quantities of hazardous materials can be found in most buildings, the use of such substances would not occur in quantities that would present a significant hazard to the environment or the public at large. Accidents or spills involving small quantities of the materials typical of any residences or place of employment would not create a significant hazard to the public or the environment. Additionally, any potentially hazardous materials utilized as a part of the project would be contained, stored and used in accordance with manufacturer's instructions and handled in compliance with applicable standards and regulations. Any associated risk would be adequately reduced to a less than significant level through compliance with these standards and regulations.

Question C: Less than Significant

The DWR website was reviewed for groundwater levels at nearby wells (WKA 2015). The nearest well is located approximately 0.25 mile southeast of the project site (Well No. 07N05E26C001M), with a ground surface elevation similar to the project site. Groundwater data was recorded from May 1963 to November 2008. Based on the groundwater data, elevations at the site are considered to be deeper than 56 feet below grade. Although project construction requires the installation of utilities within the ground, construction activities would primarily be limited to a depth of approximately 5 feet. There is no evidence to suggest that this construction action would require dewatering efforts or the introduction of contaminated groundwater to the surface; this impact would be **less than significant**.

MITIGATION MEASURES

HAZ-01: Conduct Hazardous Materials Assessments of Previously Unevaluated Areas

- Prior to approval of the proposed project, the project applicant shall retain a hazardous materials investigator to investigate all portions of the project site not previously evaluated in the Hazards Materials Site Assessment/Phase I Report prepared for APN 117-0220-038 (Westech 2015). If hazardous materials or the potential for

hazardous risks are found to be present, the project applicant shall have a licensed contractor properly remove and dispose of the hazardous materials, if any are identified, in accordance with federal, state, and local laws. The project shall not be constructed until said materials and/or risks are appropriately addressed and removed from the site.

HAZ-02: Conduct Lead-Based Paint and Asbestos Surveys and Testing

- Prior to initiating construction activities, the project applicant shall retain a qualified inspector to survey the remnant building pads for hazardous materials. If hazardous materials are found to be present, the project applicant shall have a licensed contractor properly remove and dispose of these hazardous materials in accordance with federal, state, and local laws.

FINDINGS

With implementation of Mitigation Measures HAZ-01 and HAZ-02, construction and operation of the project would not expose people (e.g., residents, pedestrians, construction workers) to asbestos-containing materials or other hazardous materials; this impact would be mitigated to **less than significant**.

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HYDROLOGY AND WATER QUALITY

Issues:	Effect will be studied in the EIR	Effect can be mitigated to less than significant	No additional significant environmental effect
6. HYDROLOGY AND WATER QUALITY			
Would the project:			
A) Substantially degrade water quality and violate any water quality objectives set by the State Water Resources Control Board, due to increases in sediments and other contaminants generated by construction and/or development of the project?			X
B) Substantially increase the exposure of people and/or property to the risk of injury and damage in the event of a 100-year flood?			X

ENVIRONMENTAL SETTING

The project site is altered, and reflects a history of past hydrologic manipulation. The project site has been previously cleared and graded. Precipitation is the only source of surface water for the project site. No developed storm drainage features are present on the project site, although Sheldon Road is developed with curb and gutters with connections to the City’s storm drain system. Impervious surfaces on the project site include two building foundations, and existing driveways associated with each of the buildings.

The Federal Emergency Management Agency (FEMA) publishes Flood Insurance Rate Maps (FIRM) that delineate flood hazard zones for communities. The project site is located outside of any flood hazard zone (Community Panel Numbers 06067C0308H and 06067C0309H). FEMA does not have building regulations for development in areas outside of flood hazard zones.

The public wastewater collection system with the City includes a combined sewer system (CSS) in the older Central City and a newer separated sewer system (sanitary sewer) in the remaining areas of the City and is the treatment service type for this project. The Sacramento Regional County Sanitation District (SRCSD) and the Sacramento Area Sewer District (formerly County Services District [CSD-1]) provide both collection and treatment services within their service area for the portions of the city served by the separate sewer system. Wastewater generated in this area is collected by trunk facilities in the Sacramento Area Sewer District and then conveyed via interceptors to the Sacramento Regional Wastewater Treatment Plant. The SRCSD has prepared and is implementing its master plan related to wastewater conveyance – the Interceptor Master Plan 2000 – and the SASD is implementing its master plan – the Sewerage Facilities Master Plan Update 2006.

The community plan areas served by the City’s separate sewer system include the Pocket, North Sacramento, and portions of Arden-Arcade, South Sacramento, East Sacramento, East Broadway and Airport Meadowview. The areas served by the City’s separate sewer systems are divided into dozens of sewer sheds, and wastewater from the basins is pumped to the Sacramento River Wastewater Treatment Plant (SRWTP) via numerous pumping stations located throughout the City.

The Sacramento Area Sewer District serves the community plan areas of South Natomas, North Natomas, and portions of Arden-Arcade, East Broadway, East Sacramento, Airport Meadowview and South Sacramento. The service area is divided into ten trunk sheds, which are based on the collection systems of the individual sewer districts from which CSD-1 was

originally formed. For the most part, each trunk shed consists of a number of hydraulically independent systems, each discharging into the SRCSD interceptor system. According to the District's Sewerage Facilities Expansion Master Plan dated March 2002, there are capacity deficiencies in portions of the Southeast (Central), Natomas, Arden/North Highlands and Rio Linda trunk systems. The Southeast (Central) system serves the plan areas of South Sacramento, East Broadway and Airport Meadowview. The Natomas shed area includes portions of the North and South Natomas community plan areas. The Arden/North Highlands system serves the Arden-Arcade Community Plan area. The Rio Linda system is outside of the Policy Area, but within the Study Area. These areas are generally served by older sewer systems that are subject to substantial amounts of infiltration/inflow during wet weather.

Flows conveyed by the City's wastewater systems are routed to the SRWTP for treatment and disposal via an interceptor system consisting of large diameter pipes and pump stations. The interceptor system and the SRWTP, located just south of the City limits, are owned and operated by the independent SRCSD.

The City's separate storm drainage system includes conveyance of storm water and dry weather urban runoff to the adjacent creeks and rivers. The separate drainage system consists of street drains, conveyance systems, and usually a pump station to discharge into either the Sacramento or American River. These discharges are regulated for water quality by the Regional Water Quality Control Board National Pollutant Discharge Elimination System (NPDES) permit R5-2002-0206.

The Stormwater Quality Improvement Plan (SQIP) (July 2007) outlines the priorities, key elements, strategies, and evaluation methods of the City's Stormwater Management program for 2007-2011. The Program is based on the NPDES municipal stormwater discharge permit. The comprehensive Program includes pollution reduction activities for construction sites, industrial sites, illegal discharges and illicit connections, new development, and municipal operations. The Program also includes an extensive public education effort, target pollutant reduction strategy and monitoring program [<http://www.sacstormwater.org/>].

The Sacramento City Code Section 13.08.145 addresses mitigation of drainage impacts; design and procedures manual for water, sanitary sewer, storm drainage, and water quality facilities. The code requires that when a property contributes drainage to the storm drain system or combined sewer system, all storm water and surface runoff drainage impacts resulting from the improvement or development must be fully mitigated to ensure that the improvement or development does not affect the function of the storm drain system or combined sewer system, and that there is no increase in flooding or in water surface elevation that adversely affects individuals, streets, structures, infrastructure, or property. These requirements will be included as conditions of project approval and development not allowed to proceed without compliance.

SUMMARY OF ANALYSIS UNDER THE 2035 GENERAL PLAN MEIR, INCLUDING CUMULATIVE IMPACTS, GROWTH INDUCING IMPACTS, AND IRREVERSIBLE SIGNIFICANT EFFECTS

Chapter 4.7 of the MEIR evaluates the potential effects of the 2035 General Plan as they relate to surface water, groundwater, flooding, stormwater and water quality. Potential effects include water quality degradation due to construction activities (Impacts 4.7-1, 4.7-2), and exposure of people to flood risks (Impacts 4.7-3). Policies included in the 2035 General Plan, including a directive for regional cooperation (Policies ER 1.1.2, EC 2.1.1, EC 2.1.1), conservation of open space areas (Policy ER 1.1.1), control sources of stormwater pollution (Policies ER 1.1.3, 1.1.4, and 1.1.7), comprehensive flood management (Policy EC 2.1.2 through 2.1.16), and construction of adequate drainage facilities with new development (Policy U 4.1.1) were identified that reduced all impacts to a less-than-significant level.

MITIGATION MEASURES FROM 2035 GENERAL PLAN MEIR THAT APPLY TO THE PROJECT

None.

GENERAL PLAN POLICIES CONSIDERED MITIGATION

The following General Plan policies would avoid or lessen environmental impacts as identified in the MEIR, and are applicable to the proposed project:

- Policy ER 1.1.3 (Stormwater Quality)
- Policy ER 1.1.4 (New Development)
- Policy ER 1.1.5 (Limit Stormwater Peak Flows)
- Policy ER 1.1.6 (Post-Development Runoff)
- Policy ER 1.1.7 (Construction Site Impacts)
- Policy EC 2.1.11 (New Development)

STANDARDS OF SIGNIFICANCE

For purposes of this Initial Study, impacts to hydrology and water quality may be considered significant if construction and/or implementation of the proposed project would result in the following impacts that remain significant after implementation of General Plan policies or mitigation from the General Plan MEIR:

- substantially degrade water quality and violate any water quality objectives set by the State Water Resources Control Board, due to increases in sediments and other contaminants generated by construction and/or operational activities; or
- substantially increase the exposure of people and/or property to the risk of injury and damage in the event of a 100-year flood.

ANSWERS TO CHECKLIST QUESTIONS

Question A: Less than Significant

Construction-Related Impacts

Storm water runoff from the project site is either absorbed onsite or flows to the City's storm water drainage system. Construction activities associated with the proposed project would create the potential to degrade water quality from increased sedimentation and increased discharge (increased flow and volume of runoff) associated with storm water runoff. Disturbance of site soils would increase the potential for erosion from storm water. The SWRCB adopted a statewide general NPDES permit for stormwater discharges associated with construction activity. Dischargers whose projects disturb one or more acres of soil are required to obtain coverage under the General Permit for Discharges of Storm Water Associated with Construction Activity Construction General Permit Order 2009- 0009-DWQ. Construction activity subject to this permit includes clearing, grading and disturbances to the ground such as stockpiling, or excavation.

The City's SQIP contains a Construction Element that guides in implementation of the NPDES Permit for Storm Water Discharges Associated with Construction Activity. This General Construction Permit requires the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP should contain a site map(s) which shows the construction site perimeter, existing and proposed buildings, lots, roadways, storm water collection and discharge points, general topography both before and after construction, and drainage patterns across the project. The SWPPP must list best management practices (BMP) the discharger will use to protect storm water runoff and the placement of those BMPs. Additionally, the SWPPP must contain a visual monitoring program; a chemical monitoring program for "non-visible" pollutants to be implemented if there is a failure of BMPs; and a sediment monitoring plan if the site discharges directly to a water body listed on the Clean Water Act Section 303(d) list for sediment. Section A of the Construction General Permit describes the elements that must be contained in a SWPPP. Compliance with City requirements

to protect storm water inlets would require the developer to implement BMPs such as the use of straw bales, sandbags, gravel traps, and filters; erosion control measures such as vegetation and physical stabilization; and sediment control measure such as fences, dams, barriers, berms, traps, and basins. City staff also inspects and enforce the erosion, sediment and pollution control requirements in accordance with City codes (Grading, Erosion and Sediment Control ordinance).

Conformance with City regulations and permit requirements along with implementation of best management practices, construction activities under the proposed project would result in a **less than significant** impact related to storm water absorption rates, discharges, flows, and water quality.

Operation-Related Impacts

Development of the project site would introduce impervious surfaces to the site which can increase storm water runoff. Modifications to the onsite drainage resulting in on-or off-site erosion, pollutants, flooding, and/or otherwise substantially degrade water quality associated with urban runoff (non-point source pollutants) to storm drains would be a potentially significant impact. The surrounding storm water drainage systems are designed to accommodate storm water from the project site and connect to the City's drainage systems. Storm water from the project site would be collected by the project's storm drain system and directed to existing storm drains in Masters Street and Praline Way west of the project site. A ~~4.4-acre~~ water quality detention basin would be constructed in the northern portion of the project site, which would provide opportunity for percolation and groundwater recharge. Overflows from the detention basin would enter the existing storm drain in Melville Drive west of the project site.

The County of Sacramento and the cities of Sacramento, Folsom, Citrus Heights, Elk Grove, Rancho Cordova, and Galt have a joint NPDES permit (No. CAS082597) that was granted in December 2002. The permittees listed under the joint permit have the authority to develop, administer, implement, and enforce storm water management programs within their own jurisdiction. The permit is intended to implement the Basin Plan through the effective implementation of BMPs to reduce pollutants in storm water discharges to the maximum extent practicable.

The proposed project would conform with City regulations and permit requirements as well as implement effective BMPs that reduce stormwater discharges that would result in a **less than significant** impact related to storm water absorption rates, discharges, flows, and water quality.

Question B: Less than Significant

As described above, the project site is not located within a 100-year flood hazard area. As such, the proposed project would not place housing or structures within a 100-year flood hazard area and would not expose people or structures to risks associated with flooding. Therefore, impacts related to flooding would be **less than significant** and no mitigation would be required.

MITIGATION MEASURES

None.

FINDINGS

The project would have no additional project-specific environmental effects relating to hydrology and water quality.

NOISE

Issues:	Effect will be studied in the EIR	Effect can be mitigated to less than significant	No additional significant environmental effect
8. <u>NOISE</u>			
Would the project:			
A) Result in exterior noise levels in the project area that are above the upper value of the normally acceptable category for various land uses due to the project's noise level increases?		X	
B) Result in residential interior noise levels of 45 dBA L _{dn} or greater caused by noise level increases due to the project?		X	
C) Result in construction noise levels that exceed the standards in the City of Sacramento Noise Ordinance?			X
D) Permit existing and/or planned residential and commercial areas to be exposed to vibration-peak-particle velocities greater than 0.5 inches per second due to project construction?			X
E) Permit adjacent residential and commercial areas to be exposed to vibration peak particle velocities greater than 0.5 inches per second due to highway traffic and rail operations?			X
F) Permit historic buildings and archaeological sites to be exposed to vibration-peak-particle velocities greater than 0.2 inches per second due to project construction and highway traffic?			X

ENVIRONMENTAL SETTING

The predominant existing noise sources in the vicinity of the project site are vehicles on SR 99, West Stockton Boulevard, and Sheldon Road. No commercial or private airports are located within two miles of the project site, though occasional overflights and associated noise occur from aircraft using the public Sacramento Executive Airport (located approximately 4.7 miles northwest of the project site) or the privately-owned Elk Grove Airport (located approximately 4.7 miles east of the project site).

Existing Noise Receptors

Some land uses are considered more sensitive to ambient noise levels than others. Noise-sensitive land uses (NSLU) generally include residences, schools, libraries and hospitals. Sensitivity is a function of noise exposure (in terms of both exposure duration and insulation from noise) and the types of activities involved. The primary NSLUs near the project site are the single-family residences to the west and north and a recreational vehicle park to the east.

Existing Ambient Daytime Noise Levels

To generally quantify existing ambient noise levels in the project vicinity, two ambient noise measurements were recorded at the project site on February 5, 2016. One measurement was performed at the southern end of the site, facing Sheldon Road; the measured noise level at this location was 57.5 A-weighted decibels (dBA) L_{EQ} . L_{EQ} is the equivalent steady-state noise level or energy-averaged sound level over a stated period of time (i.e., average noise level) and dBA are a frequency-dependent weighting of sound levels that better represent human perception of noise. The remaining measurement was taken at the eastern end of the site, facing West Stockton Boulevard and SR 99. The measured noise level at this location was 62.7 dBA L_{EQ} .

SUMMARY OF ANALYSIS UNDER THE 2035 GENERAL PLAN MEIR, INCLUDING CUMULATIVE IMPACTS, GROWTH INDUCING IMPACTS, AND IRREVERSIBLE SIGNIFICANT EFFECTS

The MEIR evaluated the potential for development under the 2035 General Plan to increase noise levels in the community. New noise sources include vehicular traffic, aircraft, railways, light rail and stationary sources. General Plan policies establish exterior (Policy EC 3.1.1) and interior (EC 3.1.3) noise standards. Notwithstanding application of the General Plan policies, noise impacts for exterior noise levels (Impact 4.8-1), interior noise levels (Impact 4.8-2), and vibration impacts (Impact 4.8-4) were found in the MEIR to be significant and unavoidable.

MITIGATION MEASURES FROM 2035 GENERAL PLAN MEIR THAT APPLY TO THE PROJECT

None available.

GENERAL PLAN POLICIES CONSIDERED MITIGATION

The following General Plan policies would avoid or lessen environmental impacts as identified in the MEIR, and are applicable to the proposed project:

- Policy EC 3.1.1 (Exterior Noise Standards)
- Policy EC 3.1.2 (Exterior Incremental Noise Standards)
- Policy EC 3.1.3 (Interior Noise Standards)
- Policy EC 3.1.4 (Interior Noise Review for Multiple, Loud Short-Term Events)
- Policy EC 3.1.5 (Interior Vibration Standards)
- Policy EC 3.1.6 (Effects of Vibration)
- Policy EC 3.1.7 (Vibration)
- Policy EC 3.1.8 (Operational Noise)
- Policy EC 3.1.10 (Construction Noise)
- Policy EC 3.1.11 (Alternatives to Sound Walls)
- Policy EC 3.2.1 (Land Use Compatibility)
- Policy EC 3.2.2 (Hazardous Noise Protection)
- Policy LU 2.7.5 (Development Along Freeways)

STANDARDS OF SIGNIFICANCE

For purposes of this Initial Study, impacts due to noise may be considered significant if construction and/or implementation of the proposed project would result in the following impacts that remain significant after implementation of General Plan policies or mitigation from the General Plan MEIR:

- exterior noise levels that are above the upper value of the normally acceptable category for multi-family residences of 65 dBA L_{DN} and for park areas of 70 dBA L_{DN} ;
- residential interior noise levels of 45 dBA L_{DN} or greater caused by noise level increases due to the project;

- construction noise levels that exceed the standards in the City of Sacramento Noise Ordinance;
- existing and/or planned residential and commercial areas to be exposed to vibration greater than 0.5 inches per second (in./sec) peak particle velocity (PPV) due to project construction;
- adjacent residential and commercial areas to be exposed to vibration greater than 0.5 in./sec PPV due to highway traffic and rail operations; or
- historic buildings and archaeological sites to be exposed to vibration greater than 0.2 in./sec PPV due to project construction and highway traffic.

ANSWERS TO CHECKLIST QUESTIONS

Question A: Less than Significant

Noise Exposure in Excess of Standards

Potential noise impacts as a result of the proposed project are those resulting from project construction and operational activities. Construction noise would be temporary; operational noise would continue throughout the lifetime of the project.

Noise modeling for on-site transportation noise was conducted with Computer Aided Noise Abatement (CadnaA) version 4.5 and used average daily traffic numbers from the “Existing + Project” scenario described in the project’s transportation analysis (DKS 2015). The model was calibrated with the measured site values described above; the calibration assumed a ground absorption coefficient of 1.0 to account for the undeveloped project site that was covered in wild grass at the time of the measurement.

The noise environment in the area of the project site is dominated by low-level intermittent traffic noise from vehicles on Sheldon Road, Stockton Boulevard, and SR 99. The City’s exterior noise standards apply to the residential outdoor use recreational areas and parks. The project provides four designated outdoor use recreational areas for the residents, including a pool area, playground area, open area, and a dog park (labeled as Open Space 1, Open Space 2, Open Space 3 and Dog Park on Figure 6). These are the areas that were modeled to estimate future noise levels.

Exterior noise level modeling for the project site assumed a ground absorption coefficient of zero as the site would add hard surfaces and the soft grass cover present in the site visit could not be assumed in hotter, dry seasons. A solid masonry wall is included as part of the project’s site design and would be located along the western, southern, and most of the eastern perimeter of the site. The masonry wall would be 3 feet high along the southern perimeter of the site (with 3 feet of steel picket above) and 6 feet high along the western and eastern perimeters of the site; this wall would provide noise shielding for the pool area, playground area, and open area. These areas would also receive additional shielding from the proposed project buildings. The pool area, playground area, and open area would be subject to the multi-family residential exterior use standards (65 dBA L_{DN}); the dog park is subject to the exterior noise limit for parks (70 dBA L_{DN}). As shown in Table 4, with incorporation of the perimeter wall, noise levels at these multi-family residential outdoor use areas would range from 60.9 dBA L_{DN} to 62.3 dBA L_{DN} ; therefore, the pool area, playground area, and open area would not exceed the City exterior noise level standard of 65 dBA L_{DN} . At 67.4 dBA L_{DN} the dog park would not exceed the City’s 70 dBA L_{DN} exterior noise limit for parks. A **less than significant** impact is identified and no mitigation is required.

Table 4	
Future Outdoor On-site Noise Levels	
Receiver¹	Noise Levels (dBA L_{DN})
Open Space 1	62.3
Open Space 2	60.9
Open Space 3	62.2
Dog Park	67.4

Noise levels assume incorporation of the 3- to 6-foot high masonry wall design feature.

Note: Open space and dog park locations shown on Figure 3; Noise levels in table are for the “Existing + Project” condition.

Off-site Transportation Noise

Noise modeling for off-site transportation noise was conducted with Traffic Noise Model (TNM) version 2.5 and used average daily traffic numbers from the “Existing + Project” scenario described in the project’s transportation analysis (DKS 2015). The roadways analyzed were Sheldon Road, from Bruceville Road to SR 99 northbound ramps, West Stockton Boulevard, from Sheldon Road to Tolkien Avenue, Lewis Stein Road, from Sheldon Road to Big Horn Boulevard, and Jocelyn Way, from Sheldon Road to Masters Street. The nearest NSLUs from each roadway are approximately 50 to 100 feet from the roadway centerline (single- and multi-family residences).

According to General Plan Policy EC 3.1.2 (Exterior Incremental Noise Standards), mitigation shall be required for development that increases existing noise levels to residences (NSLUs) by more than 3 dBA in areas with noise levels between 55 dBA L_{DN} and 60 dBA L_{DN}, 2 dBA in areas with noise levels between 60 dBA L_{DN} and 65 dBA L_{DN}, and 1 dBA in areas with noise levels between 65 dBA L_{DN} and 75 dBA L_{DN}. As presented in Table 5, existing noise levels for the nearest NSLUs range from 58.4 dBA L_{DN} for Jocelyn Way to 67.2 dBA L_{DN} for Sheldon Road. The greatest increase from the existing to the Existing + Project scenario would be the West Stockton Boulevard segment, with a 0.6 dBA L_{DN} increase. Therefore, project traffic would not cause an increase above General Plan standards and impacts to off-site NSLUs would be **less than significant**.

Table 5
Off-Site Traffic Noise Levels

Roadway/ Segment	Distance to Nearest NSLU (feet)	Existing				Existing + Project			
		dBA L _{DN} at nearest NSLU	70 dBA L _{DN} (ft)	65 dBA L _{DN} (ft)	60 dBA L _{DN} (ft)	dBA L _{DN} at nearest NSLU	70 dBA L _{DN} (ft)	65 dBA L _{DN} (ft)	60 dBA L _{DN} (ft)
Sheldon Road									
Bruceville Road to Jocelyn Way/Lewis Stein Road	75	66.3	52	81	144	66.3	52	86	145
Jocelyn Way/Lewis Stein Road to Stockton Road/SR 99 SB Ramps	75	67.2	56	94	159	67.2	56	94	160
SR 99 SB Ramps to SR 99 NB Ramps	100	65.6	64	106	180	65.7	64	107	181
Stockton Boulevard									
Sheldon Road to Tolkien Avenue	50	64.1	12	42	76	64.7	15	47	81
Lewis Stein Road									
Sheldon Road to Big Horn Boulevard	50	65.2	17	51	87	65.3	17	52	87
Jocelyn Way									
Sheldon Road to Masters Street	50	58.4	IRW	IRW	37	58.5	IRW	IRW	38

NSLU = noise sensitive land use

IRW = In road right-of-way

HVAC

Stationary noise sources are regulated by the exterior noise limits contained within the City municipal code. Section 8.68.060 of the code states that the exterior noise limit at the property boundary for residential property is 55 dBA during the daytime period (7:00 a.m. to 10:00 p.m.) and 50 dBA during the nighttime period (10:00 p.m. to 7:00 a.m.) at the property line of NSLUs. The main stationary noise source from the project would be the outdoor heating, ventilation, and air conditioning (HVAC) units on the roof of the proposed multi-family buildings. Specific planning information is not available for the HVAC units at this time; modeling assumed the use of a Carrier 38HDR060 split system, which is typical for residential units and typically generates a noise level of 56 dBA at a distance of 7 feet. Based on the site plans, the closest project buildings to NSLU property lines would be the buildings that border the western end of the project, which are located adjacent to an existing single-family development. The HVAC units would likely be placed at least 10 feet from the edge of the building; therefore, the HVAC

units would be set back an approximate distance of 40 feet from the property line. At this distance, the condenser would generate a noise level of 40.9 dBA. Therefore, noise levels from HVAC units would not exceed the City's day (55 dBA) and night (50 dBA) maximum acceptable noise levels and impacts would be **less than significant**.

Question B: Less than Significant with Mitigation Incorporated

Interior noise levels at the buildings were modeled. Because most of the first story units nearest to SR 99 would be shielded by the 6-foot-high masonry wall along the eastern boundary of the project site, noise levels of the second story units were considered. The interior noise levels were predicted by modeling the exterior noise levels at the building façade of the potentially affected unit, then calculating the predicted interior noise levels based on typical noise reduction from traditional building materials. Noise levels at the building façades for the second stories of the 16-unit buildings range from 56.2 to 70.7 dBA L_{DN} as the project perimeter wall would provide limited noise attenuation at second story heights (see Table 6). Noise levels at the building façades for the 14-unit buildings would range from 59.3 to 64.9 dBA L_{DN}. Traditional architectural materials are normally able to reduce exterior to interior noise by up to 20 dBA. Based on these exterior noise levels, traditional architectural materials may not attenuate interior noise to a level of 45 dBA L_{DN} at buildings 16P-7 and 16P-8, resulting in a potentially significant impact at the first and second story units in those buildings with a direct line-of-sight to SR 99. Refer to Figure 6 for the building receiver locations.

Table 6
Future Second Story Interior Noise Levels

Receiver ¹	Façade (Exterior) Noise Levels (dBA L _{DN})	Interior Noise Levels with Traditional Architectural Materials (dBA L _{DN})
14P-1	60.3	40.3
14P-2	61.6	41.6
14P-3	62.7	42.7
14P-4	64.6	44.6
14P-5	64.3	44.3
14P-6	61.4	41.4
14P-7	59.3	39.3
14P-8	60.6	40.6
14P-9	60.8	40.8
14P-10	60.1	40.1
14P-11	59.8	39.8
14P-12	58.5	38.5
14P-13	59.9	39.9
14P-14	64.9	44.9
16P-1	58.6	38.6

16P-2	56.2	36.2
16P-3	61.3	41.3
16P-4	64.3	44.3
16P-5	64.7	44.7
16P-6	63.4	43.4
16P-7a (Bedroom Wall #1)	70.7	50.7
16P-7b (Dining Room Wall #1)	70.6	50.6
16P-7c (Dining Room Wall #2)	67.3	47.3
16P-8a	69.6	49.6

Note: Bold font and shading indicate noise levels above the 45 dBA threshold.

¹Noise levels in table are for the “Existing + Project” condition.

²Interior Noise Levels are calculated assuming a 20 dBA reduction in noise levels from the façade on-site noise levels based on attenuation from traditional building materials.

For buildings 16P-7 and 16P-8, an Exterior-to-Interior noise analysis was conducted to predict interior noise levels at these units. The residential rooms used in the Exterior-to-Interior analysis are the eastern bedroom and the dining room of the second story unit of Building 16P-7 (Receivers 16-7a through 16-7c). These rooms are the closest on the project site to SR 99 and are therefore exposed to the highest traffic noise levels (see Figure 6). The bedroom and dining room specifications used in this analysis are based on January 2016 floor plans provided by the project applicant and are detailed in the Exterior-to-Interior Noise Analysis Letter (see Appendix F). Refer to Figure 7 for the project plans for the rooms included in this Title 24 analysis. The bedroom has one wall (Wall 1) and the dining room has two walls (Wall 1 and 2) that are exposed to traffic noise.

Table 7 displays the Sound Transmission Class (STC) ratings necessary to ensure interior noise levels for the proposed project would be below the 45 dBA L_{DN} threshold. Detailed modeling results are included in Appendix F.

Table 7		
Exterior-to-Interior Noise Levels for Second Story Rooms in Building 16P-7		
Specification	Bedroom	Dining Room
Exterior wall requirement	STC 46	STC 46
Minimum window requirement	STC 31	STC 31
Window construction	Dual Glazing Window Thickness 1/8- and 1/2-inch Air Gap	Dual Glazing Window Thickness 1/8- and 1/2-inch Air Gap
Exterior Noise	70.7 dBA L _{DN} on Wall 1	70.5 dBA L _{DN} on Wall 1; 67.3 dBA L _{DN} on Wall 2
Interior Noise (calculated):	40.8 dBA L _{DN} with windows closed	44.5 dBA L _{DN} with windows closed
Above 45 dBA L _{DN} interior noise standard?	No	No

With dual glazing and the incorporation of the building materials as described in Table 7, all rooms would be in compliance with the relevant interior noise standards of 45 dBA L_{DN} for multi-family residences. Appropriate means of air circulation and provision of fresh air must be present to allow windows to remain closed for extended intervals of time so that acceptable levels of noise can be maintained on the interior. The building design would include HVAC units that would meet the criteria of the International Building Code (Chapter 12, Section 1203.3 of the 2013 California Building Code) to ensure that windows would be able to remain closed for extended periods of time.

Because the remaining rooms within the proposed complex are further from SR 99 and therefore exposed to lower traffic noise levels. With implementation of mitigation measure NOI-01, it is assumed that with the incorporation of standard building materials, all units would be within the 45 dBA L_{DN} standard. Therefore, impacts associated with interior noise levels would be **less than significant with mitigation incorporated**.

Question C: Less than Significant

Construction of the project would generate elevated noise levels that may disrupt nearby NSLUs including the nearby single-family residences adjacent to the west and north and the nearby recreational vehicle park to the east. The magnitude of the impact would depend on the type of construction activity, equipment, duration of each construction phase, distance between the noise source and receiver, and any intervening structures.

Grading and demolition are typically significantly louder than other construction activities and have the greatest potential to create impacts to off-site NSLUs. Demolition would involve the use of an excavator and a dump truck to demolish the existing single-family home on site. Grading would involve the use of two scrapers.

For modeling purposes using the Roadway Construction Noise Model (RCNM), demolition activities were assumed to occur approximately 190 feet from the nearest NSLU (single-family residence to the west). For grading, the scrapers were assumed to operate at an average distance of 100 feet from the nearest NSLUs. Over the course of a day, the equipment may be closer or farther than 100 feet from the nearest residence; however, a reasonable average is 100 feet. The equipment was assumed to be in operation for 40 percent of an 8-hour construction day. Based on these assumptions, the highest impact level for an excavator and a dump truck during demolition at the nearest NSLU would be 66.5 dBA L_{EQ} and for the scrapers during grading would be 76.6 dBA L_{EQ} . Detailed results are provided in Appendix F.

Construction noise would be regulated by Title 8 – Health and Safety, Chapter 8.68 of the City's Noise Ordinance. The ordinance exempts certain activities from Chapter 8.68, including “noise sources due to the erection (including excavation), demolition, alteration or repair of any building or structure,” as long as these activities are limited to between the hours of 7 a.m. and 6 p.m. Monday through Saturday, and between the hours of 9 a.m. and 6 p.m. on Sunday. Project construction would only occur during these exempted hours and would be temporary in nature. Therefore, construction noise impacts would be **less than significant**.

Question D: Less than Significant

Generation of construction-related ground-borne vibration would primarily occur from a vibratory roller during foundation compaction. A vibratory roller creates approximately 0.210 inches per second PPV at 25 feet, according to Caltrans' Transportation and Construction Vibration Guidance Manual (Caltrans 2013). The nearest NSLUs (the single-family residences to the west and north and the recreational vehicle park to the east) would be approximately 25 feet from the use of a vibratory roller. Therefore, vibration levels would be approximately 0.210 in./sec PPV,

which is below the City's 0.5 in./sec PPV threshold, and impacts related to ground-borne vibration would be **less than significant**.

Question E: Less than Significant

According to the Federal Transit Administration's Transit Noise and Vibration Impact Assessment guidance, vibration impacts related to railroads must be assessed if a project is located within 200 feet of a conventional commuter railroad or rail rapid transit, or 150 feet of a light rail transit (FTA 2006). No rail lines or transit stations of any type are located within these distances of the proposed project boundary. Traffic along SR 99, which is approximately 200 feet from the nearest project residence, would not cause perceptible vibration at this distance. Impacts related to vibration from rail operations or highway traffic are assessed as **less than significant**.

Question F: Less than Significant

If a vibratory roller is utilized during project construction, it would generate a maximum vibration level of approximately 0.210 in./sec PPV at a distance of 25 feet. There are no historic buildings or archaeological sites located in close proximity to the project site; surrounding land uses include single-family residences, a recreational vehicle park, and industrial/commercial buildings. As there are no historic buildings or archaeological sites within close proximity to the project site, project-related construction would not expose any historic buildings or known archaeological sites to vibration levels that exceed 0.20 in./sec PPV; this impact would be **less than significant**.

MITIGATION MEASURES

NOI-01: Exterior-to-Interior Noise Level Limit.

Interior building noise levels for the proposed project shall not exceed 45 dBA L_{DN}. Wall design at buildings with interior noise levels potentially exceeding 45 dBA (i.e., impacted units with line-of-site to State Route 99 in buildings 16P-1 through 16P-8) shall be comprised of a typical 2x4 stud wall construction with 1/2-inch exterior shear wall covered with 7/8-inch thick stucco. Any variance from this wall design will require a final update of this analysis when the finished building plans are available to be submitted with the final building plans prior to the issuance of construction permits.

For residential buildings 16P-7 and 16P-8 (see Figure 6), all first and second story windows with direct line of site to SR 99 must provide a minimum window glazing with an STC 31 rating or better. Use of dual glazing with the following minimum design will normally fulfill this specification (other designs may be used provided they have a manufacturer's certified minimum STC 31 rating):

1. 1/8-inch thick exterior glass
2. 1/2-inch air gap
3. 1/8-inch thick interior glass

Appropriate means of air circulation and provision of fresh air would be provided to allow windows to remain closed for extended intervals of time so that acceptable interior noise levels can be maintained. The mechanical ventilation system would meet the criteria of the International Building Code (Chapter 12, Section 1203.3 of the 2013 California Building Code).

FINDINGS

Implementation of Mitigation Measure NOI-1 will ensure that potentially, significant environmental effects to interior noise can be mitigated to a **less than significant** level.

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PUBLIC SERVICES

Issues:	Effect will be studied in the EIR	Effect can be mitigated to less than significant	No additional significant environmental effect
<p><u>9. PUBLIC SERVICES</u></p> <p>A) Would the project result in the need for new or altered services related to fire protection, police protection, school facilities, or other governmental services beyond what was anticipated in the 2035 General Plan?</p>			X

ENVIRONMENTAL SETTING

The project site is located in the City of Sacramento and is located within the Valley Hi/North Laguna Subarea of the South Area Community Plan area. Public services are discussed individually below.

Fire

The City of Sacramento provides fire protection services within the project area. The City Fire Department operates approximately 21 stations. Fire stations are located so as to provide a maximum effective service radius of two miles (SGPU DEIR, M-1). This service radius virtually assures blanket coverage of the City. Typical response time to fire calls is four minutes (SGPU DEIR, M-1).

The project site is located within the response zone for Fire Station 7, located at 6500 Wyndham Drive, approximately 3 miles north of the project site.

Police

The City of Sacramento provides police protection service within the project area. The project site is located in District 5, Beat 5C of the Valley Hi/North Laguna service area, and would be served by the Joseph E. Rooney Police Facility located at 5303 Franklin Boulevard.

Schools and Libraries

The project site is located within the attendance areas for Irene B. West Elementary School, Edward Harris Middle School, and Monterey Trail High School in the Elk Grove Unified School District (EGUSD 2016). The project site is located in an area served by urban levels of library services.

SUMMARY OF ANALYSIS UNDER THE 2035 GENERAL PLAN MEIR, INCLUDING CUMULATIVE IMPACTS, GROWTH INDUCING IMPACTS, AND IRREVERSIBLE SIGNIFICANT EFFECTS

The MEIR evaluated the potential effects of the 2035 General Plan on various public services. These include parks (Chapter 4.9) and police, fire protection, schools, libraries and emergency services (Chapter 4.10).

The general plan provides that adequate staffing levels for police and fire are important for the long-term health, safety and well-being of the community (Goal PHS 1.1, PHS 2.1). The MEIR concluded that effects would be less than significant.

General plan policies that call for the City to consider impacts of new development on schools (see, for example, Policy ERC 1.1.2 setting forth locational criteria, and Policy ERC 1.1.4 that encourages joint-use development of facilities) reduced impacts on schools to a less-than-significant level. Impacts on library facilities were also considered less than significant (Impact 4.10-5).

MITIGATION MEASURES FROM 2035 GENERAL PLAN MEIR THAT APPLY TO THE PROJECT

None.

GENERAL PLAN POLICIES CONSIDERED MITIGATION

The following General Plan policies would avoid or lessen environmental impacts as identified in the MEIR, and are applicable to the proposed project:

- ERC 2.1.1 (Complete System)
- ERC 2.2.1 (Parks and Recreation Master Plan)
- ERC 2.2.2 (Timing of Service)
- ERC 2.2.3 (Service Level Radius)
- ERC 2.2.4 ((Park Acreage Service Level)
- ERC 2.2.5 (Meeting Service Level Goal)
- ERC 2.2.6 (Urban Park Facility Improvements)
- PHS 1.1.1 (Police Master Plan)
- PHS 1.1.2 (Response Time Standards)
- PHS 1.1.3 (Staffing Standards)
- PHS 1.1.4 (Timing of Services)
- PHS 1.1.7 (Development Review)
- PHS 1.1.8 (Development Fees for Facilities and Services)
- PHS 2.1.1 (Fire Department Strategic Plan)
- PHS 2.1.2 (Response Time Standards)
- PHS 2.1.3 (Staffing Standards)
- PHS 2.1.4 (Response Units and Facilities)
- PHS 2.1.5 (Timing of Services)
- PHS 2.1.11 (Development Fees for Facilities and Services)
- PHS 2.2.2 (Development Review)
- PHS 2.2.4 (Water Supply for Fire Suppression)
- PHS 2.2.9 (Development Review for Emergency Response)

The following policy applies specifically to the South Area Community Plan:

- Policy ERC 3.1.3 (Under-Served Areas)
- Policy SA.PHS 1.1 (Emergency Service Coverage)

STANDARDS OF SIGNIFICANCE

For the purposes of this Initial Study, an impact would be considered significant if the project resulted in the need for new or altered services related to fire protection, police protection, school facilities, or other governmental services beyond what was anticipated in the 2035 General Plan.

ANSWERS TO CHECKLIST QUESTIONS

Question A: Less than Significant

The proposed project would construct a multi-family development on a currently vacant/undeveloped property. While development of an undeveloped site would result in an increase in public service needs, the project would not result in increased demand for fire protection, police protection, or school facilities beyond that which was analyzed in the City's General Plan MEIR; the site has been envisioned for multi-family development in the General Plan and the project's public resource needs were previously analyzed in the General Plan MEIR.

Fire and Police

The project site is served by the City of Sacramento Police Department and Fire Department. The Police Department participates in project site design, and the project would be consistent with the principles of Crime prevention through environmental design (CPTED) which is a multi-disciplinary approach to deterring criminal behavior through the design of project sites. CPTED principles relate to multiple aspects of site design, including lighting and visibility. These actions will ensure that the site design minimizes enforcement activity and the resulting burden on police services. Consistent with the MEIR's conclusions, implementation of the proposed project would result in a **less than significant** impact related to fire and police protection services.

Schools and Libraries

The State of California has traditionally been responsible for the funding of local public schools. To assist in providing facilities to serve students generated by new development projects, the State passed Assembly Bill 2926 (AB 2926) in 1986. This bill allowed school districts to collect impact fees from developers of new residential and commercial/industrial building space. Development impact fees were also referenced in the 1987 Leroy Greene Lease-Purchase Act, which required school districts to contribute a matching share of project costs for construction, modernization, or reconstruction.

Senate Bill 50 (SB 50) and Proposition 1A (both of which passed in 1998) provided a comprehensive school facilities financing and reform program by, among other methods, authorizing a \$9.2 billion school facilities bond issue, school construction cost containment provisions, and an eight-year suspension of the Mira, Hart, and Murrieta court cases. Specifically, the bond funds are to provide \$2.9 billion for new construction and \$2.1 billion for reconstruction/modernization needs. The provisions of SB 50 prohibit local agencies from denying either legislative or adjudicative land use approvals on the basis that school facilities are inadequate and reinstate the school facility fee cap for legislative actions (e.g., general plan amendments, specific plan adoption, zoning plan amendments) as was allowed under the Mira, Hart, and Murrieta court cases. According to Government Code Section 65996, the development fees authorized by SB 50 are deemed to be "full and complete school facilities mitigation." These provisions are in effect until 2006 and will remain in place as long as subsequent state bonds are approved and available.

To accommodate students from new development projects, school districts may alternatively finance new schools through special school construction funding resolutions and/or agreements between developers, the affected school districts and, occasionally, other local governmental agencies. These special resolutions and agreements often allow school districts to realize school mitigation funds in excess of the developer fees allowed under SB 50.

Public schools in the vicinity of the project site are operated by the Elk Grove Unified School District. The School District has commented on several projects in the vicinity, and was asked to provide comment for the proposed project. In response, the School District sent their standard comment letter, which states:

The District is currently impacted, overcrowded, and experiencing a high rate of growth. This and other development projects will have a negative impact upon the District's existing school facilities. The District does not have the financial capability to purchase school sites nor construct and furnish needed school facilities with local funds alone. Developer fees and Mello-Roos taxes collected by the District are not sufficient or timely to satisfy the need. The District relies on statewide school bonds to provide funding necessary to construct new school facilities.

Without continued state funding, the District is in a school housing crisis. The District will continue to seek additional state funds to construct needed school facilities. Until such time as adequate facilities are available for current and projected students, students may be housed on campuses that have exceeded their intended capacity.

The project site falls within the attendance area for Irene B. West Elementary School, Edward Harris Middle School, and Monterey Trail High School. The Elk Grove Unified School District Facilities Master Plan (EGUSD 2016) identifies the construction of approximately 150 new homes between 2015 and 2025 within the attendance area for these schools – less than the 324 homes proposed under the proposed project. Table 8 presents the total number of students that the proposed project would generate based on student yield factors for apartments included in the Facility Master Plan (EGUSD 2016; Table 6-1).

Table 8		
Student Yield from Proposed Project and Affected Serving School		
Grade Level / Serving School	Number of Students per Dwelling Unit (Apartments)	Number of Students added to Attendance Area (324 Apartment Units)
K-6 / Irene B. West Elementary	0.3469	112
7-8 / Edward Harris, Jr. Middle	0.0879	29
9-12 / Monterey Trail High	0.1808	59
Total	0.6156	200

Source: Serving schools and student yield factor from EGUSD 2016 (Table 6-1 presents student yield factor for apartments)

The proposed project is projected to introduce a total of 112 elementary school students, 29 middle school students, and 59 high school students to the Elk Grove Unified School District. Table 9 presents the current capacity of each of the serving schools, and the number of residing and enrolled students for the 2015 -16 academic year, as well as the projected residing students for 2025.

Table 9				
Current Capacity and Enrollment at Serving Schools				
Grade Level / Serving School	Current Capacity	Current Residing Students (2015 – 2016)	Current Year Enrollment (2015 – 2016)	Projected Residing Students (2025)
K-6 / Irene B. West Elementary	900	785	846	705
7-8 / Edward Harris, Jr. Middle	1,296	1,031	1,176	891
9-12 / Monterey Trail High	2,268	2,294	2,303	1,844

Source: Capacity, Current Residing Students, and Current Year Enrollment from Elk Grove Unified School District Project Review/Environmental Reply Form dated January 27, 2016, prepared by the Elk Grove Unified School District. Projected Residing Students (2025) from EGUSD 2016.

Note: Shaded cell and bold font indicates student numbers exceeding the capacity of the school.

As summarized in Table 4, Irene B. West Elementary School and Edward Harris, Jr. Middle School currently operate near capacity (54 and 120 enrolled students below capacity, respectively), and Monterey Trail High School operates above capacity (35 enrolled students above capacity). The number of students are expected to decrease by 2025 for all schools. Even with the addition of homes projected in the Facility Master Plan, the number of general education students is projected to decrease by approximately 80 students by 2025 and continue to be less than the school's current capacity. The proposed project would produce approximately 112 new students to the school's attendance area. This addition of students would not exceed the current capacity of the school.

The number of general education students at the Middle School is projected to decrease by approximately 140 students and decrease by 450 students at the High School by 2025. The attendance for both schools would be less than the school's current capacity. The proposed project would produce approximately 29 new middle school students and 59 high school students. The addition of students from the project would not exceed the current capacity for either school by 2025.

Development of the proposed project would be required to pay fees to the Elk Grove Unified School District to compensate for the impacts of the residential development on local school capacity in order to maintain adequate classroom seating and facilities standards. Pursuant to SB 50, payment of fees to the Elk Grove Unified School is considered full mitigation for project impacts, including impacts related to the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, or other performance objectives for schools.

Consistent with the MEIR's conclusions, implementation of the proposed project would result in a **less than significant** impact related to school facilities.

MITIGATION MEASURES

None.

FINDINGS

The project would have no additional project-specific environmental effects relating to public services.

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RECREATION

Issues:	Effect will be studied in the EIR	Effect can be mitigated to less than significant	No additional significant environmental effect
<p>10. <u>RECREATION</u></p> <p>Would the project:</p> <p>A) Cause or accelerate substantial physical deterioration of existing area parks or recreational facilities?</p> <p>B) Create a need for construction or expansion of recreational facilities beyond what was anticipated in the 2035 General Plan?</p>			<p align="center">X</p> <p align="center">X</p>

ENVIRONMENTAL SETTING

The City provides and maintains a full range of recreational activities and park facilities for the community. The Valley Hi/North Laguna Subarea includes several park facilities: the 20-acre Shasta Community Park, Mesa Grande Park, Hite Park, Valley Hi Community Park, the North Laguna Creek Community Park and Wildlife Area, and Jacinto Creek Park and the new Valley Hi/North Laguna Library. Jacinto Creek Park is located approximately 0.1 mile north of the project site along Melville Drive, or 0.2 mile north of the project site along West Stockton Boulevard.

SUMMARY OF ANALYSIS UNDER THE 2035 GENERAL PLAN MEIR, INCLUDING CUMULATIVE IMPACTS, GROWTH INDUCING IMPACTS, AND IRREVERSIBLE SIGNIFICANT EFFECTS

Chapter 4.9 of the MEIR considered the effects of the 2035 General Plan on the City’s existing parkland, urban forest, recreational facilities and recreational services. Impacts on parks and recreation were found to be less than significant (see Impacts 4.9-1 and 4.9-2) due to Quimby Act and City Code requirements that new development offset its demand for those facilities, and General Plan Policies ERC 2.2.1 (maintaining the Parks and Recreation Master Plan), Policies ERC 2.1 through 2.2.8, 2.211, 2.216 through 2.218 (ensuring planning for and provision of parks and related facilities), ERC 2.4.1 (service levels for trails), and ERC 2.4.2, 2.5.1 and 2.5.4 (access, planning and maintenance of waterways and parkways).

MITIGATION MEASURES FROM 2035 GENERAL PLAN MEIR THAT APPLY TO THE PROJECT

None required.

GENERAL PLAN POLICIES CONSIDERED MITIGATION

The following General Plan policies would avoid or lessen environmental impacts as identified in the MEIR, and are applicable to the proposed project:

- Policy ERC 2.1.1 (Complete System)
- Policy ERC 2.2.1 (Parks and Recreation Master Plan)
- Policy ERC 2.2.2 (Timing of Service)
- Policy ERC 2.2.3 (Service Level Radius)
- Policy ERC 2.2.4 (Park Acreage Service Level). The City shall develop and maintain 1.75 acres of neighborhood and community parks and recreational facilities per 1,000 population in the Central City, and 3.5 acres of neighborhood and community parks and recreational facilities per 1,000 population in the remainder of the City.

- Policy ERC 2.2.5 (Meeting Service Level Goal) The City shall require new residential development to either dedicate land for new parks, pay a fair share of the costs for new parks and recreation facilities, and/or pay a fair share for rehabilitation or renovation of existing parks and recreation facilities.
- Policy ERC 2.2.6 (Urban Park Facility Improvements)
- Policy ERC 2.2.17 (Joint Use Facilities Co-Located)
- Policy ERC 2.4.1 (Service Levels). The City shall provide 0.5 linear mile of parks/parkways and trails/bikeways per 1,000 population.
- Policy LU 9.1.2 (New Parks and Open Spaces)
- Policy LU 9.1.3 (Connected Open Space System)
- Policy LU 9.1.4 (Open Space Buffers)

STANDARDS OF SIGNIFICANCE

For purposes of this Initial Study, impacts to recreational resources are considered significant if the proposed project would do either of the following:

- cause or accelerate substantial physical deterioration of existing area parks or recreational facilities; or
- create a need for construction or expansion of recreational facilities beyond what was anticipated in the 2035 General Plan.

ANSWERS TO CHECKLIST QUESTIONS

Question A and B: Less than Significant

The proposed project would provide housing for an estimated 680 residents (2.1 residents per household x 324 households). While the proposed project would result in an increase in the population of the area, which would increase demand on existing recreational facilities in the area, the site has been envisioned for multi-family development in the General Plan, and the project's impacts on parks and recreational facilities were in the General Plan MEIR. The proposed project would not result in impacts in addition to those identified in the General Plan MEIR. General Plan policies have been adopted to ensure adequate parks and recreational facilities are provided to accommodate increases in residents (Policies ERC 2.2.1, 2.2.2, 2.2.4, 2.2.5, 2.2.6, 2.2.7, 2.2.8, 2.2.9, 2.4.2, 2.4.3, and 2.5.3, 2.5.4). The General Plan includes park and trail service level goals, of providing 5 acres of parks and other recreational facilities per 1,000 population, and 0.5 linear mile of parks/parkways and trails/bikeways per 1,000 population.

While the residents of the proposed project would be expected to use recreational facilities in the City, the development also includes recreational facilities for use by its residents, including 370 square feet of open space/outdoor use area per unit – which exceeds the City requirements of 100 square feet of open space. A 5,300 square foot clubhouse would be located near the Sheldon Road entrance to the development. Open space (Open Space 1) would be provided at the clubhouse, with a resort style pool furnished with cabanas and landscaped seating areas associated with the clubhouse. A second area of open space (Open Space 2) would be provided near the center of the development, and would feature bocce courts, a gazebo, fire pits, barbecue areas, and turf areas. The third outdoor use area (Open Space 3) would be located in the northern portion of the site, where additional fire pits and seating areas would be provided. A dog park would be established in the northeast portion of the project site, adjacent to the proposed retention basin north of the Masters Street Extension. All units in the development would have access to a walking trail following the perimeter of the development, and which would provide a pedestrian route to all of the amenity areas and the clubhouse.

These amenities would lessen the impacts on recreational facilities in the City from the proposed project.

Based on the relatively small increase in the number of residents in the City and the recreational facilities that would be provided for the residents of the proposed project, the proposed project would not result in a substantial increase in the use or demand for neighborhood or regional parks or other recreational facilities and the project would not create a need for the construction or expansion of recreational facilities beyond what was anticipated in the 2035 General Plan. Further, the City charges impact fees to all new development to abate a project's impacts on parks and recreational facilities in the City. These impact fees and the associated-funded improvements would reduce any impacts from the project to less than significant. Impacts related to recreational facilities would be **less than significant**.

MITIGATION MEASURES

None.

FINDINGS

The project would have no additional project-specific environmental effects relating to recreation.

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TRANSPORTATION AND CIRCULATION

Issues:	Effect remains significant with all identified mitigation	Effect can be mitigated to less than significant	No additional significant environmental effect
11. <u>TRANSPORTATION AND CIRCULATION</u>			
Would the project:			
A) Roadway segments: degrade peak period Level of Service (LOS) from A, B, C or D (without the project) to E or F (with project) or the LOS (without project) is E or F, and project generated traffic increases the Volume to Capacity Ratio (V/C ratio) by 0.02 or more?			X
B) Intersections: degrade peak period level of service from A, B, C or D (without project) to E or F (with project) or the LOS (without project) is E or F, and project generated traffic increases the peak period average vehicle delay by five seconds or more?			X
C) Freeway facilities: off-ramps with vehicle queues that extend into the ramp's deceleration area or onto the freeway; project traffic increases that cause any ramp's merge/diverge level of service to be worse than the freeway's level of service; project traffic increases that cause the freeway level of service to deteriorate beyond level of service threshold defined in the Caltrans Route Concept Report for the facility; or the expected ramp queue is greater than the storage capacity?			X
D) Transit: adversely affect public transit operations or fail to adequately provide for access to public?		X	
E) Bicycle facilities: adversely affect bicycle travel, bicycle paths or fail to adequately provide for access by bicycle?		X	
F) Pedestrian: adversely affect pedestrian travel, pedestrian paths or fail to adequately provide for access by pedestrians?		X	

The discussion of transportation and circulation is based on a Transportation Analysis prepared for the project (DKS 2015), and a technical memorandum (DKS 2016), which are included as Appendix G.

ENVIRONMENTAL SETTING

Roadway System

The project site is bordered by Sheldon Road to the south and West Stockton Boulevard to the east. Existing developments are located to the west and north. SR 99 is located east of West Stockton Boulevard. Regional access to the site is provided primarily by SR 99. Local access to the site is Sheldon Road, West Stockton Boulevard, and would be available by a proposed extension of Masters Street.

Brief descriptions of the roadways serving the project site are provided below:

- SR 99 is a north-south limited access freeway, with three through lanes in each direction near the site. A full interchange with Sheldon Road is located near the project site. To the north, SR 99 continues to Central City Sacramento. To the south, SR 99 provides access to Elk Grove, southern Sacramento County, and communities to the south in the Central Valley.
- Sheldon Road is an east-west roadway with three through lanes in each direction adjacent to the site. It is designated as an arterial roadway in both the Sacramento and Elk Grove General Plans. To the west, Sheldon Road curves to the north and becomes Center Parkway, continuing through the City of Sacramento. To the east, Sheldon Road continues through the City of Elk Grove to Grant Line Road.
- West Stockton Boulevard is a collector roadway in the City, which parallels the west side of SR 99 from Bruceville Road northwest of the project site, to Sheldon Road east of the project site. Adjacent to the project site, the road has one travel lane in each direction.
- Masters Street is a local east-west residential street northwest of the project site which currently terminates at Melville Drive at the western site boundary. It provides access to Bruceville Road indirectly via Damascas Drive. Melville Drive, a residential street northwest of the project site, begins at Masters Street and continues north and then east to West Stockton Boulevard.
- Praline Way and Splendid Way are east-west residential streets west of the project site that terminate in dead-ends at the western project site boundary.
- Jocelyn Way is a north-south roadway from Masters Street to Sheldon Road that intersects Sheldon Road west of the project site. South of Sheldon Road, the roadway continues southward as Lewis-Stein Road where it terminates at Big Horn Boulevard.

Pedestrian System

Sidewalks exist along both sides of Sheldon Road from Jocelyn Way/Lewis Stein Road to approximately two miles east of SR 99. West of Jocelyn Way/Lewis Stein Road the sidewalk continues westward along the north side of the road. An off-street bike/pedestrian path follows the south side of the street. There are crosswalks with pedestrian signal heads at the Sheldon Road intersections with Jocelyn Way/Lewis Stein Road and with West Stockton Boulevard. These crosswalks provide access from the project site to the commercial shopping area located across Sheldon Road.

Along West Stockton Boulevard, there are sidewalks along both sides of the roadway from Sheldon Road to just north of the site access location. North of that location, pedestrian travel is via paved shoulders and intermittent sidewalks along the west side of the roadway.

The adjacent residential neighborhoods to the north and west of the project site include a complete sidewalk system on both sides of each street. These sidewalks provide a continuous path to the Irene B. West Elementary School, located about one-third mile northwest of the

intersection of Masters Street and Melville Drive near the northwest corner of the project site. Continuous sidewalks are also provided to the Jacinto Creek Park.

Bicycle System

Numerous bicycle facilities are in the project area. On street bike lanes are located along both sides of Sheldon Road from Center Parkway west of the project site to Waterman Road east of SR 99. As previously described, an off-street bike/pedestrian path follows the south side of Sheldon Road from Jocelyn Way/Lewis Stein Road, west to Bruceville Road.

On-street bike lanes are located along both sides of Jocelyn Way/Lewis Stein Road along its entire length from Masters Street to Big Horn Boulevard, and along Masters Street for its entire length. An off-street bike/pedestrian path follows Jacinto Creek north of the project site. It begins at Jacinto Creek Park/Irene B. West Elementary School and continues westward across Bruceville Road and Center Parkway. The off-street bikeway can be accessed from the project site via Melville Drive and Jocelyn Way.

Transit System

The Sacramento Regional Transit (RT) District operates 67 bus routes and 38.6 miles of light rail over a 418 square mile service area. No RT bus service is near the project site. The Blue Line light rail service is located at the Cosumnes River College approximately 1 mile northwest of the project site, and provides connectivity to Central Sacramento. The City of Elk Grove's *e-tran* provides both local and commuter public transit service. The routes are coordinated with RT buses and light rail, and South County Transit/Link to areas outside of the City. Two *e-tran* commuter routes (Commuter Routes 59 and 60 – northbound morning commute and southbound evening commute) provide service near the site from a park-and-ride lot located at East Stockton Boulevard south of Sheldon Road. Local Route 162 (Cosumnes River College to Elk Grove Boulevard and Elk-Grove-Florin Road) provides service along Sheldon Road, past the project site.

EXISTING INTERSECTION OPERATIONS

Existing intersection delay and level of service (LOS) calculated for the study intersections are presented in Table 10. The intersection LOS definitions and evaluation criteria are described the "Methodology" and "Intersection Analysis" sections of the traffic study.

Intersections 1 – 3 do not exist – they will be constructed as part of the project – therefore, there is no existing LOS data for those intersections. Under existing conditions, Jocelyn Way/Lewis Stein Road and Sheldon Road intersection (Intersection 4) operates at LOS D in the a.m. and LOS F in the p.m. The West Stockton Boulevard/SR 99 southbound ramp and Sheldon Road intersection (Intersection 5) operates at LOS C in the a.m. and LOS E in the p.m. SR 99 Northbound Ramps and Sheldon Road intersection (Intersection 6) operates at LOS B in the a.m. and LOS A in the p.m.

Based upon information gathered by the Institute of Transportation Engineers (ITE) *Trip Generation, 9th Edition*, the proposed project is expected to generate 2,087 daily trips, with 32 entering and 130 exiting during the a.m. peak hour (162 total), and 127 entering and 69 exiting during the p.m. peak hour (196 total) (DKS Associates 2015).

Table 11 presents project vehicle miles of travel for the a.m. peak hour, p.m. peak hour, and daily (weekday) time periods.

Table 10
Existing Plus Project Intersection Operating Conditions

Intersection	Signal?	Existing				Existing Plus Project			
		A.M. Peak Hour		P.M. Peak Hour		A.M. Peak Hour		P.M. Peak Hour	
		Delay (Seconds)	LOS	Delay (Seconds)	LOS	Delay (Seconds)	LOS	Delay (Seconds)	LOS
1. Driveway 1 and Sheldon Road (intersection average) <i>Southbound Right Turn</i>	No	--	--	--	--	0.3	A	0.2	A
		--	--	--	--	12.7	B	16.4	C
2. Melville Drive and Masters Street (intersection average) <i>Southbound</i> <i>Eastbound Left Turn</i>	No	--	--	--	--	3.2	A	4.3	A
		--	--	--	--	8.5	A	8.7	A
		--	--	--	--	7.3	A	7.3	A
3. Melville Drive and Masters Street (intersection average) <i>Northbound Left Turn</i> <i>Eastbound</i>	No	--	--	--	--	1.5	A	1.4	A
		--	--	--	--	7.7	A	7.7	A
		--	--	--	--	10.1	B	9.6	A
4. Lewis Stein Road / Jocelyn Way and Sheldon Road	Yes	38.5	D	146.0	F	44.5	D	150.9	F
5. West Stockton Boulevard / SR 99 Southbound Ramps and Sheldon Road	Yes	32.5	C	60.7	E	41.2	D	65.3	E
6. SR 99 Northbound Ramps and Sheldon Road	Yes	16.2	B	9.2	A	15.1	B	9.3	A

Source: DKS Associates 2015

Table 11
Estimated Project Vehicle Miles of Travel

Time Period	Vehicle Trips	Average Trip Length (miles)	Vehicle Miles of Travel
AM Peak Hour	162	8.78	1,422
PM Peak Hour	196	7.04	1,380
Daily	2,087	7.28	15,193

Source: DKS 2016

SUMMARY OF ANALYSIS UNDER THE 2035 GENERAL PLAN MEIR, INCLUDING CUMULATIVE IMPACTS, GROWTH INDUCING IMPACTS, AND IRREVERSIBLE SIGNIFICANT EFFECTS

Transportation and circulation were discussed in the MEIR in Chapter 4.12. Various modes of travel were included in the analysis, including vehicular, transit, bicycle, pedestrian and aviation components. The analysis included consideration of roadway capacity and identification of levels of service, and effects of the 2035 General Plan on the public transportation system. Provisions of the 2035 General Plan that provide substantial guidance include Goal Mobility 1.1, calling for a transportation system that is effectively planned, managed, operated and maintained, promotion of multimodal choices (Policy M 1.2.1), identification of level of service standards (Policy M 1.2.2), support for expansion of Caltrans facilities consistent with the SACOG MTP/SCS (Policy M 1.5.6), requirement to work with Caltrans and adjacent jurisdictions to identify funding for improvements (Policy M 1.5.7); and development of streets (Goal M 4.2).

The MEIR concluded that most traffic impacts would be less than significant with implementation of General Plan policies; however, impacts on freeway segments (Impact 4.12-4) and impacts on roadway segments (Impact 4.12-3) in adjacent jurisdictions were found to be significant and unavoidable.

MITIGATION MEASURES FROM 2035 GENERAL PLAN MEIR THAT APPLY TO THE PROJECT

None.

GENERAL PLAN POLICIES CONSIDERED MITIGATION

The following General Plan policies would avoid or lessen environmental impacts as identified in the MEIR, and are applicable to the proposed project:

- Policy M 1.1.2 (Transportation System). The City shall manage to travel system to ensure safe operating conditions.
- Policy M 1.1.4 (Facilities and Infrastructure). The City shall effectively operate and maintain transportation facilities and infrastructure to preserve the quality of the system.
- Policy M 1.2.2 (LOS Standard). The City shall implement a flexible, context-sensitive Level of Service (LOS) standard, and will measure traffic operations against the vehicle LOS thresholds established in this policy. The City will measure Vehicle LOS based on the methodology contained in the latest version of the Highway Capacity Manual (HCM) published by the Transportation Research Board. The City's specific vehicle LOS thresholds have been defined based on community values with respect to modal priorities, land use context, economic development, and environmental resources and constraints. As such, the City has established variable LOS thresholds appropriate for

the unique characteristics of the City's diverse neighborhoods and communities. The City will strive to operate the roadway network at LOS D or better for vehicles during typical weekday conditions, including AM and PM peak hour with the following exceptions described below and mapped on [2035 General Plan] Figure M-1:

A. Core Area (Central City Community Plan Area) - LOS F allowed.

B. Priority Investment Areas - LOS F allowed.

C. LOS E Roadways - LOS E is allowed for the following roadways because expansion of the roadways would cause undesirable impacts or conflict with other community values.

- 65th Street: Elvas Avenue to 14th Avenue
- Arden Way: Royal Oaks Drive to I-80 Business
- Broadway: Stockton Boulevard to 65th Street
- College Town Drive: Hornet Drive to La Rivera Drive
- El Camino Avenue: I-80 Business to Howe Avenue
- Elder Creek Road: Stockton Boulevard to Florin Perkins Road
- Elder Creek Road: South Watt Avenue to Hedge Avenue
- Fruitridge Road: Franklin Boulevard to SR 99
- Fruitridge Road: SR 99 to 44th Street
- Howe Avenue: El Camino Avenue to Auburn Boulevard
- Sutterville Road: Riverside Boulevard to Freeport Boulevard

LOS E is also allowed on all roadway segments and associated intersections located within ½ mile walking distance of light rail stations.

D. Other LOS F Roadways - LOS F is allowed for the following roadways because expansion of the roadways would cause undesirable impacts or conflict with other community values.

- 47th Avenue: SR 99 to Stockton Boulevard
- Arcade Boulevard: Marysville Boulevard to Roseville Road
- Carlson Drive: Moddison Avenue to H Street
- El Camino Avenue: Grove Avenue to Del Paso Boulevard
- Elvas Avenue: J Street to Folsom Boulevard
- Elvas Avenue/56th Street: 52nd Street to H Street
- Florin Road: Havenside Drive to Interstate 5
- Florin Road: Interstate 5 to Freeport Boulevard
- Folsom Boulevard: 47th Street to 65th Street
- Folsom Boulevard: Howe Avenue to Jackson Highway
- Folsom Boulevard: US 50 to Howe Avenue
- Freeport Boulevard: Sutterville Road (North) to Sutterville Road (South)
- Freeport Boulevard: 21st Street to Sutterville Road (North)
- Freeport Boulevard: Broadway to 21st Street
- Garden Highway: Truxel Road to Northgate Boulevard
- H Street: Alhambra Boulevard to 45th Street
- H Street 45th: Street to Carlson Drive
- Hornet Drive: US 50 Westbound On-ramp to Folsom Boulevard
- Howe Avenue: US 50 to Fair Oaks Boulevard
- Howe Avenue: US 50 to 14th Avenue
- Raley Boulevard: Bell Avenue to Interstate 80

- South Watt Avenue: US 50 to Kiefer Boulevard
- West El Camino Avenue: Northgate Boulevard to Grove Avenue

E. If maintaining the above LOS standards would, in the City's judgement be infeasible and/or conflict with the achievement of other goals, LOS E or F conditions may be accepted provided that provisions are made to improve the overall system, promote non-vehicular transportation, and/or implement vehicle trip reduction measures as part of a development project or a city-initiated project. Additionally, the City shall not expand the physical capacity of the planned roadway network to accommodate a project beyond that identified in [2035 General Plan] Figure M4 and M4a (2035 General Plan Roadway Classification and Lanes).

- Policy M 1.2.3 (Transportation Evaluation). The city shall evaluate discretionary projects for potential impacts to traffic operations, traffic safety, transit service, bicycle facilities, and pedestrian facilities, consistent with the City's Traffic Study Guidelines.

STANDARDS OF SIGNIFICANCE

For purposes of this Initial Study, impacts resulting from changes in transportation or circulation may be considered significant if construction and/or implementation of the proposed project would result in the following impacts that remain significant after implementation of General Plan policies or mitigation from the General Plan MEIR:

Roadway Segments

- the traffic generated by a project degrades peak period Level of Service (LOS) from A, B, C or D (without the project) to E or F (with project) or
- the LOS (without project) is E or F, and project generated traffic increases the Volume to Capacity Ratio (V/C ratio) by 0.02 or more.

Intersections

- the traffic generated by a project degrades peak period level of service from A, B, C or D (without project) to E or F (with project) or
- the LOS (without project) is E or F, and project generated traffic increases the peak period average vehicle delay by five seconds or more.

Freeway Facilities

Caltrans considers the following to be significant impacts.

- off-ramps with vehicle queues that extend into the ramp's deceleration area or onto the freeway;
- project traffic increases that cause any ramp's merge/diverge level of service to be worse than the freeway's level of service;
- project traffic increases that cause the freeway level of service to deteriorate beyond level of service threshold defined in the Caltrans Route Concept Report for the facility; or
- the expected ramp queue is greater than the storage capacity.

Transit

- adversely affect public transit operations or
- fail to adequately provide for access to public transit.

Bicycle Facilities

- adversely affect bicycle travel, bicycle paths or
- fail to adequately provide for access by bicycle.

Pedestrian Circulation

- adversely affect pedestrian travel, pedestrian paths or
- fail to adequately provide for access by pedestrians.

ANSWERS TO CHECKLIST QUESTIONS

Questions A and B: Less than Significant with Mitigation

The study intersections included three existing intersections, and three intersections that would be developed under the proposed project (refer to Table 4). Existing LOS were determined for the three existing study intersections. Existing plus project intersection delay and LOS were calculated for all six of the study intersections and compared against existing conditions. During the a.m. peak hour, all of the three existing study intersections meet the LOS D goal. During the p.m. peak hour, intersections 4 and 5 (Lewis Stein Road / Jocelyn Way and Sheldon Road, and West Stockton Boulevard/SR 99 Southbound Ramps, and Sheldon Road) currently operate at worse than the LOS D goal.

With construction of the proposed project, all study intersections would operate at LOS D or better during the a.m. peak hour. During the p.m. peak hour, intersection 4 (Lewis Stein Road / Jocelyn Way and Sheldon Road) would operate at LOS F, and intersection 5 (West Stockton Boulevard/SR 99 Southbound Ramps and Sheldon Road) would operate at LOS E. The remaining intersections would operate at LOS D or better. Intersection 4 operates at LOS F during the p.m. peak hour under existing conditions, and intersection 5 operates at LOS E during the p.m. peak hour under existing conditions. The increases in average delay at each of the intersections would be less than five seconds. Therefore, while implementation of the proposed project would result in a slight increase in traffic volumes at the study intersections, the increase would not result in changes in the LOS at those intersections when compared with the existing operations, nor would the delay exceed five seconds. This would be a less than significant impact, and no mitigation would be necessary.

While project operation would not result in potentially significant impacts to LOS at the study intersections, construction activities may result in temporary disruptions to the transportation network near the project site, including temporary lane and/or street closures. Heavy vehicles will access the site and may need to be staged for construction. These activities could result in degraded roadway operating conditions, which would be a **potentially significant** impact. Mitigation Measure TRA-01 would be implemented to avoid and minimize construction-related impacts on transportation and circulation, and impacts would be reduced to less than significant with mitigation incorporated.

Question C: Less than Significant

SR 99 runs north-south east of the project site. A full interchange with Sheldon Road is located east of the project site. The interchange intersections were analyzed as part of the traffic study for the proposed project. As described above, intersection 5 (West Stockton Boulevard/SR 99 Southbound Ramps and Sheldon Road) currently operates at LOS C during the a.m. peak hour, and LOS E during the p.m. peak hour. With construction of the proposed project, the intersection would operate at LOS D in the a.m., and would continue to operate at LOS E in the p.m.

Intersection 6 (SR 99 Northbound Ramp and Sheldon Road) currently operates at LOS B during the a.m. peak hour and LOS A during the p.m. peak hour, and would continue to operate at the same LOS following construction of the proposed project.

Table 12 summarizes queuing at the SR 99 exit ramp intersections. None of the queues are projected to exceed the available storage capacity.

Table 12				
Existing Plus Project Peak Hour Freeway Ramp Termini Queuing				
Direction	Location	Available Storage Length (feet per lane)	Maximum Queue Length (feet per lane)	
			A.M. Peak Hour	P.M. Peak Hour
Northbound SR 99 Exit to Sheldon Road	Single left turn lane	590	56	87
	Shared left/right turn lane	590	41	73
	Single right turn lane	590	37	69
Southbound SR 99 Exit to Sheldon Road	Double left turn lane	310	59	160
	Single through lane	310	17	21
	Double right turn lane	310	22	28

Source: DKS 2016

The proposed project and the associated traffic would not result in significant impacts to the freeway ramp queue, or to the LOS of the freeway ramps exceeding the level of significance threshold defined in the Caltrans Route Concept Report. Impacts related to freeway facilities would be **less than significant**.

Questions D, E, and F: Less than Significant with Mitigation

Implementation of the proposed project would not result in any modification of, or interference with, any existing or planned pedestrian, bicycle, or transit facility in the Cities of Sacramento or Elk Grove. The project would add pedestrian, bicycle, and transit demands, but existing facilities in the vicinity were determined to adequately meet the needs of the project along with current needs. Existing bicycle facilities are located throughout the area, and no additional bicycle facilities are incorporated into the proposed project. The proposed project would enhance the existing pedestrian facilities by incorporating walkways into the design. Impacts related to pedestrian, bicycle, and transit facilities from operation of the proposed project would be less than significant.

While project operation would not result in potentially significant impacts pedestrian, bicycle, and transit facilities, construction activities may result in temporary disruptions to the transportation network near the project site, including temporary lane and/or street closures, sidewalk closures, and bikeway closures. Pedestrian, bicycle, and transit access may be disrupted, which would result in a **potentially significant** impact. Mitigation Measure TRA-01 would be implemented to avoid and minimize construction-related impacts on transportation and circulation, and impacts would be reduced to less than significant with mitigation incorporated.

MITIGATION MEASURES

TRA-01: Prepare a Construction Traffic and Parking Management Plan

- Consistent with City Code 12.20.030, the project applicant shall prepare a construction traffic and parking management plan prior to the beginning of construction to the satisfaction of the City Traffic Engineer. The plan shall ensure that acceptable operating conditions on local roadways and freeway facilities are maintained. At a minimum, the plan shall include:
 - The number of truck trips, time, and day of street closures.

- Time of day of arrival and departure of trucks.
- Limitations on the size and type of trucks, provision of a staging area with a limitation on the number of trucks that can be waiting.
- Provision of a truck circulation pattern
- Provision of driveway access plan so that save vehicular, pedestrian, and bicycle movements are maintained (e.g., steel plates, minimum distances of open trenches, and private vehicle pick up and drop off areas).
- Maintain safe and efficient access routes for emergency vehicles.
- Manual traffic control when necessary.
- Proper advance warning and posted signage concerning street closures.
- Provisions for pedestrian safety.
- A copy of the construction traffic management plan shall be submitted to local emergency response agencies and these agencies shall be notified at least 14 days before the commencement of construction that would partially or fully obstruct roadways.

FINDINGS

With implementation of Mitigation Measure TRA-1, potential impacts to transportation and circulation during construction of the proposed project would be mitigated to a **less than significant** level.

UTILITIES

Issues:	Effect will be studied in the EIR	Effect can be mitigated to less than significant	No additional significant environmental effect
12. UTILITIES AND SERVICE SYSTEMS			
Would the project:			
A) Result in the determination that adequate capacity is not available to serve the project's demand in addition to existing commitments?			X
B) Require or result in either the construction of new utilities or the expansion of existing utilities, the construction of which could cause significant environmental impacts?			X

ENVIRONMENTAL SETTING

Stormwater Drainage and Sanitary Sewer

The Sacramento Regional County Sanitation District (SRCSD) provides sewage treatment for the cities of Folsom and Sacramento and County Sanitation District (CSD)-1, which serve the unincorporated urban portions of the County and portions of Sacramento. The SRCSD is responsible for the operation of all regional interceptors and wastewater treatment plants, while local collection districts operate the systems that transport less than 10 million gallons of waste flow daily. The proposed development is located within the SASD. Wastewater would be collected by the SASD, which provides collection and treatment services for some portions of the City that are served by the separate sewer system (as opposed to the combined sewer system that serves the older Central City area). Wastewater generated in this vicinity of the project is collected by trunk facilities in the SASD and then conveyed via interceptors to the Sacramento Regional Wastewater Treatment Plant. The project site is also within the Jacinto Creek Planning Area, for which there is a fee district (Jacinto Creek Planning Fee District) and a drainage master plan. As previously mentioned (Section 2 of this Initial Study), the fee district was formed to provide financing for the backbone infrastructure required to support development in the area. The facilities include a storm drainage channel and detention basins, major roadways, traffic signals, and water conveyance pipelines. The project site is located in Drainage Basin G269, and is within the Jacinto Creek Planning Area Watershed 5.

Water Supply

Water service for the project would be provided by the City of Sacramento. The City provides domestic water service from a combination of surface water and groundwater sources: the American River, Sacramento River, and groundwater wells (pumped from the North and South American Subbasins). Water from the American River and Sacramento River is diverted by two water treatment plants: the Sacramento River Water Treatment Plant (SRWTP), located at the southern end of Bercut Drive approximately 11.5 miles northwest of the project site, and the E.A. Fairbairn Water Treatment Plant (FWTP), located at the northeast corner of State University Drive South and College Town Drive approximately 7.7 miles north of the project site. The FWTP and the SRWTP divert water from the American and Sacramento rivers, respectively. Water diverted from the Sacramento and American Rivers is treated, stored in storage reservoirs, and pumped to customers via a conveyance network.

The City of Sacramento complies with the California Water Code, which requires urban water suppliers to prepare and adopt Urban Water Management Plan (UWMP) every five years. The most recent UWMP was adopted in 2010, and includes an analysis of water demand sufficiency

under normal, single dry year, and multiple dry year scenarios. Water supply and demand projections include future planned development under the 2030 General Plan. Based, in part, on these projections, the City possesses sufficient water supply entitlements and treatment capacity during normal, dry, and multiple dry years to meet the demands of its customers up to the year 2035. It is important to note that this assumes that wells and surface water treatment capacity will be rehabilitated and expanded as needed (City of Sacramento 2011).

Solid Waste Disposal

Commercial solid waste materials collected by the Solid Waste Division of the City Department of Utilities are sorted at either the Sacramento Recycling and Transfer Station (owned by BLT Enterprise) or the North Area Transfer Station, owned by the County of Sacramento Public Works Department; City waste transported from the City's transfer stations is then transported to Lockwood Landfill in Lockwood, Nevada. The City of Sacramento General Plan MEIR indicates that the City landfills have sufficient capacity for full buildout of the 2035 General Plan.

Electricity and Natural Gas

The Sacramento Municipal Utility District (SMUD) is responsible for the generation, transmission, and distribution of electrical power to its 900 square mile service area, which includes most of Sacramento County and a small portion of Placer County. SMUD buys and sells energy and capacity on a short-term basis to meet load requirements and reduce costs. The Pacific Gas & Electric Company (PG&E) provides natural gas service to residents and businesses within the City of Sacramento.

SUMMARY OF ANALYSIS UNDER THE 2035 GENERAL PLAN MEIR, INCLUDING CUMULATIVE IMPACTS, GROWTH INDUCING IMPACTS, AND IRREVERSIBLE SIGNIFICANT EFFECTS

The MEIR evaluated the effects of development under the 2035 General Plan on water supply, sewer and storm drainage, solid waste, electricity, natural gas and telecommunications (see Chapter 4.11).

The MEIR evaluated the impacts of increased demand for water that would occur with development under the 2035 General Plan. Policies in the General Plan would lessen the impacts on water supply, but the increased demand and need for new water facilities would remain significant and unavoidable impacts (Impacts 4.11-1 and 4.11-2). The potential need for expansion of wastewater and stormwater drainage conveyance facilities was found to be less than significant (Impacts 4.11-3), as was the need to expand wastewater treatment facilities (Impact 4.1-4). Impacts on solid waste facilities were less than significant (Impact 4.11-5). Implementation of energy efficient standards as set forth in Titles 20 and 24 of the California Code of Regulations for residential and non-residential buildings and General Plan Policies U 6.1.1 through 6.1.17 would reduce effects for energy to a less than significant level (Impact 4.11-6).

MITIGATION MEASURES FROM 2035 GENERAL PLAN MEIR THAT APPLY TO THE PROJECT

None available.

GENERAL PLAN POLICIES CONSIDERED MITIGATION

The following General Plan policies would avoid or lessen environmental impacts as identified in the MEIR, and are applicable to the proposed project:

- Policy U 1.1.1 (Provision of Adequate Utilities)
- Policy U 1.1.4 (Timing of Urban Expansion)
- Policy U 1.1.5 (Growth and Level of Service)
- Policy U 2.1.2 (Increase Water Supply Sustainability)

- Policy U 2.1.3 (Water Treatment Capacity and Infrastructure)
- Policy U 2.1.5 (Comprehensive Water Supply Plans)
- Policy U 2.1.9 (New Development)
- Policy U 2.1.10 (Water Conservation Standards)
- Policy U 2.1.11 (Water Conservation Programs)
- Policy U 2.1.15 (Landscaping)
- Policy U 2.1.18 (Future Water Supply)
- Policy U 3.1.1 (Sufficient Service)
- Policy U 3.1.2 (New Developing Areas)
- Policy U 4.1.1 (Adequate Drainage Facilities)
- Policy U 4.1.6 (New Development)
- Policy U 5.1.2 (Landfill Capacity)
- Policy U 5.1.3 (Transfer Station)
- Policy ER 1.1.5 (Limit Stormwater Peak Flows)
- Policy ER 1.1.6 (Post-Development Runoff)

STANDARDS OF SIGNIFICANCE

For the purposes of this Initial Study, an impact would be considered significant if the project resulted in the need for new or altered services related to fire protection, police protection, or school facilities beyond what was anticipated in the 2035 General Plan:

- result in the determination that adequate capacity is not available to serve the project's demand in addition to existing commitments or
- require or result in either the construction of new utilities or the expansion of existing utilities, the construction of which could cause significant environmental impacts.

ANSWERS TO CHECKLIST QUESTIONS

Question A: Less than Significant

Wastewater

The proposed project would provide housing for an estimated 680 residents (2.1 residents per household x 324 households). Implementation of the proposed project would increase the demand for sewer conveyance capacity within the project service area. The project area is located in the Sacramento Area Sewer District service area. Based on the population flow factor identified in Section 4.11, Public Utilities, of the MEIR, the proposed project would result in a wastewater flow of 90,032 gallons per day (132.4 gallons per capita per day x 680 residents).

The proposed project would be required to connect to the City's water distribution, storm water drainage. The Department of Utilities has reviewed the project and has placed conditions on the project to ensure the project is consistent with the JCPA Infrastructure and Utilities Plan and the JCPA Drainage Master Plan. SASD has reviewed the application and has placed conditions on the project ensuring construction of new infrastructure. All new infrastructure would be designed and constructed to City and SASD Design Standards. Each parcel with a sewage source shall have a separate connection to the SASD public sewer system. If there is more than one building in any single parcel and the parcel is not proposed for split, then each building on that parcel shall have a separate connection to a private on-site sewer line or SASD public sewer line. In order to obtain sewer service for this project, construction of onsite and offsite sewer infrastructure will be required. Sewer infrastructure shall be constructed as per the approved sewer study. SASD shall require an approved Subdivision Level (Level 3) sewer study prior to

recording of Final Map or submittal of improvement plans for plan check to SASD, whichever comes first. The sewer study shall demonstrate the quantity of discharge and any “flow through sewage” along with appropriate pipe sizes and related appurtenances from this subject and other upstream areas and shall be done in accordance with the SASD’s most recent “Minimum Sewer Study Requirements”. The study shall be done on a no “Shed-Shift” basis unless approved by SASD in advance and in compliance with the SASD Design Standards. Developing this property will require payment of sewer impact fees to both SASD and SRCSD, in accordance with each District’s Ordinances.

The City is responsible for managing and maintaining its wastewater collection system, and ensuring adequate facilities in accordance with the 2035 General Plan. While the proposed project would result in an increase in the population of the area, which would increase demand on the wastewater facilities, the site has been envisioned for multi-family development in the General Plan, and the project’s impacts on wastewater facilities were contemplated in the General Plan MEIR. The project would result in a **less than significant** impact on wastewater facilities.

Stormwater

Development of the project site would introduce impervious surfaces to the site which can increase storm water runoff. The project includes the installation of an underground storm drain system with inlets throughout the project site. Storm water from the project site would be collected by the project’s storm drain system and directed to existing storm drains in Masters Street and Praline Way west of the project site. A water quality basin would be installed in the northern portion of the project site, north of the Masters Street Extension through the project site. Overflows from the basin would enter the existing storm drain in Melville Drive west of the project site.

During construction of the project, the project applicant would be required to comply with the State “NPDES General Permit for Stormwater Discharges Associated with Construction Activity” (State Permit). To comply with the State Permit, the applicant would need to file a Notice of Intent with the State Water Resources Control Board and prepare a Stormwater Pollution Prevention Plan (SWPPP) prior to construction. The SWPPP would be reviewed by the Department of Utilities prior to the issuance of a grading permit or approval of improvement plans to assure the following items are included: 1) vicinity map, 2) site map, 3) list of potential pollutant sources, 4) type and location of erosion and sediment BMPs, 5) name and phone number of person responsible for SWPPP, and 6) signed certification page by property owner or authorized representative. Post-construction stormwater quality control measures would be required to minimize the increase of urban runoff pollution caused by development of the area. Source control and onsite treatment measures would be required (refer to “Guidance Manual for On-site Stormwater Quality Control Measures” January 2000 for appropriate source control measures).

The City is responsible for maintaining its stormwater system and ensuring adequate capacity for build out of the 2035 General Plan. As previously described, the proposed project is consistent with the land use envisioned in the General Plan, and the potential impacts to stormwater facilities were contemplated in the General Plan MEIR. The project would result in a **less than significant** impact on stormwater facilities.

Water

The 2010 UWMP for the City projects the annual water per capita demand for year 2015 to be 256 gallons per capita per day (City of Sacramento 2011). As a result, the proposed project could require a maximum 224,000 gallons of water per day (875 residents x 256 gallons of water).

While the proposed project would result in an increase in the population of the area, which would increase demand on water, the site has been envisioned for multi-family development in the General Plan, and the project's impacts on water resources and facilities were contemplated in the General Plan MEIR. The 2010 UWMP considered these projections during normal, dry, and multiple dry years. Thus, the project's water demand would be met by the city's existing water right permits and U.S. Bureau of Reclamation contract. In addition, according to the 2010 UWMP, the City's water supply would be within the City's water demand and treatment capability during a multi-dry year in 2015, 2020, 2025, 2030, and 2035. Thus, the project would have a **less than significant** impact related to water supply.

The project has been designed to minimize water use to the maximum extent practicable, including incorporating elective water efficiency and conservation measures such as installing low-water consumption irrigation systems, providing water efficient landscape irrigation design that reduces the use of potable water, developing a water budget for the landscape irrigation, and providing separate submeters or metering devices for outdoor potable water use of landscaped irrigated area more than 2,500 square feet. Implementation of these design elements would further reduce potential impacts to water supply.

Solid Waste

The City's 2035 General Plan MEIR provides solid waste generation rates for residential and employment (retail, office, industrial uses). For residential, the solid waste generation rate is 1.1 tons per unit per year. As a result, the proposed project could produce 356.4 tons of solid waste per year (324 units x 1.1 tons per unit). Because the project is consistent with the General Plan land use designation, this increase in solid waste production would not exhaust the remaining landfill capacity and this impact would be **less than significant**.

Electricity and Natural Gas

Implementation of the proposed project would result in an increase in electricity and natural gas consumption. The project site is served by SMUD (electricity) and PG&E (natural gas). Both utility providers would install new distribution facilities, as needed, according to California Public Utilities Commission rules. Because the increased demand in energy is evaluated in the 2035 General Plan MEIR, and because PG&E and SMUD would ensure their capability of providing an adequate level of service to the project site, this impact would be **less than significant**.

Question B: Less than Significant

The project site is not currently connected to the City's utility systems; therefore, tie-ins to existing City of Sacramento water, sewer, natural gas, and stormwater lines would be installed. New solid waste services would be provided. As part of the project, new underground utilities would be installed and would tie-in to existing lines adjacent to the project site. Potential environmental effects associated with the construction of these facilities are generally discussed throughout this Initial Study in various sections including: Air Quality (during construction), Cultural Resources, Hazards, Noise, and Traffic. With implementation of the applicable mitigation measures listed in this document, impacts related to the construction of new utilities would be **less than significant**.

MITIGATION MEASURES

None.

FINDINGS

The project would have no additional project-specific environmental effects relating to utilities and service systems.

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MANDATORY FINDINGS OF SIGNIFICANCE

Issues:	Effect remains significant with all identified mitigation	Effect can be mitigated to less than significant	No additional significant environmental effect
13. <u>MANDATORY FINDINGS OF SIGNIFICANCE</u>			
A.) Does the project have the potential to 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, 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	

ANSWERS TO CHECKLIST QUESTIONS

Question A: Less than Significant with Mitigation

As discussed in the Biological Resources, Cultural Resources, Hazards, Noise, and Transportation and Circulation sections of this Initial Study, the proposed project would result in potentially significant impacts with the potential to degrade the quality of the environment. However, adoption and implementation of the mitigation measures described in this Initial Study, and compliance with City programs and requirements identified in this report, impacts would be reduced to a less than significant level. No significant or potentially significant impacts would remain.

Biological Resources

There is the potential for significant impacts to special status species from previously undocumented and undiscovered hazardous materials to be present in the project site. Mitigation Measures HAZ-1 and HAZ-2 require that the appropriate investigations be conducted on all parcels of the project site, and the necessary remediation be conducted. Implementation of these mitigation measures would reduce potential impacts associated with hazardous materials to less than significant levels.

The loss of Swainson’s hawk foraging habitat is considered a potentially significant impact. While the project applicant has secured 18.7 credits to mitigate for impacts to Swainson’s hawk based on the project footprint analyzed in the 2006 Initial Study, the proposed project would impact 19.7 acres – 1 acre more than what has been mitigated. Implementation of Mitigation

Measure BIO-1 requires that the applicant provide compensatory mitigation at a ratio acceptable to CDFW, which would reduce the potential impact to less than significant levels.

Various species of birds protected under the MBTA and/or Fish and Game Code, including white-tailed kite, loggerhead shrike, and short-eared owl, as well as Swainson's hawk and burrowing owl may use the project site and/or project area for nesting. If active nests are present in trees that would be removed during the raptor breeding season (February 1 – August 31), mortality of eggs and chicks could result. In addition, project demolition and construction could disturb active nests by increased activity and higher than ambient noise levels near the site or in trees not yet removed from the site, potentially resulting in nest abandonment by the adults and mortality of chicks and eggs. This would be a significant impact. Implementation of Mitigation Measures BOI-2 and BIO-3 would reduce the impact to a less than significant level.

With implementation of the mitigation measures described above, the project would not 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, or reduce the number or restrict the range of an endangered, rare, or threatened species.

Cultural Resources

Although no documented cultural or paleontological resources are located at the project site, the potential exists to encounter previously undiscovered cultural material or paleontological resources during construction-related ground disturbing activities. However, adoption and implementation of Mitigation Measure CUL-1, CUL-2, and CUL-4 would reduce these potential impacts to less than significant levels.

No evidence suggests that any prehistoric or historic-era marked or unmarked interments are present within or in the immediate vicinity of the project site. However, there is a possibility that unmarked previously unknown graves could be present within the project site. Potential disturbance of previously undiscovered human remains during project construction would be a potentially significant impact. Implementation of Mitigation Measure CUL-3 would reduce the project's potential for disturbance of human remains to a less than significant level.

Hazards

The Hazardous Materials Assessment/Phase I prepared for the proposed project did not include all parcels associated with the project site. As a result, there is the potential for previously undocumented and undiscovered hazardous materials to be present in the project site, which could result in significant impacts on the public and the environment. Mitigation Measures HAZ-1 and HAZ-2 require that the appropriate investigations be conducted on all parcels of the project site, and the necessary remediation be conducted. Implementation of these mitigation measures would reduce potential impacts associated with hazardous materials to less than significant levels.

Noise

Implementation of the proposed project could subject future residents to noise levels exceeding acceptable thresholds inside some buildings. With implementation of Mitigation Measure NOI-1, potentially significant environmental effects related to interior noise can be mitigated to a less than significant level.

Traffic

Construction activities may result in temporary disruptions to the transportation network near the project site, including temporary lane and/or street closures, sidewalk closures, and bikeway closures. Traffic, and pedestrian, bicycle, and transit access may be disrupted. MEIR Mitigation Measure TRA-01 would be implemented to avoid and minimize construction-related

impacts on transportation and circulation, and impacts would be reduced to less than significant with mitigation incorporated.

Question B: Less than Significant with Mitigation

Cumulative environmental effects are multiple individual effects that, when considered together, would be considerable or compound or increase other environmental impacts. Individual effects may result from a single project or a number of separate projects and may occur at the same place and point in time or at different locations and over extended periods of time.

While the project would indirectly contribute to cumulative impacts associated with increased urban development in the City and region, these impacts have previously been evaluated by the City and considered in development of the General Plan. The proposed project is consistent with the land uses envisioned in the General Plan for the project site, and the potential cumulative effects of developing the project site have been considered in the MEIR. Implementation of the MEIR and project-specific mitigation measures proposed in this Initial Study would reduce the project's impacts to a less than significant level, further reducing the project's contribution to environmental impacts to less than cumulatively considerable.

Question C: Less than Significant with Mitigation

With implementation of MEIR and project-specific mitigation measures for potential impacts associated with Biological Resources, Cultural Resources, Hazards, Noise, and/or Transportation and Circulation identified in this Initial Study, the project would not have a substantial adverse effect on human beings, either directly or indirectly.

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SECTION IV – ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would potentially be affected by this project.

- | | |
|--|--|
| <input type="checkbox"/> Aesthetics | <input checked="" type="checkbox"/> Noise |
| <input type="checkbox"/> Air Quality/Greenhouse Gas | <input type="checkbox"/> Public Services |
| <input checked="" type="checkbox"/> Biological Resources | <input type="checkbox"/> Recreation |
| <input checked="" type="checkbox"/> Cultural Resources | <input checked="" type="checkbox"/> Transportation/Circulation |
| <input type="checkbox"/> Geology and Soils | <input type="checkbox"/> Utilities and Service Systems |
| <input checked="" type="checkbox"/> Hazards | |
| <input type="checkbox"/> Hydrology and Water Quality | |
| <input type="checkbox"/> None Identified | |

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SECTION V – DETERMINATION

On the basis of the initial study:

I find that (a) the proposed project is an anticipated subsequent project identified and described in the 2035 General Plan MEIR; (b) the proposed project is consistent with the 2035 General Plan land use designation and the permissible densities and intensities of use for the project site; (c) that the discussions of cumulative impacts, growth inducing impacts, and irreversible significant effects in the MEIR are adequate for the proposed project; and (d) the proposed project will have additional significant environmental effects not previously examined in the MEIR. A Mitigated Negative Declaration will be prepared. Mitigation measures from the MEIR will be applied to the project as appropriate, and additional feasible mitigation measures and alternatives will be incorporated to revise the proposed project before the negative declaration is circulated for public review, to avoid or mitigate the identified effects to a level of insignificance. (CEQA Guidelines Section 15178(b))

Signature

Date

Dana Mahaffey

Printed Name

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SECTION VI – REFERENCES CITED

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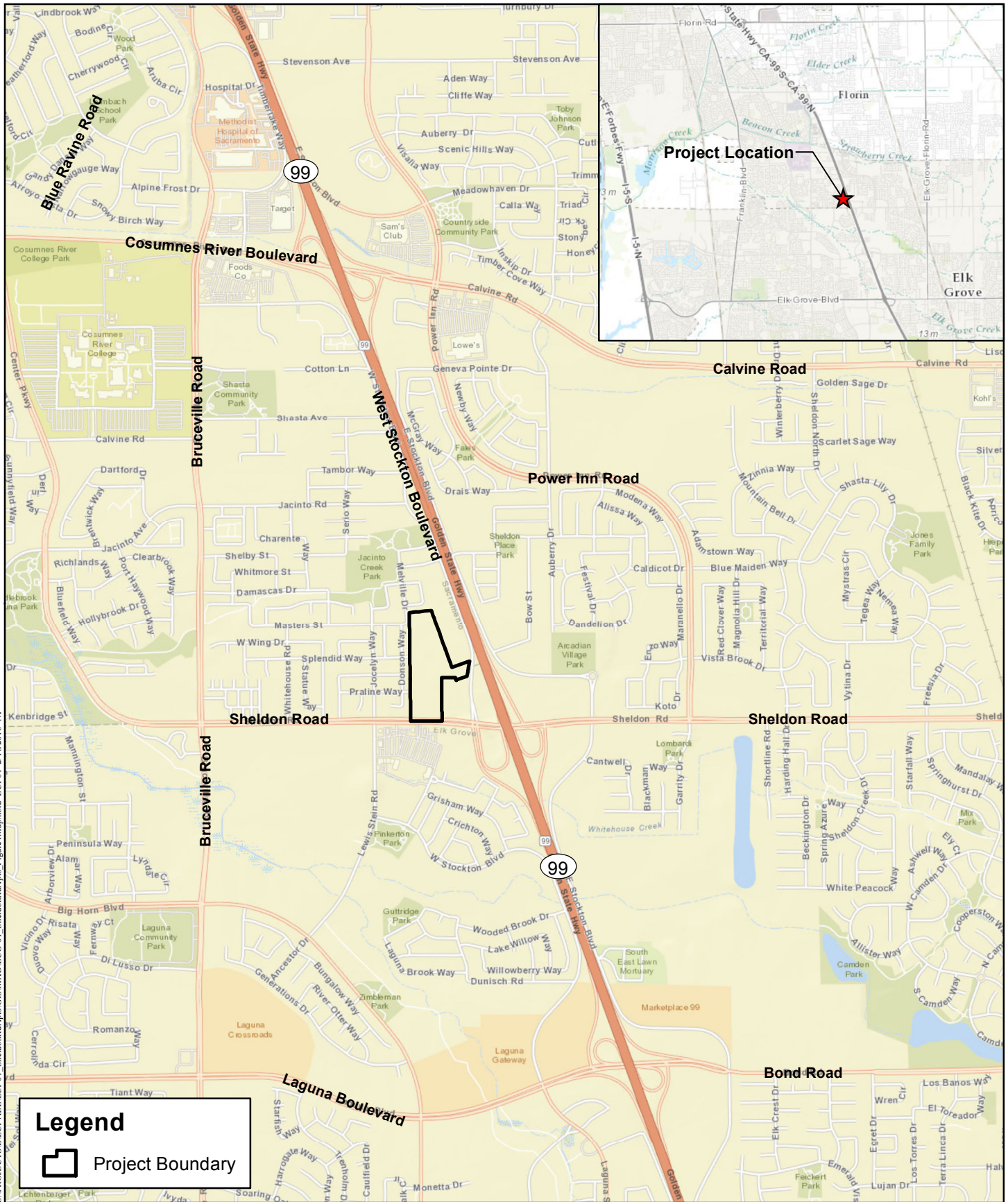
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Appendix A

FIGURES 1-7





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Project Site and Vicinity

8151 SHELDON ROAD APARTMENTS PROJECT

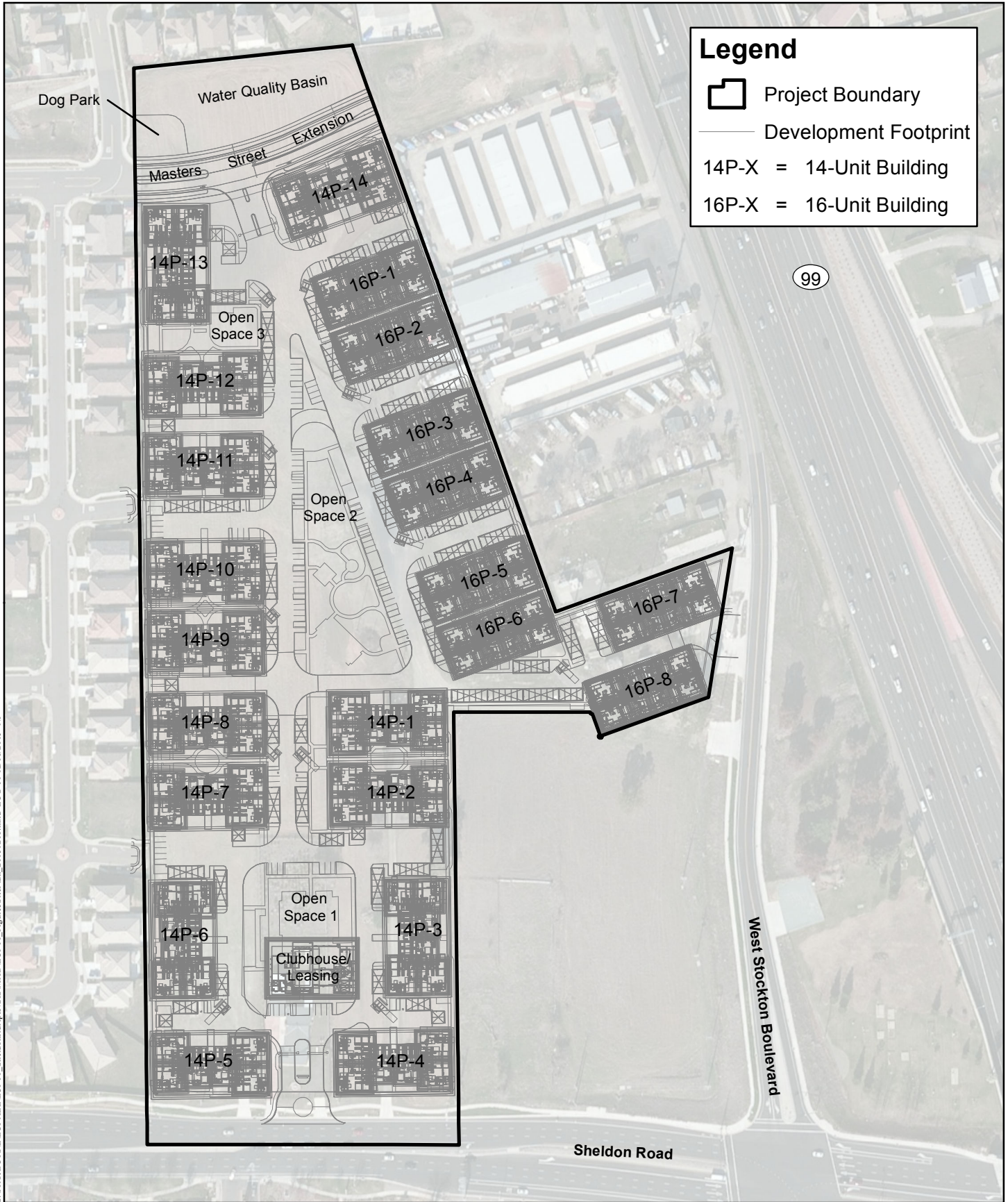


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Aerial Map

8151 SHELDON ROAD APARTMENTS PROJECT

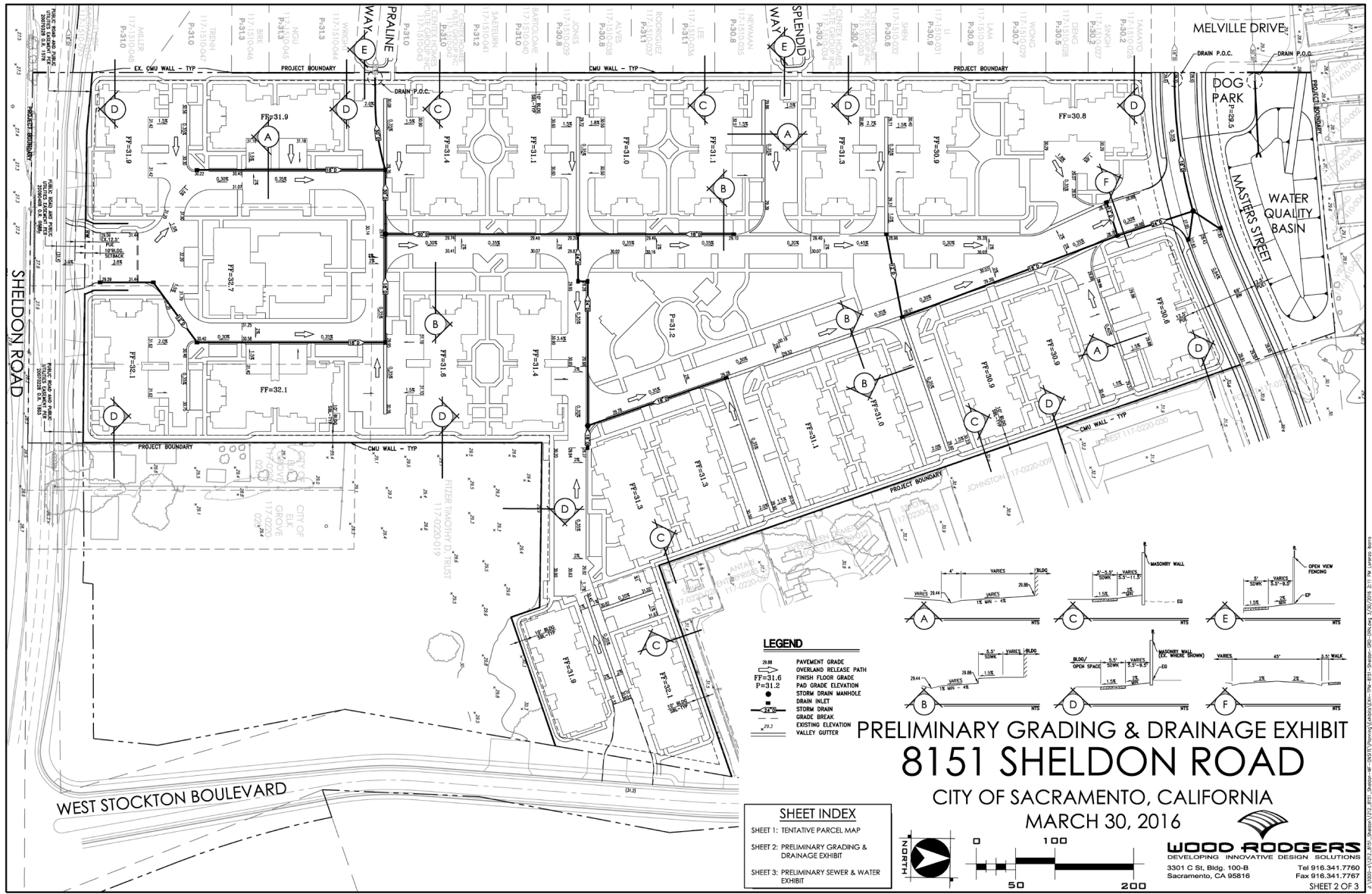
Figure 2



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Site Plan

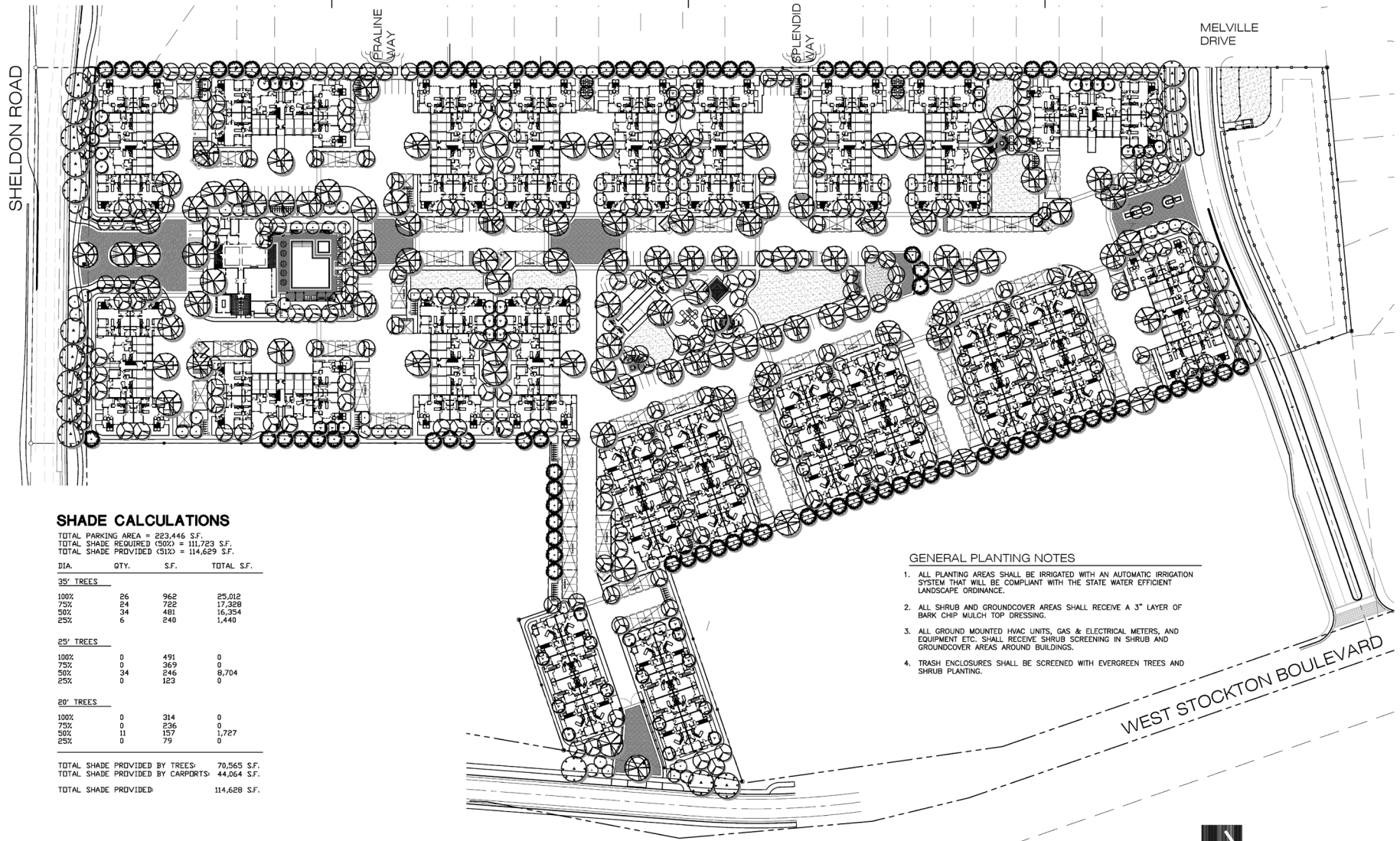
8151 SHELDON ROAD APARTMENTS PROJECT



Source: Wood Rodgers 2016

Grading and Drainage Plan
 8151 SHELDON ROAD APARTMENTS PROJECT
 Figure 4

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SHADE CALCULATIONS

TOTAL PARKING AREA = 223,446 S.F.
 TOTAL SHADE REQUIRED (50%) = 111,723 S.F.
 TOTAL SHADE PROVIDED (31%) = 114,629 S.F.

DIA.	QTY.	S.F.	TOTAL S.F.
35' TREES			
100%	26	962	25,012
75%	24	782	17,388
50%	34	481	16,354
25%	6	240	1,440
25' TREES			
100%	0	491	0
75%	0	369	0
50%	34	246	8,704
25%	0	123	0
20' TREES			
100%	0	314	0
75%	0	236	0
50%	11	137	1,727
25%	0	79	0
TOTAL SHADE PROVIDED BY TREES:		70,565 S.F.	
TOTAL SHADE PROVIDED BY CARPORTS:		44,064 S.F.	
TOTAL SHADE PROVIDED:		114,629 S.F.	

GENERAL PLANTING NOTES

1. ALL PLANTING AREAS SHALL BE IRRIGATED WITH AN AUTOMATIC IRRIGATION SYSTEM THAT WILL BE COMPLIANT WITH THE STATE WATER EFFICIENT LANDSCAPE ORDINANCE.
2. ALL SHRUB AND GROUNDCOVER AREAS SHALL RECEIVE A 3" LAYER OF BARK CHIP MULCH TOP DRESSING.
3. ALL GROUND MOUNTED HVAC UNITS, GAS & ELECTRICAL METERS, AND EQUIPMENT ETC. SHALL RECEIVE SHRUB SCREENING IN SHRUB AND GROUNDCOVER AREAS AROUND BUILDINGS.
4. TRASH ENCLOSURES SHALL BE SCREENED WITH EVERGREEN TREES AND SHRUB PLANTING.

8151 SHELDON ROAD
 SACRAMENTO, CALIFORNIA

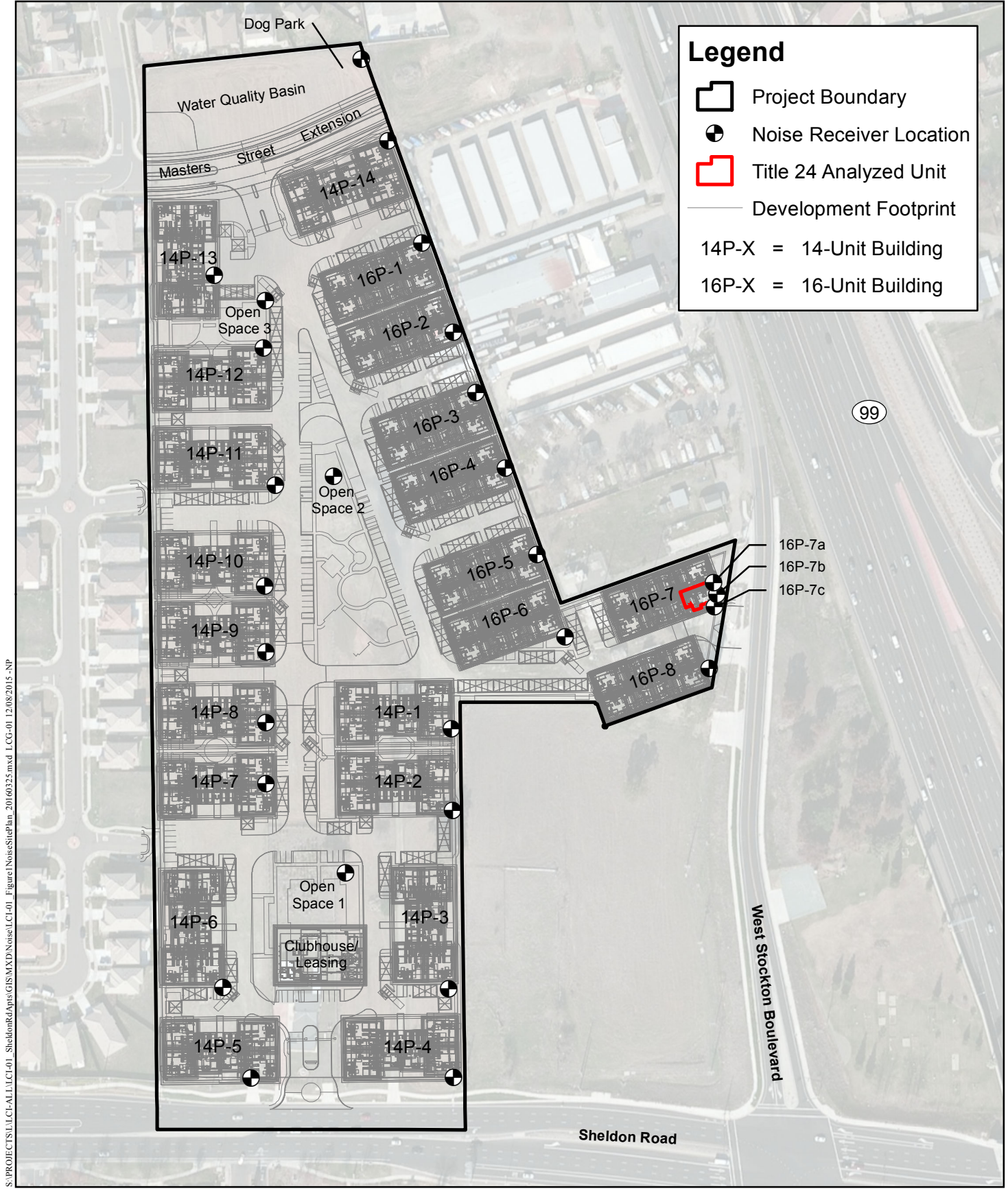
PRELIMINARY PLANTING PLAN

SCALE: 1" = 50'
 0 50' 100'

PL3  FUHRMAN LEAMY LAND GROUP
 DATE: 3-30-2016
 PROJECT: LIP-15119

Source: Fuhrman Leamy Land Group 2016

Landscape Design
 8151 SHELDON ROAD APARTMENTS PROJECT
 Figure 5

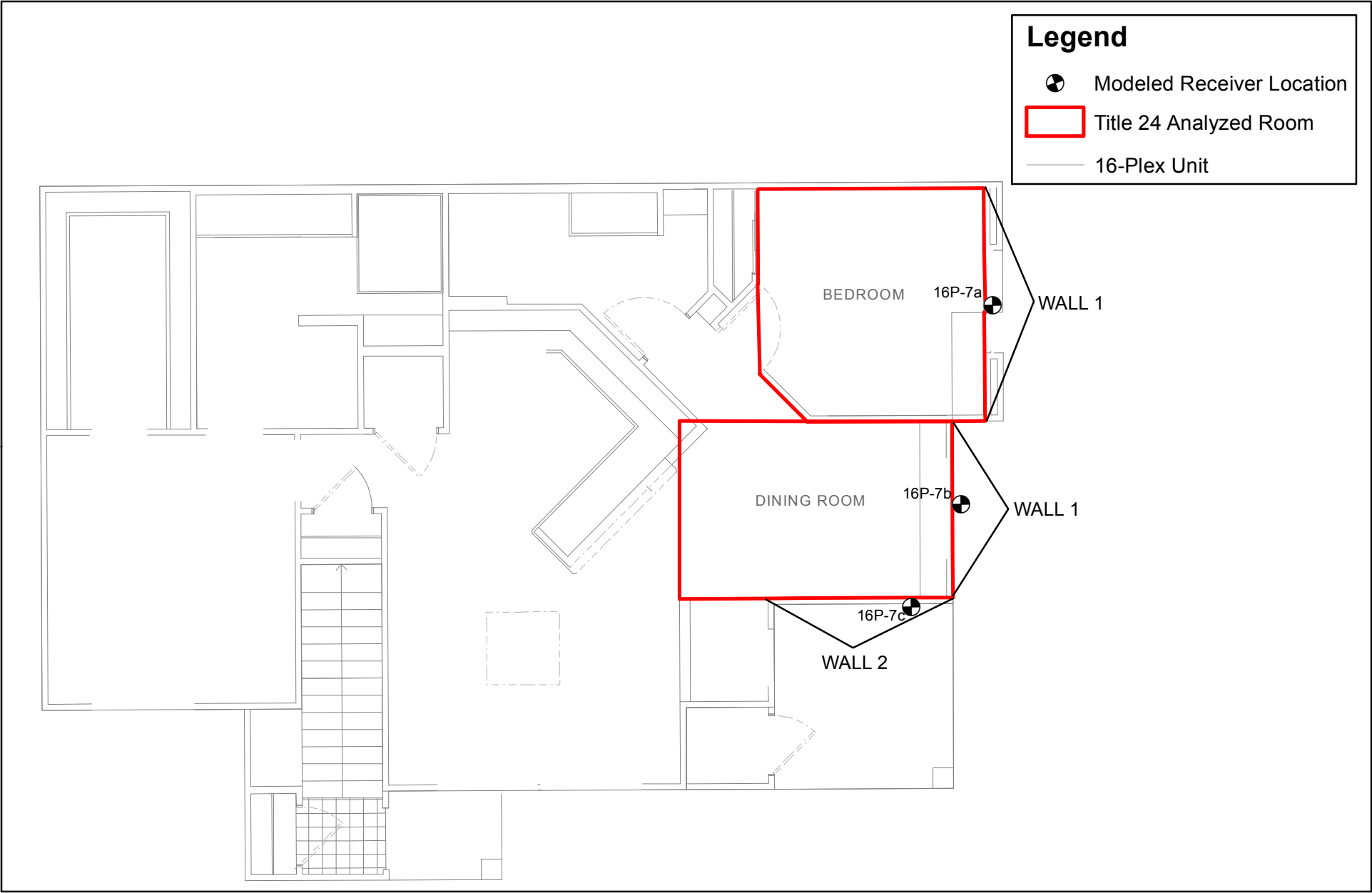


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Noise Receiver Locations and Title 24 Analyzed Unit

8151 SHELDON ROAD APARTMENTS PROJECT

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Exterior-to-Interior Title 24 Rooms

8151 SHELDON ROAD APARTMENTS PROJECT

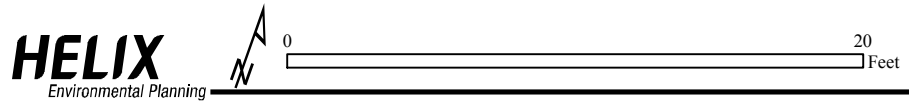


Figure 7



Appendix B

CLIMATE ACTION PLAN CONSISTENCY CHECKLIST AND CALEEMOD RESULTS



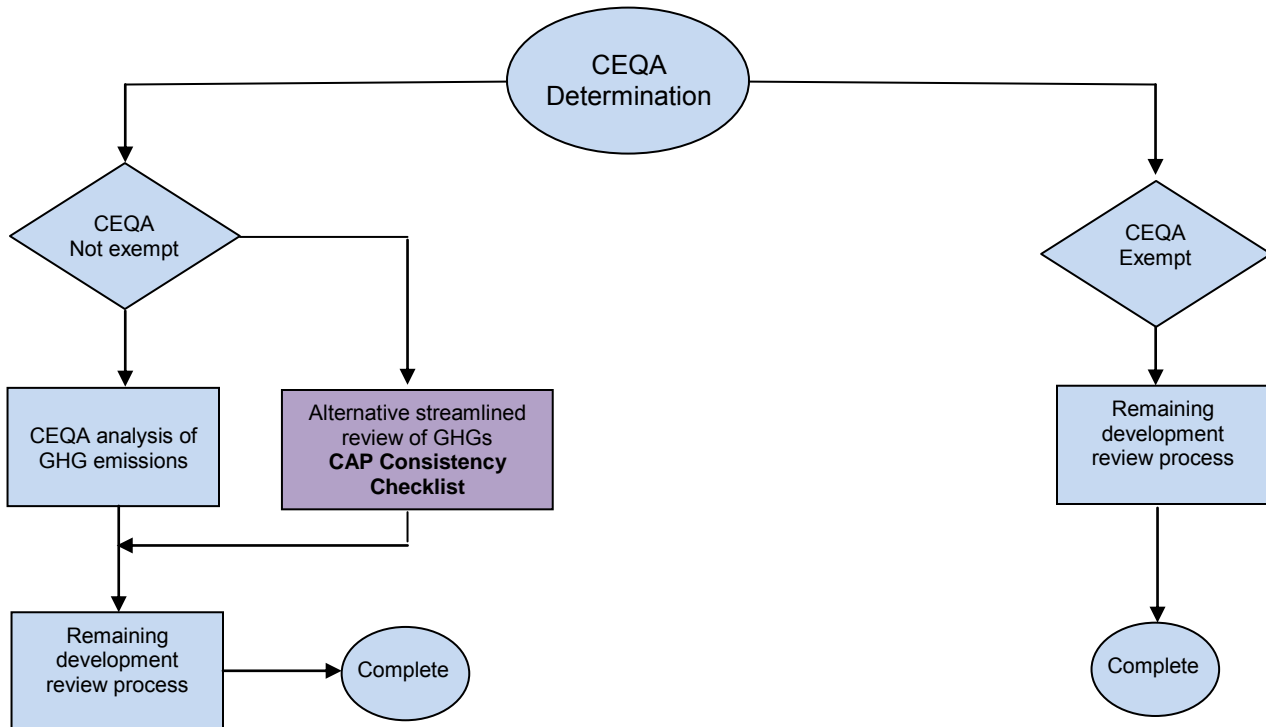
CLIMATE ACTION PLAN – CONSISTENCY REVIEW CHECKLIST

The purpose of the Climate Action Plan Consistency Review Checklist (CAP Consistency Review Checklist) is to provide a streamlined review process for proposed new development projects which are subject to discretionary review and trigger environmental review pursuant to the California Environmental Quality Act (CEQA)..

CEQA Guidelines require the analysis of greenhouse gas (GHG) emissions and potential climate change impacts from new development. The Sacramento Climate Action Plan qualifies under section 15183.5 of the CEQA Guidelines as a plan for the reduction of GHG emissions for use in cumulative impact analysis pertaining to development projects. This allows projects that demonstrate consistency with the CAP to be eligible for this streamlining procedure. Projects that demonstrate consistency with the CAP and the Sacramento 2030 General Plan may be able to answer “No additional significant environmental effect” in the City’s initial study checklist. Projects that do not demonstrate consistency may, at the City’s discretion, prepare a more comprehensive project-specific analysis of GHG emissions consistent with CEQA requirements. (See FAQ about the CAP Consistency Review Checklist for more details.)

The diagram below shows the context for the CAP Consistency Review Checklist within the planning review process framework.

Streamlined Review of GHG Emissions in Development Projects



CLIMATE ACTION PLAN – CONSISTENCY REVIEW CHECKLIST

Application Submittal Requirements

1. The CAP Consistency Review Checklist is required only for proposed new development projects which are subject to CEQA review (non-exempt projects)
2. If required, the CAP Consistency Review Checklist must be submitted in addition to the basic set of requirements set forth in the Universal Application and the Planning Application Submittal Matrix.
3. The applicant shall work with staff to meet the requirements of this checklist. These requirements will be reflected in the conditions of approval and/or mitigation measures.
4. All conditions of approval and mitigation measures from this checklist shall be shown on full-size sheets for building plan check submittals.

Application Information

Project Number: PN-16-007

Address of Property: 8151 Sheldon Road

Was a special consultant retained to complete this checklist? Yes No. If yes, complete following

Consultant Name*: Victor Ortiz

Company: HELIX Environmental Planning Inc.

Phone: 619-462-1515 E-Mail: victoro@helixepi.com

CAP Consistency Checklist Form for Projects that are Not Exempt from CEQA

Checklist Item (Check the appropriate box, and provide explanation for your answer).	Yes	No*
1. Is the proposed project substantially consistent with the City's over-all goals for land use and urban form, allowable floor area ratio (FAR) and/or density standards in the City's 2035 General Plan, as it currently exists?	X	
<p>Please explain how proposed project compares to 2035 General Plan with respect to density standards, FAR, land use and urban form. (See directions for filling out CAP Checklist)</p> <p>The project site has been designated as Suburban Center (Density 15-36 units per acre) and Suburban Neighborhood High (Density 15-30 units per acre) in the 2035 General Plan. Both land use designations provide for residential land uses within the allowable densities. The proposed project would result in a net density of 17.7 units per acre, which is within the allowable density for both land use designations. The proposed project is consistent with the 2035 General Plan.</p>		

2. Would the project incorporate traffic calming measures? (Examples of traffic calming measures include, but are not limited to: curb extensions, speed tables, raised crosswalks, raised intersections, median islands, tight corner radii, roundabouts or mini-circles, on-street parking, planter strips with street trees, chicanes/chokers.)	Yes	NA
<p>Please explain how the proposed project meets this requirement (list traffic calming measures). If "not applicable" (NA), explain why traffic calming measures were not required.</p> <p>The proposed project does not include any roadway or facility improvements, traffic calming measures do not apply.</p>		

*If "No", equivalent or better GHG reduction must be demonstrated as part of the project and incorporated into the conditions of approval.

Note: Requirements from this checklist should be incorporated into the conditions of approval, and shown on the full-size plans submitted for building plan check.

Checklist Item (Check the appropriate box, and provide explanation for your answer).	Yes	NA
<p>3. Would the project incorporate pedestrian facilities and connections to public transportation consistent with the City's Pedestrian Master Plan?</p>	X	
<p>Please explain how the proposed project meets this requirement. If "not applicable" (NA), explain why this was not required.</p> <p>Two existing off-site neighborhood streets (Praline Way and Splendid Way) currently terminate at the project site's western boundary. The project would provide gated pedestrian access to Praline Way. A similar gate would be used for maintenance access only at the Splendid Way terminus. Existing sidewalks along the north and south sides of Praline and Splendid Ways would connect to sidewalks on the project site. A walking trail would follow the perimeter of the project site with continuous pedestrian connectivity to all building entrances in the development. The project site is located approximately 500 feet from Elk Grove Transit (e-Tran) routes 160 and 162.</p>		

4. Would the project incorporate bicycle facilities consistent with the City's Bikeway Master Plan, and meet or exceed minimum standards for bicycle facilities in the Zoning Code and CALGreen?	Yes	NA
	<p>Please explain how the proposed project meets this requirement. If "not applicable" (NA), explain why this was not required.</p> <p>Bicycle storage would be available at patios, balconies, or under the private stairways. Additionally, bicycle racks would be installed near each building to provide short-term bicycle parking areas to provide one space for every two units. A total of 486 bicycle spaces would be provided (one long-term storage, and 0.5 short-term storage space per unit).</p>	X

*If "No", equivalent or better GHG reduction must be demonstrated as part of the project and incorporated into the conditions of approval.

Note: Requirements from this checklist should be incorporated into the conditions of approval, and shown on the full-size plans submitted for building plan check.

Checklist Item (Check the appropriate box, and provide explanation for your answer).	Yes	No*	NA
5. For residential projects of 10 or more units, commercial projects greater than 25,000 square feet, or industrial projects greater than 100,000 square feet, would the project include on-site renewable energy systems (e.g., photovoltaic systems) that would generate at least a minimum of 15% of the project's total energy demand on-site? (CAP Actions: 3.4.1 and 3.4.2)	X		
<p>Please explain how the proposed project meets this requirement. If "not applicable" (NA), explain why this was not required. If project does not meet requirements, see DIRECTIONS FOR FILLING OUT CAP CONSISTENCY REVIEW CHECKLIST re: alternatives to meeting checklist requirements.</p> <p>See Additional Pages.</p> <p>Attach a copy of the CalEEMod input and output. Record the model and version here <u>CalEEMod.2013.2.2</u>. Do NOT select the "use historical" box in CalEEMod for energy demand analysis related to this requirement.</p>			
6. Would the project (if constructed on or after January 1, 2014) comply with minimum CALGreen Tier 1 water efficiency standards?	Yes	NA	
	X		
<p>Please explain how the proposed project meets this requirement. If "not applicable" (NA), explain why this was not required.</p> <p>The project shall comply with the adopted CAP by meeting the Tier 1 Voluntary Standards in the 2013 California Green Building Standards Code (CALGreen).</p>			

*If "No", equivalent or better GHG reduction must be demonstrated as part and incorporated into the conditions of approval.

Note: Requirements from this checklist should be incorporated into the conditions of approval, and shown on the full-size plans submitted for building plan check.

Certification

I hereby certify that the statements furnished above and in the attached exhibits present the data and information required for this initial evaluation to the best of my ability and that the facts, statements and information presented are true and correct to the best of my knowledge and belief.

Signature:  _____ Date: 04/14/2016

DIRECTIONS FOR FILLING OUT CAP CONSISTENCY REVIEW CHECKLIST

General Plan Consistency & Sustainable Land Use

1. Is the proposed project substantially consistent with the land use and urban form designation, allowable floor area ratio (FAR) and/or density standards in the City's [2035 General Plan](#)?

Consistency with the General Plan land use and urban form designation, FAR and/or density standards is a key determining factor in whether or not the CAP Consistency Review procedure can be used. This is because future growth and development consistent with the General Plan was used to estimate business as usual emission forecasts, as well as emission reductions from actions that would be applicable to new development.

Refer to the 2035 General Plan, Land Use and Urban Form Designations and Development Standards starting on page 2-29. If a project is not fully consistent with the General Plan, the project still may qualify for consistency with the CAP, but this determination will need to be closely coordinated with the City. The City will determine whether the proposed land uses under consideration could be found consistent with the growth projections and assumptions used to develop the GHG emissions inventory and projections in the CAP.

Mobility

2. Would the project incorporate traffic calming measures? (Applicable CAP Action: 2.1.1)

List the traffic calming measures that have been incorporated into the project. These may include, but are not limited to: curb extensions, speed tables, raised crosswalks, raised intersections, median islands, tight corner radii, roundabouts or mini-circles, on-street parking, planter strips with street trees, chicanes/chokers.

The project proponent and City staff should consult with staff in the Department of Public Works-Transportation Division to verify that traffic calming measures are adequate and in compliance with the City's Street Design Standards.

If the proposed project does not include any roadway or facility improvements, traffic calming measures may not apply. For example, certain infill projects may not result in on-street or transportation facility improvements because sufficient infrastructure already exists.

3. Would the project incorporate pedestrian facilities and connections to public transportation consistent with the City's Pedestrian Master Plan? (Applicable CAP Action: 2.2.1)

List the pedestrian facilities and connections to public transportation that have been included in the proposed project on the Checklist. These may include, but are not limited to: sidewalks on both sides of streets, marked crosswalks, count-down signal timers, curb extensions, median islands, transit shelters, street lighting.

The project proponent and City staff should consult with Department of Public Works-Transportation Division staff to verify that pedestrian facilities are consistent with the [Pedestrian Master Plan](#). As in the previous example, if "not applicable", an explanation shall be documented in the Checklist. For example, certain infill projects may not require on-street or transportation facility improvements because sufficient infrastructure already exists.

The “Pedestrian Review Process Guide” ([Appendix A to the Master Plan](#)) will be used to determine consistency, as follows:

- For typical infill development projects where existing streets will serve the site (no new streets are proposed): the level of pedestrian improvements necessary to determine Pedestrian Master Plan consistency will be measured according to the “Basic, Upgrade or Premium” categories defined in Appendix A to the Pedestrian Master Plan, which are based on project location, surrounding land uses, proximity to transit, etc. If the proposed project does not include the minimum level of improvements per the assigned category for the project’s location, the project will be required as a condition of approval to include appropriate features, per the approval of the Department of Public Works-Transportation Division.
- For new “greenfield” projects and/or larger infill development projects where new streets are proposed as part of the project, the following will apply:
 - “Basic, Upgrade or Premium” levels of improvement will be required based on the proposed project’s location and context, where applicable, consistent with the criteria defined in the Master Plan. If the proposed project does not include the minimum level of improvements per the assigned category, the project will be required as a condition of approval to include appropriate features, per the approval of the Department of Public Works-Transportation Division.
 - The “Pedestrian Smart Growth Scorecard” (Appendix A to the Master Plan) will be required to be completed for the project, and a minimum score of 3 or better will need to be achieved. If the proposed project cannot achieve the minimum score, changes to the proposed project may be required, and/or the project may be required as a condition of approval to include certain improvements such that the average score will meet 3 or better. (Note: an Excel version of the Pedestrian Smart Growth Scorecard is available, to assist in automating the rating & scoring process)

4. Would the project incorporate bicycle facilities consistent with the City’s Bikeway Master Plan, and meet or exceed minimum standards for bicycle facilities in the Zoning Code and CALGreen? (Applicable CAP Action: 2.3.1)

List the bicycle facilities that are incorporated into the proposed project on the Checklist. These include, but are not limited to: Class I bike trails and Class II bike lanes connecting the project site to an existing bike network and transit stations, bike parking [bike racks, indoor secure bike parking, bike lockers], end-of-trip facilities at non-residential land uses [showers, lockers]).

The project proponent and City staff should consult with staff in the Transportation Division of the Department of Public Works to verify that such facilities are consistent with the [Bikeway Master Plan](#) and meet or exceed Zoning Code and CALGreen standards. Generally, the following guidelines will be used:

- If existing on-street and off-street bikeways are already present and determined to be consistent with the Bikeway Master Plan, no additional on-street bikeways will be required. Check the “not applicable” box if appropriate. However, on-site facilities shall still be required to meet or exceed minimum Zoning and CALGreen requirements.
- If not applicable, fully document the reasons why using the Checklist.

- If on-street bicycle facilities are not present or are only partially consistent with the Master Plan, the project will be required as a condition of approval to construct or pay for its fair-share of on-street and/or off-street bikeways described in the Master Plan, in addition to meeting or exceeding minimum on-site facilities.
- In some cases, a combination of new or upgraded on-street and off-street bikeways may be used to determine consistency with the Master Plan, at the discretion of the Department of Public Works-Transportation Division staff.

Energy Efficiency and Renewable Energy

- 5. For residential projects of 10 or more units, commercial projects greater than 25,000 square feet, or industrial projects greater than 100,000 square feet, would the project include on-site renewable energy systems (e.g., solar photovoltaic, solar water heating etc.) that would generate at least 15% of the project's total energy demand? (CAP Actions: 3.4.1 and 3.4.2)**

For projects of the minimum size specified in this measure, a commitment in the project description or in a mitigation measure that the project shall generate a minimum of 15% of the project's energy demand on-site is sufficient to demonstrate consistency with this measure. However, the project conditions of approval or mitigation measures should specify the intended renewable energy technology to be used (e.g. solar photovoltaic, solar water heating, wind, etc.) and estimated size of the systems to meet project demand based on the project description.

"Total energy demand" refers to the energy (electricity and natural gas) consumed by the built environment (including HVAC systems, water heating systems, and lighting systems) as well as uses that are independent of the construction of buildings, such as office equipment and other plug-ins.

Applicants may estimate the total energy demand of their projects using California Emissions Estimator Model (CalEEMod 2013.2), the same software used to estimate greenhouse gas emissions. **For CalEEMod estimates of energy demand to meet this specific requirement, the user should NOT select the "use historical" box, otherwise they will be "double-counting" emissions reductions that have already been counted.** CalEEMod outputs for electricity demand are provided in annual kWh, and natural gas demand is provided in annual kBtu.

The energy demand estimate by CalEEMod is based on two datasets:

- The California Commercial End Use Survey (CEUS);
- The Residential Appliance Saturation Survey (RASS)

CalEEMod takes energy use intensity data (above) and forecasts energy demand based on climate zone, land use subtype (such as "hospital", "arena", or "apartments, mid rise"), building area, and the number of buildings or units. This is an appropriate level of analysis for use at the planning submittal stage, but it may not provide an accurate picture of actual project energy demand because it does not factor project specifics such as building design.

Therefore, the applicant is advised (but not required) to run a more comprehensive energy simulation once project-specific details are known: basic building design, square-footage, building envelope, lighting design (at least rudimentary), and the mechanical system (at least minimally zoned). Some of the energy simulation programs that are appropriate for this level of analysis include: DOE 2.2, Trace 700, and Energy Pro.

The U.S. DOE maintains a list of energy simulation programs that are available.

http://apps1.eere.energy.gov/buildings/tools_directory/subjects.cfm/pagename=subjects/pagename_menu=whole_building_analysis/pagename_submenu=energy_simulation

The applicant may then revise the estimate and make a final determination regarding the size of the PV system that is required.

Substitutions: Projects may substitute a quantity of energy efficiency for renewable energy, as long as the substituted GHG reduction does not “double count” GHG reductions already taken by the CAP. In other words, substitutions must reduce GHG emissions from the project beyond what is already accounted for in the CAP (to avoid double-counting).

- Additional mitigation may include equivalent or better GHG reduction from individual measures or a combination of:
- In lieu of installing PV systems that would generate 15% of the projects total energy, the project may exceed energy efficiency standards of Title 24, part 6 of the California Building Code, such as building to CALGreen Tier 1 energy standards. (Residential projects shall exceed the 2013 Title 24 energy efficiency by a minimum of 10% and commercial projects shall exceed 2013 Title 24 energy efficiency by a minimum of 5%).

6. Would the project comply with minimum CALGreen Tier I water efficiency standards? (CAP Action: 5.1.1)

The [California Green Building Standards Code \(CALGreen\)](#) includes mandatory green building measures, as well as voluntary measures that local jurisdictions may choose to adopt to achieve higher performance tiers, at either Tier 1 or Tier 2 compliance levels. Sacramento has adopted Tier 1 Water Efficiency Standards to be required on or after January 1, 2014. Currently, in order to meet the Tier 1 Water Efficiency Standards, buildings are required to implement all mandatory water efficiency and conservation measures as well as certain Tier 1 specific measures that exceed minimum mandatory measures (e.g. 30% increase in indoor water efficiency). Specific Tier 1 provisions can be found in the CALGreen Code at <http://www.bsc.ca.gov/Home/CALGreen.aspx>.

The City recognizes that project construction details are often not known at the environmental review stage, and it may be premature for a project proponent to identify compliance with precise requirements of CALGreen. A condition of approval requiring the project to comply with minimum CALGreen Tier 1 water efficiency and conservation standards is sufficient to demonstrate consistency with this criterion.

Planning approval of your project will include the following condition:

Project must meet CALGreen Tier 1 water efficiency and conservation standards. Copies of the appropriate CalGreen checklist (see FAQ) shall be included on the full-size sheets for building plan check submittals.

Note: Requirements from this checklist should be incorporated into the conditions of approval, and shown on the full-size plans submitted for building plan check.

Climate Action Plan – Consistency Review Checklist

Additional Pages

8151 Sheldon Road Apartments Project

Checklist Item #5. Please explain how the proposed project meets this requirement. If “not applicable” (NA), explain why this was not required. If the project does not meet requirements, see DIRECTIONS FOR FILLING OUT CAP CONSISTENCY REVIEW CHECKLIST re: alternatives to meeting checklist requirements.

Prior to issuance of building permits, the applicant shall comply with the alternative CAP requirement to exceed the minimum energy efficiency standards under California Administrative Code Title 24 by 10% for residential land uses and 5% for commercial land uses. Measures to increase the energy efficiency of the project buildings shall include, but are not limited to:

- Increased wall insulation, smart meters, above-standard ventilation systems or other energy efficiency lighting fixtures.
- Enrollment in Greenergy (SMUD) or other program achieving programmatic reductions in GHG emissions
- Purchase of energy efficiency credits (SMAQMD) or other program achieving programmatic improvements in building efficiency.

The applicant shall submit energy calculations with building plans and certification of any required professional to demonstrate compliance with this condition, including specific reference to the percentage improvements required under the CAP.

Sheldon Rd Apts
Sacramento County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Low Rise	324.00	Dwelling Unit	20.25	324,000.00	865

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	3.5	Precipitation Freq (Days)	58
Climate Zone	6			Operational Year	2017
Utility Company	Sacramento Municipal Utility District				
CO2 Intensity (lb/MWhr)	590.31	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstructionPhase	NumDays	370.00	80.00
tblConstructionPhase	NumDays	20.00	10.00
tblConstructionPhase	NumDays	35.00	20.00
tblConstructionPhase	PhaseEndDate	9/23/2016	12/16/2016
tblConstructionPhase	PhaseEndDate	11/17/2016	11/18/2016
tblConstructionPhase	PhaseEndDate	7/12/2016	6/28/2016
tblConstructionPhase	PhaseEndDate	12/16/2016	8/26/2016
tblConstructionPhase	PhaseEndDate	6/28/2016	6/14/2016
tblConstructionPhase	PhaseEndDate	7/26/2016	7/28/2016
tblConstructionPhase	PhaseStartDate	8/27/2016	11/19/2016
tblConstructionPhase	PhaseStartDate	7/29/2016	8/1/2016
tblConstructionPhase	PhaseStartDate	6/15/2016	6/1/2016
tblConstructionPhase	PhaseStartDate	11/19/2016	8/1/2016
tblConstructionPhase	PhaseStartDate	6/15/2016	6/1/2016
tblConstructionPhase	PhaseStartDate	6/29/2016	7/1/2016
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	LoadFactor	0.37	0.37
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	OffRoadEquipmentType		Off-Highway Trucks

tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentType		Rollers
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2017
tblVehicleTrips	ST_TR	7.16	6.44
tblVehicleTrips	SU_TR	6.07	6.44
tblVehicleTrips	WD_TR	6.59	6.44

2.0 Emissions Summary

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.5732	0.0393	3.3750	1.8000e-004		0.0183	0.0183		0.0183	0.0183	0.0000	5.4580	5.4580	5.4800e-003	0.0000	5.5730
Energy	0.0237	0.2025	0.0862	1.2900e-003		0.0164	0.0164		0.0164	0.0164	0.0000	563.3785	563.3785	0.0207	7.6400e-003	566.1813
Mobile	1.2905	2.9111	13.5845	0.0285	1.9931	0.0387	2.0318	0.5339	0.0356	0.5695	0.0000	2,171.5166	2,171.5166	0.0919	0.0000	2,173.4465
Waste						0.0000	0.0000		0.0000	0.0000	30.2538	0.0000	30.2538	1.7880	0.0000	67.8007
Water						0.0000	0.0000		0.0000	0.0000	7.4687	40.6357	48.1044	0.0277	0.0167	53.8493
Total	2.8874	3.1530	17.0456	0.0300	1.9931	0.0734	2.0665	0.5339	0.0703	0.6043	37.7225	2,780.9887	2,818.7112	1.9337	0.0243	2,866.8506

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.5732	0.0393	3.3750	1.8000e-004		0.0183	0.0183		0.0183	0.0183	0.0000	5.4580	5.4580	5.4800e-003	0.0000	5.5730
Energy	0.0189	0.1612	0.0686	1.0300e-003		0.0130	0.0130		0.0130	0.0130	0.0000	507.9856	507.9856	0.0194	6.6900e-003	510.4656
Mobile	1.2905	2.9111	13.5845	0.0285	1.9931	0.0387	2.0318	0.5339	0.0356	0.5695	0.0000	2,171.5166	2,171.5166	0.0919	0.0000	2,173.4465
Waste						0.0000	0.0000		0.0000	0.0000	15.1269	0.0000	15.1269	0.8940	0.0000	33.9003
Water						0.0000	0.0000		0.0000	0.0000	5.9750	34.1039	40.0789	0.0222	0.0133	44.6814
Total	2.8826	3.1117	17.0281	0.0297	1.9931	0.0701	2.0631	0.5339	0.0670	0.6009	21.1019	2,719.0641	2,740.1659	1.0330	0.0200	2,768.0668

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.17	1.31	0.10	0.87	0.00	4.55	0.16	0.00	4.75	0.55	44.06	2.23	2.79	46.58	17.57	3.45

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	6/1/2016	6/14/2016	5	10	
2	Site Preparation	Site Preparation	6/1/2016	6/14/2016	5	10	
3	Grading	Grading	6/1/2016	6/28/2016	5	20	
4	Underground Utilities	Trenching	7/1/2016	7/28/2016	5	20	
5	Building Construction	Building Construction	8/1/2016	11/18/2016	5	80	
6	Paving	Paving	8/1/2016	8/26/2016	5	20	
7	Architectural Coating	Architectural Coating	11/19/2016	12/16/2016	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 40

Acres of Paving: 0

Residential Indoor: 656,100; Residential Outdoor: 218,700; Non-Residential Indoor: 0; Non-Residential Outdoor: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Demolition	Excavators	1	8.00	162	0.38
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Grading	Excavators	0	8.00	162	0.38
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Paving	Pavers	2	8.00	125	0.42
Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	0	8.00	255	0.40
Grading	Rubber Tired Dozers	0	8.00	255	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Graders	0	8.00	174	0.41
Grading	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Paving	Paving Equipment	2	8.00	130	0.36
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	0	8.00	255	0.40
Grading	Scrapers	2	8.00	361	0.48
Building Construction	Welders	1	8.00	46	0.45
Demolition	Off-Highway Trucks	1	6.00	400	0.38
Underground Utilities	Excavators	1	8.00	162	0.38
Underground Utilities	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Underground Utilities	Rollers	1	8.00	80	0.38

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	2	5.00	0.00	5.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	1	3.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Grading	2	5.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	233.00	35.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	47.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Underground Utilities	3	8.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

Water Exposed Area

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Demolition - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					5.1000e-004	0.0000	5.1000e-004	8.0000e-005	0.0000	8.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.4900e-003	0.0631	0.0362	8.0000e-005		2.6300e-003	2.6300e-003		2.4200e-003	2.4200e-003	0.0000	7.1676	7.1676	2.1600e-003	0.0000	7.2130
Total	5.4900e-003	0.0631	0.0362	8.0000e-005	5.1000e-004	2.6300e-003	3.1400e-003	8.0000e-005	2.4200e-003	2.5000e-003	0.0000	7.1676	7.1676	2.1600e-003	0.0000	7.2130

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	6.0000e-005	6.6000e-004	8.7000e-004	0.0000	4.0000e-005	1.0000e-005	5.0000e-005	1.0000e-005	1.0000e-005	2.0000e-005	0.0000	0.1643	0.1643	0.0000	0.0000	0.1644
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.0000e-005	1.0000e-004	1.0500e-003	0.0000	1.8000e-004	0.0000	1.9000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1639	0.1639	1.0000e-005	0.0000	0.1641
Total	1.4000e-004	7.6000e-004	1.9200e-003	0.0000	2.2000e-004	1.0000e-005	2.4000e-004	6.0000e-005	1.0000e-005	7.0000e-005	0.0000	0.3282	0.3282	1.0000e-005	0.0000	0.3284

3.2 Demolition - 2016**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.3000e-004	0.0000	2.3000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.2400e-003	0.0609	0.0464	8.0000e-005		7.9000e-004	7.9000e-004		7.9000e-004	7.9000e-004	0.0000	7.1676	7.1676	2.1600e-003	0.0000	7.2130
Total	2.2400e-003	0.0609	0.0464	8.0000e-005	2.3000e-004	7.9000e-004	1.0200e-003	3.0000e-005	7.9000e-004	8.2000e-004	0.0000	7.1676	7.1676	2.1600e-003	0.0000	7.2130

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	6.0000e-005	6.6000e-004	8.7000e-004	0.0000	4.0000e-005	1.0000e-005	5.0000e-005	1.0000e-005	1.0000e-005	2.0000e-005	0.0000	0.1643	0.1643	0.0000	0.0000	0.1644
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.0000e-005	1.0000e-004	1.0500e-003	0.0000	1.8000e-004	0.0000	1.9000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1639	0.1639	1.0000e-005	0.0000	0.1641
Total	1.4000e-004	7.6000e-004	1.9200e-003	0.0000	2.2000e-004	1.0000e-005	2.4000e-004	6.0000e-005	1.0000e-005	7.0000e-005	0.0000	0.3282	0.3282	1.0000e-005	0.0000	0.3284

3.3 Site Preparation - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.7000e-003	0.0163	0.0121	2.0000e-005		1.2500e-003	1.2500e-003		1.1500e-003	1.1500e-003	0.0000	1.4682	1.4682	4.4000e-004	0.0000	1.4775
Total	1.7000e-003	0.0163	0.0121	2.0000e-005	0.0000	1.2500e-003	1.2500e-003	0.0000	1.1500e-003	1.1500e-003	0.0000	1.4682	1.4682	4.4000e-004	0.0000	1.4775

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.0000e-005	6.0000e-005	6.3000e-004	0.0000	1.1000e-004	0.0000	1.1000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0983	0.0983	1.0000e-005	0.0000	0.0984
Total	5.0000e-005	6.0000e-005	6.3000e-004	0.0000	1.1000e-004	0.0000	1.1000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0983	0.0983	1.0000e-005	0.0000	0.0984

3.3 Site Preparation - 2016

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.3000e-004	0.0150	0.0117	2.0000e-005		3.0000e-004	3.0000e-004		3.0000e-004	3.0000e-004	0.0000	1.4682	1.4682	4.4000e-004	0.0000	1.4775
Total	7.3000e-004	0.0150	0.0117	2.0000e-005	0.0000	3.0000e-004	3.0000e-004	0.0000	3.0000e-004	3.0000e-004	0.0000	1.4682	1.4682	4.4000e-004	0.0000	1.4775

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.0000e-005	6.0000e-005	6.3000e-004	0.0000	1.1000e-004	0.0000	1.1000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0983	0.0983	1.0000e-005	0.0000	0.0984
Total	5.0000e-005	6.0000e-005	6.3000e-004	0.0000	1.1000e-004	0.0000	1.1000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0983	0.0983	1.0000e-005	0.0000	0.0984

3.4 Grading - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0212	0.0000	0.0212	2.2900e-003	0.0000	2.2900e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0277	0.3519	0.2204	3.0000e-004		0.0142	0.0142		0.0131	0.0131	0.0000	28.0769	28.0769	8.4700e-003	0.0000	28.2548
Total	0.0277	0.3519	0.2204	3.0000e-004	0.0212	0.0142	0.0354	2.2900e-003	0.0131	0.0153	0.0000	28.0769	28.0769	8.4700e-003	0.0000	28.2548

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.7000e-004	2.0000e-004	2.1000e-003	0.0000	3.7000e-004	0.0000	3.7000e-004	1.0000e-004	0.0000	1.0000e-004	0.0000	0.3277	0.3277	2.0000e-005	0.0000	0.3281
Total	1.7000e-004	2.0000e-004	2.1000e-003	0.0000	3.7000e-004	0.0000	3.7000e-004	1.0000e-004	0.0000	1.0000e-004	0.0000	0.3277	0.3277	2.0000e-005	0.0000	0.3281

3.4 Grading - 2016

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					9.5400e-003	0.0000	9.5400e-003	1.0300e-003	0.0000	1.0300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.3300e-003	0.2317	0.1589	3.0000e-004		2.6900e-003	2.6900e-003		2.6900e-003	2.6900e-003	0.0000	28.0769	28.0769	8.4700e-003	0.0000	28.2547
Total	7.3300e-003	0.2317	0.1589	3.0000e-004	9.5400e-003	2.6900e-003	0.0122	1.0300e-003	2.6900e-003	3.7200e-003	0.0000	28.0769	28.0769	8.4700e-003	0.0000	28.2547

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.7000e-004	2.0000e-004	2.1000e-003	0.0000	3.7000e-004	0.0000	3.7000e-004	1.0000e-004	0.0000	1.0000e-004	0.0000	0.3277	0.3277	2.0000e-005	0.0000	0.3281
Total	1.7000e-004	2.0000e-004	2.1000e-003	0.0000	3.7000e-004	0.0000	3.7000e-004	1.0000e-004	0.0000	1.0000e-004	0.0000	0.3277	0.3277	2.0000e-005	0.0000	0.3281

3.5 Underground Utilities - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0106	0.1077	0.0784	1.1000e-004		6.9500e-003	6.9500e-003		6.3900e-003	6.3900e-003	0.0000	10.3788	10.3788	3.1300e-003	0.0000	10.4446
Total	0.0106	0.1077	0.0784	1.1000e-004		6.9500e-003	6.9500e-003		6.3900e-003	6.3900e-003	0.0000	10.3788	10.3788	3.1300e-003	0.0000	10.4446

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.7000e-004	3.2000e-004	3.3500e-003	1.0000e-005	5.9000e-004	0.0000	5.9000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.5244	0.5244	3.0000e-005	0.0000	0.5250
Total	2.7000e-004	3.2000e-004	3.3500e-003	1.0000e-005	5.9000e-004	0.0000	5.9000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.5244	0.5244	3.0000e-005	0.0000	0.5250

3.5 Underground Utilities - 2016

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.7400e-003	0.1006	0.0833	1.1000e-004		1.8100e-003	1.8100e-003		1.8100e-003	1.8100e-003	0.0000	10.3788	10.3788	3.1300e-003	0.0000	10.4446
Total	4.7400e-003	0.1006	0.0833	1.1000e-004		1.8100e-003	1.8100e-003		1.8100e-003	1.8100e-003	0.0000	10.3788	10.3788	3.1300e-003	0.0000	10.4446

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.7000e-004	3.2000e-004	3.3500e-003	1.0000e-005	5.9000e-004	0.0000	5.9000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.5244	0.5244	3.0000e-005	0.0000	0.5250
Total	2.7000e-004	3.2000e-004	3.3500e-003	1.0000e-005	5.9000e-004	0.0000	5.9000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.5244	0.5244	3.0000e-005	0.0000	0.5250

3.6 Building Construction - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1363	1.1403	0.7403	1.0700e-003		0.0787	0.0787		0.0739	0.0739	0.0000	96.8614	96.8614	0.0240	0.0000	97.3659
Total	0.1363	1.1403	0.7403	1.0700e-003		0.0787	0.0787		0.0739	0.0739	0.0000	96.8614	96.8614	0.0240	0.0000	97.3659

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0187	0.1185	0.2307	2.9000e-004	7.9800e-003	1.8500e-003	9.8400e-003	2.2800e-003	1.7000e-003	3.9900e-003	0.0000	26.4197	26.4197	2.1000e-004	0.0000	26.4241
Worker	0.0313	0.0373	0.3908	8.2000e-004	0.0685	5.2000e-004	0.0690	0.0182	4.8000e-004	0.0187	0.0000	61.0885	61.0885	3.2700e-003	0.0000	61.1570
Total	0.0500	0.1558	0.6215	1.1100e-003	0.0764	2.3700e-003	0.0788	0.0205	2.1800e-003	0.0227	0.0000	87.5081	87.5081	3.4800e-003	0.0000	87.5812

3.6 Building Construction - 2016

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0431	0.9385	0.7126	1.0700e-003		0.0180	0.0180		0.0180	0.0180	0.0000	96.8613	96.8613	0.0240	0.0000	97.3658
Total	0.0431	0.9385	0.7126	1.0700e-003		0.0180	0.0180		0.0180	0.0180	0.0000	96.8613	96.8613	0.0240	0.0000	97.3658

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0187	0.1185	0.2307	2.9000e-004	7.9800e-003	1.8500e-003	9.8400e-003	2.2800e-003	1.7000e-003	3.9900e-003	0.0000	26.4197	26.4197	2.1000e-004	0.0000	26.4241
Worker	0.0313	0.0373	0.3908	8.2000e-004	0.0685	5.2000e-004	0.0690	0.0182	4.8000e-004	0.0187	0.0000	61.0885	61.0885	3.2700e-003	0.0000	61.1570
Total	0.0500	0.1558	0.6215	1.1100e-003	0.0764	2.3700e-003	0.0788	0.0205	2.1800e-003	0.0227	0.0000	87.5081	87.5081	3.4800e-003	0.0000	87.5812

3.7 Paving - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0209	0.2239	0.1482	2.2000e-004		0.0126	0.0126		0.0116	0.0116	0.0000	21.0138	21.0138	6.3400e-003	0.0000	21.1469
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0209	0.2239	0.1482	2.2000e-004		0.0126	0.0126		0.0116	0.0116	0.0000	21.0138	21.0138	6.3400e-003	0.0000	21.1469

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.0000e-004	6.0000e-004	6.2900e-003	1.0000e-005	1.1000e-003	1.0000e-005	1.1100e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	0.9832	0.9832	5.0000e-005	0.0000	0.9843
Total	5.0000e-004	6.0000e-004	6.2900e-003	1.0000e-005	1.1000e-003	1.0000e-005	1.1100e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	0.9832	0.9832	5.0000e-005	0.0000	0.9843

3.7 Paving - 2016

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	9.1200e-003	0.1970	0.1693	2.2000e-004		3.2700e-003	3.2700e-003		3.2700e-003	3.2700e-003	0.0000	21.0138	21.0138	6.3400e-003	0.0000	21.1469
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	9.1200e-003	0.1970	0.1693	2.2000e-004		3.2700e-003	3.2700e-003		3.2700e-003	3.2700e-003	0.0000	21.0138	21.0138	6.3400e-003	0.0000	21.1469

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.0000e-004	6.0000e-004	6.2900e-003	1.0000e-005	1.1000e-003	1.0000e-005	1.1100e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	0.9832	0.9832	5.0000e-005	0.0000	0.9843
Total	5.0000e-004	6.0000e-004	6.2900e-003	1.0000e-005	1.1000e-003	1.0000e-005	1.1100e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	0.9832	0.9832	5.0000e-005	0.0000	0.9843

3.8 Architectural Coating - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.0137					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.6800e-003	0.0237	0.0188	3.0000e-005		1.9700e-003	1.9700e-003		1.9700e-003	1.9700e-003	0.0000	2.5533	2.5533	3.0000e-004	0.0000	2.5596
Total	1.0174	0.0237	0.0188	3.0000e-005		1.9700e-003	1.9700e-003		1.9700e-003	1.9700e-003	0.0000	2.5533	2.5533	3.0000e-004	0.0000	2.5596

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5800e-003	1.8800e-003	0.0197	4.0000e-005	3.4500e-003	3.0000e-005	3.4800e-003	9.2000e-004	2.0000e-005	9.4000e-004	0.0000	3.0806	3.0806	1.6000e-004	0.0000	3.0841
Total	1.5800e-003	1.8800e-003	0.0197	4.0000e-005	3.4500e-003	3.0000e-005	3.4800e-003	9.2000e-004	2.0000e-005	9.4000e-004	0.0000	3.0806	3.0806	1.6000e-004	0.0000	3.0841

3.8 Architectural Coating - 2016

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.0137					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.1400e-003	0.0235	0.0183	3.0000e-005		4.8000e-004	4.8000e-004		4.8000e-004	4.8000e-004	0.0000	2.5533	2.5533	3.0000e-004	0.0000	2.5596
Total	1.0148	0.0235	0.0183	3.0000e-005		4.8000e-004	4.8000e-004		4.8000e-004	4.8000e-004	0.0000	2.5533	2.5533	3.0000e-004	0.0000	2.5596

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5800e-003	1.8800e-003	0.0197	4.0000e-005	3.4500e-003	3.0000e-005	3.4800e-003	9.2000e-004	2.0000e-005	9.4000e-004	0.0000	3.0806	3.0806	1.6000e-004	0.0000	3.0841
Total	1.5800e-003	1.8800e-003	0.0197	4.0000e-005	3.4500e-003	3.0000e-005	3.4800e-003	9.2000e-004	2.0000e-005	9.4000e-004	0.0000	3.0806	3.0806	1.6000e-004	0.0000	3.0841

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.2905	2.9111	13.5845	0.0285	1.9931	0.0387	2.0318	0.5339	0.0356	0.5695	0.0000	2,171.5166	2,171.5166	0.0919	0.0000	2,173.4465
Unmitigated	1.2905	2.9111	13.5845	0.0285	1.9931	0.0387	2.0318	0.5339	0.0356	0.5695	0.0000	2,171.5166	2,171.5166	0.0919	0.0000	2,173.4465

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	2,086.56	2,086.56	2086.56	5,354,340	5,354,340
Total	2,086.56	2,086.56	2,086.56	5,354,340	5,354,340

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	10.00	5.00	6.50	46.50	12.50	41.00	86	11	3

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.504380	0.068251	0.178421	0.147199	0.044767	0.006294	0.020809	0.016358	0.002307	0.002286	0.006181	0.000572	0.002175

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	321.2715	321.2715	0.0158	3.2700e-003	322.6152
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	328.8230	328.8230	0.0162	3.3400e-003	330.1983
NaturalGas Mitigated	0.0189	0.1612	0.0686	1.0300e-003		0.0130	0.0130		0.0130	0.0130	0.0000	186.7141	186.7141	3.5800e-003	3.4200e-003	187.8504
NaturalGas Unmitigated	0.0237	0.2025	0.0862	1.2900e-003		0.0164	0.0164		0.0164	0.0164	0.0000	234.5555	234.5555	4.5000e-003	4.3000e-003	235.9829

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	4.3954e+006	0.0237	0.2025	0.0862	1.2900e-003		0.0164	0.0164		0.0164	0.0164	0.0000	234.5555	234.5555	4.5000e-003	4.3000e-003	235.9829
Total		0.0237	0.2025	0.0862	1.2900e-003		0.0164	0.0164		0.0164	0.0164	0.0000	234.5555	234.5555	4.5000e-003	4.3000e-003	235.9829

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	3.49889e+006	0.0189	0.1612	0.0686	1.0300e-003		0.0130	0.0130		0.0130	0.0130	0.0000	186.7141	186.7141	3.5800e-003	3.4200e-003	187.8504
Total		0.0189	0.1612	0.0686	1.0300e-003		0.0130	0.0130		0.0130	0.0130	0.0000	186.7141	186.7141	3.5800e-003	3.4200e-003	187.8504

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	1.22805e+006	328.8230	0.0162	3.3400e-003	330.1983
Total		328.8230	0.0162	3.3400e-003	330.1983

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	1.19985e+006	321.2715	0.0158	3.2700e-003	322.6152
Total		321.2715	0.0158	3.2700e-003	322.6152

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.5732	0.0393	3.3750	1.8000e-004		0.0183	0.0183		0.0183	0.0183	0.0000	5.4580	5.4580	5.4800e-003	0.0000	5.5730
Unmitigated	1.5732	0.0393	3.3750	1.8000e-004		0.0183	0.0183		0.0183	0.0183	0.0000	5.4580	5.4580	5.4800e-003	0.0000	5.5730

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.2027					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.2654					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.1051	0.0393	3.3750	1.8000e-004		0.0183	0.0183		0.0183	0.0183	0.0000	5.4580	5.4580	5.4800e-003	0.0000	5.5730
Total	1.5732	0.0393	3.3750	1.8000e-004		0.0183	0.0183		0.0183	0.0183	0.0000	5.4580	5.4580	5.4800e-003	0.0000	5.5730

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.2027					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.2654					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.1051	0.0393	3.3750	1.8000e-004		0.0183	0.0183		0.0183	0.0183	0.0000	5.4580	5.4580	5.4800e-003	0.0000	5.5730
Total	1.5732	0.0393	3.3750	1.8000e-004		0.0183	0.0183		0.0183	0.0183	0.0000	5.4580	5.4580	5.4800e-003	0.0000	5.5730

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	40.0789	0.0222	0.0133	44.6814
Unmitigated	48.1044	0.0277	0.0167	53.8493

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	21.1099 / 13.3084	48.1044	0.0277	0.0167	53.8493
Total		48.1044	0.0277	0.0167	53.8493

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	16.8879 / 10.6467	40.0789	0.0222	0.0133	44.6814
Total		40.0789	0.0222	0.0133	44.6814

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	15.1269	0.8940	0.0000	33.9003
Unmitigated	30.2538	1.7880	0.0000	67.8007

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	149.04	30.2538	1.7880	0.0000	67.8007
Total		30.2538	1.7880	0.0000	67.8007

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	74.52	15.1269	0.8940	0.0000	33.9003
Total		15.1269	0.8940	0.0000	33.9003

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Vegetation

Sheldon Rd Apts
Sacramento County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Low Rise	324.00	Dwelling Unit	20.25	324,000.00	865

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	3.5	Precipitation Freq (Days)	58
Climate Zone	6			Operational Year	2017
Utility Company	Sacramento Municipal Utility District				
CO2 Intensity (lb/MWhr)	590.31	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstructionPhase	NumDays	370.00	80.00
tblConstructionPhase	NumDays	20.00	10.00
tblConstructionPhase	NumDays	35.00	20.00
tblConstructionPhase	PhaseEndDate	9/23/2016	12/16/2016
tblConstructionPhase	PhaseEndDate	11/17/2016	11/18/2016
tblConstructionPhase	PhaseEndDate	7/12/2016	6/28/2016
tblConstructionPhase	PhaseEndDate	12/16/2016	8/26/2016
tblConstructionPhase	PhaseEndDate	6/28/2016	6/14/2016
tblConstructionPhase	PhaseEndDate	7/26/2016	7/28/2016
tblConstructionPhase	PhaseStartDate	8/27/2016	11/19/2016
tblConstructionPhase	PhaseStartDate	7/29/2016	8/1/2016
tblConstructionPhase	PhaseStartDate	6/15/2016	6/1/2016
tblConstructionPhase	PhaseStartDate	11/19/2016	8/1/2016
tblConstructionPhase	PhaseStartDate	6/15/2016	6/1/2016
tblConstructionPhase	PhaseStartDate	6/29/2016	7/1/2016
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	LoadFactor	0.37	0.37
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	OffRoadEquipmentType		Off-Highway Trucks

tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentType		Rollers
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2017
tblVehicleTrips	ST_TR	7.16	6.44
tblVehicleTrips	SU_TR	6.07	6.44
tblVehicleTrips	WD_TR	6.59	6.44

2.0 Emissions Summary

2.2 Overall Operational**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	8.8851	0.3147	26.9997	1.4100e-003		0.1466	0.1466		0.1466	0.1466	0.0000	48.1310	48.1310	0.0483	0.0000	49.1454
Energy	0.1299	1.1098	0.4722	7.0800e-003		0.0897	0.0897		0.0897	0.0897		1,416.7296	1,416.7296	0.0272	0.0260	1,425.3515
Mobile	7.4884	16.9115	81.8148	0.1534	11.3372	0.2137	11.5509	3.0285	0.1966	3.2251		12,877.1964	12,877.1964	0.5575		12,888.9036
Total	16.5034	18.3360	109.2867	0.1619	11.3372	0.4501	11.7872	3.0285	0.4330	3.4615	0.0000	14,342.0569	14,342.0569	0.6330	0.0260	14,363.4006

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	8.8851	0.3147	26.9997	1.4100e-003		0.1466	0.1466		0.1466	0.1466	0.0000	48.1310	48.1310	0.0483	0.0000	49.1454
Energy	0.1034	0.8834	0.3759	5.6400e-003		0.0714	0.0714		0.0714	0.0714		1,127.7649	1,127.7649	0.0216	0.0207	1,134.6283
Mobile	7.4884	16.9115	81.8148	0.1534	11.3372	0.2137	11.5509	3.0285	0.1966	3.2251		12,877.1964	12,877.1964	0.5575		12,888.9036
Total	16.4769	18.1097	109.1904	0.1605	11.3372	0.4318	11.7689	3.0285	0.4147	3.4432	0.0000	14,053.0923	14,053.0923	0.6274	0.0207	14,072.6773

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.16	1.23	0.09	0.89	0.00	4.07	0.16	0.00	4.23	0.53	0.00	2.01	2.01	0.87	20.37	2.02

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	6/1/2016	6/14/2016	5	10	
2	Site Preparation	Site Preparation	6/1/2016	6/14/2016	5	10	
3	Grading	Grading	6/1/2016	6/28/2016	5	20	
4	Underground Utilities	Trenching	7/1/2016	7/28/2016	5	20	
5	Building Construction	Building Construction	8/1/2016	11/18/2016	5	80	
6	Paving	Paving	8/1/2016	8/26/2016	5	20	
7	Architectural Coating	Architectural Coating	11/19/2016	12/16/2016	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 40

Acres of Paving: 0

Residential Indoor: 656,100; Residential Outdoor: 218,700; Non-Residential Indoor: 0; Non-Residential Outdoor: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Demolition	Excavators	1	8.00	162	0.38
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Grading	Excavators	0	8.00	162	0.38
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Paving	Pavers	2	8.00	125	0.42
Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	0	8.00	255	0.40
Grading	Rubber Tired Dozers	0	8.00	255	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Graders	0	8.00	174	0.41
Grading	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Paving	Paving Equipment	2	8.00	130	0.36
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	0	8.00	255	0.40
Grading	Scrapers	2	8.00	361	0.48
Building Construction	Welders	1	8.00	46	0.45
Demolition	Off-Highway Trucks	1	6.00	400	0.38
Underground Utilities	Excavators	1	8.00	162	0.38
Underground Utilities	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Underground Utilities	Rollers	1	8.00	80	0.38

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	2	5.00	0.00	5.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	1	3.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Grading	2	5.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	233.00	35.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	47.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Underground Utilities	3	8.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

Water Exposed Area

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Demolition - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.1026	0.0000	0.1026	0.0155	0.0000	0.0155			0.0000			0.0000
Off-Road	1.0982	12.6105	7.2379	0.0152		0.5266	0.5266		0.4845	0.4845		1,580.177 2	1,580.177 2	0.4766		1,590.186 5
Total	1.0982	12.6105	7.2379	0.0152	0.1026	0.5266	0.6292	0.0155	0.4845	0.5000		1,580.177 2	1,580.177 2	0.4766		1,590.186 5

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0148	0.1339	0.2045	3.6000e-004	8.6700e-003	1.9200e-003	0.0106	2.3700e-003	1.7600e-003	4.1300e-003		36.1763	36.1763	2.6000e-004		36.1817
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0175	0.0224	0.2178	4.3000e-004	0.0380	2.8000e-004	0.0383	0.0101	2.6000e-004	0.0104		35.0945	35.0945	1.9300e-003		35.1351
Total	0.0323	0.1563	0.4223	7.9000e-004	0.0467	2.2000e-003	0.0489	0.0125	2.0200e-003	0.0145		71.2708	71.2708	2.1900e-003		71.3167

3.2 Demolition - 2016**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0462	0.0000	0.0462	6.9900e-003	0.0000	6.9900e-003			0.0000			0.0000
Off-Road	0.4488	12.1858	9.2710	0.0152		0.1584	0.1584		0.1584	0.1584	0.0000	1,580.1772	1,580.1772	0.4766		1,590.1865
Total	0.4488	12.1858	9.2710	0.0152	0.0462	0.1584	0.2046	6.9900e-003	0.1584	0.1654	0.0000	1,580.1772	1,580.1772	0.4766		1,590.1865

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0148	0.1339	0.2045	3.6000e-004	8.6700e-003	1.9200e-003	0.0106	2.3700e-003	1.7600e-003	4.1300e-003		36.1763	36.1763	2.6000e-004		36.1817
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0175	0.0224	0.2178	4.3000e-004	0.0380	2.8000e-004	0.0383	0.0101	2.6000e-004	0.0104		35.0945	35.0945	1.9300e-003		35.1351
Total	0.0323	0.1563	0.4223	7.9000e-004	0.0467	2.2000e-003	0.0489	0.0125	2.0200e-003	0.0145		71.2708	71.2708	2.1900e-003		71.3167

3.3 Site Preparation - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.3406	3.2551	2.4126	3.1100e-003		0.2506	0.2506		0.2306	0.2306		323.6773	323.6773	0.0976		325.7276
Total	0.3406	3.2551	2.4126	3.1100e-003	0.0000	0.2506	0.2506	0.0000	0.2306	0.2306		323.6773	323.6773	0.0976		325.7276

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0105	0.0134	0.1307	2.6000e-004	0.0228	1.7000e-004	0.0230	6.0500e-003	1.5000e-004	6.2100e-003		21.0567	21.0567	1.1600e-003		21.0810
Total	0.0105	0.0134	0.1307	2.6000e-004	0.0228	1.7000e-004	0.0230	6.0500e-003	1.5000e-004	6.2100e-003		21.0567	21.0567	1.1600e-003		21.0810

3.3 Site Preparation - 2016

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.1456	3.0067	2.3421	3.1100e-003		0.0608	0.0608		0.0608	0.0608	0.0000	323.6773	323.6773	0.0976		325.7276
Total	0.1456	3.0067	2.3421	3.1100e-003	0.0000	0.0608	0.0608	0.0000	0.0608	0.0608	0.0000	323.6773	323.6773	0.0976		325.7276

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0105	0.0134	0.1307	2.6000e-004	0.0228	1.7000e-004	0.0230	6.0500e-003	1.5000e-004	6.2100e-003		21.0567	21.0567	1.1600e-003		21.0810
Total	0.0105	0.0134	0.1307	2.6000e-004	0.0228	1.7000e-004	0.0230	6.0500e-003	1.5000e-004	6.2100e-003		21.0567	21.0567	1.1600e-003		21.0810

3.4 Grading - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.1210	0.0000	2.1210	0.2290	0.0000	0.2290			0.0000			0.0000
Off-Road	2.7649	35.1914	22.0429	0.0298		1.4184	1.4184		1.3050	1.3050		3,094.9510	3,094.9510	0.9336		3,114.5555
Total	2.7649	35.1914	22.0429	0.0298	2.1210	1.4184	3.5394	0.2290	1.3050	1.5340		3,094.9510	3,094.9510	0.9336		3,114.5555

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0175	0.0224	0.2178	4.3000e-004	0.0380	2.8000e-004	0.0383	0.0101	2.6000e-004	0.0104		35.0945	35.0945	1.9300e-003		35.1351
Total	0.0175	0.0224	0.2178	4.3000e-004	0.0380	2.8000e-004	0.0383	0.0101	2.6000e-004	0.0104		35.0945	35.0945	1.9300e-003		35.1351

3.4 Grading - 2016

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.9545	0.0000	0.9545	0.1031	0.0000	0.1031			0.0000			0.0000
Off-Road	0.7335	23.1655	15.8919	0.0298		0.2689	0.2689		0.2689	0.2689	0.0000	3,094.9510	3,094.9510	0.9336		3,114.5555
Total	0.7335	23.1655	15.8919	0.0298	0.9545	0.2689	1.2234	0.1031	0.2689	0.3720	0.0000	3,094.9510	3,094.9510	0.9336		3,114.5555

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0175	0.0224	0.2178	4.3000e-004	0.0380	2.8000e-004	0.0383	0.0101	2.6000e-004	0.0104		35.0945	35.0945	1.9300e-003		35.1351
Total	0.0175	0.0224	0.2178	4.3000e-004	0.0380	2.8000e-004	0.0383	0.0101	2.6000e-004	0.0104		35.0945	35.0945	1.9300e-003		35.1351

3.5 Underground Utilities - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0619	10.7683	7.8365	0.0110		0.6950	0.6950		0.6394	0.6394		1,144.0689	1,144.0689	0.3451		1,151.3158
Total	1.0619	10.7683	7.8365	0.0110		0.6950	0.6950		0.6394	0.6394		1,144.0689	1,144.0689	0.3451		1,151.3158

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0280	0.0358	0.3485	6.8000e-004	0.0609	4.5000e-004	0.0613	0.0161	4.1000e-004	0.0166		56.1512	56.1512	3.0900e-003		56.2161
Total	0.0280	0.0358	0.3485	6.8000e-004	0.0609	4.5000e-004	0.0613	0.0161	4.1000e-004	0.0166		56.1512	56.1512	3.0900e-003		56.2161

3.5 Underground Utilities - 2016

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4741	10.0593	8.3286	0.0110		0.1812	0.1812		0.1812	0.1812	0.0000	1,144.0689	1,144.0689	0.3451		1,151.3158
Total	0.4741	10.0593	8.3286	0.0110		0.1812	0.1812		0.1812	0.1812	0.0000	1,144.0689	1,144.0689	0.3451		1,151.3158

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0280	0.0358	0.3485	6.8000e-004	0.0609	4.5000e-004	0.0613	0.0161	4.1000e-004	0.0166		56.1512	56.1512	3.0900e-003		56.2161
Total	0.0280	0.0358	0.3485	6.8000e-004	0.0609	4.5000e-004	0.0613	0.0161	4.1000e-004	0.0166		56.1512	56.1512	3.0900e-003		56.2161

3.6 Building Construction - 2016**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.4062	28.5063	18.5066	0.0268		1.9674	1.9674		1.8485	1.8485		2,669.2864	2,669.2864	0.6620		2,683.1890
Total	3.4062	28.5063	18.5066	0.0268		1.9674	1.9674		1.8485	1.8485		2,669.2864	2,669.2864	0.6620		2,683.1890

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.5566	3.0139	7.2002	7.3000e-003	0.2056	0.0468	0.2524	0.0585	0.0429	0.1015		724.3752	724.3752	5.9200e-003		724.4995
Worker	0.8146	1.0422	10.1497	0.0199	1.7724	0.0130	1.7855	0.4702	0.0120	0.4821		1,635.4041	1,635.4041	0.0900		1,637.2937
Total	1.3713	4.0561	17.3499	0.0272	1.9780	0.0598	2.0378	0.5287	0.0549	0.5836		2,359.7792	2,359.7792	0.0959		2,361.7932

3.6 Building Construction - 2016

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0782	23.4615	17.8156	0.0268		0.4508	0.4508		0.4508	0.4508	0.0000	2,669.2864	2,669.2864	0.6620		2,683.1890
Total	1.0782	23.4615	17.8156	0.0268		0.4508	0.4508		0.4508	0.4508	0.0000	2,669.2864	2,669.2864	0.6620		2,683.1890

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.5566	3.0139	7.2002	7.3000e-003	0.2056	0.0468	0.2524	0.0585	0.0429	0.1015		724.3752	724.3752	5.9200e-003		724.4995
Worker	0.8146	1.0422	10.1497	0.0199	1.7724	0.0130	1.7855	0.4702	0.0120	0.4821		1,635.4041	1,635.4041	0.0900		1,637.2937
Total	1.3713	4.0561	17.3499	0.0272	1.9780	0.0598	2.0378	0.5287	0.0549	0.5836		2,359.7792	2,359.7792	0.0959		2,361.7932

3.7 Paving - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.0898	22.3859	14.8176	0.0223		1.2610	1.2610		1.1601	1.1601		2,316.3767	2,316.3767	0.6987		2,331.0495
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	2.0898	22.3859	14.8176	0.0223		1.2610	1.2610		1.1601	1.1601		2,316.3767	2,316.3767	0.6987		2,331.0495

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0524	0.0671	0.6534	1.2800e-003	0.1141	8.4000e-004	0.1149	0.0303	7.7000e-004	0.0310		105.2835	105.2835	5.7900e-003		105.4052
Total	0.0524	0.0671	0.6534	1.2800e-003	0.1141	8.4000e-004	0.1149	0.0303	7.7000e-004	0.0310		105.2835	105.2835	5.7900e-003		105.4052

3.7 Paving - 2016

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9122	19.6998	16.9276	0.0223		0.3271	0.3271		0.3271	0.3271	0.0000	2,316.3767	2,316.3767	0.6987		2,331.0495
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9122	19.6998	16.9276	0.0223		0.3271	0.3271		0.3271	0.3271	0.0000	2,316.3767	2,316.3767	0.6987		2,331.0495

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0524	0.0671	0.6534	1.2800e-003	0.1141	8.4000e-004	0.1149	0.0303	7.7000e-004	0.0310		105.2835	105.2835	5.7900e-003		105.4052
Total	0.0524	0.0671	0.6534	1.2800e-003	0.1141	8.4000e-004	0.1149	0.0303	7.7000e-004	0.0310		105.2835	105.2835	5.7900e-003		105.4052

3.8 Architectural Coating - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Archit. Coating	101.3675					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Off-Road	0.3685	2.3722	1.8839	2.9700e-003		0.1966	0.1966		0.1966	0.1966		281.4481	281.4481	0.0332			282.1449
Total	101.7359	2.3722	1.8839	2.9700e-003		0.1966	0.1966		0.1966	0.1966		281.4481	281.4481	0.0332			282.1449

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Worker	0.1643	0.2102	2.0474	4.0100e-003	0.3575	2.6300e-003	0.3602	0.0948	2.4100e-003	0.0973		329.8884	329.8884	0.0182			330.2696
Total	0.1643	0.2102	2.0474	4.0100e-003	0.3575	2.6300e-003	0.3602	0.0948	2.4100e-003	0.0973		329.8884	329.8884	0.0182			330.2696

3.8 Architectural Coating - 2016

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	101.3675					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1139	2.3524	1.8324	2.9700e-003		0.0475	0.0475		0.0475	0.0475	0.0000	281.4481	281.4481	0.0332		282.1449
Total	101.4814	2.3524	1.8324	2.9700e-003		0.0475	0.0475		0.0475	0.0475	0.0000	281.4481	281.4481	0.0332		282.1449

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1643	0.2102	2.0474	4.0100e-003	0.3575	2.6300e-003	0.3602	0.0948	2.4100e-003	0.0973		329.8884	329.8884	0.0182		330.2696
Total	0.1643	0.2102	2.0474	4.0100e-003	0.3575	2.6300e-003	0.3602	0.0948	2.4100e-003	0.0973		329.8884	329.8884	0.0182		330.2696

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	7.4884	16.9115	81.8148	0.1534	11.3372	0.2137	11.5509	3.0285	0.1966	3.2251		12,877.19 64	12,877.19 64	0.5575		12,888.90 36
Unmitigated	7.4884	16.9115	81.8148	0.1534	11.3372	0.2137	11.5509	3.0285	0.1966	3.2251		12,877.19 64	12,877.19 64	0.5575		12,888.90 36

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	2,086.56	2,086.56	2086.56	5,354,340	5,354,340
Total	2,086.56	2,086.56	2,086.56	5,354,340	5,354,340

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	10.00	5.00	6.50	46.50	12.50	41.00	86	11	3

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.504380	0.068251	0.178421	0.147199	0.044767	0.006294	0.020809	0.016358	0.002307	0.002286	0.006181	0.000572	0.002175

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.1034	0.8834	0.3759	5.6400e-003		0.0714	0.0714		0.0714	0.0714		1,127.7649	1,127.7649	0.0216	0.0207	1,134.6283
NaturalGas Unmitigated	0.1299	1.1098	0.4722	7.0800e-003		0.0897	0.0897		0.0897	0.0897		1,416.7296	1,416.7296	0.0272	0.0260	1,425.3515

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	12042.2	0.1299	1.1098	0.4722	7.0800e-003		0.0897	0.0897		0.0897	0.0897		1,416.7296	1,416.7296	0.0272	0.0260	1,425.3515
Total		0.1299	1.1098	0.4722	7.0800e-003		0.0897	0.0897		0.0897	0.0897		1,416.7296	1,416.7296	0.0272	0.0260	1,425.3515

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	9.586	0.1034	0.8834	0.3759	5.6400e-003		0.0714	0.0714		0.0714	0.0714		1,127.7649	1,127.7649	0.0216	0.0207	1,134.6283
Total		0.1034	0.8834	0.3759	5.6400e-003		0.0714	0.0714		0.0714	0.0714		1,127.7649	1,127.7649	0.0216	0.0207	1,134.6283

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	8.8851	0.3147	26.9997	1.4100e-003		0.1466	0.1466		0.1466	0.1466	0.0000	48.1310	48.1310	0.0483	0.0000	49.1454
Unmitigated	8.8851	0.3147	26.9997	1.4100e-003		0.1466	0.1466		0.1466	0.1466	0.0000	48.1310	48.1310	0.0483	0.0000	49.1454

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.1109					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	6.9336					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.8407	0.3147	26.9997	1.4100e-003		0.1466	0.1466		0.1466	0.1466		48.1310	48.1310	0.0483		49.1454
Total	8.8851	0.3147	26.9997	1.4100e-003		0.1466	0.1466		0.1466	0.1466	0.0000	48.1310	48.1310	0.0483	0.0000	49.1454

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.1109					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	6.9336					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.8407	0.3147	26.9997	1.4100e-003		0.1466	0.1466		0.1466	0.1466		48.1310	48.1310	0.0483		49.1454
Total	8.8851	0.3147	26.9997	1.4100e-003		0.1466	0.1466		0.1466	0.1466	0.0000	48.1310	48.1310	0.0483	0.0000	49.1454

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Vegetation



Appendix C

BIOLOGICAL RESOURCES ASSESSMENT



Biological Resources Assessment

19.7-Acre 8151 Sheldon Road Project
City of Sacramento, California

Prepared for: LCG Sheldon, LLC

Date: February 9, 2016

Submitted by:



FOOTHILL ASSOCIATES

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1.0 EXECUTIVE SUMMARY

Foothill Associates' biologists prepared this Biological Resources Assessment (BRA) for the 8151 Sheldon Road Project (Project Site), located in the City of Sacramento, California. A BRA was prepared for a portion of this Project Site in 2006 (Foothill Associates 2006). The purpose of this BRA is to provide an updated assessment of current conditions, to summarize the general biological resources within the Project Site, to assess the suitability of the Project Site to support special-status species and sensitive habitat types, to provide recommendations for regulatory permitting or further analysis that may be required, and to recommend mitigation measures to avoid or minimize potential impacts to special-status species and sensitive habitat types.

Biological constraints within the Project Site include known or potential habitat for:

- Swainson's hawk (*Buteo swainsoni*);
- Burrowing owl (*Athene cunicularia*);
- Loggerhead shrike (*Lanius ludovicianus*);
- Short-eared owl (*Asio flammeus*);
- White-tailed kite (*Elanus leucurus*);
- Migratory birds and raptors; and
- Sensitive habitats (oak trees and potential waters of the State).

2.0 INTRODUCTION

This BRA summarizes the general biological resources within the Project Site, assesses the suitability of the Project Site to support special-status species and sensitive habitat types, provides recommendations for regulatory permitting or further analysis that may be required, and provides recommended mitigation measures to avoid or minimize potential impacts to special-status species and sensitive habitat types.

3.0 REGULATORY FRAMEWORK

Federal, State, and local environmental laws, regulations, and policies relevant to the California Environmental Quality Act (CEQA) review process are summarized below. The CEQA significance criteria are also included in this section.

3.1 Federal Jurisdiction

3.1.1 Federal Endangered Species Act

The U.S. Congress passed the Federal Endangered Species Act (FESA) in 1973 to protect those species that are endangered or threatened with extinction. FESA is intended to operate in conjunction with the National Environmental Policy Act (NEPA) to help protect the ecosystems upon which endangered and threatened species depend.

FESA prohibits the “take” of endangered or threatened wildlife species. “Take” is defined to include harassing, harming, pursuing, hunting, shooting, wounding, killing, trapping, capturing, or collecting wildlife species or any attempt to engage in such conduct (FESA Section 3 [(3)(19)]). Harm is further defined to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing behavioral patterns (50 CFR §17.3). Harass is defined as actions that create the likelihood of injury to listed species to such an extent as to significantly disrupt normal behavior patterns (50 CFR §17.3). Actions that result in take can result in civil or criminal penalties.

FESA and Clean Water Act (CWA) Section 404 guidelines prohibit the issuance of wetland permits for projects that jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of habitat of such species. The U.S. Army Corps of Engineers (Corps) must consult with the U.S. Fish and Wildlife Service (USFWS) and/or the National Marine Fisheries Service (NMFS) when threatened or endangered species under their jurisdiction may be affected by a proposed project. In the context of the proposed project, FESA would be initiated if development resulted in take of a threatened or endangered species or if issuance of a Section 404 permit or other federal agency action could result in take of an endangered species or adversely modify critical habitat of such a species.

3.1.2 Migratory Bird Treaty Act

Raptors (birds of prey), migratory birds, and other avian species are protected by a number of State and federal laws. The federal Migratory Bird Treaty Act (MBTA) prohibits the killing, possessing, or trading of migratory birds except in accordance with regulations prescribed by the Secretary of Interior.

3.1.3 The Bald and Golden Eagle Protection Act

The Bald and Golden Eagle Protection Act (Eagle Act) prohibits the taking or possession of and commerce in bald and golden eagles with limited exceptions. Under the Eagle Act, it is a violation to “take, possess, sell, purchase, barter, offer to sell, transport, export or import, at any time or in any manner, any bald eagle commonly known as the American eagle, or golden eagle, alive or dead, or any part, nest, or egg, thereof.” Take is defined to include pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, destroy, molest, and disturb. Disturb is further defined in 50 CFR Part 22.3 as “to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available (1) injury to an eagle, (2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior, or (3) nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior.”

3.2 State Jurisdiction

3.2.1 California Endangered Species Act

The State of California enacted the California Endangered Species Act (CESA) in 1984. CESA is similar to the FESA but pertains to State-listed endangered and threatened species. CESA requires state agencies to consult with the California Department of Fish and Wildlife (CDFW), when preparing California Environmental Quality Act (CEQA) documents. The purpose is to ensure that the state lead agency actions do not jeopardize the continued existence of a listed species or result in the destruction, or adverse modification of habitat essential to the continued existence of those species, if there are reasonable and prudent alternatives available (Fish and Game Code §2080). CESA directs agencies to consult with CDFW on projects or actions that could affect listed species, directs CDFW to determine whether jeopardy would occur and allows CDFW to identify “reasonable and prudent alternatives” to the project consistent with conserving the species. CESA allows CDFW to authorize exceptions to the State’s prohibition against take of a listed species if the “take” of a listed species is incidental to carrying out an otherwise lawful project that has been approved under CEQA (Fish & Game Code § 2081).

3.2.2 California Department of Fish and Game Codes

Fully protected fish species are protected under Section 5515; fully protected amphibian and reptile species are protected under Section 5050; fully protected bird species are protected under Section 3511; and fully protected mammal species are protected under Section 4700. The California Fish and Game Code defines take as “hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill.” Except for take related to scientific research, all take of fully protected species is prohibited.

Section 3503 of the California Fish and Game Code prohibits the killing of birds or the destruction of bird nests. Section 3503.5 prohibits the killing of raptor species and the

destruction of raptor nests. Sections 2062 and 2067 define endangered and threatened species.

3.2.3 California Department of Fish and Wildlife Species of Concern

In addition to formal listing under FESA and CESA, species receive additional consideration by CDFW and local lead agencies during the CEQA process. Species that may be considered for review are included on a list of “Species of Special Concern,” developed by the CDFW. It tracks species in California whose numbers, reproductive success, or habitat may be threatened.

3.3 Jurisdictional Waters

3.3.1 Federal Jurisdiction

The Corps regulates discharge of dredge or fill material into waters of the U.S. under Section 404 of the CWA. “Discharges of fill material” is defined as the addition of fill material into waters of the U.S., including, but not limited to the following: placement of fill that is necessary for the construction of any structure, or impoundment requiring rock, sand, dirt, or other material for its construction; site-development fills for recreational, industrial, commercial, residential, and other uses; causeways or road fills; fill for intake and outfall pipes and subaqueous utility lines [33 C.F.R. §328.2(f)]. In addition, Section 401 of the CWA (33 U.S.C. 1341) requires any applicant for a Federal license or permit to conduct any activity that may result in a discharge of a pollutant into waters of the U.S. to obtain a certification that the discharge will comply with the applicable effluent limitations and water quality standards.

Waters of the U.S. include a range of wet environments such as lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, and wet meadows. Boundaries between jurisdictional waters and uplands are determined in a variety of ways depending on which type of waters is present. Methods for delineating wetlands and non-tidal waters are described below.

- Wetlands are defined as “those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions” [33 C.F.R. §328.3(b)]. Presently, to be a wetland, a site must exhibit three wetland criteria: hydrophytic vegetation, hydric soils, and wetland hydrology existing under the “normal circumstances” for the site.
- The lateral extent of non-tidal waters is determined by delineating the ordinary high water mark (OHWM) [33 C.F.R. §328.4(c)(1)]. The OHWM is defined by the Corps as “that line on shore established by the fluctuations of water and indicated by physical character of the soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas” [33 C.F.R. §328.3(e)].

3.3.2 State Jurisdiction

CDFW is a trustee agency that has jurisdiction under Section 1600 *et seq.* of the California Fish and Game Code. Under Sections 1602 and 1603, a private party must notify CDFW if a proposed project will “substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake designated by the department, or use any material from the streambeds...except when the department has been notified pursuant to Section 1601.” Additionally, CDFW may assert jurisdiction over native riparian habitat adjacent to aquatic features, including native trees over 4 inches in diameter at breast height (DBH). If an existing fish or wildlife resource may be substantially adversely affected by the activity, CDFW may propose reasonable measures that will allow protection of those resources. If these measures are agreeable to the parties involved, they may enter into an agreement with CDFW identifying the approved activities and associated mitigation measures.

Section 13260(a) of the Porter-Cologne Water Quality Control Act (contained in the California Water Code) requires any person discharging waste or proposing to discharge waste, other than to a community sewer system, within any region that could affect the quality of the waters of the State (all surface and subsurface waters) to file a report of waste discharge. The discharge of dredged or fill material may constitute a discharge of waste that could affect the quality of waters of the State. All of the wetlands and waterways in the Project Site are waters of the State, which are protected under this act.

Historically, California relied on its authority under Section 401 of the CWA to regulate discharges of dredged or fill material to California waters. That section requires an applicant to obtain “water quality certification” from the State Water Resources Control Board (SWRCB) through its Regional Water Quality Control Boards (RWQCB) to ensure compliance with state water quality standards before certain federal licenses or permits may be issued. The permits subject to Section 401 include permits for the discharge of dredged or fill materials (CWA Section 404 permits) issued by the U.S. Army Corps of Engineers. Waste discharge requirements under the Porter-Cologne Water Quality Control Act were typically waived for projects that required certification. With the recent changes that limited the jurisdiction of wetlands under the CWA, the SWRCB has needed to rely on the report of waste discharge process.

3.4 CEQA Significance Criteria

Section 15064.7 of the CEQA Guidelines encourages local agencies to develop and publish the thresholds that the agency uses in determining the significance of environmental effects caused by projects under its review. However, agencies may also rely upon the guidance provided by the expanded Initial Study checklist contained in Appendix G of the CEQA Guidelines. Appendix G provides examples of impacts that would normally be considered significant. Based on these examples, impacts to biological resources would normally be considered significant if the project would:

- 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 CDFW or USFWS;

- 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 CDFW or USFWS;
- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the CWA (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;
- 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;
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; and
- Conflict with the provisions of an adopted Habitat Conservation Plan (HCP), Natural Community Conservation Plan (NCCP), or other approved local, regional or state habitat conservation plan.

An evaluation of whether or not an impact on biological resources would be substantial must consider both the resource itself and how that resource fits into a regional or local context. Substantial impacts would be those that would diminish, or result in the loss of, an important biological resource, or those that would obviously conflict with local, State, or federal resource conservation plans, goals, or regulations. Impacts are sometimes locally important but not significant according to CEQA. The reason for this is that although the impacts would result in an adverse alteration of existing conditions, they would not substantially diminish, or result in the permanent loss of, an important resource on a population-wide or region-wide basis.

3.4.1 California Native Plant Society

The California Native Plant Society (CNPS) maintains a rank of plant species native to California that has low population numbers, limited distribution, or are otherwise threatened with extinction. This information is published in the *Inventory of Rare and Endangered Vascular Plants of California*. Potential impacts to populations of CNPS-ranked plants receive consideration under CEQA review. The following identifies the definitions of the CNPS ranks:

- Rank 1A: Plants presumed Extinct in California
- Rank 1B: Plants Rare, Threatened, or Endangered in California and elsewhere
- Rank 2: Plants Rare, Threatened, or Endangered in California, but more numerous elsewhere
- Rank 3: Plants about which we need more information – A Review List
- Rank 4: Plants of limited distribution – A Watch List

All plants appearing on CNPS Ranked 1 or 2 are considered to meet CEQA Guidelines Section 15380 criteria. While only some of the plants ranked 3 and 4 meet the definitions of threatened or endangered species, the CNPS recommends that all Rank 3 and Rank 4 plants be evaluated for consideration under CEQA.

3.4.2 City of Sacramento Tree Ordinance

The City of Sacramento City Code (City Code) protects City Street Trees (any tree growing on a public street right-of-way) and heritage trees. According to City General Tree Ordinance Code #12.56.060, a heritage tree is defined as:

Any tree of any species with a trunk circumference of 100 inches (31.8 inches diameter at breast height; DBH) or more at 4.5 feet from the ground, which is of good quality in terms of health, vigor of growth and conformity to generally accepted horticultural standards of shape and location for its species.

Any oak (Quercus sp.), sycamore (Platanus racemosa), or buckeye (Aesculus californica) having a circumference of 36 inches (11.5 inches DBH) or greater when a single trunk, or a cumulative circumference of 36 inches (11.5 inches DBH) or greater when a multi-trunk, which is of good quality in terms of health, vigor of growth and conformity to generally accepted horticultural standards of shape and location for its species.

Any tree 36 inches in circumference (11.5 inches DBH) or greater in a riparian zone. The riparian zone is measured from the centerline of the water course to 30 feet beyond the high water line.

Any tree, grove of trees, or woodland trees designated by resolution of the City Council to be of special historical or environmental value or of significant community benefit (Ord. 2008-018 § 3; prior code § 45.04.211).

4.0 METHODS

Available information pertaining to the natural resources of the region was reviewed. All references reviewed for this assessment are listed in the **References** section. The following site-specific information was reviewed:

- California Department of Fish and Wildlife (CDFW). 2015. California Natural Diversity Data Base (CNDDDB: *Bruceville, Carmichael, Clarksburg, Courtland, Elk Grove, Florin, Galt, Sacramento East, and Sacramento West* U.S. Geological Survey (USGS) 7.5-minute series quadrangles (quadrangles)), Sacramento, CA. [Accessed 11/30/2015] (**Appendix A**);
- California Native Plant Society (CNPS). 2015. Inventory of Rare and Endangered Plants (online edition, v8-01a) (CNPS: *Bruceville, Carmichael, Clarksburg, Courtland, Elk Grove, Florin, Galt, Sacramento East, and Sacramento West* quadrangles). [Accessed 11/30/2015] (**Appendix A**);
- U.S. Fish and Wildlife Service (USFWS). 2015. *Information for Planning and Conservation (IPaC) Trust Resource Report: My Project*. [Accessed 11/30/2015] (**Appendix A**); and
- U.S. Department of Agriculture (USDA), Natural Resource Conservation Service (NRCS). 1993. *Soil Survey of Sacramento County, California*. U.S. Department of Agriculture.

Foothill Associates' biologists conducted a biological survey on December 3, 2015. The biological survey consisted of conducting botanical inventories, evaluating biological communities, determining whether wetlands and waterways occur, and documenting habitat for special-status species with the potential to occur within the Project Site. Plants and wildlife observed within the Project Site are identified in **Appendix B**.

A wetland delineation was prepared for the majority of the Project Site in 2007 (Foothill Associates 2007a). Although the wetland delineation does not include a 0.7-acre portion of the Project Site associated with a remnant residential dwelling, this portion of the Project Site does not contain wetland features. The Corps verified the delineation on September 11, 2007. A subsequent delineation map was submitted on August 21, 2012 requesting an approved determination (Foothill Associates 2012). The Corps verified the 2012 delineation on October 16, 2012. The Corps concurred that the features onsite are intrastate isolated waters with no apparent interstate or foreign commerce connection and are therefore not regulated by the Corps.

Protocol-level invertebrate surveys were conducted during the dry season in 2006 (EcoAnalysts, Inc. 2006) and during the wet season from 2006 to 2007 (Foothill Associates 2007b). The results of the surveys are summarized herein.

5.0 RESULTS

5.1 Site Location and Description

The Project Site consists of 19.7 acres of disturbed land within the City of Sacramento, California that is currently composed of disturbed non-native annual grassland and disturbed/developed areas associated with graded roads, a cargo container storage lot, and a foundation associated with a remnant residence. The disturbed non-native annual grassland had been recently tilled and appears to be tilled periodically as part of the normal maintenance of the Project Site. Land uses surrounding the Project Site include single-family residences to the north, commercial complexes and State Highway 99 to the east, Sheldon Road and commercial retail complexes to the south, and Sheldon Golf Center and single-family residences to the west. The Project Site is located within Township 17 North, Range 5 East, and Section 23 of the *Florin* quadrangle (**Figure 1**).

5.2 Physical Features

5.2.1 Topography and Drainage

Topography within the Project Site is relatively level. Elevations range from approximately 25 to 30 feet above mean sea level (MSL). Scattered seasonal depressions collect some limited surface runoff from the Project Site. A manmade roadside ditch flows north to south along the western edge of a graded road. Surface runoff drains southward to a roadside ditch that runs along the north side of Sheldon Road to the south of the Project Site.

5.2.2 Soils

The Natural Resources Conservation Service (NRCS) has mapped two soil units within the Project Site (**Figure 2**): **San Joaquin Silt Loam, Leveled, 0 to 1 Percent Slopes** and **San Joaquin-Galt Complex, 0 to 3 Percent Slopes**. General characteristics associated with these soils types are described below (USDA, NRCS 1993, 2015a, and 2015b).

- **(213) San Joaquin Silt Loam, Leveled, 0 to 1 Percent Slopes:** This soil unit is found on low terraces at an elevation of 20 to 125 feet above MSL. San Joaquin silt loam is a moderately deep, moderately well-drained soil formed in alluvium derived from dominantly granitic rocks. Permeability is very slow and runoff is very slow. Available water capacity is low. The hydric soils list for Sacramento County does not identify any hydric inclusions within this soil type. (USDA, NRCS 2015b).
- **San Joaquin-Galt Complex, 0 to 3 Percent Slopes:** This soil unit is found on low terraces at an elevation of 20 to 95 feet above MSL. The San Joaquin soil is moderately deep and moderately well-drained. Permeability is very slow and runoff is slow. It formed in alluvium derived from mixed granitic rocks. The Galt soil is moderately deep and moderately well-drained. Permeability is slow and runoff is ponded. It formed in textured alluvium derived from granitic rocks. Most areas with

this soil type are used for rangeland. The hydric soils list for Sacramento County identifies the Galt hydric component occurring within depressions and the Clearlake hydric inclusion found on basin floors as occurring within this soil unit (USDA, NRCS 2015b).

5.3 Wildlife Corridors

Wildlife corridors link together areas of suitable wildlife habitat that are otherwise separated by rugged terrain, changes in vegetation, or human disturbance. The fragmentation of open space areas by urbanization creates isolated "islands" of wildlife habitat. Fragmentation can also occur when a portion of one or more habitats is converted into another habitat, such as when woodland or scrub habitat is altered or converted into grasslands after a disturbance such as fire, mudslide, or grading activities. Wildlife corridors mitigate the effects of this fragmentation by: (1) allowing animals to move between remaining habitats, thereby permitting depleted populations to be replenished and promoting genetic exchange; (2) providing escape routes from fire, predators, and human disturbances, thus reducing the risk of catastrophic events (such as fire or disease) on population or local species extinction; and (3) serving as travel routes for individual animals as they move within their home ranges in search of food, water, mates, and other needs.

The Project Site is not part of a major or local wildlife corridor/travel route because it does not connect two significant habitats. The Project Site is surrounded by single-family residences to the north, commercial complexes and State Highway 99 to the east, Sheldon Road and commercial retail complexes to the south, and Sheldon Golf Center and single-family residences to the west. Therefore, no wildlife corridors occur within the Project Site.

5.4 Biological Communities

The following biological communities occur within the Project Site: disturbed non-native annual grassland, disturbed/developed, depressional seasonal wetland, and ditch/canal. **Table 1** below summarizes the biological communities by acreages. Dominant vegetation observed within each biological community is discussed in detail below. A comprehensive list of plants observed within the Project Site is provided in **Appendix B**. The biological communities are depicted in **Figure 3**.

Table 1 — Biological Communities by Acreages

Biological Community	Total Acreage ¹
Non-Native Annual Grassland	15.02
Disturbed/Developed	4.43
Depressional Seasonal Wetland	0.19
Ditch/Canal	0.01
Total	19.65

¹GIS calculations may not reflect exact acreage of Project Site due to rounding.

5.4.1 Non-Native Annual Grassland

Disturbed non-native annual grassland occurs throughout the Project Site. The majority of the disturbed non-native annual grassland had been recently tilled. Dominant vegetation includes: wild oat (*Avena fatua*), soft chess (*Bromus hordeaceus*), ripgut grass (*Bromus diandrus*), winter vetch (*Vicia villosa*), yellow star-thistle (*Centaurea solstitialis*), and filaree (*Erodium botrys*). Isolated trees and shrubs including coyote bush (*Baccharis pilularis*), Aleppo pine (*Pinus halepensis*), valley oak (*Quercus lobata*), common fig (*Ficus carica*), mulberry (*Morus* sp.), and eucalyptus (*Eucalyptus* sp.) occur within the disturbed non-native annual grassland.

5.4.2 Disturbed/Developed

Disturbed/developed areas occur throughout the southern and eastern portions of the Project Site. Disturbed/developed areas include: graded roads, a cargo container storage lot, and a foundation associated with a remnant residence. Dominant vegetation includes soft chess, wild oat, yellow star-thistle, Himalayan blackberry (*Rubus armeniacus*), rose (*Rosa* sp.), and annual canarygrass (*Phalaris canariensis*). Mexican fan palms (*Washingtonia robusta*) are growing throughout the developed areas.

5.4.3 Depressional Seasonal Wetland

Depressional seasonal wetlands were mapped and verified in the wetland delineation in 2012. The locations of these features were not apparent during the December 3, 2015 biological survey. Based on current conditions, only a few low spots less than one inch in depth are present within the areas where these features were previously mapped due to ongoing disking. Dominant vegetation within the depressional seasonal wetlands includes: ryegrass (*Festuca perennis*), soft chess, and ripgut grass.

5.4.4 Ditch/Canal

One manmade roadside ditch occurs within the Project Site. Dominant vegetation includes the upland species identified within the disturbed non-native annual grassland biological community.

5.5 Wildlife Observed

Commonly occurring wildlife observed within the Project Site includes: western scrub jay (*Aphelocoma californica*), mourning dove (*Zenaida macroura*), black phoebe (*Sayornis nigricans*), and black-tailed jackrabbit (*Lepus californicus*). A comprehensive list of wildlife observed is provided in **Appendix B**.

5.6 Special-Status Species

Special-status species are plant and animal species that have been afforded special recognition by federal, State, or local resource agencies or organizations. Listed and special-status species are of relatively limited distribution and may require specialized

habitat conditions. Special-status species are defined as meeting one or more of the following criteria:

- Listed or proposed for listing under the CESA or the FESA;
- Protected under other regulations (e.g. Migratory Bird Treaty Act);
- CDFW Species of Special Concern;
- Plant species ranked by the CNPS; or
- Receive consideration during environmental review under CEQA.

Special-status species considered for this analysis are based on the CNDDDB, CNPS, and USFWS lists. CNDDDB occurrences of special-status species documented within five miles of the Project Site are illustrated within **Figure 4** (CDFW 2015). **Appendix C** includes the common and scientific names for each species, regulatory status (federal, State, local, CNPS), habitat descriptions, and potential for occurrence on the Project Site. The following set of criteria has been used to determine each species potential for occurrence within the Project Site:

- **Present:** Species known to occur within the Project Site based on CNDDDB records and/or observed within the Project Site during the biological survey.
- **High:** Species known to occur on or near the Project Site (based on CNDDDB records within five miles and/or based on professional expertise specific to the Project Site or species) and there is suitable habitat within the Project Site.
- **Low:** Species known to occur in the vicinity of the Project Site and there is marginal habitat within the Project Site **-OR-** Species is not known to occur in the vicinity of the site, however, there is suitable habitat on the site.
- **None:** Species is not known to occur on or in the vicinity of the Project Site and there is no suitable habitat within the Project Site **-OR-** The Project Site does not provide suitable soils or occurs outside of the known elevation or geographic ranges **-OR-** Species is not known in Sacramento County.

Only those species that are known to be present or that have a *high* or *low* potential for occurrence will be discussed further in the following paragraphs.

5.6.1 Listed and Special-Status Plants

No special-status plants have the potential to occur within the Project Site.

5.6.2 *Listed and Special-Status Wildlife*

The following special-status wildlife species have a *high* potential to occur within the Project Site: Swainson's hawk. The following special-status wildlife have a *low* potential to occur within the Project Site: burrowing owl, loggerhead shrike, short-eared owl, and white-tailed kite. The following special-status wildlife no longer have the potential to occur due to lack of habitat based on current conditions: vernal pool invertebrates including vernal pool fairy shrimp and vernal pool tadpole shrimp. These species are discussed in detail below.

Wildlife with a High Potential to Occur

Swainson's Hawk

Swainson's hawk is a long-distance migrant with nesting grounds in western North America. The Swainson's hawk population that nests in the Central Valley winters primarily in Mexico, while the population that nests in the interior portions of North America winters in South America (Bradbury *et. al.*, in prep.). Swainson's hawks arrive in the Central Valley between March and early April to establish breeding territories. Breeding occurs from late March to late August, peaking in late May through July (Zeiner *et. al.*, 1990). In the Central Valley, Swainson's hawks nest in isolated trees, small groves, or large woodlands next to open grasslands or agricultural fields. This species typically nests near riparian areas; however, it has been known to nest in urban areas as well. Valley oak, Fremont cottonwood, walnut, and large willow trees, ranging in height from 41 to 82 feet, are the most commonly used nest trees in the Central Valley (County of Sacramento 2007). Nest locations are usually in close proximity (up to a 10-mile radius) to suitable foraging habitats, which include fallow fields, all types of grasslands, irrigated pastures, alfalfa and other hay crops, and low-growing row crops (SAIC 2012). Swainson's hawks leave their breeding grounds to return to their wintering grounds in late August or early September (Bloom and De Water 1994).

There are 162 CNDDDB occurrences of this species within five miles of the Project Site (**Figure 4**) (CDFW 2015). The nearest CNDDDB occurrence is from 2002 and is located 0.05 miles northeast of the Project Site. The nearest CNDDDB occurrence (Occurrence #2245) that documents an active nest within the last five years is from 2011 and is located approximately 3.52 miles east of the Project Site. The record states that a nest was observed in a medium-sized oak tree.

The Project Site provides marginal nesting habitat since it does not contain tall mature trees aside from a single eucalyptus tree within the southeastern portion of the Project Site. No Swainson's hawks were observed during the December 3, 2015 biological survey; however, the survey was conducted outside of the breeding season. The generally accepted nesting season is from February 1 through August 31. There is a *high* potential for this species to forage in the non-native annual grassland within the Project Site.

Wildlife with a Low Potential to Occur

Burrowing Owl

Burrowing owl is a small ground-dwelling owl that occurs in western North America from Canada to Mexico and east to Texas and Louisiana. Although in certain areas of its range burrowing owls are migratory, these owls are predominantly non-migratory in California. The breeding season for burrowing owls occurs from March to August, peaking in April and May (Zeiner *et. al.* 1990). Burrowing owls nest in burrows in the ground, often in old ground squirrel burrows. Burrowing owl also uses artificial burrows including pipes, culverts, and nest boxes. There are nine CNDDDB records for this species within five miles of the Project Site (CDFW 2015). The disturbed non-native annual grassland provides nesting or wintering habitat for this species, however, no burrowing owls or potential burrow sites that could be utilized by this species were observed during the December 3, 2015 biological survey. Therefore, this species has a *low* potential to nest or winter within the disturbed non-native annual grassland within the Project Site.

Loggerhead Shrike

Loggerhead shrikes are common residents and winter visitors of valleys and foothills throughout California. This species utilizes open habitats with scattered shrubs and trees, posts, fences, utility lines, and occurs often in cropland (Zeiner *et. al.* 1990). The highest density of shrikes occurs in open valley foothill grassland areas with occasional shrubs and available perch sites. This species nests from March to May, building twig nests within the dense foliage of shrubs or trees that conceal the nest. There are no records in the CNDDDB for this species within five miles of the Project Site (CDFW 2015). The trees and shrubs within the non-native annual grassland provide nesting habitat for this species. Although no loggerhead shrike was observed nesting within the Project Site, the December 3, 2015 biological survey was conducted outside of the nesting season. Therefore, this species has a *low* potential to nest or winter within the disturbed non-native annual grassland within the Project Site.

Short-Eared Owl

Short-eared owls are ground-nesting species found in open areas with few trees, such as marshes, annual and perennial grasslands, prairies, dunes, meadows, irrigated lands, and saline and fresh emergent wetlands. The nests are usually located on dry sites with enough vegetation to conceal incubating females. There are no CNDDDB records for this species within five miles of the Project Site (CDFW 2015). The disturbed non-native annual grassland provides nesting and foraging habitat for this species. Although no short-eared owl was observed nesting within the Project Site, the December 3, 2015 biological survey was conducted outside of the nesting season. This species has a *low* potential to nest and forage within the Project Site.

White-Tailed Kite

White-tailed kite is a medium sized raptor that is a yearlong resident in coastal and valley lowlands in California. White-tailed kite breed from February to October, peaking from

May to August (Zeiner *et. al.* 1990). This species nests near the top of dense oaks, willows, or other large trees. There are 14 CNDDDB records of white-tailed kite documented within five miles of the Project Site (**Figure 4**) (CDFW 2015). The nearest is located one mile north of the Project Site. The disturbed non-native annual grassland provides foraging habitat. The isolated trees within the non-native annual grassland provide marginal nesting habitat for this species given that they lack dense vegetation. Although no white-tailed kites were observed nesting within the Project Site, the December 3, 2015 biological survey was conducted outside of the nesting season. This species has a *low* potential to nest within the isolated trees within the Project Site.

Wildlife with a Low Potential to Occur with Negative Protocol-Level Survey Findings

Vernal Pool Invertebrates

Vernal pool fairy shrimp are found most commonly in small swales, earth slumps, or basalt-flow depression basins with grassy or muddy bottoms in unplowed soils, and occasionally in clear depressions less than three feet (one meter) in diameter in sandstone outcrops surrounded by foothill grasslands (Eriksen and Belk 1999). Vernal pool tadpole shrimp inhabit natural and artificial seasonally ponded habitats including: vernal pools, swales, ephemeral drainages, stock ponds, reservoirs, ditches, backhoe pits, and ruts caused by vehicular activities that range in size from very small (2 square meters) to very large (356,253 square meters) (Helm 1998). There are several CNDDDB occurrences for these species within five miles of the Project Site (**Figure 4**) (CDFW 2015).

The depressional seasonal wetlands that were mapped and verified in the wetland delineation in 2012 are no longer present. Based on current conditions, only a few low spots less than one inch in depth are present within the areas where these features were previously mapped due to ongoing maintenance activities associated with routine disking. Therefore, these features no longer provide habitat for listed vernal pool invertebrates. Further, protocol-level surveys were conducted during the dry season in 2006 (EcoAnalysts, Inc.) and during the wet season in 2006 to 2007 (Foothill Associates 2007b). No listed or non-listed invertebrates or invertebrate cysts were observed within the depressional seasonal wetlands. The results of the surveys conclude that the depressional seasonal wetlands within the Project Site do not inundate for a sufficient period of time to support listed branchiopod species. This is supported by the results of the dry season survey that did not find any cysts of listed branchiopods. Since the habitat is no longer there and previous protocol level surveys were conducted with negative findings, listed invertebrates do not occur within the Project Site.

5.6.3 Nesting Birds of Conservation Concern Protected under the Migratory Bird Treaty Act (MBTA) and §3503.5 Department of Fish and Game Code

Migratory birds and other birds of prey, including those identified as Birds of Conservation Concern in Table 2 in **Appendix C**, are protected under 50 CFR 10 of the MBTA and/or Section 3503 of the California Fish and Game Code. Although no active nests were observed within the Project Site, the December 3, 2015 biological survey was

conducted outside of the nesting season. Migratory birds and other birds of prey have a *high* potential to nest within the Project Site during the nesting season. The generally accepted nesting season is from February 1 through August 31.

5.7 Sensitive Habitats

Sensitive habitats include those that are of special concern to resource agencies or those that are protected under CEQA, Section 1600 of the California Fish and Game Code, or Section 404 of the Clean Water Act. Sensitive habitats within the Project Site include a valley oak tree protected under the City of Sacramento General Tree Ordinance Code #12.56.060. The valley oak is comprised of multiple stems totaling approximately 32 inches DBH.

5.7.1 Jurisdictional Status of Onsite Aquatic Features

A total of 0.195 acres of aquatic features occur within the Project Site. The Corps verified the 2012 delineation on October 16, 2012. The Corps concurred that the features onsite are intrastate isolated waters with no apparent interstate or foreign commerce connection and are therefore not regulated by the Corps. The verification expires on October 16, 2017. These features may be considered waters of the State.

6.0 DISCUSSION AND RECOMMENDATIONS

The proposed project would result in the removal of 15.02 acres of non-native annual grassland, 4.43 acres of disturbed developed areas, 0.19 acres of depression seasonal wetland, and 0.01 acres of ditch/canal.

Biological constraints within the Project Site include known or potential habitat for:

- Swainson's hawk (*Buteo swainsoni*);
- Burrowing owl (*Athene cunicularia*);
- Loggerhead shrike (*Lanius ludovicianus*);
- Short-eared owl (*Asio flammeus*);
- White-tailed kite (*Elanus leucurus*);
- Migratory birds and raptors); and
- Sensitive habitats (oak trees and potential waters of the State).

6.1 Swainson's Hawk

The CDFW considers five or more vacant acres within ten miles of an active nest within the last five years to be significant foraging habitat for Swainson's hawk, the conversion of which to urban uses is considered a significant impact, in accordance with the *Staff Report Regarding Mitigation for Impacts to Swainson's Hawk in the Central Valley of California* (CDFG 1994; Staff Report). Currently, the CDFW recommends that impacts to suitable Swainson's hawk foraging habitat within 10 miles of an active nest should be mitigated by securing a conservation easement or fee title on suitable Swainson's hawk foraging habitat in the region. Currently, this translates to the following: (1) for projects within a one-mile radius of an active nest site, the project proponent should preserve 1.0 acre of similar habitat for each acre lost, (2) for projects within a one to five-mile radius of an active nest site, the project proponent should preserve 0.75 acre of similar habitat for each acre lost, and (3) for projects within a five to ten-mile radius of an active nest site, the project proponent should preserve 0.5 acre of similar habitat for each acre lost.

In the case of a conservation easement, the applicant should prepare and implement a Swainson's hawk mitigation plan to the satisfaction of CDFW that includes the preservation of Swainson's hawk foraging habitat on the appropriate amount of foraging acreage. The lead agency under CEQA, in coordination with CDFW, would determine what mitigations would be appropriate for impacts to Swainson's hawk foraging and nesting habitat.

The loss of Swainson's hawk foraging habitat can also be mitigated by securing mitigation credits at a City of Sacramento-approved mitigation bank.

6.2 Burrowing Owl

Although the non-native annual grassland provides nesting and wintering habitat for burrowing owl, no potential burrow sites that could be utilized by this species were observed within the Project Site. Due to the low likelihood of presence, a single take avoidance survey should be conducted between 14 days and 30 days prior to commencement of construction activities, in accordance with Appendix D of the 2012 CDFW *Staff Report on Burrowing Owl Mitigation* (2012 Staff Report) (CDFW 2012). The survey area includes an approximately 500-foot (150-meter) buffer around the Project Site, where access is permitted. If the survey is negative, then a letter report documenting the results of the survey should be provided to the project proponent for their records, and no additional measures are recommended.

If active burrows are observed within 500 feet of the Project Site, an impact assessment should be prepared and submitted to the CDFW, in accordance with the 2012 Staff Report. If it is determined that project activities may result in impacts to nesting, occupied, and satellite burrows and/or burrowing owl habitat, the project proponent should delay commencement of construction activities until the biologist determines that the burrowing owls have fledged and the burrow is no longer occupied. If this is infeasible, the project proponent should consult with the CDFW and develop a detailed mitigation plan such that the habitat acreage, number of burrows, and burrowing owls impacted are replaced. The mitigation plan should be based on the requirements set forth in Appendix A of the 2012 Staff Report. No construction can commence until the CDFW has approved the mitigation plan.

6.3 Vernal Pool Invertebrates

No vernal pool invertebrates occur onsite. Therefore, no mitigation is recommended.

6.4 Migratory Birds and Other Birds of Prey

Migratory birds and other birds of prey, protected under 50 CFR 10 of the MBTA and/or Section 3503 of the California Fish and Game Code have the potential to nest in the non-native annual grassland and within the trees and shrubs within the non-native annual grassland, including white-tailed kite, loggerhead shrike, and short-eared owl. Vegetation clearing operations, including pruning or removal of the ornamental trees and shrubs, should be completed between September 1 and January 31, if feasible. If vegetation removal begins during the nesting season (February 1 to August 31), a qualified biologist should conduct a pre-construction survey for active nests. The pre-construction survey should be conducted within 14 days prior to commencement of ground-disturbing activities for planning purposes. An additional pre-construction survey should be conducted within 72 hours of commencement of ground-disturbing activities. If the pre-construction survey shows that there is no evidence of active nests, then a letter report should be submitted to the project proponent for their records and no additional measures are recommended. If construction does not commence within 72 hours of the pre-construction survey, or halts for more than 72 hours, an additional pre-construction survey is recommended.

If any active nests are located within the Project Site, an appropriate buffer zone should be established around the nests, as determined by the biologist. The biologist should mark the buffer zone with construction tape or pin flags and maintain the buffer zone until the end of breeding season or until the young have successfully fledged. Buffer zones are typically 100 feet for migratory bird nests and 250 feet for raptor nests. If active nests are found on the Project Site, a qualified biologist should monitor nests weekly during construction to evaluate potential nesting disturbance by construction activities. If establishing the typical buffer zone is impractical, the qualified biologist may reduce the buffer depending on the species and daily monitoring is recommended to ensure that the nest is not disturbed and no forced fledging occurs. Daily monitoring should occur until the qualified biologist determines that the nest is no longer occupied.

6.5 Sensitive Habitats

The project proponent should apply for a tree removal permit if the valley oak tree is proposed for removal.

Since the project is not subject to Section 404 of the Clean Water Act, the RWQCB has no jurisdiction under Section 401 of the Clean Water Act. However, under the Porter-Cologne Water Quality Act, any activity that results or may result in a discharge that directly or indirectly impacts waters of the State, defined as “any surface water or groundwater, including saline waters, within the boundaries of the state”, or the beneficial uses of those waters, are subject to waste discharge requirements (WDRs). The applicant should obtain a waste discharge requirement permit from the RWQCB prior to fill of the depressional seasonal wetlands and ditch within the Project Site.

6.6 Summary of Avoidance and Minimization Measures

- Conduct a take avoidance survey for burrowing owl between 14 and 30 days prior to commencement of construction activities;
- Compensate for impacts to Swainson’s hawk foraging habitat;
- Conduct clearing and tree removal operations between September 1 and January 31 to minimize potential impacts to nesting birds;
- If construction begins or trees are anticipated for removal during the nesting season (February 1 – August 31), conduct a pre-construction survey for active migratory bird and raptor nests within the Project Site;
- Apply for a tree removal permit if the valley oak tree is proposed for removal; and
- Comply with the waste discharge requirements prior to fill of potential waters of the State.

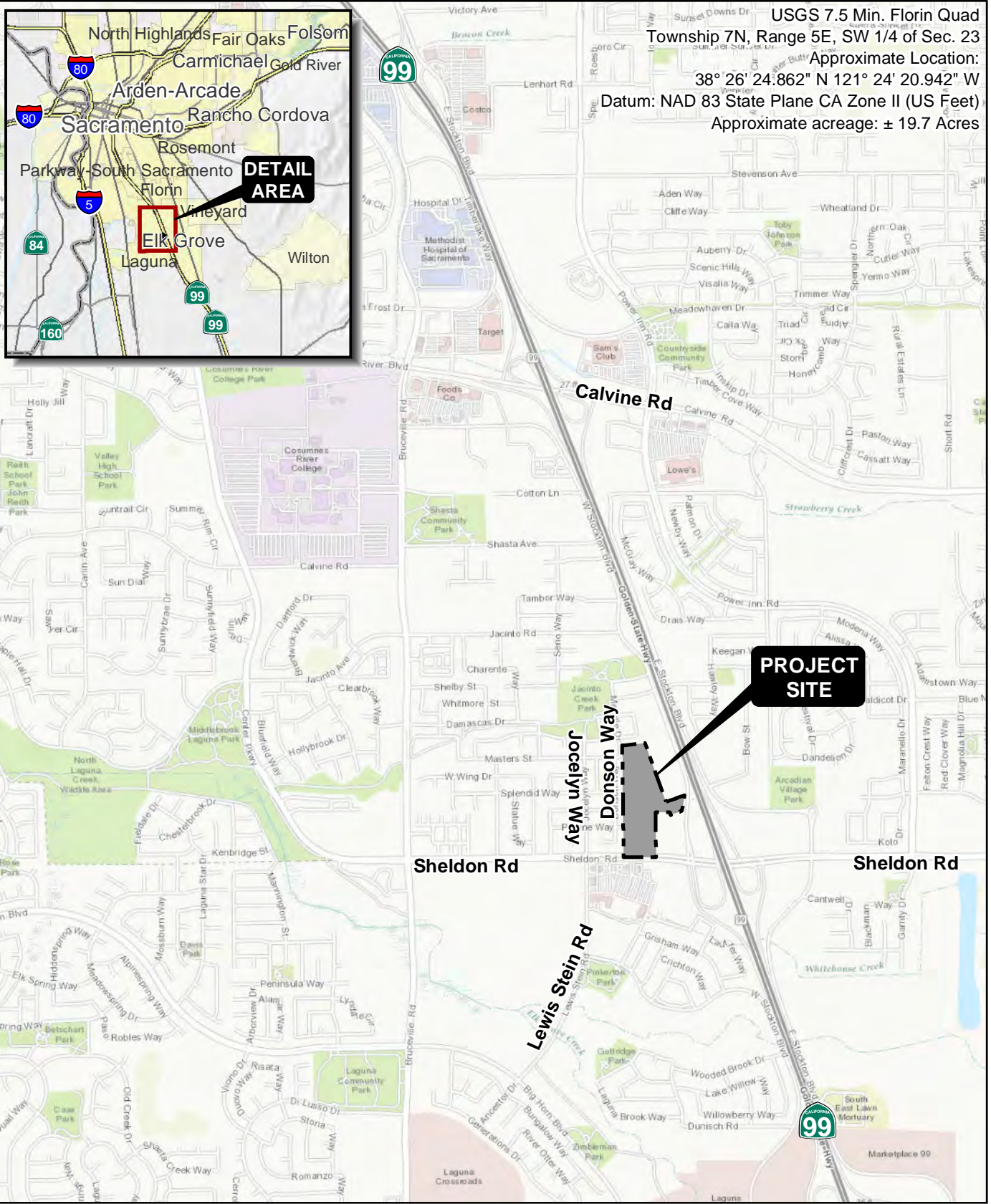
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USGS 7.5 Min. Florin Quad
 Township 7N, Range 5E, SW 1/4 of Sec. 23
 Approximate Location:
 38° 26' 24.862" N 121° 24' 20.942" W
 Datum: NAD 83 State Plane CA Zone II (US Feet)
 Approximate acreage: ± 19.7 Acres

**DETAIL
 AREA**

**PROJECT
 SITE**

SITE AND VICINITY

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0 0.2 0.4
 Miles
 1 in = 2,000 feet

Drawn By: MUB
 Date: 12/01/2015

FIGURE 1

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Soil Type	
	213 - SAN JOAQUIN SILT LOAM, LEVELED, 0 TO 1 PERCENT SLOPES
	218 - SAN JOAQUIN-GALT COMPLEX, 0 TO 3 PERCENT SLOPES

SOILS

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0 100 200
 Feet
 1 inch = 200 feet

Drawn By: MUB
 Date: 12/01/2015

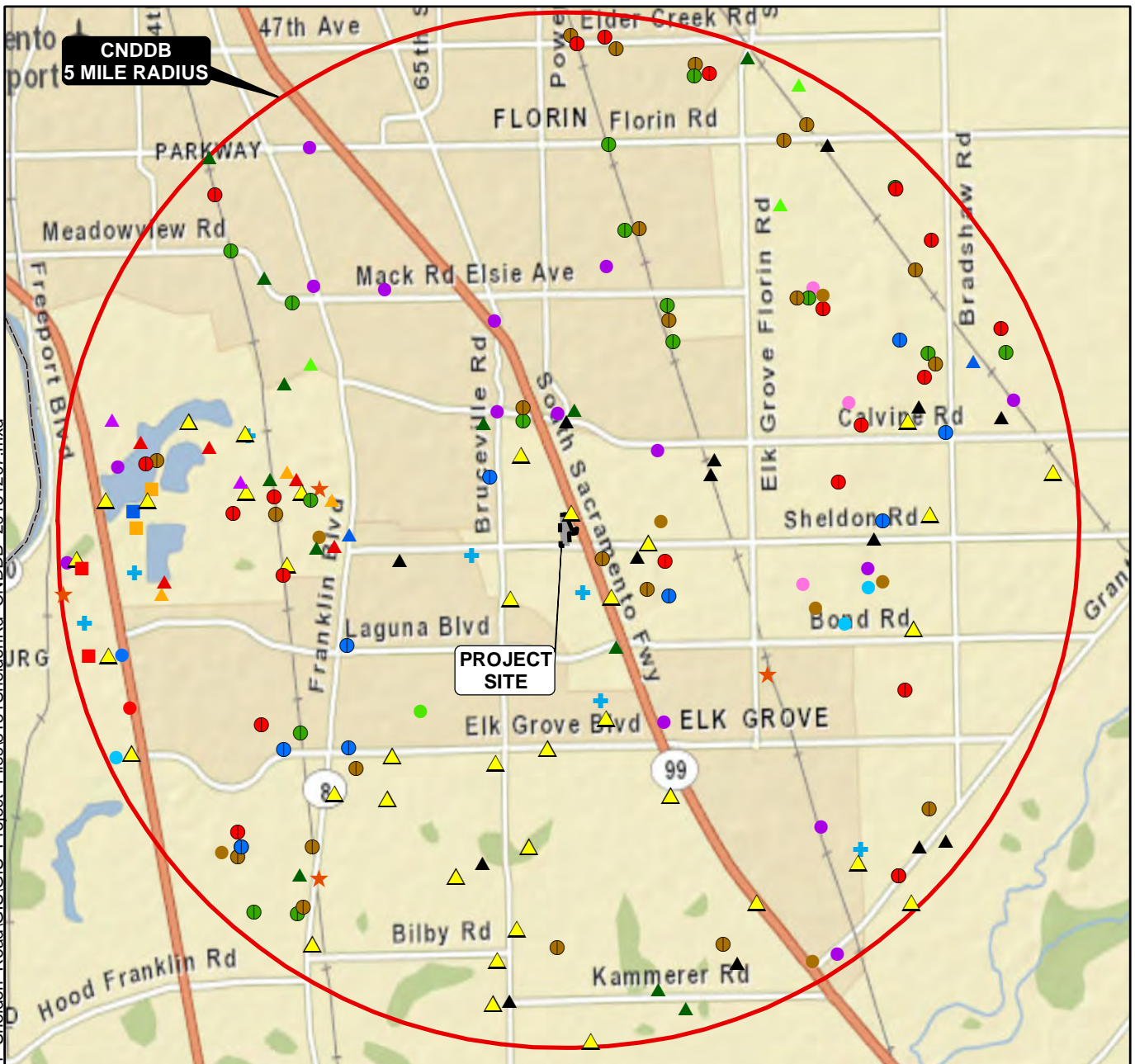
FIGURE 2



BIOLOGICAL COMMUNITIES



Document Path: O:\N_Cal\123_Projects\8151_Sheldon_Road\GIS\GIS Project Files\8151SheldonRd_CNDDDB_20151207.mxd

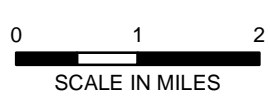


CNDDDB Occurrences			
● Boggs Lake hedge-hyssop	● woolly rose-mallow	★ western pond turtle	■ great blue heron
● dwarf downingia	● California linderiella	▲ black-crowned night heron	■ great egret
● legenere	● midvalley fairy shrimp	▲ burrowing owl	▲ merlin
● Peruvian dodder	● vernal pool fairy shrimp	▲ Cooper's hawk	■ song sparrow ("Modesto" population)
● saline clover	● vernal pool tadpole shrimp	■ double-crested cormorant	▲ Swainson's hawk
● Sanford's arrowhead	● giant garter snake	▲ ferruginous hawk	▲ tricolored blackbird
			▲ white-tailed kite

SOURCE: Department of Fish and Wildlife, CA Natural Diversity Database (CNDDDB), 12/01/2015. CNDDDB points are centroids of polygon occurrences. These points do not represent actual point locations of occurrence.

Sources: Esri, DeLorme, NAVTEQ, USGS, NRCAN, METI, iPC, TomTom

CNDDDB



Drawn By: CCH
Date: 12/07/2015

FIGURE 4

Appendix A — CDFW, CNPS, and USFWS Queries

**CDFW CNDDDB: *Bruceville, Carmichael, Clarksburg,
Courtland, Elk Grove, Florin, Galt, Sacramento East, and
Sacramento West Quadrangles***

CALIFORNIA DEPARTMENT OF
FISH and WILDLIFE *RareFind*

Query Summary:

Quad **IS** (Bruceville (3812134) **OR** Carmichael (3812153) **OR** Clarksburg (3812145) **OR** Courtland (3812135) **OR** Elk Grove (3812143) **OR** Florin (3812144) **OR** Galt (3812133) **OR** Sacramento East (3812154) **OR** Sacramento West (3812155))

CNDDDB Element Query Results

Scientific Name	Common Name	Taxonomic Group	Element Code	Total Occs	Returned Occs	Federal Status	State Status	Global Rank	State Rank	CA Rare Plant Rank	Other Status	Habitats
<i>Accipiter cooperii</i>	Cooper's hawk	Birds	ABNKC12040	103	5	None	None	G5	S4	null	CDFW_WL-Watch List IUCN_LC-Least Concern	Cismontane woodland Riparian forest Riparian woodland Upper montane coniferous forest
<i>Agelaius tricolor</i>	tricolored blackbird	Birds	ABPBXB0020	603	60	None	None	G2G3	S1S2	null	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_EN-Endangered NABCI_RWL-Red Watch List USFWS_BCC-Birds of Conservation Concern	Freshwater marsh Marsh & swamp Swamp Wetland
<i>Ambystoma californiense</i>	California tiger salamander	Amphibians	AAAAA01180	1132	1	Threatened	Threatened	G2G3	S2S3	null	CDFW_SSC-Species of Special Concern IUCN_VU-Vulnerable	Cismontane woodland Meadow & seep Riparian woodland Valley & foothill grassland Vernal pool Wetland
<i>Aquila chrysaetos</i>	golden eagle	Birds	ABNKC22010	312	1	None	None	G5	S3	null	BLM_S-Sensitive CDF_S-Sensitive CDFW_FP-Fully Protected CDFW_WL-Watch List IUCN_LC-Least Concern USFWS_BCC-Birds of Conservation	Broadleaved upland forest Cismontane woodland Coastal prairie Great Basin grassland Great Basin scrub Lower montane coniferous forest Pinon & juniper woodlands Upper montane coniferous forest Valley & foothill grassland

											Concern	
Archoplites interruptus	Sacramento perch	Fish	AFCQB07010	5	1	None	None	G2G3	S1	null	AFS_TH- Threatened CDFW_SSC- Species of Special Concern	Aquatic Sacramento/San Joaquin flowing waters Sacramento/San Joaquin standing waters
Ardea alba	great egret	Birds	ABNGA04040	35	4	None	None	G5	S4	null	CDF_S- Sensitive IUCN_LC- Least Concern	Brackish marsh Estuary Freshwater marsh Marsh & swamp Riparian forest Wetland
Ardea herodias	great blue heron	Birds	ABNGA04010	134	5	None	None	G5	S4	null	CDF_S- Sensitive IUCN_LC- Least Concern	Brackish marsh Estuary Freshwater marsh Marsh & swamp Riparian forest Wetland
Astragalus tener var. ferrisiae	Ferris' milk-vetch	Dicots	PDFAB0F8R3	18	1	None	None	G2T1	S1	1B.1	BLM_S- Sensitive	Meadow & seep Valley & foothill grassland Wetland
Athene cunicularia	burrowing owl	Birds	ABNSB10010	1875	38	None	None	G4	S3	null	BLM_S- Sensitive CDFW_SSC- Species of Special Concern IUCN_LC- Least Concern USFWS_BCC- Birds of Conservation Concern	Coastal prairie Coastal scrub Great Basin grassland Great Basin scrub Mojavean desert scrub Sonoran desert scrub Valley & foothill grassland
Branchinecta lynchi	vernal pool fairy shrimp	Crustaceans	ICBRA03030	751	50	Threatened	None	G3	S3	null	IUCN_VU- Vulnerable	Valley & foothill grassland Vernal pool Wetland
Branchinecta mesovallensis	midvalley fairy shrimp	Crustaceans	ICBRA03150	126	19	None	None	G2	S2	null	null	Vernal pool Wetland
Brasenia schreberi	watershield	Dicots	PDCAB01010	33	1	None	None	G5	S3	2B.3	null	Marsh & swamp Wetland
Buteo regalis	ferruginous hawk	Birds	ABNKC19120	103	3	None	None	G4	S3S4	null	CDFW_WL- Watch List IUCN_LC- Least Concern USFWS_BCC- Birds of Conservation Concern	Great Basin grassland Great Basin scrub Pinon & juniper woodlands Valley & foothill grassland
Buteo swainsoni	Swainson's hawk	Birds	ABNKC19070	2394	271	None	Threatened	G5	S3	null	BLM_S- Sensitive IUCN_LC- Least Concern USFWS_BCC- Birds of Conservation Concern	Great Basin grassland Riparian forest Riparian woodland Valley & foothill grassland
Carex comosa	bristly	Monocots	PMCYP032Y0	29	16	None	None	G5	S2	2B.1	null	Coastal prairie Freshwater marsh Marsh &

	sedge											swamp Valley & foothill grassland Wetland
Cicindela hirticollis abrupta	Sacramento Valley tiger beetle	Insects	IICOL02106	6	1	None	None	G5TH	SH	null	null	Sand shore
Cicuta maculata var. bolanderi	Bolander's water-hemlock	Dicots	PDAPI0M051	17	1	None	None	G5T3T4	S2	2B.1	null	Marsh & swamp Salt marsh Wetland
Coastal and Valley Freshwater Marsh	Coastal and Valley Freshwater Marsh	Marsh	CTT52410CA	60	1	None	None	G3	S2.1	null	null	Marsh & swamp Wetland
Coccyzus americanus occidentalis	western yellow-billed cuckoo	Birds	ABNRB02022	155	3	Threatened	Endangered	G5T2T3	S1	null	BLM_S-Sensitive NABCI_RWL-Red Watch List USFS_S-Sensitive USFWS_BCC-Birds of Conservation Concern	Riparian forest
Cuscuta obtusiflora var. glandulosa	Peruvian dodder	Dicots	PDCUS01111	6	1	None	None	G5T4T5	SH	2B.2	null	Marsh & swamp Wetland
Desmocerus californicus dimorphus	valley elderberry longhorn beetle	Insects	IICOL48011	271	27	Threatened	None	G3T2	S2	null	null	Riparian scrub
Downingia pusilla	dwarf downingia	Dicots	PDCAM060C0	127	4	None	None	GU	S2	2B.2	null	Valley & foothill grassland Vernal pool Wetland
Dumontia oregonensis	hairy water flea	Crustaceans	ICBRA23010	2	1	None	None	G1G3	S1	null	null	Vernal pool
Elanus leucurus	white-tailed kite	Birds	ABNKC06010	158	16	None	None	G5	S3S4	null	BLM_S-Sensitive CDFW_FP-Fully Protected IUCN_LC-Least Concern	Cismontane woodland Marsh & swamp Riparian woodland Valley & foothill grassland Wetland
Elderberry Savanna	Elderberry Savanna	Riparian	CTT63440CA	4	3	None	None	G2	S2.1	null	null	Riparian scrub
Emys marmorata	western pond turtle	Reptiles	ARAAD02030	1146	10	None	None	G3G4	S3	null	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_VU-Vulnerable USFS_S-Sensitive	Aquatic Artificial flowing waters Klamath/North coast flowing waters Klamath/North coast standing waters Marsh & swamp Sacramento/San Joaquin flowing waters Sacramento/San Joaquin standing waters South coast flowing waters South coast standing waters Wetland
Falco columbarius	merlin	Birds	ABNKD06030	34	5	None	None	G5	S3S4	null	CDFW_WL-Watch List IUCN_LC-Least	Estuary Great Basin grassland Valley & foothill grassland

											Concern	
Gratiola heterosepala	Boggs Lake hedge-hyssop	Dicots	PDSCR0R060	94	5	None	Endangered	G2	S2	1B.2	BLM_S-Sensitive	Freshwater marsh Marsh & swamp Vernal pool Wetland
Great Valley Cottonwood Riparian Forest	Great Valley Cottonwood Riparian Forest	Riparian	CTT61410CA	56	1	None	None	G2	S2.1	null	null	Riparian forest
Great Valley Mixed Riparian Forest	Great Valley Mixed Riparian Forest	Riparian	CTT61420CA	68	1	None	None	G2	S2.2	null	null	Riparian forest
Great Valley Valley Oak Riparian Forest	Great Valley Valley Oak Riparian Forest	Riparian	CTT61430CA	33	3	None	None	G1	S1.1	null	null	Riparian forest
Hibiscus lasiocarpus var. occidentalis	woolly rose-mallow	Dicots	PDMAL0H0R3	173	22	None	None	G5T2	S2	1B.2	SB_RSABG-Rancho Santa Ana Botanic Garden	Freshwater marsh Marsh & swamp Wetland
Hydrochara rickseckeri	Ricksecker's water scavenger beetle	Insects	IICOL5V010	13	2	None	None	G2?	S2?	null	null	Aquatic Sacramento/San Joaquin flowing waters Sacramento/San Joaquin standing waters
Juglans hindsii	Northern California black walnut	Dicots	PDJUG02040	5	1	None	None	G1	S1	1B.1	SB_USDA-US Dept of Agriculture	Riparian forest Riparian woodland
Juncus leiospermus var. ahartii	Ahart's dwarf rush	Monocots	PMJUN011L1	13	1	None	None	G2T1	S1	1B.2	null	Valley & foothill grassland Vernal pool Wetland
Lasiurus cinereus	hoary bat	Mammals	AMACC05030	235	1	None	None	G5	S4	null	IUCN_LC-Least Concern WBWG_M-Medium Priority	Broadleaved upland forest Cismontane woodland Lower montane coniferous forest North coast coniferous forest
Lathyrus jepsonii var. jepsonii	Delta tule pea	Dicots	PDFAB250D2	131	7	None	None	G5T2	S2	1B.2	SB_BerrySB-Berry Seed Bank SB_RSABG-Rancho Santa Ana Botanic Garden	Freshwater marsh Marsh & swamp Wetland
Legenere limosa	legenere	Dicots	PDCAM0C010	78	19	None	None	G2	S2	1B.1	BLM_S-Sensitive	Vernal pool Wetland
Lepidium latipes var. heckardii	Heckard's pepper-grass	Dicots	PDBRA1M0K1	14	2	None	None	G4T2	S2	1B.2	null	Valley & foothill grassland
Lepidurus packardii	vernal pool tadpole shrimp	Crustaceans	ICBRA10010	316	56	Endangered	None	G3	S2S3	null	IUCN_EN-Endangered	Valley & foothill grassland Vernal pool Wetland
Lilaeopsis masonii	Mason's lilaeopsis	Dicots	PDAPI19030	197	2	None	Rare	G2	S2	1B.1	null	Freshwater marsh Marsh & swamp Riparian scrub Wetland
Limosella australis	Delta mudwort	Dicots	PDSCR10050	59	1	None	None	G4G5	S2	2B.1	null	Brackish marsh Freshwater marsh Marsh & swamp Riparian scrub Wetland

Linderiella occidentalis	California linderiella	Crustaceans	ICBRA06010	425	56	None	None	G2G3	S2S3	null	IUCN_NT-Near Threatened	Vernal pool
Melospiza melodia	song sparrow ("Modesto" population)	Birds	ABPBXA3010	92	17	None	None	G5	S3?	null	CDFW_SSC-Species of Special Concern	null
Northern Hardpan Vernal Pool	Northern Hardpan Vernal Pool	Herbaceous	CTT44110CA	126	22	None	None	G3	S3.1	null	null	Vernal pool Wetland
Nycticorax nycticorax	black-crowned night heron	Birds	ABNGA11010	25	4	None	None	G5	S4	null	IUCN_LC-Least Concern	Marsh & swamp Riparian forest Riparian woodland Wetland
Oncorhynchus mykiss irideus	steelhead - Central Valley DPS	Fish	AFCHA0209K	31	6	Threatened	None	G5T2Q	S2	null	AFS_TH-Threatened	Aquatic Sacramento/San Joaquin flowing waters
Oncorhynchus tshawytscha	chinook salmon - Central Valley spring-run ESU	Fish	AFCHA0205A	13	1	Threatened	Threatened	G5	S1	null	AFS_TH-Threatened	Aquatic Sacramento/San Joaquin flowing waters
Oncorhynchus tshawytscha	chinook salmon - Sacramento River winter-run ESU	Fish	AFCHA0205B	2	1	Endangered	Endangered	G5	S1	null	AFS_EN-Endangered	Aquatic Sacramento/San Joaquin flowing waters
Orcuttia tenuis	slender Orcutt grass	Monocots	PMPOA4G050	96	2	Threatened	Endangered	G2	S2	1B.1	SB_UCBBG-UC Berkeley Botanical Garden	Vernal pool Wetland
Orcuttia viscida	Sacramento Orcutt grass	Monocots	PMPOA4G070	12	1	Endangered	Endangered	G1	S1	1B.1	null	Vernal pool Wetland
Phalacrocorax auritus	double-crested cormorant	Birds	ABNFD01020	37	3	None	None	G5	S4	null	CDFW_WL-Watch List IUCN_LC-Least Concern	Riparian forest Riparian scrub Riparian woodland
Pogonichthys macrolepidotus	Sacramento splittail	Fish	AFCJB34020	15	1	None	None	GNR	S3	null	AFS_VU-Vulnerable CDFW_SSC-Species of Special Concern IUCN_EN-Endangered	Aquatic Estuary Freshwater marsh Sacramento/San Joaquin flowing waters
Progne subis	purple martin	Birds	ABPAU01010	61	9	None	None	G5	S3	null	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern	Broadleaved upland forest Lower montane coniferous forest
Riparia riparia	bank swallow	Birds	ABPAU08010	296	2	None	Threatened	G5	S2	null	BLM_S-Sensitive IUCN_LC-	Riparian scrub Riparian woodland

											Least Concern	
<i>Sagittaria sanfordii</i>	Sanford's arrowhead	Monocots	PMALI040Q0	93	36	None	None	G3	S3	1B.2	BLM_S-Sensitive	Marsh & swamp Wetland
<i>Scutellaria galericulata</i>	marsh skullcap	Dicots	PDLAM1U0J0	31	2	None	None	G5	S2	2B.2	null	Lower montane coniferous forest Marsh & swamp Meadow & seep Wetland
<i>Scutellaria lateriflora</i>	side-flowering skullcap	Dicots	PDLAM1U0Q0	13	5	None	None	G5	S2	2B.2	null	Marsh & swamp Meadow & seep Wetland
<i>Spea hammondii</i>	western spadefoot	Amphibians	AAABF02020	425	2	None	None	G3	S3	null	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_NT-Near Threatened	Cismontane woodland Coastal scrub Valley & foothill grassland Vernal pool Wetland
<i>Spirinchus thaleichthys</i>	longfin smelt	Fish	AFCHB03010	45	2	Candidate	Threatened	G5	S1	null	CDFW_SSC-Species of Special Concern	Aquatic Estuary
<i>Symphotrichum lentum</i>	Suisun Marsh aster	Dicots	PDASTE8470	173	1	None	None	G2	S2	1B.2	null	Brackish marsh Freshwater marsh Marsh & swamp Wetland
<i>Taxidea taxus</i>	American badger	Mammals	AMAJF04010	478	3	None	None	G5	S3	null	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern	Alkali marsh Alkali playa Alpine Alpine dwarf scrub Bog & fen Brackish marsh Broadleaved upland forest Chaparral Chenopod scrub Cismontane woodland Closed-cone coniferous forest Coastal bluff scrub Coastal dunes Coastal prairie Coastal scrub Desert dunes Desert wash Freshwater marsh Great Basin grassland Great Basin scrub Interior dunes lone formation Joshua tree woodland Limestone Lower montane coniferous forest Marsh & swamp Meadow & seep Mojavean desert scrub Montane dwarf scrub North coast coniferous forest Oldgrowth Pavement plain Redwood Riparian forest Riparian scrub Riparian woodland Salt marsh Sonoran desert scrub Sonoran thorn woodland Ultramafic Upper montane coniferous forest Upper Sonoran scrub Valley & foothill grassland
<i>Thamnophis gigas</i>	giant garter snake	Reptiles	ARADB36150	345	19	Threatened	Threatened	G2	S2	null	IUCN_VU-Vulnerable	Marsh & swamp Riparian scrub Wetland
<i>Trifolium hydrophilum</i>	saline clover	Dicots	PDFAB400R5	49	5	None	None	G2	S2	1B.2	null	Marsh & swamp Valley & foothill grassland Vernal pool Wetland
Valley Oak Woodland	Valley Oak Woodland	Woodland	CTT71130CA	91	1	None	None	G3	S2.1	null	null	Cismontane woodland
<i>Vireo bellii pusillus</i>	least Bell's vireo	Birds	ABPBW01114	468	2	Endangered	Endangered	G5T2	S2	null	IUCN_NT-Near Threatened NABCI_YWL-Yellow Watch List	Riparian forest Riparian scrub Riparian woodland

Xanthocephalus xanthocephalus	yellow- headed blackbird	Birds	ABPBXB3010	11	1	None	None	G5	S3	null	CDFW_SSC- Species of Special Concern IUCN_LC- Least Concern	Marsh & swamp Wetland
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CNPS Inventory of Rare and Endangered: *Bruceville, Carmichael, Clarksburg, Courtland, Elk Grove, Florin, Galt, Sacramento East, and Sacramento West* Quadrangles

Plant List

26 matches found. Click on scientific name for details

Search Criteria

Found in 9 Quads around 38121D4

Scientific Name	Common Name	Family	Lifeform	Rare Plant Rank	State Rank	Global Rank
Astragalus tener var. ferrisiae	Ferris' milk-vetch	Fabaceae	annual herb	1B.1	S1	G2T1
Brasenia schreberi	watershield	Cabombaceae	perennial rhizomatous herb	2B.3	S3	G5
Carex comosa	bristly sedge	Cyperaceae	perennial rhizomatous herb	2B.1	S2	G5
Centromadia parryi ssp. rudis	Parry's rough tarplant	Asteraceae	annual herb	4.2	S3	G3T3
Cicuta maculata var. bolanderi	Bolander's water-hemlock	Apiaceae	perennial herb	2B.1	S2	G5T3T4
Cuscuta obtusiflora var. glandulosa	Peruvian dodder	Convolvulaceae	annual vine (parasitic)	2B.2	SH	G5T4T5
Downingia pusilla	dwarf downingia	Campanulaceae	annual herb	2B.2	S2	GU
Gratiola heterosepala	Boggs Lake hedge-hyssop	Plantaginaceae	annual herb	1B.2	S2	G2
Hespereryx caulescens	hogwallow starfish	Asteraceae	annual herb	4.2	S3	G3
Hibiscus lasiocarpus var. occidentalis	woolly rose-mallow	Malvaceae	perennial rhizomatous herb	1B.2	S2	G5T2
Juglans hindsii	Northern California black walnut	Juglandaceae	perennial deciduous tree	1B.1	S1	G1
Juncus leiospermus var. ahartii	Ahart's dwarf rush	Juncaceae	annual herb	1B.2	S1	G2T1
Lasthenia ferrisiae	Ferris' goldfields	Asteraceae	annual herb	4.2	S3	G3
Lathyrus jepsonii var. jepsonii	Delta tule pea	Fabaceae	perennial herb	1B.2	S2	G5T2
Legenere limosa	legenere	Campanulaceae	annual herb	1B.1	S2	G2
Lepidium latipes var. heckardii	Heckard's pepper-grass	Brassicaceae	annual herb	1B.2	S2	G4T2
Lilaeopsis masonii	Mason's lilaeopsis	Apiaceae	perennial rhizomatous herb	1B.1	S2	G2
Limosella australis	Delta mudwort	Scrophulariaceae	perennial stoloniferous herb	2B.1	S2	G4G5
Navarretia eriocephala	hoary navarretia	Polemoniaceae	annual herb	4.3	S4	G4
Orcuttia tenuis	slender Orcutt grass	Poaceae	annual herb	1B.1	S2	G2

Orcuttia viscida	Sacramento Orcutt grass	Poaceae	annual herb	1B.1	S1	G1
Sagittaria sanfordii	Sanford's arrowhead	Alismataceae	perennial rhizomatous herb	1B.2	S3	G3
Scutellaria galericulata	marsh skullcap	Lamiaceae	perennial rhizomatous herb	2B.2	S2	G5
Scutellaria lateriflora	side-flowering skullcap	Lamiaceae	perennial rhizomatous herb	2B.2	S2	G5
Symphyotrichum lentum	Suisun Marsh aster	Asteraceae	perennial rhizomatous herb	1B.2	S2	G2
Trifolium hydrophilum	saline clover	Fabaceae	annual herb	1B.2	S2	G2

Suggested Citation

CNPS, Rare Plant Program. 2015. Inventory of Rare and Endangered Plants (online edition, v8-02). California Native Plant Society, Sacramento, CA. Website <http://www.rareplants.cnps.org> [accessed 30 November 2015].

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***USEFWS Information for Planning and Conservation
Trust Resource Report: My Project***

IPaC My project Sacramento County, California

U.S. Fish & Wildlife Service

This project potentially impacts **28 resources** managed or regulated by the U.S. Fish & Wildlife Service

Endangered species

Proposed, candidate, threatened, and endangered species that are managed by the Endangered Species Program and should be considered as part of an effect analysis for this project.

Amphibians

California Red-legged Frog *Rana draytonii*

Threatened (A species likely to become endangered within the foreseeable future throughout all or a significant portion of its range)

California Tiger Salamander *Ambystoma californiense*

Threatened (A species likely to become endangered within the foreseeable future throughout all or a significant portion of its range)

Crustaceans

Vernal Pool Fairy Shrimp *Branchinecta lynchi*

Threatened (A species likely to become endangered within the foreseeable future throughout all or a significant portion of its range)

Vernal Pool Tadpole Shrimp *Lepidurus packardii*

Endangered (A species in danger of extinction throughout all or a significant portion of its range)

Fishes

Delta Smelt *Hypomesus transpacificus*

Threatened (A species likely to become endangered within the foreseeable future throughout all or a significant portion of its range)

Steelhead *Oncorhynchus (=Salmo) mykiss*

Threatened (A species likely to become endangered within the foreseeable future throughout all or a significant portion of its range)

Insects

Valley Elderberry Longhorn Beetle *Desmocerus californicus dimorphus*

Threatened (A species likely to become endangered within the foreseeable future throughout all or a significant portion of its range)

Reptiles

Giant Garter Snake *Thamnophis gigas*

Threatened (A species likely to become endangered within the foreseeable future throughout all or a significant portion of its range)

Critical habitats

Potential effects to critical habitat(s) within the project area must be analyzed along with the endangered species themselves.

THERE IS NO CRITICAL HABITAT WITHIN THIS PROJECT AREA

Migratory birds

Birds are protected by the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act.

Any activity which results in the take (to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct) of migratory birds or eagles is prohibited unless authorized by the U.S. Fish and Wildlife Service (1). There are no provisions for allowing the take of migratory birds that are unintentionally killed or injured.

You are responsible for complying with the appropriate regulations for the protection of birds as part of this project. This involves analyzing potential impacts and implementing appropriate conservation measures for all project activities.

Bald Eagle *Haliaeetus leucocephalus*
Year-round

Black Rail *Laterallus jamaicensis*
Season: Breeding

Burrowing Owl *Athene cunicularia*
Year-round

Fox Sparrow *Passerella iliaca*
Season: Wintering

Least Bittern *Ixobrychus exilis*
Season: Breeding

Lesser Yellowlegs *Tringa flavipes*

Season: Wintering

Lewis's Woodpecker *Melanerpes lewis*

Season: Wintering

Loggerhead Shrike *Lanius ludovicianus*

Year-round

Long-billed Curlew *Numenius americanus*

Season: Wintering

Marbled Godwit *Limosa fedoa*

Season: Wintering

Mountain Plover *Charadrius montanus*

Season: Wintering

Nuttall's Woodpecker *Picoides nuttallii*

Year-round

Oak Titmouse *Baeolophus inornatus*

Year-round

Peregrine Falcon *Falco peregrinus*

Season: Wintering

Short-eared Owl *Asio flammeus*

Season: Wintering

Swainson's Hawk *Buteo swainsoni*

Season: Breeding

Tricolored Blackbird *Agelaius tricolor*

Year-round

Western Grebe *aechmophorus occidentalis*

Year-round

Williamson's Sapsucker *Sphyrapicus thyroideus*

Year-round

Yellow-billed Magpie *Pica nuttalli*

Year-round

Wildlife refuges

Any activity proposed on National Wildlife Refuge lands must undergo a 'Compatibility Determination' conducted by the Refuge. If your project overlaps or otherwise impacts a Refuge, please contact that Refuge to discuss the authorization process.

THERE ARE NO REFUGES WITHIN THIS PROJECT AREA

Wetlands in the National Wetlands Inventory

Impacts to NWI wetlands and other aquatic habitats from your project may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal Statutes.

Project proponents should discuss the relationship of these requirements to their project with the Regulatory Program of the appropriate U.S. Army Corps of Engineers District.

THERE ARE NO WETLANDS IDENTIFIED IN THIS PROJECT AREA

Appendix B — Plants and Wildlife Observed within the Project Site

Appendix B
Plants Observed within the Project Site

Family	Scientific Name	Common Name	Native or Invasive
Asteraceae	<i>Baccharis pilularis</i>	Coyote brush	N
Asteraceae	<i>Centromadia fitchii</i>	Spikeweed	N
Asteraceae	<i>Centaurea solstitialis</i>	Yellow star-thistle	I
Asteraceae	<i>Cichorium intybus</i>	Chicory	I
Asteraceae	<i>Holocarpha virgata</i>	Narrow tarplant	N
Asteraceae	<i>Lactuca serriola</i>	Prickly lettuce	I
Asteraceae	<i>Silybum marianum</i>	Milk thistle	I
Brassicaceae	<i>Hirschfeldia incana</i>	Wild mustard	I
Convolvulaceae	<i>Convolvulus arvensis</i>	Field bindweed	--
Cyperaceae	<i>Cyperus eragrostis</i>	Tall cyperus	N
Fagaceae	<i>Quercus lobata</i>	Valley oak	N
Moraceae	<i>Ficus carica</i>	Common fig	I
Myrtaceae	<i>Eucalyptus</i> sp.	Eucalyptus	--
Pinaceae	<i>Pinus halepensis</i>	Aleppo pine	--
Plantaginaceae	<i>Plantago lanceolata</i>	English plantain	I
Poaceae	<i>Avena fatua</i>	Wild oat	--
Poaceae	<i>Bromus diandrus</i>	Ripgut grass	I
Poaceae	<i>Bromus hordeaceus</i>	Soft chess	I
Poaceae	<i>Distichlis spicata</i>	Salt grass	N
Poaceae	<i>Elymus caput-medusae</i>	Medusa head	I
Poaceae	<i>Festuca perennis</i>	Rye grass	I
Poaceae	<i>Hordeum marinum</i>	Seaside barley	--
Poaceae	<i>Hordeum murinum</i>	Farmer's foxtail	I
Poaceae	<i>Phalaris canariensis</i>	Annual canarygrass	--
Polygonaceae	<i>Rumex crispus</i>	Curly dock	I
Rosaceae	<i>Rosa</i> sp.	Rose	--
Rosaceae	<i>Rubus armeniacus</i>	Himalayan blackberry	I
Spindaceae	<i>Maple</i> sp.	Maple	--

Appendix B
Wildlife Observed within the Project Site

Family	Scientific Name	Common Name	Native or Invasive
Birds			
Columbidae	<i>Zenaida macroura</i>	Morning Dove	--
Corvidae	<i>Corvus brachyrhynchos</i>	American Crow	--
Laridae	<i>Larus argentatus</i>	Herring Gull	
Mimidae	<i>Mimus polyglottos</i>	Northern Mockingbird	--
Trochilidae	<i>Calypte anna</i>	Anna's Hummingbird	--
Tyrannidae	<i>Sayornis nigricans</i>	Black Phoebe	--
Mammals			
Leporidae	<i>Lepus californicus</i>	Black-tailed jackrabbit	--

Appendix C — Regionally Occurring Listed and Special-Status Species

Table 1 — Regionally Occurring Special-Status Species

Special-Status Species	Regulatory Status (Federal; State; Local; CNPS)	Habitat Requirements	Identification/ Survey Period	Potential for Occurrence
Plants				
Ahart's dwarf rush <i>Juncus leiospermus</i> var. <i>ahartii</i>	--; --; --; 1B	Annual herb found in mesic areas in valley and foothill grasslands from 30 to 229 meters.	Blooming period: April – August.	None ; the Project Site is outside of the elevation range for this species.
Bristly sedge <i>Carex comosa</i>	--; --; --; 2B	Perennial rhizomatous herb found on Coastal prairie, marshes and swamps occasionally found on lake margins and valley and foothill grassland from 0 to 625 meters.	Blooming period: May – September.	None ; the Project Site does not provide habitat for this species.
Boggs Lake hedge-hyssop <i>Gratiola heterosepala</i>	--; CE; --; 1B	Annual herb found on clay soils around the lake margins of marshes and swamps and in vernal pools from 10 to 2,375 meters.	Blooming period: April – August.	None ; the Project Site does not provide habitat for this species. CNDDDB occurrences are documented within 5 miles of the Project Site (CDFW 2015).
Bolander's water-hemlock <i>Cicuta maculata</i> var. <i>bolanderi</i>	--; --; --; 2B	Perennial herb found in marshes and swamps Coastal, fresh or brackish water from 0 to 200 meters.	Blooming period: July – September.	None ; the Project Site does not provide habitat for this species.
Delta mudwort <i>Limosella subulata</i>	--; --; --; 2B	Perennial stoloniferous herb usually found in mud banks, occasionally found in fresh or brackish marshes and swamps and riparian scrubs form 0 to 3 meters.	Blooming period: May – August.	None ; the Project Site is outside of the elevation range for this species.
Delta tule pea <i>Lathyrus jepsonii</i> var. <i>jepsonii</i>	--; --; --; 1B	Perennial herb found in marshes and swamps (freshwater and brackish) from 0 to 5 meters.	Blooming period: May – September	None ; the Project Site is outside of the elevation range for this species
Dwarf downingia <i>Downingia pusilla</i>	--; --; --; 2	Annual herb found in vernal pools under natural conditions within valley and foothill grassland from 1 to 445 meters (CNPS 2015; Calflora 2015).	Blooming period: March – May.	None ; the Project Site does not provide habitat for this species. CNDDDB occurrences are documented within 5 miles of the Project Site (CDFW 2015).
Ferris' goldfields <i>Lasthenia ferrisiae</i>	--; --; --; 4.2	Annual herb found primarily on alkaline and clay soil, in vernal pools form 20 to 700 meters.	Blooming period: February – May.	None ; the Project Site is outside of the elevation range for this species.
Farris' mile-vetch <i>Astragalus tener</i> var. <i>ferrisiae</i> <i>Liston</i>	--; --; --; 1B	Annual herb found in meadows and seeps occasionally found in vernal mesic, along with sub-alkaline flats in valley and foothill grassland from 2 to 75 meters.	Blooming period: April – May.	None ; the Project Site does not provide habitat for this species.
Heckard's pepper-grass <i>Lepidium latipe</i> var. <i>heckardii</i>	--; --; --; 1B	Annual herb found primarily on alkaline flats in valley and foothill grasslands from 2 to 200 meters.	Blooming period: March – May.	None ; the Project Site does not provide habitat for this species.
Hoary navarretia <i>Navarretia eriocephala</i>	--; --; --; 4.3	Annual herb found on vernal mesic, cismontane woodland and valley and foothill grasslands from 105 to 400 meters.	Blooming period: May – June.	None ; the Project Site is outside of the elevation range for this species.
Hogwallow starfish <i>Hesperis matronalis</i>	--; --; --; 4.2	Annual herb primarily found on mesic, clay soils, sometimes found on alkaline soil, in valley and foothill grassland and in shallow vernal pools from 0 to 505 meters.	Blooming period: March – June.	None ; the Project Site does not provide habitat for this species.
Legenere <i>Legenere limosa</i>	--; CT; --; 1B	Annual herb found in vernal pools from 1 to 880 meters.	Blooming period: April – June.	None ; the Project Site does not provide habitat for this species. CNDDDB occurrences are documented within 5 miles of the Project Site (CDFW 2015).
Marsh skullcap <i>Scutellaria galericulata</i>	--; --; --; 2B	Perennial rhizomatous herb found in lower montane coniferous forests, meadows and seeps, occasionally in mesic and marshes and swamps form 0 to 2,100 meters.	Blooming period: June – September.	None ; the Project Site does not provide habitat for this species.
Mason's lilaeopsis <i>Lilaeopsis masonii</i>	--; --; --; 1B	Perennial rhizomatous herb occasionally found in barakish and fresh water marshes and swamps riparian scrubs from 0 to 10 meters.	Blooming period: April – November.	None ; the Project Site does not provide habitat for this species.
Northern California black walnut <i>Juglans californica</i> var. <i>hindsii</i>	--; --; --; 1B	Perennial deciduous tree found in riparian forests and riparian woodlands from 0 to 440 meters.	Blooming period: April – May	None ; the Project Site does not provide habitat for this species.
Parry's rough tarplant <i>Centromadia parryi</i> ssp. <i>rudis</i>	--; --; --; 4.2	Annul herb found on alkaline soils vernal mesic, seeps, sometimes roadsides in valley and foothill grassland and vernal pools from 0 to 100 meters.	Blooming period: May – October.	None ; the Project Site does not provide habitat for this species.
Peruvian dodder <i>Cuscuta obtusiflora</i> var. <i>glandulosa</i>	--; --; --; 2B	Annual vine (parasitic), found in marshes and swamps (freshwater) form 15-280 meters.	Blooming period: July – October.	None ; the Project Site is outside of the elevation range for this species. CNDDDB occurrences are documented within 5 miles of the Project Site (CDFW 2015).
Sacramento orcutt grass <i>Orcuttia viscida</i>	FE; CE; --; 1B	Annual herb found in vernal pools from 30 to 100 meters.	Blooming period: April – September.	None ; the Project Site does not provide habitat for this species.
Saline clover <i>Trifolium hydrophilum</i>	--; --; --; 1B	Annual herb found in marshes and swamps, valley and foothill grassland, which is occasionally in mesic and alkaline areas, and vernal pool from 0-300 meters.	Blooming period: April – June.	None ; the Project Site does not provide habitat for this species. CNDDDB occurrences are documented within 5 miles of the Project Site (CDFW 2015).
Side-flowering skullcap <i>Scutellaria lateriflora</i>	--; --; --; 2B	Perennial rhizomatous herb found primarily on mesic soils in meadows and seeps and in marshes and swamps from 0 to 500 meters.	Blooming period: July – September.	None ; the Project Site does not provide habitat for this species.
Sanford's arrowhead <i>Sagittaria sanfordii</i>	--; --; --; 1B	Perennial rhizomatous herb found in marshes and swamps in assorted shallow freshwater areas from 0 to 650 meters.	Blooming period: May – October.	None ; the Project Site does not provide habitat for this species. CNDDDB occurrences are documented within 5 miles of the Project Site (CDFW 2015).
Slender orcutt grass <i>Orcuttia tenuis</i>	FT; CE; --; 1B	Annual herb found in vernal pools that are often gravelly, from 35 to 1,760 meters.	Blooming period: May – October.	None ; the Project Site does not provide habitat for this species.
Suisun Marsh aster	--; --; --; 1B	Perennial rhizomatous herb, found in marshes	Blooming period:	None ; the Project Site is outside of the elevation range

Special-Status Species	Regulatory Status (Federal; State; Local; CNPS)	Habitat Requirements	Identification/ Survey Period	Potential for Occurrence
<i>Aster chilensis</i> var. <i>lentus</i>		and swamps brackish h and fresh water from 0 to 3 meters.	April – November.	for this species.
Watershield <i>Brasenia schreberi</i>	--; --; --; 2B	Perennial rhizomatous herb, found in freshwater marshes and swamps from 33 to 2,200 meters.	Blooming period: June – September.	None ; the Project Site is outside of the elevation range for this species.
Woolly rose-mallow <i>Hibiscus lasiocarpus</i> var. <i>occidentalis</i>	--; --; --; 1B	Perennial rhizomatous herb, often in riprap on side of levees found in freshwater marshes and swamps from 0 to 120 meters.	Blooming period: June – September.	None ; the Project Site does not provide habitat for this species. CNDDDB occurrences are documented within 5 miles of the Project Site (CDFW 2015).
Wildlife				
Invertebrates				
Valley elderberry longhorn beetle <i>Desmocerus californicus dimorphus</i>	FT; --; --; --	Blue elderberry shrubs usually associated with riparian areas.	Adults emerge in spring until June. Exit holes visible year – round.	None ; the Project Site does not contain elderberry shrubs.
Vernal pool fairy shrimp <i>Branchinecta lynchi</i>	FT; --; --; --	Vernal pools, swales, and ephemeral freshwater habitat.	USFWS protocol-level wet-season sampling and/or dry season cyst identification.	Low ; the depressional seasonal wetlands provide marginal habitat for this species. CNDDDB occurrences are documented within 5 miles of the Project Site (CDFW 2015).
Vernal pool tadpole shrimp <i>Lepidurus packardii</i>	FE; --; --; --	Vernal pools, swales, and ephemeral freshwater habitat.	USFWS protocol-level wet-season sampling and/or dry season cyst identification.	Low ; the depressional seasonal wetlands provide marginal habitat for this species. CNDDDB occurrences are documented within 5 miles of the Project Site (CDFW 2015).
Amphibians/Reptiles				
California red-legged frog <i>Rana draytonii</i>	FT; CSC; --; --	Requires a permanent water source and is typically found along quiet, slow-moving streams, ponds, or marsh communities with emergent vegetation. Believed extirpated from the Central Valley floor since 1970s.	Found in open oak and conifer woodlands, grasslands, and riparian areas. Most often found in areas with sandy soil types.	None ; the Project Site does not have suitable habitat for this species.
California tiger salamander <i>Ambystoma californiense</i>	FT; CT; --; --	Ponded water required for breeding. Adults spend summer in small mammal burrows.	Ponded water required for breeding. Adults spend summer in small mammal burrows.	None ; the Project Site is outside known range for this species and site lacks appropriate permanent water sources for breeding.
Giant garter snake <i>Thamnophis gigas</i>	FT; CT; --; --	Found in agricultural wetlands and other wetlands such as irrigation and drainage canals, low gradient streams, marshes, ponds, sloughs, small lakes, and their associated uplands. Upland habitat should have burrows or other soil crevices suitable for snakes to reside during their dormancy period (November – mid March). This species is known from Sacramento, Sutter, Butte, Colusa, and Glenn counties.	Active outside of dormancy period November – mid March.	None ; the Project Site does not provide habitat for this species. CNDDDB occurrences are documented within 5 miles of the Project Site (CDFW 2015).
Western pond turtle <i>Emys marmorata</i>	--; CSC; --; --	Agricultural wetlands and other wetlands such as irrigation and drainage canals, low gradient streams, marshes, ponds, sloughs, small lakes, and their associated uplands.	Active outside of dormancy period November – February.	None ; the Project Site does not provide habitat for this species. CNDDDB occurrences are documented within 5 miles of the Project Site (CDFW 2015).
Western spadefoot <i>Spea hammondi</i>	--; CSC; --; --	Found in open grasslands and woodlands. Requires vernal pools or seasonal wetlands for breeding. Temporary breeding pools must last for at least 30 days for larvae to metamorphose into terrestrial adults. Spends the majority of its life underground in earth-filled burrows and active for only a short period each year, typically between October to May, depending on rainfall. Known from Alameda, Butte, Calaveras, Colusa, Fresno, Glenn, Kern, Kings, Los Angeles, Madera, Mariposa, Merced, Monterey, Orange, Placer, Riverside, Sacramento, San Benito, San Diego, San Joaquin, San Luis Obispo, Santa Barbara, Siskiyou, Stanislaus, Tehama, Tulare, Ventura and Yolo counties.	Year – round	None ; although the depressional seasonal wetlands provide marginal habitat, these features do not appear to hold water for a long enough period for these species to metamorphose into adults. Although the disturbed non-native grassland provides upland aestivation habitat, no burrows were observed.
Fish				
Central Valley fall/late fall-run Chinook salmon <i>Oncorhynchus tshawytscha</i>	FC; CSC; --; --	Sacramento and San Joaquin Rivers and their tributaries.		None ; the Project Site does not provide habitat for this species.
Central Valley steelhead <i>Oncorhynchus mykiss</i>	FT; --; --; --	Inhabits rivers and streams tributary to the Sacramento-San Joaquin Rivers and Delta ecosystems.	Spawn in winter and spring.	None ; the Project Site does not provide habitat for this species.
Delta smelt <i>Hypomesus transpacificus</i>	FT; CE; --; --	Inhabits shallow fresh or brackish water tributary to the Delta ecosystem; spawns in freshwater sloughs and channel edgewaters. Known almost exclusively in the Fresno-San Joaquin estuary.	Spawn December – July. Present year – round in delta.	None ; the Project Site does not provide habitat for this species.
Longfin smelt <i>Spirinchus thaleichthyslt</i>	FC; CT; --; --	Inhabits open water estuaries ; The known range of the longfin smelt extends from the San Francisco Bay-Delta in California northward to the Cook Inlet in Alaska.	Spawn January-March	None ; the Project Site does not provide habitat for this species.
Winter run Chinook salmon <i>Oncorhynchus tshawytscha</i>	FE; CE; --; --	Sacramento and San Joaquin Rivers and their tributaries.		None ; the Project Site does not provide habitat for this species.

Special-Status Species	Regulatory Status (Federal; State; Local; CNPS)	Habitat Requirements	Identification/ Survey Period	Potential for Occurrence
Birds				
Bald eagle <i>Haliaeetus leucocephalus</i>	FD; CFP, CE; --; --	Breeding habitat most commonly includes areas within 2.5 miles (4.0 kilometers) of coastal areas, bays, rivers, lakes, and reservoirs. Nests usually are in tall trees or on pinnacles or cliffs near water.	Winter	None ; the Project Site does not provide habitat for this species.
Bank swallow <i>Riparia riparia</i>	--; CT; --; --	Nests in riverbanks and forages over riparian areas and adjacent uplands.	April – July	None ; the Project Site does not provide nesting habitat for this species.
Burrowing owl <i>Athene cucularia</i>	--; CSC; --; --	Nests in burrows in the ground, often in old ground squirrel burrows or badger, within open dry grassland and desert habitat. The burrows are found in dry, level, open terrain, including prairie, plains, desert, and grassland with low height vegetation for foraging and available perches, such as fences, utility poles, posts, or raised rodent mounds.	Year – round; Breeding season March and August.	Low ; the non-native annual grassland provides marginal habitat for this species given the lack of burrows present. CNDDDB occurrences are documented within 5 miles of the Project Site (CDFW 2015).
California black rail <i>Laterallus jamaicensis coturniculus</i>	--; CT; --; --	Saltwater, brackish, and freshwater marshes. This species is known from Alameda, Butte, Contra Costa, Imperial, Los Angeles, Marin, Napa, Nevada, Orange, Placer, Sacramento, San Bernardino, San Diego, San Francisco, San Joaquin, San Luis Obispo, San Mateo, Santa Clara, Santa Cruz, Solano, Sonoma, Sutter, and Yuba counties, in California.	Year – round	None ; the Project Site does not provide nesting habitat for this species.
Golden eagle <i>Aquila chrysaetos</i>	--; CFP; --; --	Open and semi-open areas up to 12,000 feet in elevation. Builds stick nests on cliffs, in trees, or on man-made structures.	Year – round	None ; the Project Site does not provide nesting habitat for this species.
Least bell's vireo <i>Vireo bellii pusillus</i>	FE; CE; --; --	Nests in riparian forests, shrubs, and woodlands.	Year – round	None ; the Project Site does not provide nesting habitat for this species.
Least bittern <i>Ixobrychus exilis</i>	--; CSC; --; --	The least bittern range extends from southeastern Canada south through the U.S. and east to the Atlantic Coast, found in the Central Valley and Modoc Plateau of California, occur in freshwater and brackish marshes with tall, dense emergent vegetation such as cattails, sedges, and rushes that are interspersed with clumps of woody shrubs and open water.	Breeding	None ; there is no suitable habitat for this species on site.
Loggerhead shrike <i>Lanius ludovicianus</i>	--; CSC; --; --	Found in a variety of woodland and grassland habitats throughout California.	Year – round	Low ; limited shrub habitat on site available for nesting.
Mountain plover <i>Charadrius montanus</i>	--; CSC; --; --	Winters in California in agricultural fields and grasslands.	Wintering	None ; there is no suitable habitat for this species on the site.
Purple martin <i>Progne subis</i>	--; CSC; --; --	Often nests in tall, old trees near body of water in woodland and conifer habitats.	Year – round	None ; the Project Site does not provide nesting habitat for this species.
Short-eared owl <i>Asio flammeus</i>	--; CSC; --; --	Usually found in open areas with few trees, such as annual and perennial grasslands, prairies, dunes, meadows, irrigated lands, and saline and fresh emergent wetlands. Nests usually located on dry sites with enough vegetation to conceal incubating female.	Year – round	Low ; the non-native annual grassland within the Project Site provides nesting habitat for this species.
Song sparrow (“Modesto population”) <i>Melospiza melodia</i>	--; CSC; --; --	Resides only in the north-central portion of the Central Valley, with the highest concentrations in the Butte Sink area of the Sacramento Valley and in the Sacramento-San Joaquin River Delta. Prefers freshwater marshes and riparian thickets.	Year-round	None ; the Project Site does not provide nesting habitat for this species. CNDDDB occurrences are documented within 5 miles of the Project Site (CDFW 2015).
Swainson's hawk <i>Buteo swainsoni</i>	--; CT; --; --	Nest peripherally to Valley riparian systems lone trees or groves of trees in agricultural fields. Valley oak, Fremont cottonwood, walnut, and large willow trees, ranging in height from 41 to 82 feet, are the most commonly used nest trees in the Central Valley. This species is known from Alameda, Butte, Colusa, Contra Costa, Fresno, Glenn, Inyo, Kern, Kings, Lassen, Los Angeles, Madera, Merced, Modoc, Mono, Napa, Placer, Plumas, Sacramento, San Bernardino, San Joaquin, San Luis Obispo, Siskiyou, Solano, Stanislaus, Sutter, Tehama, Tulare, Yolo, and Yuba counties.	March – October	High ; the non-native annual grassland provides foraging habitat for this species. There are 162 CNDDDB occurrences documented within 10 miles of the Project Site.
Tricolored blackbird <i>Agelaius tricolor</i>	--; CSC; --; --	Nests in dense blackberry, cattail, tules, bulrushes, sedges, willow, or wild rose within freshwater marshes. Nests in large colonies of at least 50 pairs (up to thousands of individuals).	Year – round	None ; although the disturbed non-native annual grassland provides foraging habitat, no nesting habitat is present within the Project Site. CNDDDB occurrences are documented within 5 miles of the Project Site (CDFW 2015).
Western yellow-billed cuckoo <i>Coccyzus americanus occidentalis</i>	FT; CE; --; --	Nest in riparian forest habitat with dense canopy overstory.	Year – round	None ; the Project Site does not provide nesting habitat for this species.
White-tailed kite <i>Elanus leucurus</i>	--; CFP; --; --	This species nests near the top of dense oaks, willows, or other large trees.	Year – round	Low ; this species was observed foraging during a 2006 survey and has a low potential to nest within the isolated trees within the Project Site. CNDDDB occurrences are documented within 5 miles of the Project Site (CDFW 2015).

Special-Status Species	Regulatory Status (Federal; State; Local; CNPS)	Habitat Requirements	Identification/ Survey Period	Potential for Occurrence
Mammals				
American badger <i>Taxidea taxus</i>	--; CSC; --; --	Found in a variety of grasslands, shrublands, and open woodlands throughout California.	Year – round	None ; although the disturbed non-native annual grassland provides habitat, suitable burrows were not observed during biological survey.
Hoary bat <i>Lasiurus cinereus</i>	--; --; --; --	Found in broad-leaved upland forest, cismontane woodland, lower montane coniferous forest, and north coast coniferous forest.	Year – round	None ; the Project Site does not provide habitat for this species.
Federally-Listed Species: FE = federal endangered FT = federal threatened FC = candidate PT = proposed threatened FPD = proposed for delisting FD = delisted		California State Ranked Species: CE = California state endangered CT = California state threatened CR = California state rare CSC = California species of special Concern CCT = California state threatened candidate		CNPS* Rank Categories: 1A = plants presumed extinct in California 1B = plants rare, threatened, or endangered in California and elsewhere 2 = plants rare, threatened, or endangered in California, but common elsewhere 3 = plants about which we need more information 4 = plants of limited distribution
<i>Source: Foothill Associates</i>				

Special-Status Species list generated from queries of the USFWS for the Project Site and CNPS and CNDDDB databases for the *Florin* quadrangle and eight surrounding quadrangles.

Table 2 — Nesting Birds of Conservation Concern Protected under the Migratory Bird Treaty Act (MBTA) and §3503.5 Department of Fish and Game Code

Birds of Conservation Concern	Habitat Requirements	Identification/ Survey Period	Potential for Occurrence
Black-crowned night heron <i>Nycticorax nycticorax</i>	Breeds in fresh, brackish, and salt-water habitats. Forages in swamps, streams, rivers, margins of pools, ponds, lakes, lagoons, tidal mudflats, salt marsh, freshwater marshes, manmade ditches, canals, ponds, reservoirs, and wet agricultural fields.	Year – round	None ; the Project Site does not provide habitat for this species.
Cooper’s hawk <i>Accipiter cooperii</i>	A winter resident of open habitats in California including grassland, shrubsteppes, sagebrush, deserts, saltbush-greasewood shrublands, and outer edges of pinyon-pine and other forests.	Winter	Low ; the trees within the non-native annual grassland provide wintering habitat for this species. CNDDB occurrences are documented within 5 miles of the Project Site (CDFW 2015).
Double-crested cormorant <i>Phalacrocorax auritus</i>	A winter resident that prefers aquatic bodies large enough to support a diet of fish. They sometimes roost on smaller ponds, and fly up to 40 miles to a larger water bodies to feed.	Winter	None ; the Project Site does not provide habitat for this species. CNDDB occurrences are documented within 5 miles of the Project Site (CDFW 2015).
Ferruginous hawk <i>Buteo regalis</i>	Inhabits open country, primarily prairies, plains, and badlands.	Winter	Low ; the trees within the non-native annual grassland provide habitat for this species. CNDDB occurrences are documented within 5 miles of the Project Site (CDFW 2015).
Fox sparrow <i>Passerella iliaca</i>	Prefers thick cover, especially brushy woodland edges, grown-up fields, cut-over woodland, and scrubby woods, nests in montane chaparral consisting of brushy fields, occurring from 1,220 to 3,000 meters.	Wintering	None ; the Project Site does not provide habitat for this species.
Great blue heron <i>Ardea herodias</i>	Inhabits both freshwater and saltwater habitats and forages in grasslands and agricultural field. Breeding colonies are located within 2 to 4 miles of feeding areas, often in isolated swamps or on islands, and near lakes and ponds bordered by forests.	May occur during migration	None ; although the non-native annual grassland provides foraging habitat, the Project Site does not provide nesting habitat for this species. CNDDB occurrences are documented within 5 miles of the Project Site (CDFW 2015).
Great egret <i>Ardea alba</i>	Occurs in freshwater and saltwater habitats.	Year – round	None ; the Project Site does not provide habitat for this species. CNDDB occurrences are documented within 5 miles of the Project Site (CDFW 2015).
Lewis’ woodpecker <i>Melanerpes lewis</i>	Nests in wet meadows interspersed with emergent marsh habitat. Winters in agricultural croplands, marshlands, and irrigated pastures.	Wintering	None ; the Project Site does not provide habitat for this species.
Marbled godwit <i>Limosa fedoa</i>	Mudflats and shallow marsh areas.	Wintering	None ; the Project Site does not provide habitat for this species.
Merlin <i>Falco columbarius</i>	Prefers open to semi-open areas. Breeds in open forests and grasslands.	Year-round	Low ; the trees within the non-native annual grassland provide habitat for this species. CNDDB occurrences are documented within 5 miles of the Project Site (CDFW 2015).
Oak titmouse <i>Baeolophus inornatus</i>	Found in oak savannah and oak woodlands.	Year-round	None ; the Project Site does not provide habitat for this species.
Peregrine falcon <i>Falco peregrinus</i>	Nests on man-made structures and in the hollows of old trees or open tops of cypress, sycamore, or cottonwood trees 50 to 90 feet above the ground, mostly in woodland, forest, and coastal habitats.	Year – round (some migrate)	None ; the Project Site does not provide habitat for this species.
Western grebe <i>Aechmophorus occidentalis</i>	Breeds on freshwater lakes and marshes with extensive open water bordered by emergent vegetation. During winter they move to saltwater or brackish bays, estuaries, or sheltered sea coasts and are less frequently found on freshwater lakes or rivers.	Year- round	None ; the Project Site does not provide habitat for this species.
Williamson’s sapsucker <i>Sphyrapicus thyroideus</i>	Found in montane coniferous forests. Nest site is cavity in tree, often in aspen, pine, or fir, usually 1.5 – 18 meters above ground. Favors trees with dead heartwood and live outer layer, and may return to dig new nest holes in same tree year after year.	Year – round	None ; the Project Site does not provide habitat for this species.
Yellow-billed magpie <i>Pica nuttalli</i>	Occurs in broken oak woodland interspersed with grasslands or cultivated lands, open riparian woodland, and savanna.	Year – round	None ; although the non-native annual grassland provides foraging habitat, the Project Site does not provide nesting habitat for this species.

Migratory Bird Treaty Act and Golden Eagle Protection Act list generated from queries of the USFWS for the Project Site (USFWS 2015).



Appendix D

JURISDICTIONAL DETERMINATION
WETLAND DELINEATION





DEPARTMENT OF THE ARMY
U.S. ARMY ENGINEER DISTRICT, SACRAMENTO
CORPS OF ENGINEERS
1325 J STREET
SACRAMENTO CA 95814-2922

REPLY TO
ATTENTION OF

October 16, 2012

Regulatory Division SPK-2007-00778

Guide Engineering, Inc.
Attn: Mr. Jared Brown
1536 Eureka Road, Suite 600
Roseville, California 95661

Dear Mr. Brown:

We are responding to your August 21, 2012 request for an approved jurisdictional determination for the Nouveau Sheldon project. The approximately 19-acre site is located north of Sheldon Road and west of State Route 99 in Section 23, Township 7 North, Range 5 East, Mount Diablo Meridian, Latitude 38.44039° North, Longitude 121.40587° West, in the City of Sacramento, Sacramento County, California.

Based on available information, we have determined that the 0.195 acre waters identified as Isolated Seasonal Wetlands (SW) 2, 3 and 4 and Ditch/Canal on the enclosed May 21, 2007, *Nouveau Sheldon Delineated Waters of the U.S.* drawing, prepared by Foothill Associates, are intrastate isolated waters with no apparent interstate or foreign commerce connection. In addition, we have determined that the features identified on the May 21, 2007 drawing as SW 1 and 5 have been filled and are no longer aquatic resources. Therefore, these areas are not currently regulated by the Corps of Engineers. This disclaimer of jurisdiction is only for Section 404 of the Federal Clean Water Act. Other Federal, State, and local laws may apply to your activities. *In particular, you may need authorization from the California State Water Resources Control Board and/or the U.S. Fish and Wildlife Service.*

This verification is valid for five years from the date of this letter, unless new information warrants revision of the determination before the expiration date. This letter contains an approved jurisdictional determination for your subject site. If you object to this determination, you may request an administrative appeal under Corps regulations at 33 CFR Part 331.

A Notification of Appeal Process (NAP) and Request for Appeal (RFA) form is enclosed. If you request to appeal this determination you must submit a completed RFA form to the South Pacific Division Office at the following address: Administrative Appeal Review Officer, Army Corps of Engineers, South Pacific Division, CESPDPDO, 1455 Market Street, 2052B, San Francisco, California 94103-1399, Telephone: 415-503-6574, FAX: 415-503-6646.

In order for an RFA to be accepted by the Corps, the Corps must determine that it is complete, that it meets the criteria for appeal under 33 CFR Part 331.5, and that it has been received by the Division Office within 60 days of the NAP. Should you decide to submit an RFA form, it must be received at the above address by 60 days from the date of this letter. It is not necessary to submit an RFA form to the Division Office if you do not object to the determination in this letter.

You should provide a copy of this letter and notice to all other affected parties, including any individual who has an identifiable and substantial legal interest in the property.


This determination has been conducted to identify the limits of Corps of Engineers' Clean Water Act jurisdiction for the particular site identified in this request. This determination may not be valid for the wetland conservation provisions of the Food Security Act of 1985. If you or your tenant are U.S. Department of Agriculture (USDA) program participants, or anticipate participation in USDA programs, you should request a certified wetland determination from the local office of the Natural Resources Conservation Service prior to starting work.

We appreciate your feedback. At your earliest convenience, please tell us how we are doing by completing the customer survey on our website under *Customer Service Survey*.

Please refer to identification number SPK-2007-00778 in any correspondence concerning this project. If you have any questions, please contact Lisa Gibson at our California Delta Regulatory Branch, 1325 J Street, Room 1350, Sacramento, California 95814-2922, email Lisa.M.Gibson2@usace.army.mil, or telephone 916-557-5288. For more information regarding our program, please visit our website at www.spk.usace.army.mil/Missions/Regulatory.aspx.

Sincerely,

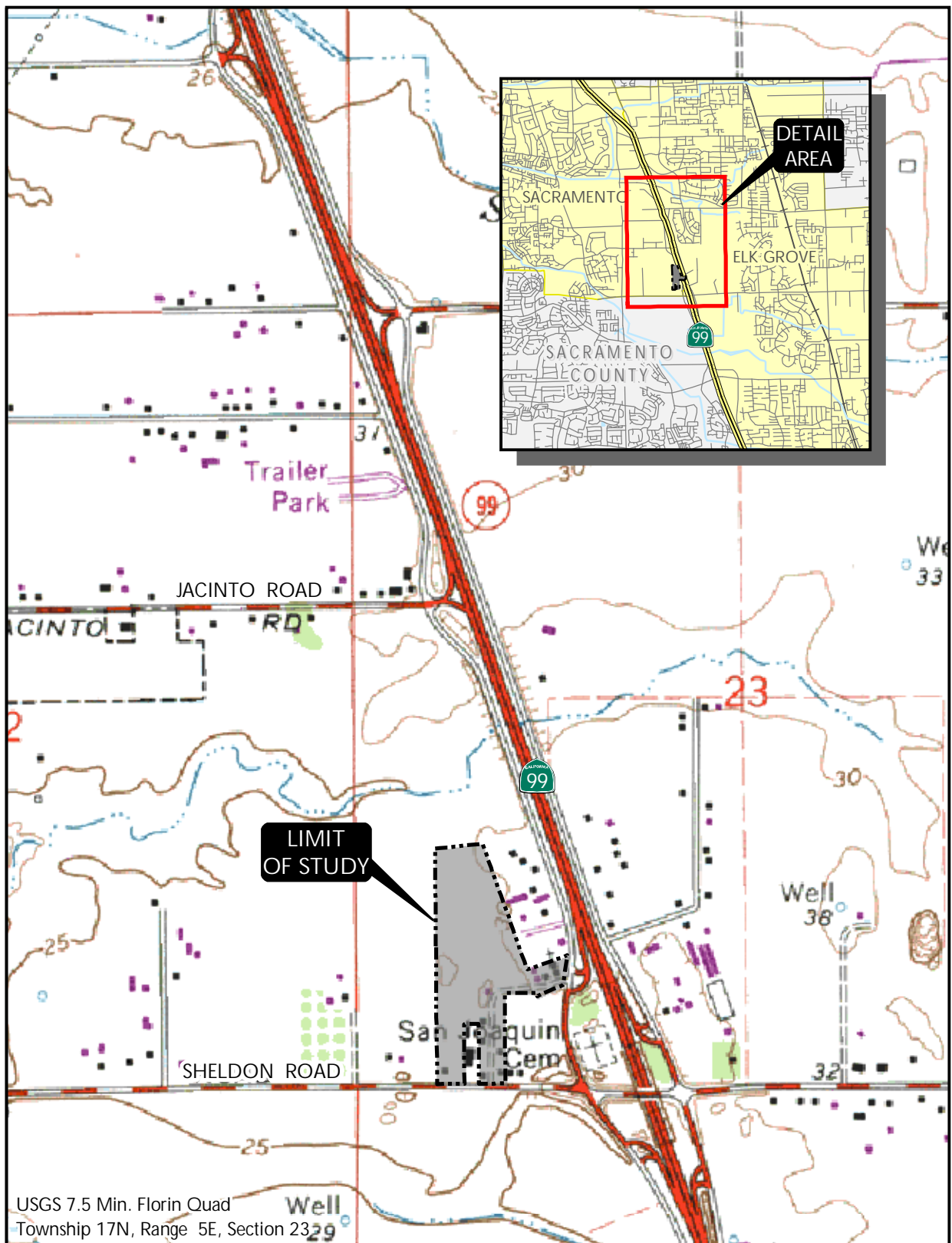


 Kathleen A. Dadey
Chief, California Delta Branch

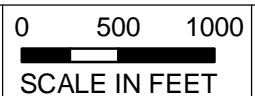
Enclosures

Copies Furnished without enclosures

- Ms. Kellie Berry, Sacramento Valley Branch, Endangered Species Division, U.S. Fish and Wildlife Service, 2800 Cottage Way, Suite W2605, Sacramento, California 95825-3901
- Mr. Paul Jones, U.S. Environmental Protection Agency, Region IX, Wetlands Regulatory Office (WTR-8), 75 Hawthorne Street, San Francisco, California 94105-3901
- Mr. Kent Smith, California Department of Fish and Game, Region 2, 1701 Nimbus Road, Rancho Cordova, California 95670-4599
- Ms. Elizabeth Lee, Storm Water and Water Quality Certification Unit, Central Valley Regional Water Quality Control Board, 11020 Sun Center Drive #200, Rancho Cordova, California 95670-6114



SITE AND VICINITY



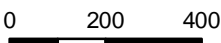


Drawn By: MMI
Date: 01/06/05

FIGURE 1



SOILS

 FOOTHILL ASSOCIATES <small>ENVIRONMENTAL CONSULTING • PLANNING • LANDSCAPE ARCHITECTURE</small>		 SCALE IN FEET	Drawn By: AH Date: 01/17/06	FIGURE 2
---	---	---	--------------------------------	-----------------

121° 24' 24" W
38° 26' 33" N

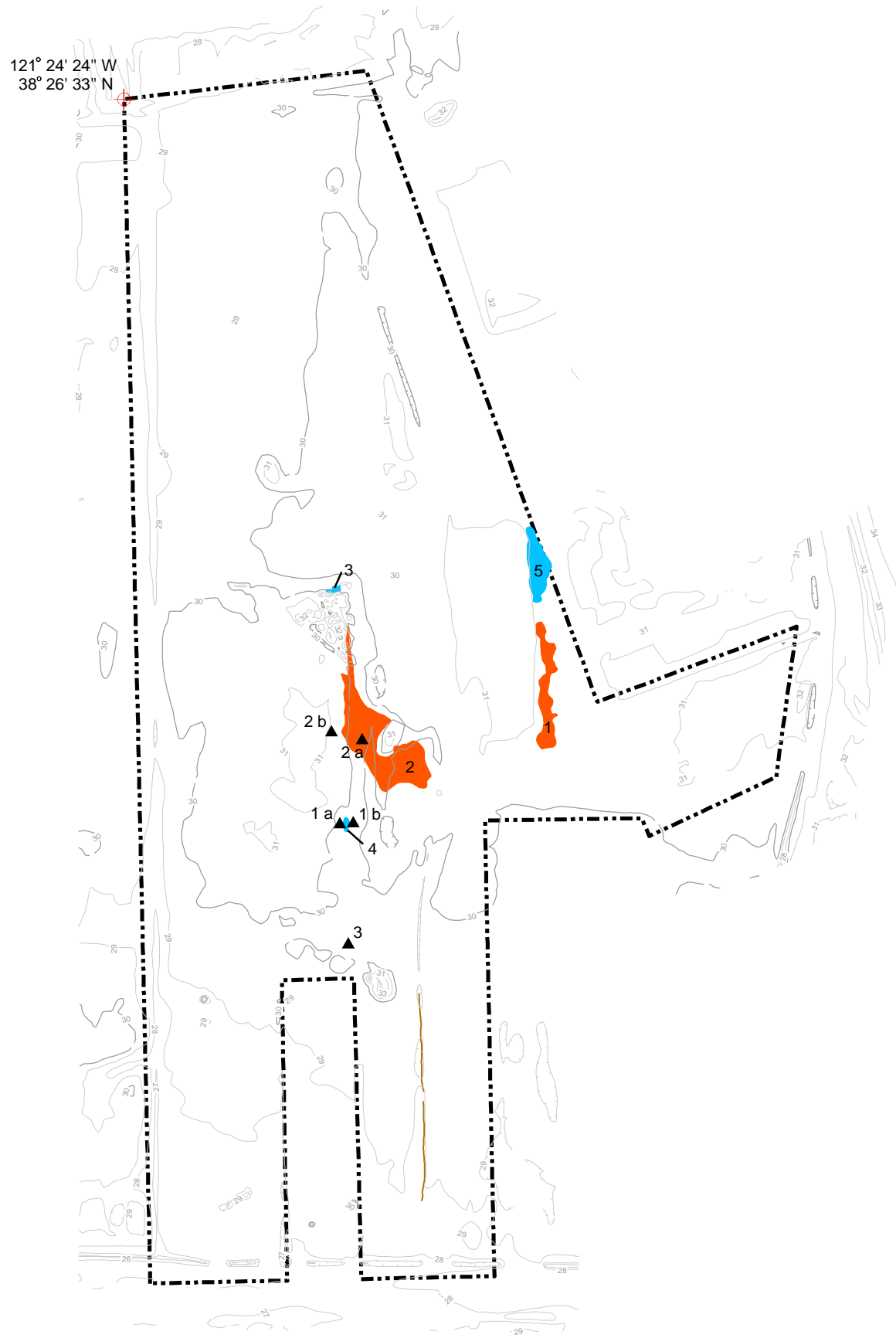
**INDIVIDUAL WOUS
FEATURE ACREAGES**

VP	
LABEL	ACRES*
1	0.063
2	0.188
SUBTOTAL	0.251

DSW	
LABEL	ACRES*
3	0.003
4	0.004
5	0.049
SUBTOTAL	0.056

TOTAL**	0.31
----------------	-------------

*Individual acreage reported to 3 significant figures.
**Based on sum of subtotals at 2 significant figures.



WATERS OF THE U.S.

CLASSIFICATION	ACREAGE
DEPRESSIONAL WETLANDS	
Vernal Pool	0.25
Seasonal Wetland	0.06
TOTAL	0.31

- OTHER FEATURES**
- Data Points
 - Project Boundary
 - Ditch/Canal

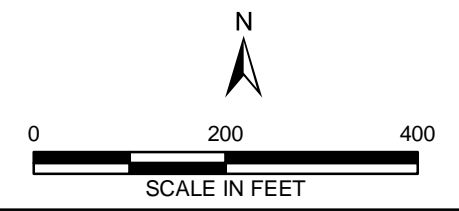


FIGURE 3

- NOTES**
- Wetland delineation subject to U.S. Army Corps of Engineers verification.
 - Digital base data provided by Wood Rodgers. Contour interval is 1 foot.
 - The Hydrologic Unit Code for this site is 18020109.
 - Study area wetlands and other waters of the U.S. were surveyed and mapped using a Trimble GPS (Global Positioning System).
 - This wetland delineation utilizes the Corps' 1987 three-parameter methodology to delineate jurisdictional waters of the U.S.

NOUVEAU SHELDON

WETLAND DELINEATION

FOOTHILL ASSOCIATES

ENVIRONMENTAL CONSULTING • PLANNING • LANDSCAPE ARCHITECTURE
© 2006

DATE: 05/25/06 FILE NAME: Wetland_delineation_11x17.mxd
DELINEATED BY: DB
DRAWN BY: BLM

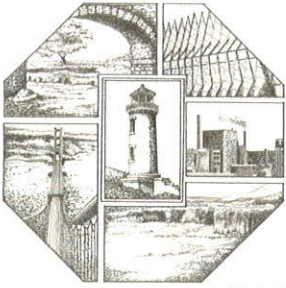
DRAFT



Appendix E

HAZARDOUS MATERIALS
SITE ASSESSMENT (PHASE 1)





WESTECH COMPANY

Environmental Consulting ~ Site Permitting

**HAZARDOUS MATERIALS SITE ASSESSMENT/PHASE I UPDATE
8151 SHELDON ROAD
SACRAMENTO, CALIFORNIA 95823**



September 2015

G. Bradford Shea, Ph.D., REPA

Submitted to:

SLC SHELDON, LLC
c/o Mr. Jeff Moore
702 Ash Street, #101
San Diego, California 92101

Submitted by:

WESTECH COMPANY
P.O. Box 2299
Cottonwood, California 96022

HAZARDOUS MATERIALS SITE ASSESSMENT/PHASE I UPDATE

8151 SHELDON ROAD

SACRAMENTO, CALIFORNIA 93823

September 2015

G. Bradford Shea, Ph.D., REPA

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Cottonwood, California 96022

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EXECUTIVE SUMMARY

This Phase I Environmental Site Assessment has been prepared to meet ASTM E1527-05 and ASTM 1527-13 Standards. It has been prepared by Dr. G. Bradford Shea, a National Registered Environmental Property Assessor (REPA) and Registered Asbestos Building Inspector to meet requirements for All Appropriate Inquiries and Due Diligence standards for environmental site assessments.

The Phase I Report has been prepared on Assessor's Parcel Number 117-0220-038-0000 in Sacramento County within the City of Sacramento. This parcel constitutes a 15.36 acre site on which the applicants propose to construct a residential subdivision. The Property is a nearly level, undeveloped open area of sparse vegetation located at 8151 Sheldon Road, Sacramento, California.

Reconnaissance site visits and searches of government records (federal, state and local), revealed no regulated quantities of hazardous materials currently on the Site (Westech 2015 and EDR 2015a,b,c). A search of government records indicated that the Site is not currently listed on any list of potentially contaminated sites, however, the property was previously listed on the FINDS database, but is at a "No Further Action" status with the regulatory agencies (County of Sacramento and the State of California Department of Toxic Substances Control). No Recognized Environmental Concerns (RECs) appear to be present on the Site.

No evidence of leaking underground storage tanks was found on or within 0.5 miles of the Site although one adjacent property and another nearby property were historically on these lists and were certified as "No Further Action" sites. No currently listed facilities, were found within 0.5 miles of the Site.

A historical review of maps and aerial photographs indicated that the Site was the site of a single residence (between 1957 and 2005), but that residence was removed and the site has since been undeveloped land. A past spill of hydrocarbon materials necessitated a cleanup during the 1990s, and leads to a determination of a Historical Recognized Environmental Concern (HREC), however, the Site was certified as "No Further Action" by the agencies in 1997.

Various agencies were interviewed and databases checked regarding the Site including the Site owner, an adjacent property owner, the Sacramento Fire Department, the local Air Quality Management District, the Regional Water Quality Control Board, the Sacramento Environmental Health Department and others. No information leading to identification of a REC was found in these interviews or data base searches. No environmental liens were found pertaining to the property.

1.0 INTRODUCTION

1.1 INTRODUCTION

This Hazardous Material Site Assessment/Phase I Environmental Site Assessment (ESA) Report has been prepared to meet ASTM E1527-05 and ASTM E1527-13 standards. It also meets requirements for All Appropriate Inquiries and Due Diligence as mandated by federal legislation.

This report has been prepared for the company SLC Sheldon, LLC to document site conditions at one parcel of land approximately 15.36 acres in size located in Sacramento, California. The Property (Site) includes Assessor's Parcel Number 117-0220-038-0000 located north of Sheldon Road in Sacramento, California (Figures 1, 2, 3 and 4). The Site is currently vacant and undeveloped. It is proposed for construction as a residential subdivision. Site photographs are found in Appendix A.

This Project is located within the City Limits of Sacramento, California and is located in Section 23 of Township 7 North, Range 5 East, Mount Diablo Base and Meridian. The property is owned by the SLC Sheldon, LLC (FATC 2015). SLC Sheldon, LLC has contracted with Westech Company (Westech) to prepare this updated Site Assessment to assist with compliance requirements for the development of the parcel (Site) as a residential subdivision.

The Site lies on moderately level land and is at an elevation of approximately 25-30 feet above sea level. It lies in the middle of the Sacramento-San Joaquin Valley with no significant bodies of water nearby (Laguna and Elk Grove Creeks are intermittent streams located roughly 1.0 miles to the southwest of the Site). The Site is currently undeveloped land adjacent to residential subdivisions (to the west), a variety of commercial properties (to the northeast and south) and fallow agricultural land (to the southeast).

Our analysis has been directed toward preliminary assessment of the site which includes:

- Research and review of pertinent, readily available geologic and hydrogeologic literature
- Performance of reconnaissance of the Site and surrounding properties
- Contact with local, state and federal agencies regarding potential for contamination on the property or on adjacent and nearby properties
- Review of historical maps and aerial photographs of the Site and surrounding area



Figure 1. Location Map



Figure 2. Vicinity Map



Figure 3. Parcel Map

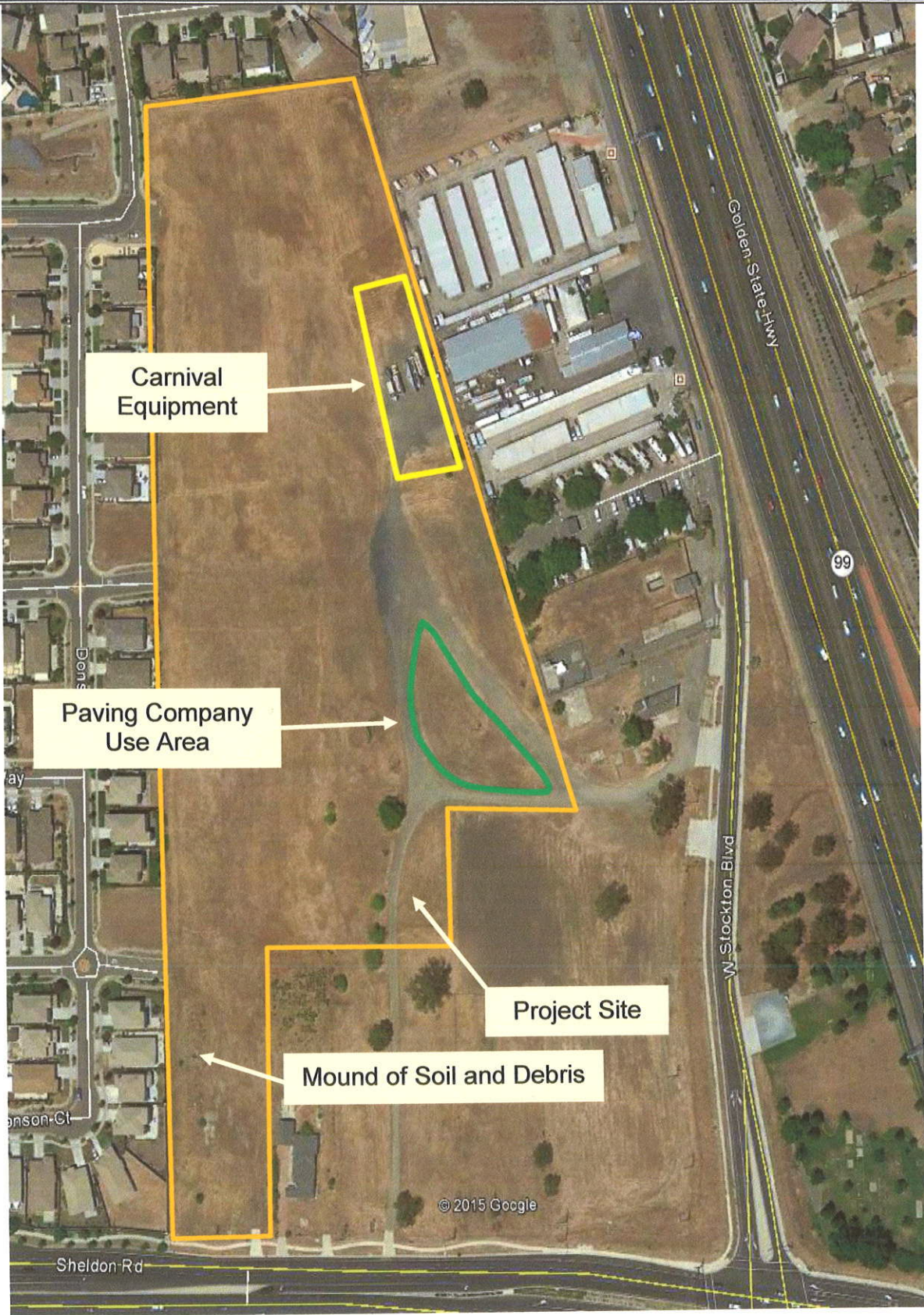


Figure 4. Aerial Site Map

Westech Company 2015
Source: Google Earth 2015

- Review of title policies and chain-of-title reports on the property
- Review of Site maps, building layouts and ownership information available from the owners and from agency records
- Evaluation of current and historic land use at the Site based on reconnaissance surveys and available county and state agency reports and permits
- Research and analysis of underground tank records on file at California Environmental Protection Agency
- Review of State of California and U.S. Environmental Protection Agency (EPA-DTSC) lists of known hazardous waste sites
- Preparation of this report to present findings, conclusions and recommendations

The purpose of this Phase I Site Assessment is to provide the current landowners as well as applicable regulatory agencies (City of Sacramento) with information pertinent to present or known historic uses of hazardous substances at the Site or such uses at adjacent sites which might cause detrimental effects to future Site use.

This report will describe the Site; it's geological, historical and land use setting and its present status of regulatory and environmental compliance in Chapters 2.0-4.0. Findings, conclusions and recommendations are in Chapter 5.0, followed by report certification (Chapter 6.0), reference citations (Chapter 7.0) and backup material (Appendices).

1.2 SITE INVESTIGATIONS

Site investigations carried out for this Phase I Site Assessment included field reconnaissance surveys of the Site, photographic documentation of conditions on the Site and adjacent properties, a boundary survey of the Site and discussions with appropriate individuals knowledgeable about the Site and nearby properties.

Initial field investigations were carried out by Dr. G. Bradford Shea on September 22, 2015 with site photographs taken on September 17 by Ms. Mary Bailey. Information and access to the Site was provided by Dr. Jeff Moore of SLC Sheldon, LLC (Moore 2015, personal communications). Information on Site history was also provided by a previous Phase I Report by Wallace-Kuhl & Associates (WKA 2013).

1.3 RESEARCH PROCEDURES

Research was carried out by Site investigations (see Section 1.2 above), records searches, telephone contacts and in-person interviews of persons knowledgeable about the property and surrounding area. Records searches and map and photographic interpretation were carried out based on local, state and federal government records and databases as described more fully in Chapter 4.0. Interviews are cited as personal communications throughout this report and documented in Chapter 7.0, References.

2.0 SITE DESCRIPTION

This Site description was developed through investigations described in Section 1.2 above, through discussions and document review of information provided by the Site owners (Dr. Jeff Moore of SLC Sheldon, LLC) and officials at local, state and federal regulatory agencies. Additional information was provided through review of maps and aerial photographs of the area which is more thoroughly discussed in Chapter 4.0.

The (Property) Site is located north of Sheldon Road and west of West Stockton Boulevard in the City of Sacramento, California (Figures 1, 2, 3 and 4). The Site is an undeveloped vacant parcel. Site photographs can be seen in Appendix A.

2.1 LEGAL DESCRIPTIONS

This Site is located within the limits of the City of Sacramento and is zoned as R2B or residential-multifamily, 21 units per acre, and is appropriate for residential use. The current land use designation is "IABDFA" vacant land (City of Sacramento 2015). The Site is situated in Section 23, Township 7 North, Range 5 East, Mount Diablo Base and Meridian. The Site address is 8151 Sheldon Road, Sacramento, California 95823.

The Site consists of one parcel of land totaling approximately 15.36 acres (City of Sacramento 2015). The Assessor's Parcel Number for the property is 117-0220-038-0000. The parcel is currently owned by the SLC Sheldon, LLC. The Site is shown in Figures 3 and 4.

The Legal Description is as follows (First American Title Insurance 2015),

Real property in the City of Sacramento, County of Sacramento, State of California, described as follows:

Parcel 1 - (APN 117-0220-038-0000) as shown on certificate of compliance for lot line adjustment as evidenced by document recorded February 09, 2011 as Book 20110209, Page 0438 of official records, being more particularly described as follows:

Being a portion of said Lots 9, 14 and 17, as shown on the map entitled "Plat of a Survey of a portion of the southwest quarter, Section 23, Township 7 North, Range 5 East", recorded July 31, 1946, in Book 5 of Surveys, Page 16, Sacramento County Records, and located in the City of Sacramento, County of Sacramento, State of California.

The property has an irregular shape as shown in Figure 4, which is described in detail in the Preliminary Title Report and Commitment for Title Insurance (FATC 2015).

2.2 PHYSICAL DESCRIPTION

The Site has been an undeveloped parcel for many years (at least 25 according to former property owners). It is relatively flat, with virtually no topographic slope. The Site lies adjacent to Sheldon Road to the south and 0.1 miles west of West Stockton Boulevard to the East and is located within the City Limits of Sacramento, California.

Adjacent parcels include residential subdivisions to the west and north, several commercial properties (including an RV Park and two mini-storage facilities) to the northeast undeveloped commercial properties to the south, and a fallow agricultural field to the southeast. The immediate surrounding area is mainly residential and commercial in nature with a large shopping center across Sheldon Road to the south.

Soils

As mapped by the Natural Resources Conservation Service (NRCS 2015) Web Soil Survey and confirmed by EDR (2015a), the soils that make up the area near the Site are classified as San Joaquin silt loam. The Site soils consist of the San Joaquin silt loam soil type consisting of silt loam underlain by clay loam. Surrounding properties are also characterized by this soil type, although with slight variation in the underlying soil layers. The characteristics of these soils are as follows (EDR 2015a):

San Joaquin silt loam, 0 to 2 percent slopes

These soils are rated Class D for drainage with very slow infiltration rates. They are deep and moderately deep soils which are moderately well and well drained with moderately coarse textures.

These soils are deep moderately well drained soils characterized by approximately 22 inches of silt loam overlying clay loam, indurated soils and a stratified sandy loam layer to a depth of up to 59 inches. The clay loam layer is made up of fine grained silts and clays. The saturated hydraulic conductivity ranges from 4-14 micro-m/second in the upper layer, with values below 1.4 micro-m/second in the lower layers. These soils are somewhat acidic with pH range from 5.6 to 6.5 in the upper layers, but more neutral (6.1-7.8) in the lower layers (EDR 2015a).

The Site characteristics appear to be consistent with soil mapping. Field investigations found silt loam and clay loam across the entire property underlain by clay loams (hardpan). Detailed soil investigations offsite were not conducted; however, offsite soils seem to be similar as mapped.

Soils are generally sparsely vegetated or bare, compacted by some previous vehicle use in portions of the Site. Soils appear to be moderately well drained and were completely dry at the time of observation (late summer). No significant soil discoloration was noted other than small areas noted by previous investigations (WKA 2013), and the limited vegetation existing on the Site appears to be healthy.

Vegetation

At the present time, the vegetation on the Site and in the surrounding area has been limited by drought. The southeast corner of the Site has been subject to discing and related previous farming activities. There is a gravel pad in the southeast corner of the Site. Most of the Site is vegetated with dry field vegetation (star thistle, oats, fescues and brome grasses) and a few trees (Eucalyptus, mulberry, etc.).

2.3 SITE HISTORY

Site history is discussed here in terms of general history of the locale as shown in historical records and aerial photographs. Chain-of-title information is provided by a Preliminary Title Report and Commitment for Title Insurance from First American Title Company (FATC 2015) and attached Exhibits. No deeds or Quit Claims were attached to the Title Report, however, various deeds, easements and tax and utility liens were referenced in that report (FATC 2015).

The Site's current owner, SLC Sheldon, LLC, purchased the property during 2011, following 50 or more years of private ownership (WKA 2013, FATC 2015). The WKA report refers to the previous ownership history (WKA 2013).

Aerial photographs and topographic maps show that the southern end of the Site has been vacant of any significant permanent structures since at least 2005. The Site was apparently used for agriculture or open space from 1937-1947 at which time one or possibly two residences were built along Sheldon Road. These were apparently removed during the period 1993-2005 and the Site has been vacant unused land since at least 2005, except for limited farming in the southeast corner. However, encroachments from adjacent commercial uses appear to have used the Site for storage from 1993 until 2009, decreasing to an encroachment storage area behind the off-site mini-storage facility until August 2013, at which time, WKA documented removal of most of the vehicles and scrap metal, however, some material still appears to remain (see Chapter 4.0).

On the September 17 and 22 site visits, two vehicles were parked on the Site by an adjacent owner who has promised to remove the vehicles and other stored parts and debris by September 30, 2015 (Johnston 2015, personal communication). Trucks and a gravel pile being used in the southeast corner of the property for a local paving operation were present in the southeast portion of the Site, but were apparently removed by September 24, 2015 (Johnston 2015, personal communication). This removal will be confirmed by the owner, Dr. Jeff Moore by September 30, 2015.

2.4 SITE PHOTOGRAPHS

The Site is currently undeveloped. There is some debris on the property, including tires, scrap metal, treated posts, concrete blocks, fencing and miscellaneous other debris (see Appendix A).

3.0 EXISTING ENVIRONMENTAL CONDITIONS

3.1 GEOLOGIC SETTING

Geology at the Site is defined as Quaternary non-marine deposits from the Cenozoic era (EDR 2015a). These are basically continental sedimentary rocks and alluvial deposits. The alluvial deposits are a sorted combination of silt, sand and gravel deposited along historic stream and river beds. The alluvium may be partly derived from older rock formations.

The Site is located within the Great Valley geomorphic province, a structural trough between the Coast Ranges and the Sierra Nevada Range foothills (Norris and Webb 1990). This is a region of sediment filled depositional basins from continental sources, mostly the Sierra Nevada Range. The Site is underlain by the Riverbank Formation, consisting of gravels, sands, silts and clays deposited as alluvial fans (WKA 2013, Wagner 1981).

3.2 HYDROGEOLOGIC CONDITIONS

The area is characterized by low surface water runoff due to relatively low precipitation (mean precipitation is 17.5 inches annually). Groundwater generally is characterized by good water yield in deep area wells with an aquifer at depths of 90-120 feet in nearby wells. Overall depth of wells in the area tends to be in the 150-250 foot range (EDR 2015a).

The Geocheck portion of the EDR Report (Appendix C) indicates that five United States Geologic Service (USGS) wells are located within one mile of the Site. In addition, the database lists three wells on the State of California database within one-half mile of the Site. The USGS and state listed wells are generally 150-250 feet in depth. Groundwater in these wells has been measured as high as 79 feet below the ground surface, however, most are within the 90 foot to 120 foot range below ground surface. Well and water surface depths for these wells were measured during the 1970s and 1980s. No flow or capacity measurements were reported (EDR 2015a). One oil-gas well was reported, over 0.5 miles from the Site.

Permeability is moderate to low for the site surface soils (San Joaquin silt loam soils). The horizontal hydraulic conductivity of the Site is fairly low (14-42 micro m/second). The hydraulic gradient is to the south-southwest (EDR 2015a). Groundwater recharge in this area is expected to be low due to the relatively low rainfall.

3.3 OTHER SITE CONDITIONS

The Site appears to have remained undeveloped from 1937 to present except for a residence on the Site from 1947-2005. Some farming activity occurred on the southeast portion of the Site and some encroachment and storage occurred on the northeastern area. The surrounding area has had considerable residential and commercial growth, mostly to the north and west, for residential growth and to the northeast and south for commercial growth.

There are no known sensitive environmental areas at or adjacent to the Site. There are no sensitive bodies of water or wetlands and no known sites of historical significance on or near the Site (EDR 2015a, Bailey 2015, personal communication).

The Site does not currently appear to have any operational septic or water systems. The previous residence which has been removed was presumably hooked up to municipal water and sewer lines. No sanitary landfills are known to exist within 0.5 miles of the Site. The Site has been vacant and undeveloped.

4.0 REGULATORY COMPLIANCE FINDINGS

This Chapter summarizes the data reviewed by Westech Company relative to compliance with existing permits and hazardous materials regulations of the Site and surrounding properties. Methods of data collection and review are discussed in each section as are findings for that subject area. Overall findings for the Site and adjacent and nearby properties are presented in Chapter 5.0. A Map Finding Summary Table may be found in Table 1. A summary of information collected and reviewed in regards to regulatory history of the Site and surrounding area may be found in Appendices B and C.

4.1 REGULATORY HISTORY OF THE SITE AND NEARBY AREAS

This section describes the history of the Site and nearby area as revealed through searches of regulatory agency files, maps and aerial photographs, information on ownership, and interviews with persons knowledgeable of the property.

4.1.1 Regulatory History of Area

The area surrounding the Site consists primarily of residential and commercial uses and a few undeveloped parcels. The Site is presently undeveloped, however, the lots surrounding the Site include residential subdivisions to the west and north, an RV Park and mini-storage facilities to the northeast, several undeveloped commercial properties immediately south of the Site (north of Sheldon Road), a farmed area southeast of the Site, and a large shopping center across Sheldon Road to the south. Large suburban developments are located within 1.0 mile of the Site to the north, northeast, west and southeast.

Listed Facilities

PROJECT SITE: Agency records revealed that the Site itself is not currently listed as potentially having hazardous materials. However, historically, when the 8151 Sheldon Road address was known as the Kilwani Property, there was apparently a spill or discharge of hydrocarbons and motor oil on the Site, sometime prior to 1997. The Site owners entered into a Voluntary Cleanup Program with Sacramento County and overseen by the Department of Toxic Substances Control (EPA-DTSC). The site was determined to be cleaned up and subject to a "No Further Action" determination by DTSC in December 1997 (EDR 2015a).

A few areas of discolored soil were found during investigations by Wallace-Kuhl & Associates during 2013, after the completion of a Phase I Report, when the property was owned by SLC Sheldon, LLC. While no report has been completed by WKA on this cleanup, apparently several cubic yards of contaminated soil were removed at that time (Moore 2015, personal communication).

TABLE 1. MAP FINDINGS SUMMARY

Database	Target Property	Search Distance (Miles)	0.0125 (< 1/8) Miles	0.0125-0.25 (1/8 - 1/4) Miles	0.25-0.5 (1/4 - 1/2) Miles	0.5-1.0 1/2 - 1 Miles	>1 Mile	Total Plotted
FEDERAL RECORDS								
NPL		1.00	0	0	0	0	NR	0
Proposed NPL		1.00	0	0	0	0	NR	0
Delisted NPL		1.00	0	0	0	0	NR	0
NPL LIENS	TP	TP	NR	NR	NR	NR	NR	0
CERCLIS		0.50	0	0	0	NR	NR	0
CERC-NFRAP		0.50	0	0	0	NR	NR	0
LIENS 2	TP	TP	NR	NR	NR	NR	NR	0
CORRACTS		1.00	0	0	0	0	NR	0
RCRA-TSDF		0.50	0	0	0	NR	NR	0
RCRIS Large Quantity Generator		0.25	0	0	NR	NR	NR	0
RCRIS Small Quantity Generator		0.25	0	0	NR	NR	NR	0
RCRA-CESQG		0.25	0	0	NR	NR	NR	0
RCRA-NONGEN		0.25	0	0	NR	NR	NR	0
ERNS	TP	TP	NR	NR	NR	NR	NR	0
HMIRS	TP	TP	NR	NR	NR	NR	NR	0
US ENG CONTROLS		0.50	0	0	0	NR	NR	0
US INST CONTROL		0.50	0	0	0	NR	NR	0
DOD		1.00	0	0	0	0	NR	0
US CDL	TP	TP	NR	NR	NR	NR	NR	0

TABLE 1. MAP FINDINGS SUMMARY									
Database	Target	Search Distance (Miles)	0.0125	0.0125-0.25	0.25-0.5	0.5-1.0	>1	Total	
	Property		Miles (< 1/8)	Miles (1/8 - 1/4)	Miles (1/4 - 1/2)	Miles 1/2 - 1			Mile
DOT OPS		TP	NR	NR	NR	NR	NR	0	
FUDS		1.00	0	0	0	0	NR	0	
US BROWNFIELDS		0.50	0	0	NR	NR	NR	0	
CONSENT		1.00	0	0	0	0	NR	0	
ROD		1.00	0	0	0	0	NR	0	
UMTRA		0.50	0	0	NR	NR	NR	0	
ODI		0.50	0	0	0	NR	NR	0	
DEBRIS REGION 9		0.50	0	0	0	NR	NR	0	
TRIS		TP	NR	NR	NR	NR	NR	0	
TSCA		TP	NR	NR	NR	NR	NR	0	
FTTS		TP	NR	NR	NR	NR	NR	0	
SSTS		TP	NR	NR	NR	NR	NR	0	
ICIS		TP	NR	NR	NR	NR	NR	0	
LUCIS		0.50	0	0	0	NR	NR	0	
RADINFO		TP	NR	NR	NR	NR	NR	0	
PADS		TP	NR	NR	NR	NR	NR	0	
MLTS		TP	NR	NR	NR	NR	NR	0	
MINES		0.25	0	0	NR	NR	NR	0	
FINDS	1	TP	NR	NR	NR	NR	NR	1	
FEDERAL FACILITY		1.00	0	0	0	0	NR	0	

TABLE 1. MAP FINDINGS SUMMARY

Database	Target Property	Search Distance (Miles)	0.0125 (< 1/8) Miles	0.0125-0.25 (1/8 - 1/4) Miles	0.25-0.5 (1/4 - 1/2) Miles	0.5-1.0 1/2 - 1 Miles	>1 Mile	Total Plotted
RAATS	TP		NR	NR	NR	NR	NR	0
SCRD DRYCLEANERS	0.50		0	0		NR	NR	0
STATE AND LOCAL RECORDS								
SLIC		0.5	0	0	0	NR	NR	0
RESPONSE		1.00	0	0	0	0	NR	0
HIST Cal-Sites		1.00	0	0	0	0	NR	0
SCRD DRYCLEANERS		0.50	0	0	0	NR	NR	0
HWP		1.00	0	0	0	0	NR	0
AOCONCERN		1.00	0	0	0	0	NR	0
CA BOND EXP. PLAN		1.00	0	0	0	0	NR	0
CA WDS	TP		NR	NR	NR	NR	NR	0
HWT		0.25	0	0	NR	NR	NR	0
Toxic Pits		1.00	0	0	0	0	NR	0
Notify 65		1.00	0	0	0	0	NR	0
ENVIROSTOR	1	1.00	0	0	0	1	NR	2
WMUDS/SWAT		0.50	0	0	0	NR	NR	0
SWF/LF		0.50	0	0	0	NR	NR	0
SWRCY		0.50	0	1	0	NR	NR	1
LUST		0.50	0	1	1	NR	NR	2

TABLE 1. MAP FINDINGS SUMMARY

Database	Target Property	Search Distance (Miles)	0.0125 ($< 1/8$) Miles	0.0125-0.25 ($1/8 - 1/4$) Miles	0.25-0.5 ($1/4 - 1/2$) Miles	0.5-1.0 1/2 - 1 Miles	>1 Mile	Total Plotted
UST		0.25	0	0	NR	NR	NR	0
FEMA UST		0.25	0	0	NR	NR	NR	0
AST		0.25	0	0	NR	NR	NR	0
DEED		0.50	0	0	0	NR	NR	0
HIST UST		0.25	0	0	NR	NR	NR	0
CA FID UST		0.25	0	0	NR	NR	NR	0
SWEEPS UST		0.25	0	0	NR	NR	NR	0
SCH		0.25	0	0	NR	NR	NR	0
LIENS		TP	NR	NR	NR	NR	NR	0
WIP		0.25	0	0	NR	NR	NR	0
SACRAMENTO CO. MC		TP	2	7	NR	NR	NR	9
HAZNET		TP	NR	NR	NR	NR	NR	0
EMI		TP	NR	NR	NR	NR	NR	0
PROC		0.50	0	0	0	NR	NR	0
CHMIRS		TP	NR	NR	NR	NR	NR	0
LDS		TP	NR	NR	NR	NR	NR	0
MCS		TP	NR	NR	NR	NR	NR	0
HAULERS		TP	NR	NR	NR	NR	NR	0
SACRAMENTO CO. CS	1	TP	1	NR	1	NR	NR	3
Cortese		0.50	0	1	1	NR	NR	2

TABLE 1. MAP FINDINGS SUMMARY

Database	Target Property	Search Distance (Miles)	0.0125 (< 1/8) Miles	0.0125-0.25 (1/8 - 1/4) Miles	0.25-0.5 (1/4 - 1/2) Miles	0.5-1.0 1/2 - 1 Miles	>1 Mile	Total Plotted
VCP	1	0.50	0	0	0	NR	NR	1
DRYCLEANERS		0.25	0	0	NR	NR	NR	0
HIST CORTESE		0.50	0	1	1	NR	NR	2
US HIST CDL		TP	NR	NR	NR	NR	NR	0
CDL		TP	NR	NR	NR	NR	NR	0
NPDES		TP	0	NR	NR	NR	NR	0
FINANCIAL ASSURANCE		TP	NR	NR	NR	NR	NR	0
MWMP		0.25	0	0	NR	NR	NR	0
HIST FTTS		TP	NR	NR	NR	NR	NR	0
PCB TRANSFORMER		TP	NR	NR	NR	NR	NR	0
COAL ASH EPA		0.50	0	0	0	NR	NR	0
COAL ASH DOE		TP	NR	NR	NR	NR	NR	0
TRIBAL RECORDS								
INDIAN RESERV		1.00	0	0	0	0	NR	0
INDIAN ODI		0.50	0	0	0	NR	NR	0
INDIAN LUST		0.50	0	0	0	NR	NR	0
INDIAN UST		0.25	0	0	NR	NR	NR	0
INDIAN VCP		0.50	0	0	0	NR	NR	0

TABLE 1. MAP FINDINGS SUMMARY

Database	Target Property	Search Distance (Miles)	Miles					Total Plotted
			0.0125 (< 1/8)	0.0125-0.25 (1/8 - 1/4)	0.25-0.5 (1/4 - 1/2)	0.5-1.0 1/2 - 1	>1	
EDR PROPRIETARY RECORDS								
Manufactured Gas Plants		1.00	0	0	0	0	NR	0
EDR Historical Auto Stations		0.25	0	1	NR	NR	NR	1
EDR Historical Cleaners		0.25	0	1	NR	NR	NR	1
NOTES:								
AQUIFLOW- see EDR Physical Setting Source Addendum								
TP = Target Property								
NR = Not Requested at this Search Distance								
Sites may be listed in more than one database								

Recent field investigations carried out by Dr. G. Bradford Shea and Ms. Mary Bailey in September 2015 revealed no presence of significant hazardous material issues. There are two commercial uses to the northeast of the Site which still encroach on the northeast edge of the Site as evidenced by some scrap metal debris, concrete debris, a plastic pipe, and several parked vehicles. Dr. Jeff Moore, the current Site owner has requested that the adjacent property owner remove these items (Moore 2015, personal communication).

Mr. Ken Johnston, the adjacent property owner has promised to remove two vehicles, carnival ride equipment and other encroaching materials on or before September 30, 2015. Mr. Johnston also apparently told VSS International, a paving and pavement maintenance company to park 7-10 vehicles on the site to use as a base of operations during a local paving job on West Stockton Boulevard. Equipment during our site visit included two large tanker trucks, a smaller tanker, dump trucks, a front-end loader and several work trucks. These have been removed as of September 25 according to Mr. Ken Johnston (Johnston 2015, personal communication).

ADJACENT AND NEARBY FACILITIES: There are two facilities within a 1.0 mile radius that are listed as either having Underground Storage Tanks (USTs) or having had other hazardous materials issues.

The E&J Market property is located on an adjacent parcel to the east at 8706 West Stockton Blvd. This property was listed on the Regional Water Quality Control Board's (RWQCB) Leaking Underground Storage Tank List prior to 1996. During March 1996, the RWQCB issued a "No Further Action" Letter for that site. The E&J Market appears to have been demolished as observed during Westech's site visits during September 2015. Another site, Century Equipment is listed as "Case Closed" by the RWQCB, and that site is located across Highway 99 at 8821 East Stockton Blvd., roughly 0.5 miles from the subject Site. Neither of these two facilities appear to currently pose any present threat to the Site (EDR 2015a).

A Site known as Obie's dump is located at 8437 Sheldon Road, about 0.6 miles east of the Site. This appears to have been a "borrow" site for sand and gravel and an unofficial dumpsite for a variety of debris including household waste. In 2003, this site was identified as containing soils with lead concentrations exceeding California state standards. The facility was ordered closed and was subject to a Voluntary Cleanup Program by the property owner, however, the Sacramento County Environmental Management Department (SCEMD) notified the owner on December 4, 2014 that the property status had been changed to "Inactive-Action Required". The Obie's Dump site appears far enough away from the subject Site, that it poses no significant threat (EDR 2015a).

Two dry cleaners facilities are located near the Site: The nearest is Fresh Cleaners Sheldon (or Fresh and Save Cleaners) is located at 8112 Sheldon Road, roughly 0.2 miles west-southwest of the Site. That facility used an organic solvent, but was cited for an administrative violations of hazardous materials handling regulations (EDR 2015a).

A number of other facilities are listed in the EDR report, however, these appear to be either too far from the facility to cause threats, or the hazardous materials violations are minor, or the facilities are only listed because they handle hazardous materials. These include Winco Foods, across Sheldon Road to the south, which had a spill of an organic liquid mixture. Two recycling facilities are in the area. The SKM Market, located on West Stockton Blvd. 0.13 miles to the north-northeast of the Site, apparently does not have any current reported problems, but may have had an underground tank at one time.

A currently operating gas station is located across Sheldon Road at 8100 Sheldon Road. A telecommunications company T-Mobile is located on West Stockton Blvd., northeast of the Site, but appears to be a small quantity generator (SQG) of hazardous materials due to disposal of cell phones and similar equipment. Stockmen Supply Company is located at 8821 East Stockton Blvd., across Highway 99 and 0.4 miles east of the Site. This facility handled gasoline and additives, which apparently spilled in soil prior to 1997. This appears to have been cleaned up and the case closed by SCEMD (EDR 2015a).

The Environmental Data Resources (EDR) Report produced for this Phase I Assessment listed two facilities on the "Orphan List" summary report. Facilities with inadequate address information are listed on the Orphan Summary List. However, further investigation by Westech Company found that these facilities were more than 0.5 miles from the site, and that the combination of distance, gradient and status of the facilities result in very low probability of any negative or hazardous effect on the Site (EDR 2015a).

4.1.2 Regulatory Agencies Consulted

Local, state and federal agencies and agency databases were consulted to assess any known regulatory non-compliance on the subject property, adjacent properties or in the area surrounding the property (0.5-1.0 mile radius). Consultation with agencies included in-person and telephone interviews with technical personnel as well as review of published lists and information. Agency personnel and data sources contacted during performance of this Site Assessment include:

- California EPA-Department of Toxic Substances Control (EPA-DTSC) – Database consulted- EnviroStor database and Geotracker Database
- City and County of Sacramento, Reviewed Sacramento County Environmental Management Department database
- Sacramento Air Quality Management District (AQMD) – Database consulted and California Air Resources Records consulted– Air Quality good to excellent
- Regional Water Quality Control Board, Central Valley Region. Checked databases regarding Underground Storage Tank (UST) locations near the facility

California EPA (EPA-DTSC) databases were consulted for this report. Two sites were identified within the one mile radius from the Site on EnviroStor and Geo-Tracker databases. Both were listed as requiring “No Further Action” (NFA). In addition to database searches, interviews were carried out with the property owner and as necessary with agency personnel. Details of those interviews are as follows:

1. Dr. Jeff Moore of SLC Sheldon, LLC is the property owner (a major partner). He indicated that the Site was not in use (other than a portion in previous agricultural use) for about 25 years prior to his purchase of the Site in 2011. He knows of no history of underground tanks on the property and no storage or spillage of hazardous materials, except for two minor soil cleanups on the Site (as discussed above).
2. The databases for the Sacramento Fire Department and the Cosumnes Community Services District indicated that the two nearest fire stations are Station 51 of the Sacramento Metropolitan Fire Department (Station 51, a distance of 1.4 miles north-northeast of the Site, at 8210 Meadowhaven Drive) and the Cosumnes Fire Station #76 at 8545 Sheldon Road, a 1.0 mile distance east of the Site. Two main hazmat stations, Stations 7 and 30 serve the City of Sacramento. The database for the local area was not complete, however, no spills or other hazardous materials incidents appeared near the subject property.
3. Bill Muir – Regional Water Quality Control Board – Mr. Muir assisted with the Geotracker Data Base. Records confirmed that no Leaking Underground Storage Tanks are currently in the vicinity of the Site.

In addition to these direct contacts, performance of the Site Assessment included review of published and unpublished toxic site lists compiled by the U.S. Environmental Protection Agency (US EPA), California Environmental Protection Agency-Department of Toxic Substances Control (EPA-DTSC) and Environmental Data Resources (EDR). Citations for published and unpublished data and personal communications are referenced in the pertinent sections of this report and full citations are presented in Chapter 7.0, References.

4.1.3 Map Review

Map review of the Site and surrounding area included review of the Florin, California (7.5 minute quadrangle) topographic map (USGS 1968, photorevised 1980). In addition, Sacramento County Assessor's Maps (Sacramento County 2015) and Wetland Inventory Maps (part of EDR database review) were reviewed for the Site and adjacent properties (EDR 2015a, Sacramento County 2015).

The topographic map shows the Site to be at an elevation of roughly 25-30 feet above mean sea level. There are no known critically sensitive areas located in the vicinity of the Site. No Sanborn Maps were found for this Site (EDR 2015b and Appendix B).

4.1.4 Aerial Photograph Review

Aerial photographs were procured from EDR and Google Earth for selected years during the period 1937 to 2012. In addition, Google-Earth aerial photos dated 7/2/2014 and 7/13/2015 were reviewed. Photographs reviewed include the following dates, scales and identification numbers (EDR 2015c):

<u>YEAR</u>	<u>SCALE</u>	<u>PHOTO ID.</u>
1937	1"= 500'	USGS (1937)
1947	1" = 500'	USGS (1947)
1957	1" = 500'	USGS (1957)
1964	1" = 500'	USGS (1964)
1966	1" = 500'	USGS (1966)
1972	1" = 500'	USGS (1972)
1984	1" = 500'	USGS (1984)
1993	1" = 500'	USGS (1993)
1998	1" = 500'	DOQQ/USGS
2005	1" = 500'	USDA/NAIP (2005)
2006	1" = 500'	USDA/NAIP
2009	1" = 500'	USDA/NAIP (2009)
2010	1" = 500'	USDA/NAIP (2010)
2012	1" = 500'	USDA/NAIP 2012
2014	NA	Google Earth (July 2, 2014)
2015	NA	Google-Earth (July 13, 2015)

The following discussion gives major features of each photograph or series of photographs as they bear on the Site and its development history during these time periods.

1937 and 1947 Aerial Photograph

The 1937 and 1947 photographs show that there was little to no development in the area. The area appears to be agricultural in nature. There are few structures or development shown on or near the Site. Sheldon Road and Highway 99 are present.

1957 Aerial Photograph

There appears to be some development, though most of the surrounding area still appears to be agricultural in nature. West Stockton Boulevard has been constructed. One residential home appears to have been constructed on the south end of the Site.

Other rural residential structures have been constructed to the east on Sheldon Road. Properties to the northeast on West Stockton Boulevard appear to be being graded or to have some construction activities occurring.

1964 and 1966 Aerial Photographs

Conditions appear very similar to the 1957 photograph, with little change or development visible in these photographs. The RV park to the northeast is in place and is occupied by a number of vehicles. There are several small structures or outbuildings on the Site

1972 Aerial Photograph

There appears to have been little to no change between 1966 and 1972. The area surrounding the Project Site appears to be the same; however, the furrowing on the Site has partially faded, possibly indicating the cessation of farming activities on the Site.

1984 Aerial Photograph

The most significant difference between the 1974 photograph and the 1989 photograph is further development of the area adjacent to the northeast, particularly at least one building where the mini-storage facility now exists. The area to the west is an active agricultural property with one residence.

1993 and 1998 Aerial Photographs

There are only a few significant changes between 1984 and 1993 and 1998. The 1993 aerial photograph shows full development of the mini-storage site to the northeast. There is little change in the 1998 photograph, however, there does appear to be grading occurring to the south, where the Winco shopping center is now located. Two channels have been filled at the east end of the shopping center and water flow has been diverted further to the south.

2005 and 2006 Aerial Photographs

These photographs show development of the shopping center south of the Site and additional residential development to the south and east of the shopping center. There is also additional residential development to the north of the Site. The properties to the northeast show a considerable area of encroachment on the Site.

2009 Aerial Photograph

The 2009 photograph shows completion of additional residential areas west, east and north of the Project Site. The residential subdivision west of the Site is partially constructed. A multi-family housing project located south of the shopping center (south of the Site), appears to have been started during the period 2005-2006 and has been completed by 2009.

2010 Aerial Photograph

This photograph shows no change to the Site. The surroundings also have not changed significantly except that the subdivision to the west has been completed.

2012 Aerial Photograph

The only visible difference between the 2009-2010 photographs and the 2012 photograph is that there appears to be some agricultural activity (furlowing) on the property to the southeast. Other features near the Site appear to be unchanged.

2014 and 2015 Aerial Photographs

The Site appears as in the 2012 photograph. The surroundings are generally unchanged. The Site appears unchanged from previous photographs. Google Earth photography allows a closer view of images, showing more clearly scattered debris piles on the site, mostly in the southwest and northeast corners. Some of the material in the northeast corner appears to have been removed.

4.1.5 Chain-of-Title for Property

According to the First American Title Insurance Company's title report (2015) and a statement by the current owner (Moore 2015, personal communication), the Site was owned by a single family for many years until it was acquired by SLC Sheldon, LLC in 2011. The Chain of Title does not indicate other deeds or sales. There are no recorded environmental liens or deeds shown in these documents (FATC 2015) or by EDR (2015a) or the Sacramento County website (Sacramento County 2015).

4.1.6 Hazardous Materials History of Site

There is no recorded history of contamination at the Site, except for a cleanup on the Kilwani property prior to 1997, and some minor soil discoloration (likely from vehicle leaks) which was documented by WKA (2013). The Site has remained vacant and undeveloped since at least 1947 except for construction of a single residence between 1957 and 2005 and there has been no apparent evidence of any risk of hazardous materials.

No significant problems related to potential hazardous material contamination were noted during the field visit by Dr. G. Bradford Shea during September 2015. There is no recorded history following 1997 of contamination of the Site or adjacent properties. The Site is not currently listed on any hazardous materials Site lists, except for the FINDS database list for the Kilwani Property cleanup which occurred in 1997 and was listed as "No Further Action" at that time (EDR 2015a).

Adjacent properties include the E&J Market at 8706 Stockton Boulevard. This property was listed as "No Further Action" in 1996.

The Sacramento Fire Department was also contacted. The nearest fire stations and the nearest hazmat response stations were identified. The Site owner, Dr. Moore has stated that he knows of no spills in the vicinity nor have there been underground storage tanks or regulated hazardous material storage on the Site. Historical maps and records show that there are no structures or activity that may suggest the recent handling of hazardous materials on the Site.

4.2 PRESENT CONDITIONS

4.2.1 Site Conditions

The Site is an undeveloped parcel located on the north side of Sheldon Road in Sacramento, California. No underground tanks are known to exist on the Site and soils do not appear to be discolored, except in a few minor spots. The limited vegetation did not appear stressed and seemed to be generally healthy. There is no evidence of any regulated hazardous materials currently on the Site. A debris pile in the southwest corner and encroaching debris in the northeast corner is to be removed (Westech 2015; Moore 2015, personal communication; Johnston 2015, personal communication).

4.2.2 Conditions of Adjacent Properties

Properties adjacent to the Site include residential subdivisions to the west and north, with commercial properties to the northeast. There is a large commercial shopping center to the south and two small commercial facilities (an RV park and a mini-storage) to the northeast. No hazardous materials were seen during field investigations, with the possible exception of treated wood in a debris pile. Other adjacent residential and commercial properties along Sheldon Road south of the Site are undeveloped and show no evidence of hazardous materials or potentially leaking underground tanks (Westech 2015).

4.3 OFF-SITE THREATS

Off-site threats may include contamination threats from adjacent or nearby properties due to contamination of soil, ground or surface water. This Section includes a review of government agency lists of known and suspected contaminated sites, review of underground tank records, an analysis of geological, hydrologic or hydrogeological factors which bear on potential contamination transport to the Site and the status of the Site and adjacent properties relative to regulatory compliance.

4.3.1 Review of State and Federal Lists of Known Contaminated Sites

Federal and State of California lists reviewed for this study were the Environmental Data Resources (EDR) Report and the Department of Toxic Substances Control (EPA-DTSC) EnviroStor and Geotracker databases (which also lists UST sites). Searches of these lists and databases showed that the Site is not currently on any of these lists as having contamination. While known as the Kilwani Property, the Site underwent a cleanup for motor oil and hydrocarbons, but was granted “No Further Action” Status in 1997. Several cubic yards of apparently contaminated soil was removed from the Site in 2013 (Moore 2015, personal communication), but apparently was not documented by WKA due to cancellation of the work order (Malaret 2015).

There are currently no sites within a 1,000 foot radius that are on lists as having Leaking Underground Storage Tanks (UST). One adjacent property, the E&J Market was on the Leaking Underground Storage Tank (LUST) list from 1990 – 1996, but was cleaned up and declared to be in a “No Further Action” status. Review of site lists confirmed that there is one current Underground Storage Tank (UST) facility located within 0.5 miles of the project Site which is an operating Chevron Service Station (EDR 2015a, EPA-DTSC 2015).

4.3.2 Review of Underground Tank Records

California Environmental Protection Agency-Department of Toxic Substances Control records have been reviewed to determine the location and status of potential underground tanks located on the Site or within its immediate vicinity (0.5 mile). Roads and properties within 0.5 miles of the Site were checked against the database. Lists reviewed are specified in Table 1. Only one site within the checked radius are listed as having USTs, which is an operating gasoline service station (EPA-DTSC 2015, EDR 2015a). There is no data indicating any leaks of tanks at that station.

4.3.3 Potential for Off-Site Contamination to Affect the Site

Topography at the Site is nearly level with a 0-2 percent slope. The Site is located in the City of Sacramento and is at an elevation of approximately 25-30 feet above sea level. The topography is nearly level for a large radius surrounding the Site. Except for those facilities discussed in Section 4.1, there are no current potentially hazardous facilities located within a mile of the Site. The surrounding topography is nearly flat, and the risk of off-site contamination migrating to the Project Site is low to negligible.

4.3.4 Compliance Status of Site and Adjacent Properties

The project Site appears to be currently in compliance with all relevant local, state and federal regulations. No evidence of underground tanks or current contamination at the Site was found in the records researched. No sites within 0.5 miles were found to currently contain leaking underground storage tanks. Table 1 provides a summary of potentially hazardous sites within 1.0 miles, lists on which they appear, and their status.

The Site itself experienced a hydrocarbon spill during the early 1990s and was listed as “No Further Action” in 1997. An adjacent property, E&J Market experienced an underground tank leak and was certified by the agencies as “No Further Action” in 1996. A small amount of soil was removed from the Site due to discoloration during 2013 (Moore 2015, personal communication). This removal appears to have not been documented. The Site and adjacent properties appear to be in current compliance with hazardous materials regulations.

4.3.5 Environmental Liens and Conditions

No environmental liens were found in the Title Report (FATC 2015) or during review of other data sources (Sacramento County 2015; EDR 2015a).

5.0 FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

This Chapter presents Westech Company's findings, conclusions and recommendations based on the research and site visits conducted for the 8151 Sheldon Road Site in Sacramento, California (Parcel # 117-0220-038-0000). Conclusions and recommendations are based on existing regulations and codes or known agency requirements. All conclusions and recommendations are based on the best professional judgment of the investigators.

5.1 FINDINGS

The Site itself appears to currently contain no regulated amounts of hazardous substances. The property appears not to contain any underground or aboveground storage tanks (Moore 2015, personal communication; EDR 2015a). The property appears to be currently in compliance with hazardous materials regulations and is not presently listed as out of compliance on any of the site lists reviewed for this report. A previous listing (FINDS List) for a hydrocarbon spill in the early 1990s is listed as "No Further Action" status as of 1997.

No current Recognized Environmental Concerns (RECs) appear to be present at the Site. A Historical Recognized Environmental Condition (HREC) previously existed, but was cleaned up and certified "No Further Action" by the responsible agency (SCEMD) (EDR 2015a). Sampling of soils due to discoloration was mentioned by Wallace-Kuhl & Associates in their Phase I Report published during August 2013. The results of that sampling were apparently not completed (Malaret 2015, personal communication), however, the owner asserts that several yards of soil were removed at that time (Moore 2015, personal communication).

5.2 CONCLUSIONS

The Site does not appear to include any current problems with or presence of hazardous materials. No sites within 1.0 mile are listed as contaminated that are up-gradient of the Site. No current Recognized Environmental Concerns (RECs) were found for the Site.

The HREC of the previous hydrocarbon spill is not of concern since it was certified as "No Further Action" by the managing agencies (SCEMD and DTSC). Our Site visits found no reason for concern based on current conditions, once encroachments have been removed.

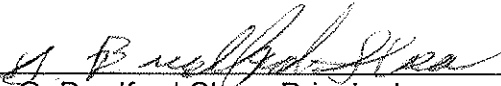
Other sites lie at comparable elevations to the Site and are to the northeast, east or south. The potential for contamination of groundwater from any of these sites appears unlikely due to distance, the gradual nature of the groundwater gradient and the slow percolation factor in the soils. The Site will utilize city water if developed and no City groundwater wells appear to be in the local area.

5.3 RECOMMENDATIONS

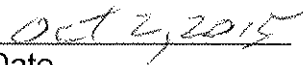
The SLC Sheldon, LLC Site (Sheldon 142) located at 8151 Sheldon Road (Parcel # 117-0220-038-0000) appears to be in compliance with all applicable federal, state and local regulations pertaining to hazardous materials or substances. Off-site threats do not appear to be significant based on the database report (EDR 2015a) and review of EPA-DTSC records (EPA-DTSC 2015). Encroachments should be removed by the adjacent property owner as promised (Johnston 2015, personal communication). No other further investigation is recommended at this time.

6.0 CERTIFICATION

I, the undersigned, certify that the information contained in this Phase 1 Hazardous Materials Site Assessment Report on Assessor's Parcel # 117-0220-038-0000 in Sacramento County, California located at 8151 Sheldon Road, Sacramento, California is true and correct to the best of my knowledge and professional judgment. The project has been performed by myself and other staff and associates of Westech Company.



Dr. G. Bradford Shea, Principal
Registered Environmental Property Assessor (REPA) #971177NREP



Date

7.0 REFERENCES

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- Wallace-Kuhl & Associates. 2013. Phase I Environmental Site Assessment, Sheldon 142. 8151 (West Stockton Blvd.) Sheldon Road. Sacramento, California.
- Westech Company (Westech). 2015. Unpublished field notes from observations of the 8151 Sheldon Road Site on September 22, 2015 by Dr. G. Bradford Shea. Rocklin and Cottonwood, California.

APPENDICIES

APPENDIX A
SITE PHOTOGRAPHS



1) Project Site looking west at adjacent residential subdivision.



2) Looking north at another adjacent residential subdivision.



3) South end of Parcel fronting on Sheldon Road and development to the south.



4) Northeast boundary of Site, showing adjacent commercial buildings, and area of encroachment.



5) Routine pavement operation (temporary) on the Site, for an adjacent property during September 2015.



6) Project Site looking south at adjacent residential and commercial parcels (undeveloped) and showing shopping center south of Sheldon Road.

APPENDIX B
CERTIFIED SANBORN MAP REPORT



Sheldon Road Site

8151 Sheldon Road
Sacramento, CA 95758

Inquiry Number: 4409179.3

September 14, 2015



Certified Sanborn® Map Report



6 Armstrong Road, 4th Floor
Shelton, Connecticut 06484
Toll Free: 800.352.0050
www.edrnet.com

Certified Sanborn® Map Report

9/14/15

Site Name:

Sheldon Road Site
8151 Sheldon Road
Sacramento, CA 95758

Client Name:

Westech
P.O. Box 2299
Cottonwood, CA 96022-0000



EDR Inquiry # 4409179.3

Contact: Dr. Bradford Shea

The Sanborn Library has been searched by EDR and maps covering the target property location as provided by Westech were identified for the years listed below. The Sanborn Library is the largest, most complete collection of fire insurance maps. The collection includes maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow, and others. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by the Sanborn Library LLC, the copyright holder for the collection. Results can be authenticated by visiting www.edrnet.com/sanborn.

The Sanborn Library is continually enhanced with newly identified map archives. This report accesses all maps in the collection as of the day this report was generated.

Certified Sanborn Results:

Site Name: Sheldon Road Site
Address: 8151 Sheldon Road
City, State, Zip: Sacramento, CA 95758
Cross Street:
P.O. # N/A
Project: Sheldon Road Project - Phase I
Certification # AA99-4A51-AA30



Sanborn® Library search results
Certification # AA99-4A51-AA30

UNMAPPED PROPERTY

This report certifies that the complete holdings of the Sanborn Library, LLC collection have been searched based on client supplied target property information, and fire insurance maps covering the target property were not found.

The Sanborn Library includes more than 1.2 million fire insurance maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow and others which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

- ✓ Library of Congress
- ✓ University Publications of America
- ✓ EDR Private Collection

The Sanborn Library LLC Since 1866™

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APPENDIX C
EDR DATA RADIUS REPORT WITH GEOCHECK

Sheldon Road Site

8151 Sheldon Road
Sacramento, CA 95758

Inquiry Number: 4409179.2s
September 14, 2015

The EDR Radius Map™ Report with GeoCheck®



6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

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Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

8151 SHELDON ROAD
SACRAMENTO, CA 95758

COORDINATES

Latitude (North):	38.4387000 - 38° 26' 19.32"
Longitude (West):	121.4042000 - 121° 24' 15.12"
Universal Transverse Mercator:	Zone 10
UTM X (Meters):	639275.9
UTM Y (Meters):	4255491.0
Elevation:	30 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	5619710 FLORIN, CA
Version Date:	2012

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from:	20120628
Source:	USDA

MAPPED SITES SUMMARY

Target Property Address:
 8151 SHELDON ROAD
 SACRAMENTO, CA 95758

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
A1	KALWANI PROPERTY	8151 SHELDON ROAD	FINDS		TP
A2	KALWANI PROPERTY	8151 SHELDON ROAD	ENVIROSTOR, Sacramento Co. CS, VCP		TP
B3	E & J MARKET	8706 W STOCKTON BLVD	Sacramento Co. CS	Higher	496, 0.094, NNE
B4	ROUTE 99 LIQUOR	8700 W STOCKTON BLVD	Sacramento Co. ML	Higher	603, 0.114, NNE
5	WINCO FOODS INC #37	8142 SHELDON RD	HAZNET, Sacramento Co. ML	Lower	651, 0.123, WSW
6	SKM MARKET	8696 W STOCKTON BLVD	Sacramento Co. ML	Higher	710, 0.134, NNE
7	M PERKINS RECYCLE CE	8126 SHELDON RD	SWRCY, Sacramento Co. ML	Lower	852, 0.161, WSW
8	T-MOBILE WEST CORP (8680 W STOCKTON BLVD	Sacramento Co. ML	Higher	1021, 0.193, North
C9		8112 SHELDON RD	EDR US Hist Cleaners	Higher	1036, 0.196, WSW
C10	FRESH CLEANERS SHELD	8112 SHELDON RD STE	DRYCLEANERS, Sacramento Co. ML	Higher	1036, 0.196, WSW
D11		8100 SHELDON RD	EDR US Hist Auto Stat	Higher	1196, 0.227, WSW
D12	SHELDON ROAD CHEVRON	8100 SHELDON RD	Sacramento Co. ML	Higher	1201, 0.227, WSW
13	ELK GROVE CYCLE CENT	8672 W STOCKTON BLVD	Sacramento Co. ML	Higher	1241, 0.235, North
14	E & J MARKET (FORMER	8706 STOCKTON	LUST, HIST CORTESE	Higher	1275, 0.241, NNE
15	S & S FENCE CO	8300 SHELDON RD	Sacramento Co. ML	Higher	1318, 0.250, ESE
E16	STOCKMEN SUPPLY CO	8821 E STOCKTON BLVD	Sacramento Co. CS, Sacramento Co. ML	Higher	2004, 0.380, East
E17	CENTURY EQUIPMENT	8821 STOCKTON BLVD E	LUST, HIST CORTESE, Sacramento Co. ML	Higher	2004, 0.380, East
18	OBIE'S DUMP	8437 SHELDON ROAD	ENVIROSTOR, SLIC, VCP, LIENS	Higher	3140, 0.595, East

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was identified in the following records. For more information on this property see page 8 of the attached EDR Radius Map report:

Site	Database(s)	EPA ID
KALWANI PROPERTY 8151 SHELDON ROAD ELK GROVE, CA 95758	FINDS Registry ID:: 110033607201	N/A
KALWANI PROPERTY 8151 SHELDON ROAD ELK GROVE, CA 95758	ENVIROSTOR Facility Id: 34880001 Status: No Further Action Sacramento Co. CS Facility Id: RO0001057 VCP Status: No Further Action Facility Id: 34880001	N/A

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL..... National Priority List
Proposed NPL..... Proposed National Priority List Sites
NPL LIENS..... Federal Superfund Liens

Federal Delisted NPL site list

Delisted NPL..... National Priority List Deletions

Federal CERCLIS list

FEDERAL FACILITY..... Federal Facility Site Information listing
CERCLIS..... Comprehensive Environmental Response, Compensation, and Liability Information System

Federal CERCLIS NFRAP site List

CERC-NFRAP..... CERCLIS No Further Remedial Action Planned

Federal RCRA CORRACTS facilities list

CORRACTS..... Corrective Action Report

EXECUTIVE SUMMARY

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF..... RCRA - Treatment, Storage and Disposal

Federal RCRA generators list

RCRA-LQG..... RCRA - Large Quantity Generators
RCRA-SQG..... RCRA - Small Quantity Generators
RCRA-CESQG..... RCRA - Conditionally Exempt Small Quantity Generator

Federal institutional controls / engineering controls registries

LUCIS..... Land Use Control Information System
US ENG CONTROLS..... Engineering Controls Sites List
US INST CONTROL..... Sites with Institutional Controls

Federal ERNS list

ERNS..... Emergency Response Notification System

State- and tribal - equivalent NPL

RESPONSE..... State Response Sites

State and tribal landfill and/or solid waste disposal site lists

SWF/LF..... Solid Waste Information System

State and tribal leaking storage tank lists

INDIAN LUST..... Leaking Underground Storage Tanks on Indian Land
SLIC..... Statewide SLIC Cases

State and tribal registered storage tank lists

FEMA UST..... Underground Storage Tank Listing
UST..... Active UST Facilities
AST..... Aboveground Petroleum Storage Tank Facilities
INDIAN UST..... Underground Storage Tanks on Indian Land

State and tribal voluntary cleanup sites

INDIAN VCP..... Voluntary Cleanup Priority Listing

State and tribal Brownfields sites

BROWNFIELDS..... Considered Brownfields Sites Listing

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS..... A Listing of Brownfields Sites

EXECUTIVE SUMMARY

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT..... Waste Management Unit Database
HAULERS..... Registered Waste Tire Haulers Listing
INDIAN ODI..... Report on the Status of Open Dumps on Indian Lands
ODI..... Open Dump Inventory
DEBRIS REGION 9..... Torres Martinez Reservation Illegal Dump Site Locations

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL..... National Clandestine Laboratory Register
HIST Cal-Sites..... Historical Calsites Database
SCH..... School Property Evaluation Program
CDL..... Clandestine Drug Labs
Toxic Pits..... Toxic Pits Cleanup Act Sites
US CDL..... Clandestine Drug Labs

Local Lists of Registered Storage Tanks

SWEEPS UST..... SWEEPS UST Listing
HIST UST..... Hazardous Substance Storage Container Database
CA FID UST..... Facility Inventory Database

Local Land Records

LIENS..... Environmental Liens Listing
LIENS 2..... CERCLA Lien Information
DEED..... Deed Restriction Listing

Records of Emergency Release Reports

HMIRS..... Hazardous Materials Information Reporting System
CHMIRS..... California Hazardous Material Incident Report System
LDS..... Land Disposal Sites Listing
MCS..... Military Cleanup Sites Listing
SPILLS 90..... SPILLS 90 data from FirstSearch

Other Ascertainable Records

RCRA NonGen / NLR..... RCRA - Non Generators / No Longer Regulated
FUDS..... Formerly Used Defense Sites
DOD..... Department of Defense Sites
SCRD DRYCLEANERS..... State Coalition for Remediation of Drycleaners Listing
US FIN ASSUR..... Financial Assurance Information
EPA WATCH LIST..... EPA WATCH LIST
2020 COR ACTION..... 2020 Corrective Action Program List
TSCA..... Toxic Substances Control Act
TRIS..... Toxic Chemical Release Inventory System
SSTS..... Section 7 Tracking Systems
ROD..... Records Of Decision
RMP..... Risk Management Plans
RAATS..... RCRA Administrative Action Tracking System
PRP..... Potentially Responsible Parties
PADS..... PCB Activity Database System

EXECUTIVE SUMMARY

Global Id: T0606700972

Sacramento Co. CS: List of sites where unauthorized releases of potentially hazardous materials have occurred.

A review of the Sacramento Co. CS list, as provided by EDR, and dated 05/07/2015 has revealed that there are 2 Sacramento Co. CS sites within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
E & J MARKET Facility Id: RO0001086 Date Closed: 02/09/1996	8706 W STOCKTON BLVD	NNE 0 - 1/8 (0.094 mi.)	B3	11
STOCKMEN SUPPLY CO Facility Id: RO0001087 Date Closed: 07/26/2000	8821 E STOCKTON BLVD	E 1/4 - 1/2 (0.380 mi.)	E16	21

ADDITIONAL ENVIRONMENTAL RECORDS

Local Lists of Landfill / Solid Waste Disposal Sites

SWRCY: A listing of recycling facilities in California.

A review of the SWRCY list, as provided by EDR, and dated 06/15/2015 has revealed that there is 1 SWRCY site within approximately 0.5 miles of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
M PERKINS RECYCLE CE Cert Id: RC189299.001	8126 SHELDON RD	WSW 1/8 - 1/4 (0.161 mi.)	7	14

Other Ascertainable Records

DRYCLEANERS: A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaners' agents; linen supply; coin-operated laundries and cleaning; drycleaning plants except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

A review of the DRYCLEANERS list, as provided by EDR, and dated 02/18/2015 has revealed that there is 1 DRYCLEANERS site within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
FRESH CLEANERS SHELD EPA Id: CAL000317867 EPA Id: CAL000355847	8112 SHELDON RD STE	WSW 1/8 - 1/4 (0.196 mi.)	C10	16

EXECUTIVE SUMMARY

HIST CORTESE: The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

A review of the HIST CORTESE list, as provided by EDR, and dated 04/01/2001 has revealed that there are 2 HIST CORTESE sites within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
E & J MARKET (FORMER) Reg id: 340609	8706 STOCKTON	NNE 1/8 - 1/4 (0.241 mi.)	14	19
CENTURY EQUIPMENT Reg id: 341147	8821 STOCKTON BLVD E	E 1/4 - 1/2 (0.380 mi.)	E17	21

Sacramento Co. ML: Sacramento County Master List. Any business that has hazardous materials on site - hazardous materials storage sites, underground storage tanks, waste generators.

A review of the Sacramento Co. ML list, as provided by EDR, and dated 05/07/2015 has revealed that there are 9 Sacramento Co. ML sites within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
ROUTE 99 LIQUOR	8700 W STOCKTON BLVD	NNE 0 - 1/8 (0.114 mi.)	B4	11
SKM MARKET	8696 W STOCKTON BLVD	NNE 1/8 - 1/4 (0.134 mi.)	6	13
T-MOBILE WEST CORP (8680 W STOCKTON BLVD	N 1/8 - 1/4 (0.193 mi.)	8	15
FRESH CLEANERS SHELD	8112 SHELDON RD STE	WSW 1/8 - 1/4 (0.196 mi.)	C10	16
SHELDON ROAD CHEVRON	8100 SHELDON RD	WSW 1/8 - 1/4 (0.227 mi.)	D12	18
ELK GROVE CYCLE CENT	8672 W STOCKTON BLVD	N 1/8 - 1/4 (0.235 mi.)	13	18
S & S FENCE CO	8300 SHELDON RD	ESE 1/8 - 1/4 (0.250 mi.)	15	20
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
WINCO FOODS INC #37	8142 SHELDON RD	WSW 0 - 1/8 (0.123 mi.)	5	12
M PERKINS RECYCLE CE	8126 SHELDON RD	WSW 1/8 - 1/4 (0.161 mi.)	7	14

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR US Hist Auto Stat: EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

A review of the EDR US Hist Auto Stat list, as provided by EDR, has revealed that there is 1 EDR US Hist Auto Stat site within approximately 0.25 miles of the target property.

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 2 records.

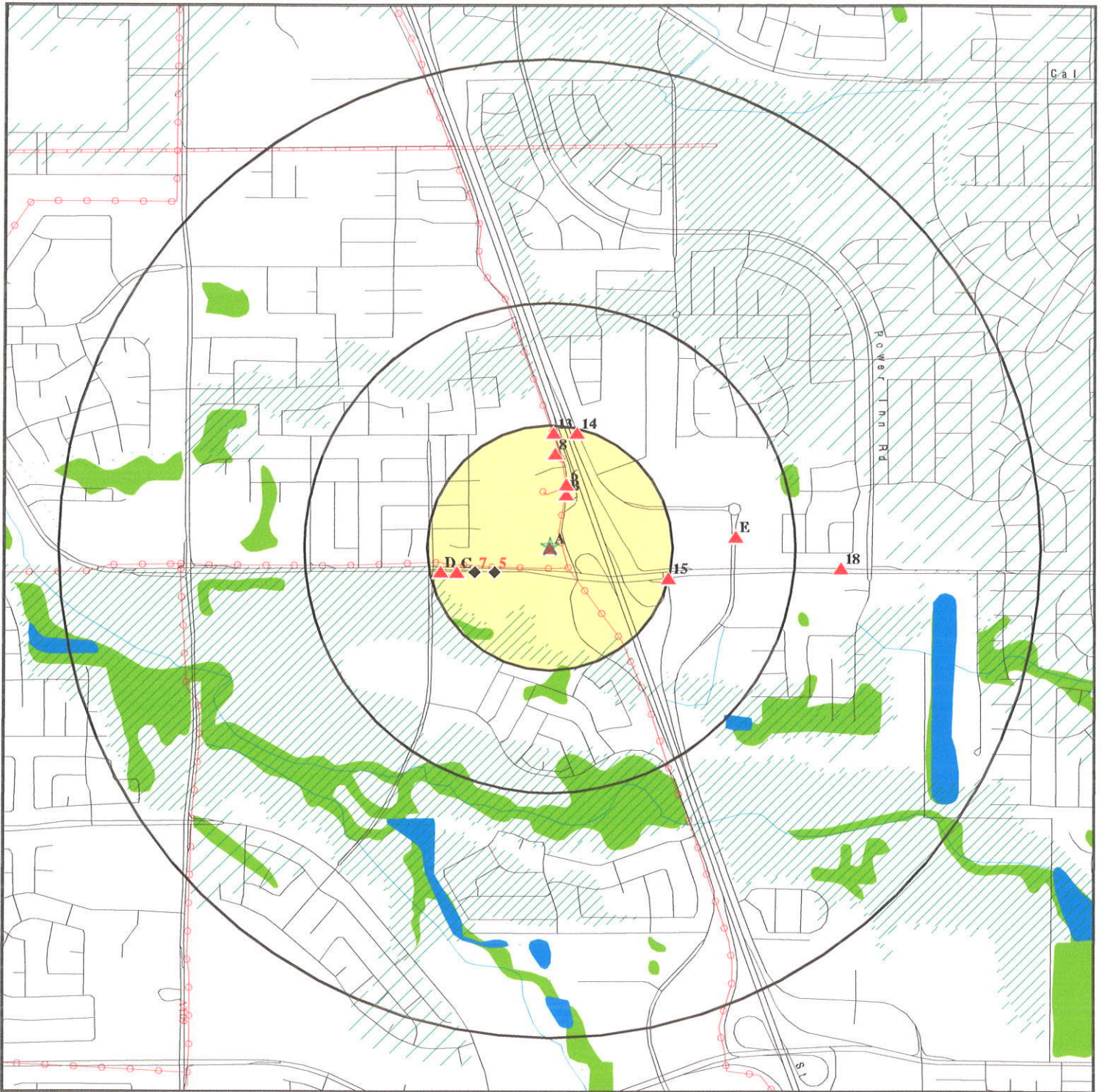
Site Name

Database(s)

PRICE CO/DWR - RETENTION POND
FRANKLIN FIELD COUNTY AIRPORT

Sacramento Co. CS
ENVIROSTOR

OVERVIEW MAP - 4409179.2S

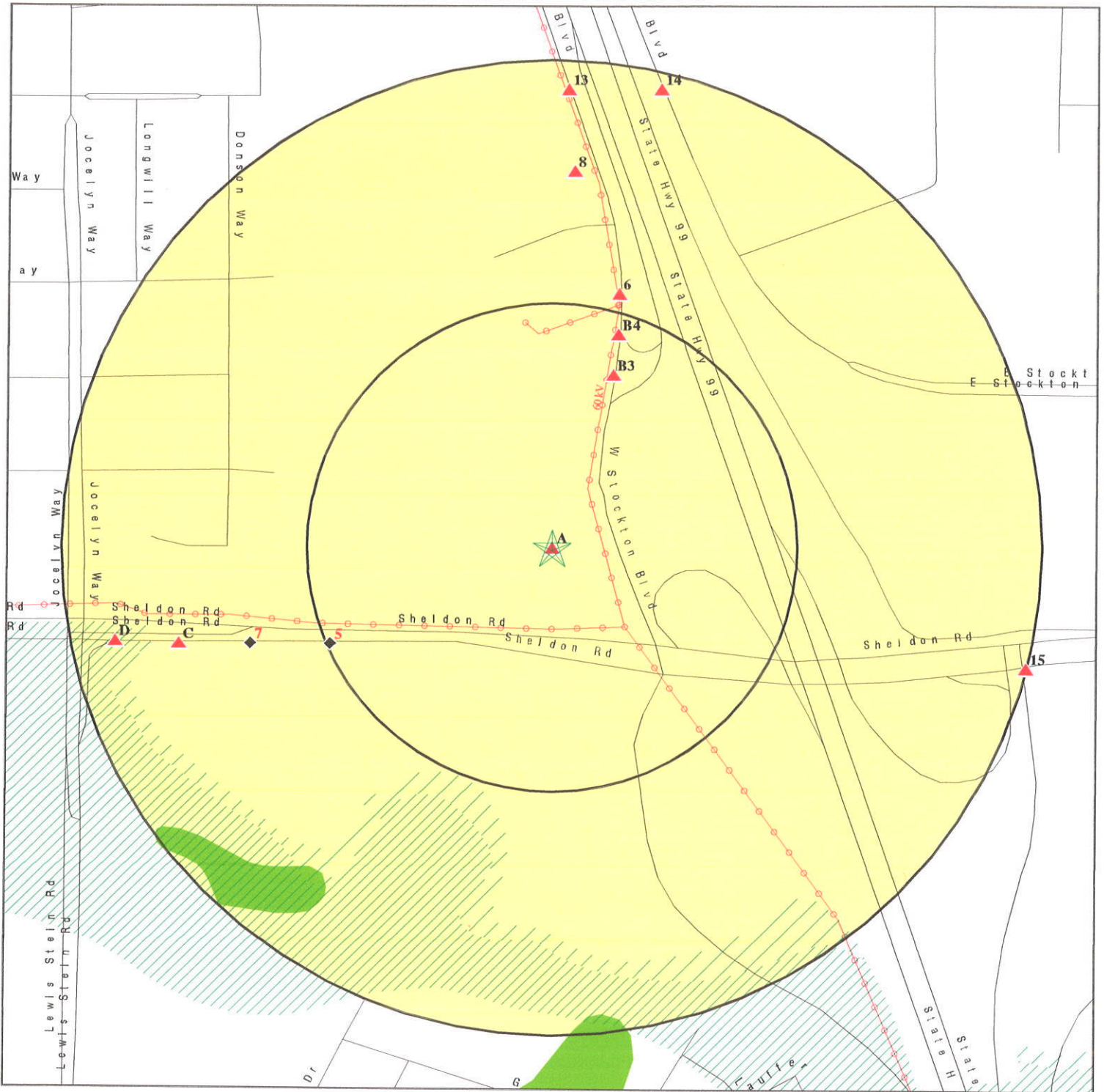


- ★ Target Property
- ▲ Sites at elevations higher than or equal to the target property
- ◆ Sites at elevations lower than the target property
- ▲ Manufactured Gas Plants
- ☒ National Priority List Sites
- ☒ Dept. Defense Sites
- ☒ Indian Reservations BIA
- ⚡ Power transmission lines
- ⚡ Pipelines
- ▨ 100-year flood zone
- ▨ 500-year flood zone
- National Wetland Inventory
- ▨ Areas of Concern

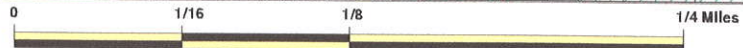
This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

<p>SITE NAME: Sheldon Road Site ADDRESS: 8151 Sheldon Road Sacramento CA 95758 LAT/LONG: 38.4387 / 121.4042</p>	<p>CLIENT: Westech CONTACT: Dr. Bradford Shea INQUIRY #: 4409179.2s DATE: September 14, 2015 4:27 pm</p>
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DETAIL MAP - 4409179.2S



- ★ Target Property
- ▲ Sites at elevations higher than or equal to the target property
- ◆ Sites at elevations lower than the target property
- ▲ Manufactured Gas Plants
- Sensitive Receptors
- ▨ National Priority List Sites
- ▨ Dept. Defense Sites
- ▨ Indian Reservations BIA
- ⚡ Power transmission lines
- ▨ 100-year flood zone
- ▨ 500-year flood zone
- National Wetland Inventory
- ▨ Areas of Concern



This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Sheldon Road Site
 ADDRESS: 8151 Sheldon Road
 Sacramento CA 95758
 LAT/LONG: 38.4387 / 121.4042

CLIENT: Westech
 CONTACT: Dr. Bradford Shea
 INQUIRY #: 4409179.2s
 DATE: September 14, 2015 4:29 pm

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
<i>Federal NPL site list</i>								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	TP		NR	NR	NR	NR	NR	0
<i>Federal Delisted NPL site list</i>								
Delisted NPL	1.000		0	0	0	0	NR	0
<i>Federal CERCLIS list</i>								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
CERCLIS	0.500		0	0	0	NR	NR	0
<i>Federal CERCLIS NFRAP site List</i>								
CERC-NFRAP	0.500		0	0	0	NR	NR	0
<i>Federal RCRA CORRACTS facilities list</i>								
CORRACTS	1.000		0	0	0	0	NR	0
<i>Federal RCRA non-CORRACTS TSD facilities list</i>								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
<i>Federal RCRA generators list</i>								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	0	NR	NR	NR	0
RCRA-CESQG	0.250		0	0	NR	NR	NR	0
<i>Federal institutional controls / engineering controls registries</i>								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
<i>Federal ERNS list</i>								
ERNS	TP		NR	NR	NR	NR	NR	0
<i>State- and tribal - equivalent NPL</i>								
RESPONSE	1.000		0	0	0	0	NR	0
<i>State- and tribal - equivalent CERCLIS</i>								
ENVIROSTOR	1.000	1	0	0	0	1	NR	2
<i>State and tribal landfill and/or solid waste disposal site lists</i>								
SWF/LF	0.500		0	0	0	NR	NR	0
<i>State and tribal leaking storage tank lists</i>								
LUST	0.500		0	1	1	NR	NR	2

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
INDIAN LUST	0.500		0	0	0	NR	NR	0
SLIC	0.500		0	0	0	NR	NR	0
Sacramento Co. CS	0.500	1	1	0	1	NR	NR	3
State and tribal registered storage tank lists								
FEMA UST	0.250		0	0	NR	NR	NR	0
UST	0.250		0	0	NR	NR	NR	0
AST	0.250		0	0	NR	NR	NR	0
INDIAN UST	0.250		0	0	NR	NR	NR	0
State and tribal voluntary cleanup sites								
INDIAN VCP	0.500		0	0	0	NR	NR	0
VCP	0.500	1	0	0	0	NR	NR	1
State and tribal Brownfields sites								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
WMUDS/SWAT	0.500		0	0	0	NR	NR	0
SWRCY	0.500		0	1	0	NR	NR	1
HAULERS	TP		NR	NR	NR	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US HIST CDL	TP		NR	NR	NR	NR	NR	0
HIST Cal-Sites	1.000		0	0	0	0	NR	0
SCH	0.250		0	0	NR	NR	NR	0
CDL	TP		NR	NR	NR	NR	NR	0
Toxic Pits	1.000		0	0	0	0	NR	0
US CDL	TP		NR	NR	NR	NR	NR	0
Local Lists of Registered Storage Tanks								
SWEEPS UST	0.250		0	0	NR	NR	NR	0
HIST UST	0.250		0	0	NR	NR	NR	0
CA FID UST	0.250		0	0	NR	NR	NR	0
Local Land Records								
LIENS	TP		NR	NR	NR	NR	NR	0
LIENS 2	TP		NR	NR	NR	NR	NR	0
DEED	0.500		0	0	0	NR	NR	0
Records of Emergency Release Reports								
HMIRS	TP		NR	NR	NR	NR	NR	0



Appendix F

NOISE ANALYSIS



HELIX Environmental Planning, Inc.
7578 El Cajon Boulevard
La Mesa, CA 91942
619.462.1515 tel
619.462.0552 fax
www.helixepi.com



March 25, 2016

Rich Alexander
985 Pearce Street
Folsom, CA 95630

Subject: Exterior-to-interior Noise Analysis for the 8151 Sheldon Road Apartments Project

Dear Mr. Alexander:

At your request, HELIX Environmental Planning, Inc. (HELIX) has performed an exterior-to-interior noise analysis for proposed residences at the 8151 Sheldon Road Apartments Project (project).

Site Information

The proposed project is located in the City of Sacramento (City) in Sacramento County. The project is on a 19.7-acre site located at 8151 Sheldon Road (Assessor's Parcel Number 117-0220-023, -024, -038, -039, -040). The project site is zoned as Multi-Family, 21 units per acre (R-2B).

Project Description

The proposed project is a 324-unit apartment complex, which includes a total of 22 buildings including 14 fourteen-unit buildings, and 8 sixteen-unit buildings. A unit mix consisting of 33 percent one-bedroom, 50 percent two-bedroom, and 17 percent three-bedroom would be constructed, with the units averaging 1,025 square feet per unit (ranging from 755 to 1,465 square feet). All residential buildings would be two stories in height. A concrete masonry wall would be constructed along most of the perimeter of the site; the wall would be 6 feet high along the eastern and western perimeter and would be 3 feet high along the southern perimeter.

Environmental Setting

The predominant existing noise sources in the vicinity of the project site are vehicles on State Route 99 (SR 99), West Stockton Boulevard, and Sheldon Road. No commercial or private airports are located within two miles of the project site, though occasional overflights and associated noise occur from aircraft using the public Sacramento Executive Airport (located

approximately 4.7 miles northwest of the project site) or the privately-owned Elk Grove Airport (located approximately 4.7 miles east of the project site).

Metrics

All noise level or sound level values presented herein are expressed in terms of decibels (dB), with A-weighting (dBA) to approximate the hearing sensitivity of humans. Time-averaged noise levels are expressed by the symbol L_{EQ} , with a specified duration. The Day-Night sound level (L_{DN}) is a 24-hour average with an added 10 dBA weighting on the nighttime hours between 10:00 p.m. to 7:00 a.m.

Impacts to interior noise may be considered significant to on-site residences if the proposed project residences would be exposed to interior noise levels of 45 dBA L_{DN} or greater per City standards.

Exterior-to-interior Analysis

Exterior noise levels at the building façades for the second stories of the 16-unit buildings range from 67.1 to 70.7 dBA L_{DN} as the 6-foot project perimeter wall would provide limited noise attenuation at second story heights. Noise levels at the building façades for the 14-unit buildings would range from 62.3 to 65.0 dBA L_{DN} . Traditional architectural materials are normally able to reduce exterior to interior noise by up to 20 dBA. Based on these exterior noise levels, traditional architectural materials may not attenuate interior noise to a level of 45 dBA L_{DN} at the 16-unit buildings.

For the 16-unit buildings, an exterior-to-interior noise analysis was conducted to estimate interior noise levels at these units. The information in the interior noise analysis includes wall heights/lengths, room volumes, and window/door tables typical for a standard building plan, as well as information on any other openings in the building shell. The analysis provides noise control specifications for the project rooms with the highest potential interior noise levels and extends these requirements to other applicable project rooms.

The residential rooms used in the exterior-to-interior analysis are the eastern bedroom and the dining room of the second story unit of Building 16P-7 (Receivers 16-7a through 16-7c). These rooms are the closest on the project site to State Route 99 and are therefore exposed to the highest traffic noise levels (see Figure 1 for location of the unit on the site plan).

The bedroom and dining room specifications used in this analysis are based on January 2016 floor plans provided by the project applicant. Refer to Figure 2 for the project plans for the rooms included in this Title 24 analysis. The bedroom has one wall (Wall 1); the noise level at this wall was modeled with Receiver 16-7a at 70.7 dBA L_{DN} . The dining room has two walls (Wall 1 and 2) that are exposed to traffic noise; the noise levels at these walls were modeled with Receiver 16-7b at 70.6 dBA L_{DN} and Receiver 16-7c at 67.3 dBA L_{DN} .

For the second-story bedroom, Wall 1 is approximately 11.6 feet wide with an approximate height of 9.1 feet. The window for Wall 1 is approximately 4.9 feet wide with an approximate

height of 8.4 feet. The bedroom has a depth of 11.9 feet. The second-story dining room Wall 1 is approximately 8.9 feet wide; Wall 2 is approximately 13 feet wide. Both have a height of approximately 9.1 feet. The window for Wall 1 is approximately 4.7 feet wide and the window for Wall 2 is approximately 4.2 feet wide, both with an approximate height of 7.8 feet. The dining room has a depth of 13 feet.

Table 1 displays the Sound Transmission Class (STC) ratings necessary to ensure interior noise levels for the proposed project would be below the 45 dBA L_{DN} threshold. Detailed modeling results can be seen in the attached modeling results.

Table 1 EXTERIOR-TO-INTERIOR NOISE LEVELS FOR SECOND STORY ROOMS WITHIN UNIT 16P-7		
Specification	Bedroom	Dining Room
Exterior wall requirement	STC 46	STC 46
Minimum window requirement	STC 31	STC 31
Window construction	Dual Glazing Window Thickness 1/8- and 1/2-inch Air Gap	Dual Glazing Window Thickness 1/8- and 1/2-inch Air Gap
Exterior Noise	70.7 dBA L_{DN} on Wall 1	70.5 dBA L_{DN} on Wall 1; 67.3 dBA L_{DN} on Wall 2
Interior Noise (calculated):	40.8 dBA L_{DN} with windows closed	44.5 dBA L_{DN} with windows closed
Above 45 L_{DN} interior noise standard?	No	No

With standard dual glazing and the incorporation of the building materials as described in Table 1, all rooms would be in compliance with the relevant interior noise standards of 45 dBA L_{DN} for multi-family residences. Appropriate means of air circulation and provision of fresh air must be present to allow windows to remain closed for extended intervals of time so that acceptable levels of noise can be maintained on the interior. The building design would include HVAC units that would meet the criteria of the International Building Code (Chapter 12, Section 1203.3 of the 2013 California Building Code) to ensure that windows would be able to remain closed for extended periods of time.

Because the remaining rooms within the proposed complex are further from State Route 99 and therefore exposed to lower traffic noise levels, it is assumed that with the incorporation of standard building materials, all units would be within the 45 dBA L_{DN} limit.

Conclusion

The proposed project would not expose on-site residences to interior noise levels in excess of the 45 dBA L_{DN} standard with incorporation of double-paned windows and standard building materials for all units. Therefore, no further measures are required.

Regards

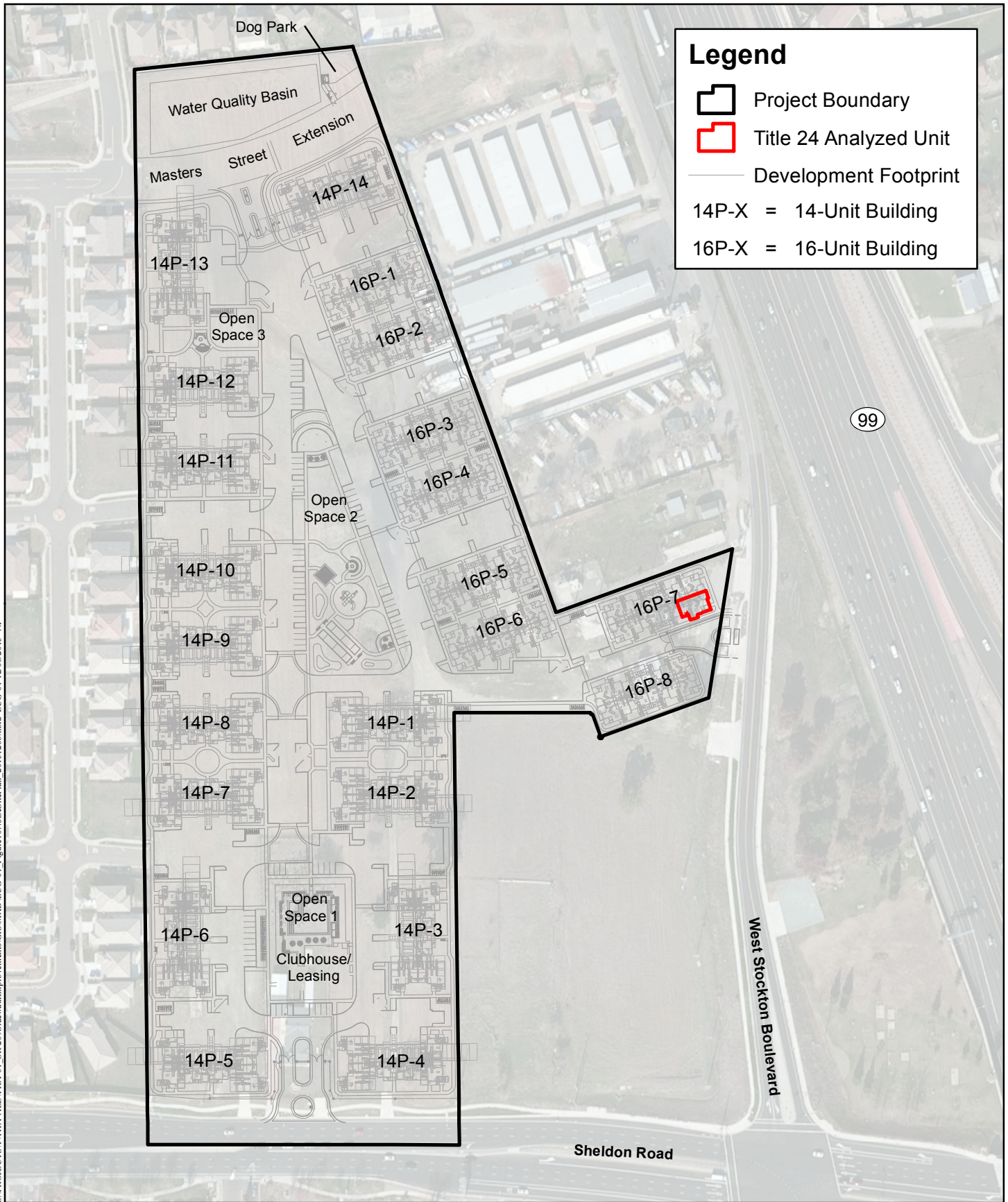


Charles Terry




March 25, 2016

Date

S:\PROJECTS\TTHA-ALL\TTHA-01_SR_2009\sidewalkimprovements\GIS\MXD\LCG-01_Figure1\NoiseShieldPlan_20151208.mxd LCG-01_12/08/2015-NP



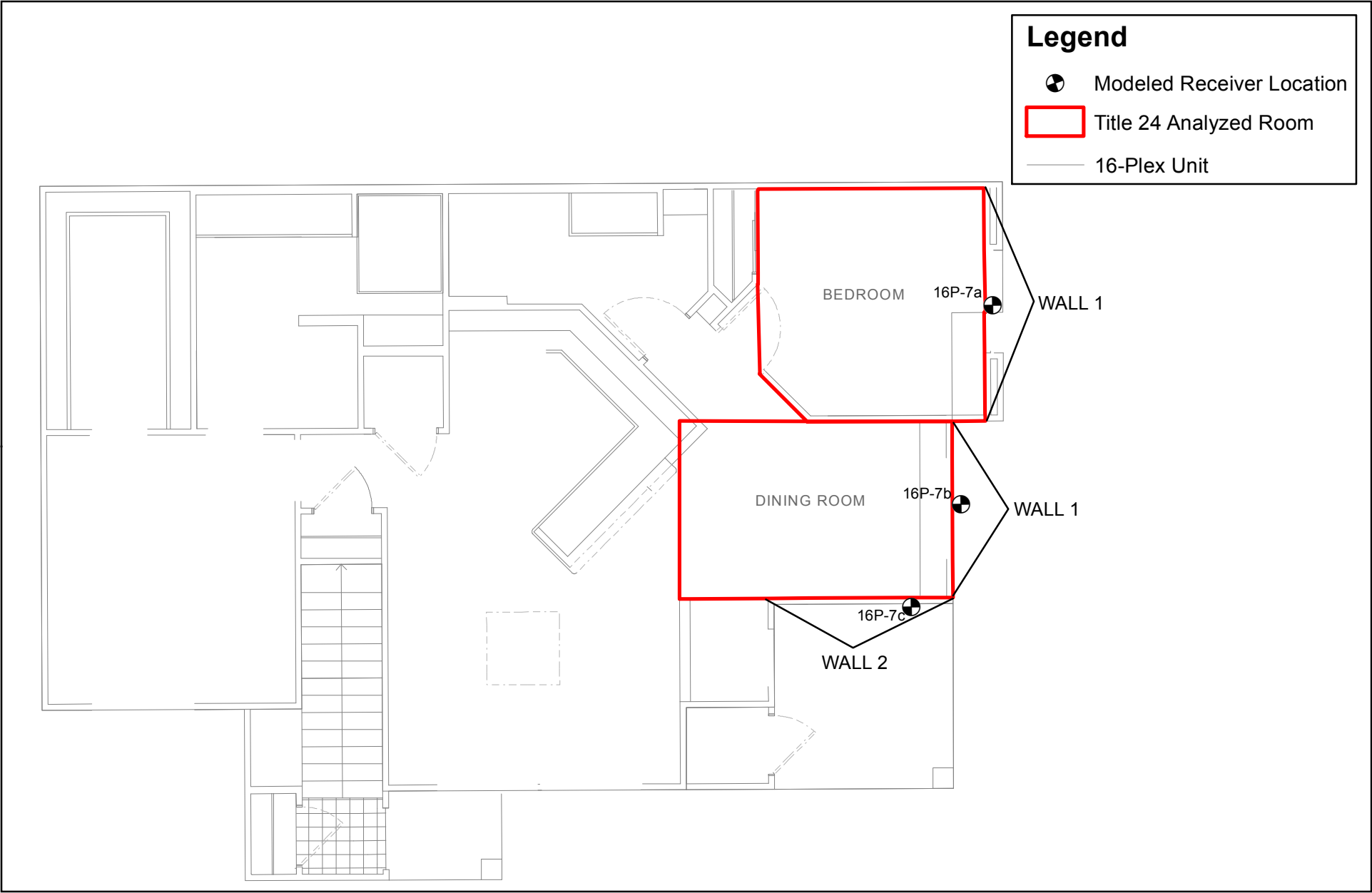
Legend

-  Project Boundary
-  Title 24 Analyzed Unit
-  Development Footprint
- 14P-X = 14-Unit Building
- 16P-X = 16-Unit Building

Title 24 Analyzed Unit

8151 SHELDON ROAD APARTMENTS PROJECT

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Exterior-to-Interior Title 24 Rooms

8151 SHELDON ROAD APARTMENTS PROJECT

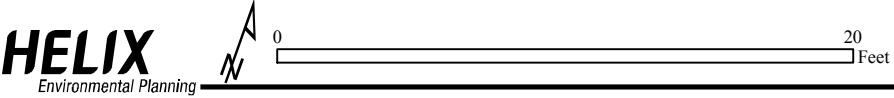


Figure 2

EXTERIOR TO INTERIOR NOISE REDUCTION ANALYSIS

Project Name: 8151 Sheldon Road Apartments
Project # : LCI-01
Room Name: Bedroom - 2nd Floor

Wall 1 of 1

Room Type : Soft							
	<u>125 Hz</u>	<u>250 Hz</u>	<u>500 Hz</u>	<u>1KHz</u>	<u>2KHz</u>	<u>4KHz</u>	
Reverberation Time (sec) :	0.8	0.8	0.8	0.8	0.7	0.7	: Highly Absorptive Room
Room Absorption (Sabins) :	76	76	76	76	95	95	

	<u>Noise Level</u>		<u>125 Hz</u>	<u>250 Hz</u>	<u>500 Hz</u>	<u>1KHz</u>	<u>2KHz</u>	<u>4KHz</u>	
Source 1: Traffic	70.7	CNEL	54.0	59.5	62.0	66.0	66.0	60.0	: Traffic Spectrum
Source 2: <N/A>	0.0	CNEL	0.0	0.0	0.0	0.0	0.0	0.0	
Source 3: <N/A>	0.0	CNEL	0.0	0.0	0.0	0.0	0.0	0.0	
Source 4: <N/A>	0.0	CNEL	0.0	0.0	0.0	0.0	0.0	0.0	
Overall:	70.7	CNEL	54.0	59.5	62.0	66.0	66.0	60.0	: Effective Noise Spectrum

<u>Assembly Type</u>	<u>Open</u>	<u>Width</u>	<u>Height</u>	<u>Qty</u>	<u>Total Area</u>	<u>125 Hz</u>	<u>250 Hz</u>	<u>500 Hz</u>	<u>1KHz</u>	<u>2KHz</u>	<u>4KHz</u>
STC 46 Typical Exterior Wall	N	11.655	9.094	1	68.1	29	40	46	46	44	53
STC 31 1/8"-1/2"-1/8" Dual Insulating Window	Y	4.87	7.78	1	37.9	17	18	29	36	40	39
<N/A>	N	0	0	0	0.0	0	0	0	0	0	0
<N/A>	N	0	0	0	0.0	0	0	0	0	0	0
<N/A>	N	0	0	0	0.0	0	0	0	0	0	0
<N/A>	N	0	0	0	0.0	0	0	0	0	0	0
<N/A>	N	0	0	0	0.0	0	0	0	0	0	0
<N/A>	N	0	0	0	0.0	0	0	0	0	0	0
<N/A>	N	0	0	0	0.0	0	0	0	0	0	0
<N/A>	N	0	0	0	0.0	0	0	0	0	0	0
<N/A>	N	0	0	0	0.0	0	0	0	0	0	0
<N/A>	N	0	0	0	0.0	0	0	0	0	0	0

Room Depth: **11.9** ft

Overall Area: **105.99057** ft²

Volume: **1261** ft³

Number of Impacted Walls: **1**

Windows Open		
Interior Noise Level:	51.5	CNEL
Windows Closed		
Interior Noise Level:	40.8	CNEL

<u>125 Hz</u>	<u>250 Hz</u>	<u>500 Hz</u>	<u>1KHz</u>	<u>2KHz</u>	<u>4KHz</u>	
54.0	59.5	62.0	66.0	66.0	60.0	: Exterior Wall Noise Exposure
7.4	7.4	7.5	7.5	7.5	7.5	: Transmission Loss
0.0	0.0	0.0	0.0	0.0	0.0	: Noise Reduction
18.8	18.8	18.8	18.8	19.8	19.8	: Absorption
35.2	40.7	43.2	47.2	46.2	40.2	: Noise Level
51.5	CNEL	WINDOWS OPEN				
<u>125 Hz</u>	<u>250 Hz</u>	<u>500 Hz</u>	<u>1KHz</u>	<u>2KHz</u>	<u>4KHz</u>	
54.0	59.5	62.0	66.0	66.0	60.0	: Exterior Wall Noise Exposure
21.0	22.4	33.3	39.7	42.1	43.2	: Transmission Loss
0.7	2.2	13.1	19.5	21.9	22.9	: Noise Reduction
18.8	18.8	18.8	18.8	19.8	19.8	: Absorption
34.5	38.6	30.2	27.7	24.4	17.3	: Noise Level
40.8	CNEL	WINDOWS CLOSED				

EXTERIOR TO INTERIOR NOISE REDUCTION ANALYSIS

Project Name: 8151 Sheldon Road Apartments
Project # : LCI-01
Room Name: Dining Room - 2nd Floor

Wall 1 of 2

Room Type : Moderate							
	<u>125 Hz</u>	<u>250 Hz</u>	<u>500 Hz</u>	<u>1KHz</u>	<u>2KHz</u>	<u>4KHz</u>	
Reverberation Time (sec) :	1.2	1.2	1.2	1.2	1.0	1.0	: Moderately Reflective Room
Room Absorption (Sabins) :	42	42	42	42	52	52	

	<u>Noise Level</u>		<u>125 Hz</u>	<u>250 Hz</u>	<u>500 Hz</u>	<u>1KHz</u>	<u>2KHz</u>	<u>4KHz</u>	
Source 1: Traffic	70.5	CNEL	53.8	59.3	61.8	65.8	65.8	59.8	: Traffic Spectrum
Source 2: <N/A>	0.0	CNEL	0.0	0.0	0.0	0.0	0.0	0.0	
Source 3: <N/A>	0.0	CNEL	0.0	0.0	0.0	0.0	0.0	0.0	
Source 4: <N/A>	0.0	CNEL	0.0	0.0	0.0	0.0	0.0	0.0	
Overall:	70.5	CNEL	53.8	59.3	61.8	65.8	65.8	59.8	: Effective Noise Spectrum

<u>Assembly Type</u>	<u>Open</u>	<u>Width</u>	<u>Height</u>	<u>Qty</u>	<u>Total Area</u>	<u>125 Hz</u>	<u>250 Hz</u>	<u>500 Hz</u>	<u>1KHz</u>	<u>2KHz</u>	<u>4KHz</u>
STC 46 Typical Exterior Wall	N	8.875	9.094	1	44.2	29	40	46	46	44	53
STC 31 1/8"-1/2"-1/8" Dual Insulating Window	Y	4.69	7.78	1	36.5	17	18	29	36	40	39
<N/A>	N	0	0	0	0.0	0	0	0	0	0	0
<N/A>	N	0	0	0	0.0	0	0	0	0	0	0
<N/A>	N	0	0	0	0.0	0	0	0	0	0	0
<N/A>	N	0	0	0	0.0	0	0	0	0	0	0
<N/A>	N	0	0	0	0.0	0	0	0	0	0	0
<N/A>	N	0	0	0	0.0	0	0	0	0	0	0
<N/A>	N	0	0	0	0.0	0	0	0	0	0	0
<N/A>	N	0	0	0	0.0	0	0	0	0	0	0
<N/A>	N	0	0	0	0.0	0	0	0	0	0	0
<N/A>	N	0	0	0	0.0	0	0	0	0	0	0

Room Depth: **13** ft Overall Area: **80.70925** ft²
 Volume: **1049** ft³

Number of Impacted Walls: **2**

Windows Open		
Interior Noise Level:	55.6	CNEL
Windows Closed		
Interior Noise Level:	44.5	CNEL

<u>125 Hz</u>	<u>250 Hz</u>	<u>500 Hz</u>	<u>1KHz</u>	<u>2KHz</u>	<u>4KHz</u>	
53.8	59.3	61.8	65.8	65.8	59.8	: Exterior Wall Noise Exposure
6.4	6.4	6.5	6.5	6.5	6.5	: Transmission Loss
0.0	0.0	0.0	0.0	0.0	0.0	: Noise Reduction
16.2	16.2	16.2	16.2	17.2	17.2	: Absorption
37.6	43.1	45.6	49.6	48.6	42.6	: Noise Level
53.9	CNEL	WINDOWS OPEN				
<u>125 Hz</u>	<u>250 Hz</u>	<u>500 Hz</u>	<u>1KHz</u>	<u>2KHz</u>	<u>4KHz</u>	
53.8	59.3	61.8	65.8	65.8	59.8	: Exterior Wall Noise Exposure
20.1	21.4	32.3	39.0	41.7	42.2	: Transmission Loss
1.1	2.3	13.3	19.9	22.7	23.2	: Noise Reduction
16.2	16.2	16.2	16.2	17.2	17.2	: Absorption
36.5	40.7	32.3	29.7	25.9	19.4	: Noise Level
42.9	CNEL	WINDOWS CLOSED				

EXTERIOR TO INTERIOR NOISE REDUCTION ANALYSIS

Project Name: 8151 Sheldon Road Apartments
 Project # : LCI-01
 Room Name: Dining Room - 2nd Floor

Wall 2 of 2

	<u>Noise Level</u>	<u>125 Hz</u>	<u>250 Hz</u>	<u>500 Hz</u>	<u>1KHz</u>	<u>2KHz</u>	<u>4KHz</u>	
Source 1: Traffic	67.3 CNEL	50.6	56.1	58.6	62.6	62.6	56.6	: Traffic Spectrum
Source 2: <N/A>	0.0 CNEL	0.0	0.0	0.0	0.0	0.0	0.0	
Source 3: <N/A>	0.0 CNEL	0.0	0.0	0.0	0.0	0.0	0.0	
Source 4: <N/A>	0.0 CNEL	0.0	0.0	0.0	0.0	0.0	0.0	
Overall:	67.3 CNEL	50.6	56.1	58.6	62.6	62.6	56.6	: Effective Noise Spectrum

<u>Assembly Type</u>	<u>Open</u>	<u>Width</u>	<u>Height</u>	<u>Qty</u>	<u>Total Area</u>	<u>125 Hz</u>	<u>250 Hz</u>	<u>500 Hz</u>	<u>1KHz</u>	<u>2KHz</u>	<u>4KHz</u>
STC 46 Typical Exterior Wall	N	13	9.094	1	85.9	29	40	46	46	44	53
STC 31 1/8"-1/2"-1/8" Dual Insulating Window	Y	4.16	7.78	1	32.4	17	18	29	36	40	39
<N/A>	N	0	0	0	0.0	0	0	0	0	0	0
<N/A>	N	0	0	0	0.0	0	0	0	0	0	0
<N/A>	N	0	0	0	0.0	0	0	0	0	0	0
<N/A>	N	0	0	0	0.0	0	0	0	0	0	0
<N/A>	N	0	0	0	0.0	0	0	0	0	0	0
<N/A>	N	0	0	0	0.0	0	0	0	0	0	0
<N/A>	N	0	0	0	0.0	0	0	0	0	0	0
<N/A>	N	0	0	0	0.0	0	0	0	0	0	0
<N/A>	N	0	0	0	0.0	0	0	0	0	0	0
<N/A>	N	0	0	0	0.0	0	0	0	0	0	0

Overall Area: 118.222 ft²

<u>125 Hz</u>	<u>250 Hz</u>	<u>500 Hz</u>	<u>1KHz</u>	<u>2KHz</u>	<u>4KHz</u>	
50.6	56.1	58.6	62.6	62.6	56.6	: Exterior Wall Noise Exposure
8.5	8.6	8.6	8.6	8.6	8.6	: Transmission Loss
0.0	0.0	0.0	0.0	0.0	0.0	: Noise Reduction
16.2	16.2	16.2	16.2	17.2	17.2	: Absorption
34.4	39.9	42.4	46.4	45.4	39.4	: Noise Level
50.7	CNEL	WINDOWS OPEN				
<u>125 Hz</u>	<u>250 Hz</u>	<u>500 Hz</u>	<u>1KHz</u>	<u>2KHz</u>	<u>4KHz</u>	
50.6	56.1	58.6	62.6	62.6	56.6	: Exterior Wall Noise Exposure
22.0	23.6	34.4	40.6	42.5	44.2	: Transmission Loss
1.2	2.8	13.7	19.9	21.8	23.5	: Noise Reduction
16.2	16.2	16.2	16.2	17.2	17.2	: Absorption
33.2	37.1	28.7	26.5	23.6	15.9	: Noise Level
39.3	CNEL	WINDOWS CLOSED				

Roadway Construction Noise Model (RCNM),Version 1.1

Report date 2/1/2016

Case Descr LCI-01

---- Receptor #1 ----

Baselines (dBA)

Description	Land Use	Daytime	Evening	Night
Homes	Residential	75	75	75

Equipment

Description	Impact	Device	Usage(%)	Spec	Actual	Receptor	Estimated
				Lmax (dBA)	Lmax (dBA)	Distance (feet)	Shielding (dBA)
Scraper	No		40		83.6	100	0
Scraper	No		40		83.6	100	0

Results

Calculated (dBA)

Equipment	*Lmax	Leq
Scraper	77.6	73.6
Scraper	77.6	73.6
Total	77.6	76.6

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM), Version 1.1

Report date: 2/1/2016

Case Description LCI-01

---- Receptor #1 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Homes	Residential	75	75	75

Description	Impact Device	Usage(%)	Equipment			
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Excavator	No	40		80.7	190	0
Dump Truck	No	40		76.5	190	0

Results

Equipment	Calculated (dBA)	
	*Lmax	Leq
Excavator	69.1	65.1
Dump Truck	64.9	60.9
Total	69.1	66.5

*Calculated Lmax is the Loudest value.



Appendix G

TRANSPORTATION ANALYSIS AND
CALTRANS RESPONSE MEMORANDUM





DRAFT Transportation Analysis
8151 Sheldon Road Apartments

Prepared for

City of Sacramento

December 24, 2015



8950 Cal Center Drive, Suite 340
Sacramento, California 95628
(916) 368-2000

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INTRODUCTION

This transportation analysis addresses transportation and circulation conditions associated with the proposed 8151 Sheldon Road Apartments project. The analysis includes consideration of automobile traffic impacts on roadway capacity, transit impacts, bicycle impacts, and pedestrian impacts. Quantitative transportation analyses have been conducted for the following scenarios:

- Existing (without project)
- Existing Plus Project

Since this project is consistent with the City's 2035 General Plan, cumulative impacts on roadway segments, transit, bicycle facilities, pedestrian circulation, and parking from development associated with the General Plan were identified and analyzed in the Master EIR, and this study reviews such issues on a project-specific basis only.

For more details of the project, please see "Project Land Use and Circulation" later in this report.

PROJECT DESCRIPTION

As illustrated in Figure 1, the project is located at 8151 Sheldon Road in the City of Sacramento. The proposed apartment complex will consist of 324 units.

The site is located on the north side of Sheldon Road, west of SR 99 and West Stockton Boulevard. The property consists of vacant land and a few vacant structures. As illustrated in Figure 2, site access is proposed via Sheldon Boulevard to the south, via West Stockton Boulevard to the east, and via an extension of Masters Street to the northwest.

ENVIRONMENTAL SETTING

The existing roadway, transit, bicycle, and pedestrian transportation systems within the study area are described below. Figure 1 illustrates the roadway system near the project site.

The site is located at the boundary of the cities of Sacramento and Elk Grove. Parcels north of Sheldon Road and west of West Stockton Boulevard are in the City of Sacramento. Parcels south of Sheldon Road and west of SR 99 are in the City of Elk Grove. Parcels east of SR 99 both north and south of Sheldon Road are also in the City of Elk Grove.

ROADWAY SYSTEM

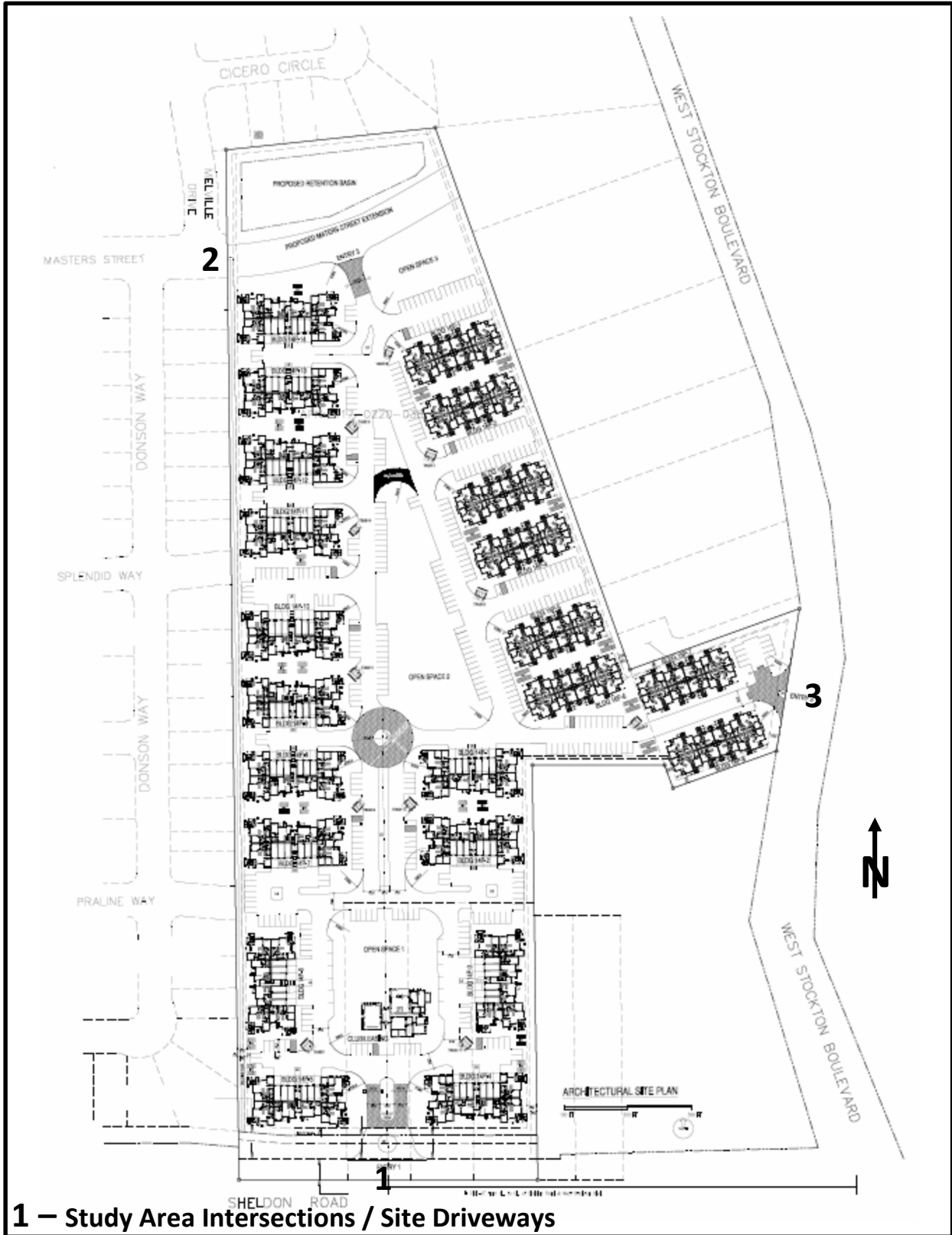
Regional access to the site is provided primarily by **SR 99**. Local access is proposed via **Sheldon Road, West Stockton Boulevard**, and an extension of **Masters Street**.



1 – Study Area Intersections

**Figure 1
Site Location and Study Area Intersections**





1 – Study Area Intersections / Site Driveways



Figure 2
Site Plan

SR 99 is a north-south limited-access freeway, with three through travel lanes in each direction near the site. A full interchange with Sheldon Road is located near the site. To the north, SR 99 continues to Central City Sacramento. To the south, SR 99 provides access to Elk Grove, southern Sacramento County, and communities to the south in the Central Valley.

Sheldon Road is an east-west roadway with three through travel lanes in each direction adjacent to the site. It is designated as an arterial roadway in both the Sacramento and Elk Grove general plans.

To the west, Sheldon Road curves to the north and becomes Center Parkway, continuing in the City of Sacramento. To the east, Sheldon Road continues through the City of Elk Grove to Grant Line Road.

West Stockton Boulevard is a collector roadway in the City of Sacramento which parallels the west side of SR 99. It has one travel lane in each direction adjacent to the site. This section of West Stockton Boulevard ends at Sheldon Road to the southeast of the site. To the north, it continues north and then west to Bruceville Road.

Masters Street is a local east-west residential street which terminates at **Melville Drive** at the site boundary. To the west, it provides access to Bruceville Road indirectly via Damascas Drive. Melville Drive, a residential street, begins at Masters Street and continues north and then east to West Stockton Boulevard.

Jocelyn Way is a north-south roadway providing access to Sheldon Road from the residential neighborhoods along its east and west sides. To the south of Sheldon Road, it continues as **Lewis Stein Road** in the City of Elk Grove.

Praline Way and **Splendid Way** are east-west residential streets that terminate in dead-ends at the western site boundary.

PEDESTRIAN SYSTEM

In the vicinity of the project site, the pedestrian infrastructure is incomplete.

Along Sheldon Road, sidewalks exist on both sides of the roadway from Jocelyn Way / Lewis Stein Road across SR 99 for almost two miles to the east. West of Jocelyn Way / Lewis Stein Road, there are sidewalks along the north side of the street. Along the south side of the street, there is an off-street bike / pedestrian path. There are crosswalks with pedestrian signal heads at the Sheldon Road intersections with Jocelyn Way / Lewis Stein Road and with West Stockton Boulevard. These crosswalks provide access from the project site to the commercial shopping area located across Sheldon Road.

Along West Stockton Boulevard, there are sidewalks along both sides of the roadway from Sheldon Road to just north of the site access location. North of that location, pedestrian travel is via paved shoulders and intermittent sidewalks along the west side of the roadway.

The adjacent residential neighborhoods to the north and west of the project site include a complete sidewalk system on both sides of each street. These sidewalks provide a continuous path to the Irene B. West Elementary School, located about one-third mile northwest of the intersection of Masters Street and Melville Drive (site access 2). Continuous sidewalks are also provided to the Jacinto Creek Park.

BICYCLE SYSTEM

Figure 3 illustrates existing bikeways in the site vicinity.

Along Sheldon Road, there are on-street bikeways along both sides of the roadway from Center Parkway to the west across SR 99 to Waterman Road to the east. There is an off-street bike path along the south side of Sheldon Road from Bruceville Road to Lewis Stein Road.

Along Jocelyn Way, there are on-street bikeways along both sides of the roadway from Sheldon Road to Masters Street. South of Sheldon Road, on-street bikeways continue along Lewis Stein Road to Big Horn Boulevard.

Along Masters Street, there are on-street bikeways along both sides of the roadway from Jocelyn Way to Melville Drive.

There is an east-west off-street bikeway north of the site along Jacinto Creek. This bikeway begins at Jacinto Creek Park / Irene B. West Elementary School and continues to the west across Bruceville Road and Center Parkway. This off-street bikeway can be accessed from Melville Drive and from Jocelyn Way.

TRANSIT SYSTEM

The Sacramento Regional Transit District (RT) operates 67 bus routes and 38.6 miles of light rail covering a 418 square-mile service area. Buses and light rail run 365 days a year using 76 light rail vehicles, 182 buses (with an additional 30 buses in reserve) powered by compressed natural gas (CNG) and 11 shuttle vans. Buses operate daily from 5 a.m. to 11 p.m. every 12 to 75 minutes, depending on the route. Light rail trains begin operation at 4 a.m. with service every 15 minutes during the day and every 30 minutes in the evening and on weekends. Blue Line and Gold Line trains operate until 12:30 a.m. and the Gold Line to Folsom operates until 7 p.m. Green Line trains operate every 30 minutes Monday through Friday.

Passenger amenities include 50 light rail stops or stations, 31 bus and light rail transfer centers and 18 park-and-ride lots. RT also serves over 3,300 bus stops throughout Sacramento County.

Annual ridership has steadily increased on both the bus and light rail systems from 14 million passengers in 1987 to over 31.5 million passengers in FY 2010. Weekday light rail ridership averages about 50,000. Bus weekday ridership has reached an average of 51,000 passengers per day.¹

¹ www.sacrt.com, accessed December 16, 2015.

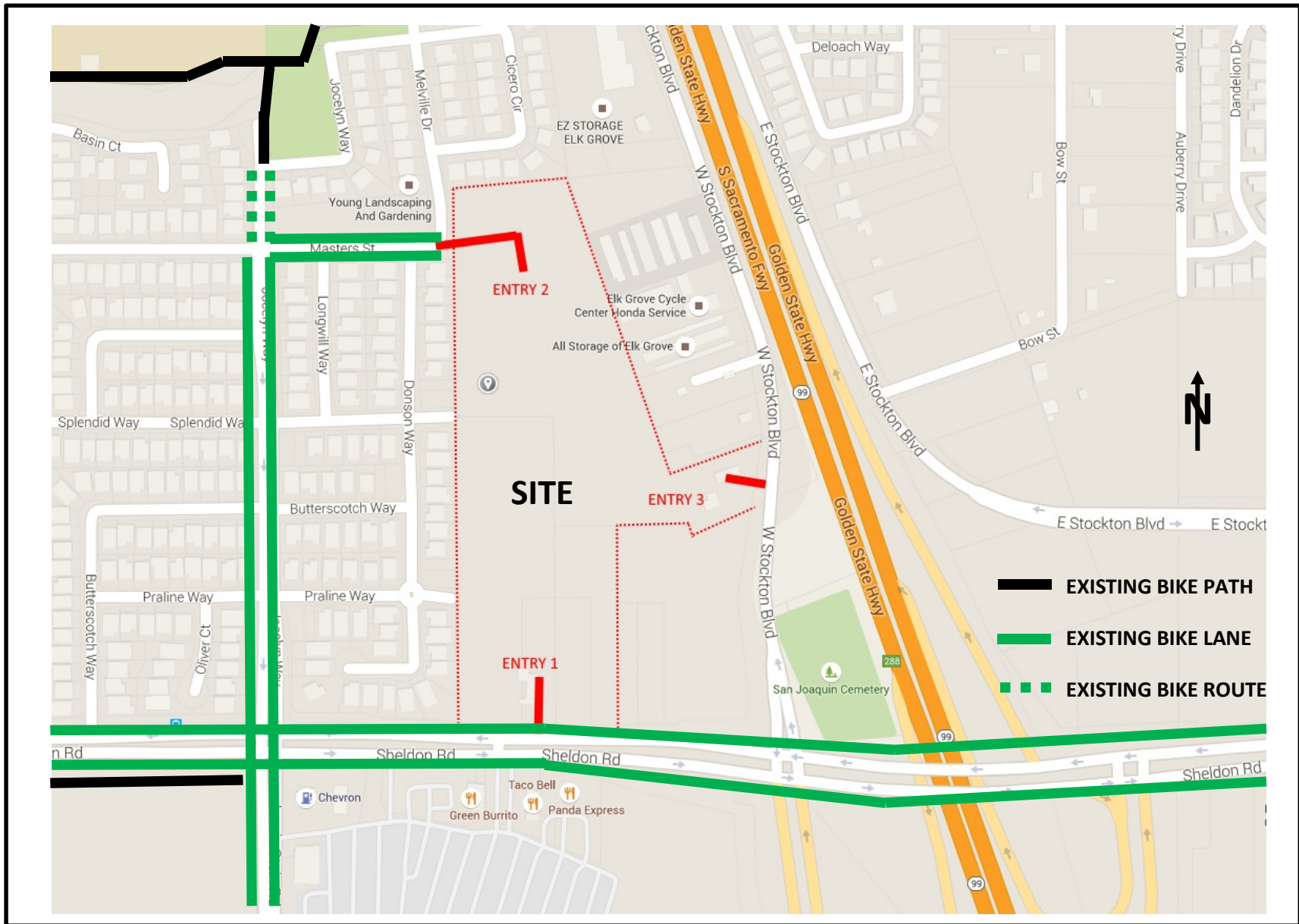


Figure 3
Existing Bikeway System



There is no Regional Transit bus service near the project site. Blue Line light rail service begins at Cosumnes River College about one mile to the northwest of the site, providing service to the north extending to Central City Sacramento.

The City of Elk Grove's *e-tran* provides both local and commuter public transit service. *e-tran* is Elk Grove's own bus system serving close to 1 million passengers / year with an annual operating cost of \$7.5 million. Routes are coordinated with RT buses and light rail and South County Transit / Link (SCT / LINK) to areas outside the city. Main transfer points are at the Cosumnes River College, Meadowview Light Rail Station and Laguna Town Hall. Services are funded with Transportation Development Act (TDA) and Federal Transit Administration (FTA) funds.² Figure 4 illustrates the *e-tran* system map.

Two *e-tran* commuter routes provide service near the site from a park-and-ride lot (located at East Stockton Boulevard south of Sheldon Road) to Central City Sacramento. Commuter routes 59 and 60 provide ten northbound trips for the morning commute, and eight southbound trips for the afternoon / evening commute.

Local Route 160 (Elk Grove Boulevard and Waterman Road to Cosumnes River College) provides service along Sheldon Road in both directions past the site from about 7:00 a.m. to about 7:00 p.m. at about sixty-minute headways.

Local Route 162 (Cosumnes River College to Elk Grove Boulevard and Elk Grove-Florin Road) provides service in a counter-clockwise loop along Sheldon Road eastbound past the site from about 6:00 a.m. to about 9:00 p.m. at about seventy five-minute headways.

STUDY AREA

For traffic analysis purposes, a set of intersections was selected based upon the anticipated volume of project traffic, the distributional patterns of project traffic, and known locations of operational difficulty. The following locations, shown in Figure 1, were identified:

- Intersections
 1. Driveway 1 and Sheldon Road
 2. Melville Drive and Masters Street
 3. West Stockton Boulevard and Driveway 3
 4. Lewis Stein Road / Jocelyn Way and Sheldon Road
 5. West Stockton Boulevard / SR 99 Southbound Ramps and Sheldon Road
 6. SR 99 Northbound Ramps and Sheldon Road

² http://www.elkgrovecity.org/city_hall/departments_divisions/transit_e-tran/comprehensive_transit_analysis/, accessed December 16, 2015.

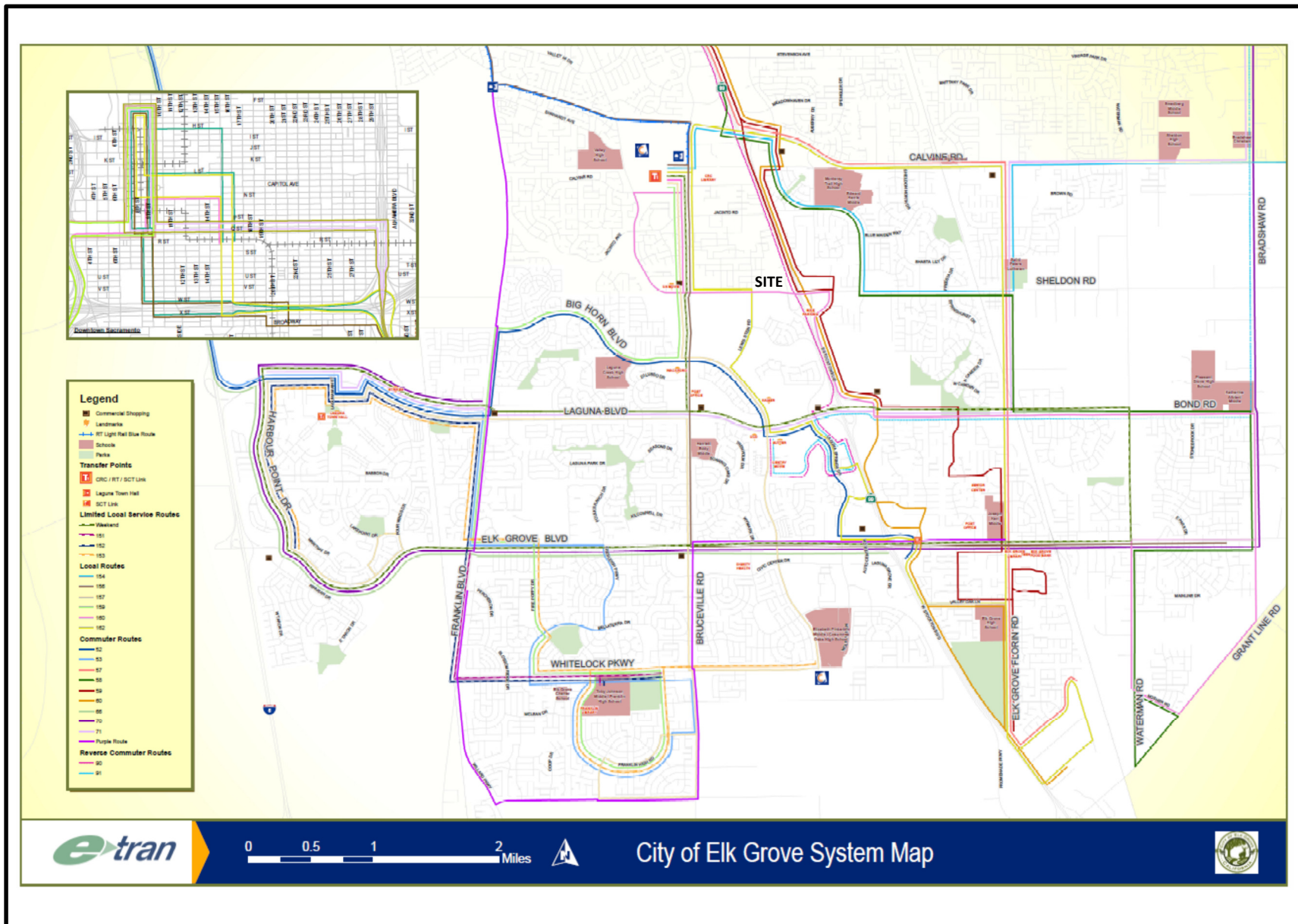


Figure 4
e-tran Transit System Map



EXISTING INTERSECTION GEOMETRY

Existing intersection geometry (number of approach lanes and traffic control) is illustrated in Figure 5.

EXISTING TRAFFIC VOLUMES

Intersection turning movement counts were collected to coincide with the peak time periods of commuter activity. Counts were collected on Wednesday, November 18, 2015 from 7:00 to 9:00 a.m. and from 3:00 to 5:00 p.m. in 15-minute intervals at the study area intersections. The peak hour volumes are shown on Figure 5.

REGULATORY SETTING

Roadway operations are regulated by agencies with jurisdiction of the particular roadway. Study area roadways are under the jurisdiction of the City of Sacramento, City of Elk Grove, and Caltrans.

METHODOLOGY

Field reconnaissance was undertaken to ascertain the traffic control characteristics of each of the study area intersections and roadway segments. Determination of roadway operating conditions is based upon comparison of known or projected traffic volumes during peak hours to roadway capacity. In an urban setting, roadway capacity is generally governed by intersection characteristics, and intersection delay is used to determine “levels of service.” Levels of service describe roadway operating conditions. Level of service is a qualitative measure of the effect of a number of factors, including speed and travel time, traffic interruptions, freedom to maneuver, safety, driving comfort and convenience, delay, and operating costs. Levels of service are designated A through F from best to worst, which cover the entire range of traffic operations that might occur. Levels of Service (LOS) A through E generally represent traffic volumes at less than roadway capacity, while LOS F represents over capacity and / or forced flow conditions.

Level of Service Policy

City of Sacramento

The Mobility Element of the City of Sacramento 2035 General Plan outlines goals and policies that coordinate the transportation and circulation system with planned land uses. The City of Sacramento has the following level of service policy relevant to this study:

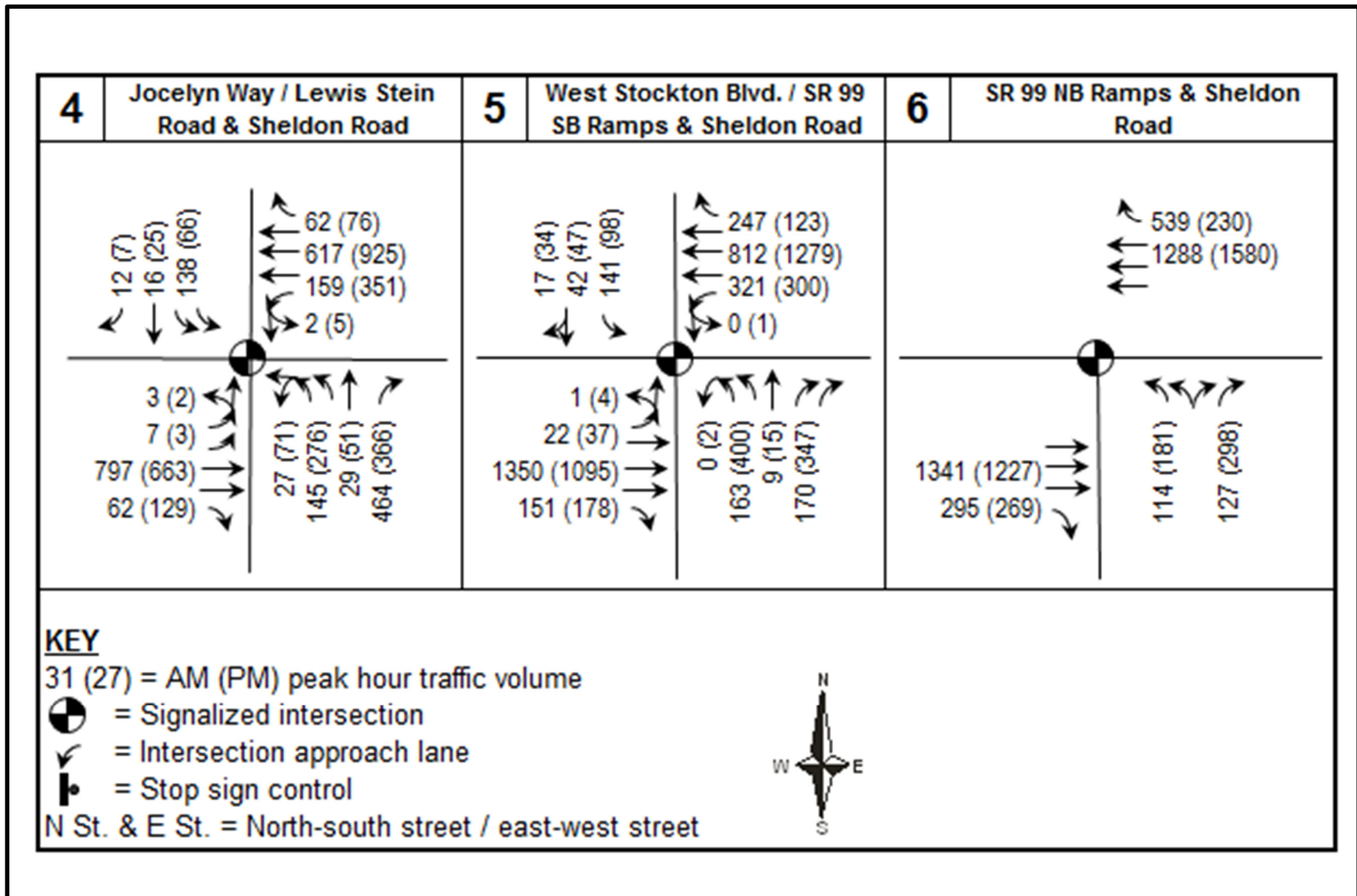


Figure 5
Existing Peak Hour Traffic Counts and Intersection Geometry

Policy M 1.2.2 Level of Service (LOS) Standard. *The City shall implement a flexible context-sensitive Level of Service (LOS) standard, and will measure traffic operations against the vehicle LOS thresholds established in this policy. The City will measure Vehicle LOS based on the methodology contained in the latest version of the Highway Capacity Manual (HCM) published by the Transportation Research Board. The City's specific vehicle LOS thresholds have been defined based on community values with respect to modal priorities, land use context, economic development, and environmental resources and constraints. As such, the City has established variable LOS thresholds appropriate for the unique characteristics of the City's diverse neighborhoods and communities. The City will strive to operate the roadway network at LOS D or better for vehicles during typical weekday conditions, including AM and PM peak hour with the following exceptions described below and mapped on Figure M-1:*

All of the study area intersections are located in an area of the City with a LOS D standard, with no exceptions to the LOS Standard within the study area.

City of Elk Grove

The City of Elk Grove General Plan has the following level of service policy:

CI-13 *The City shall require that all roadways and intersections in Elk Grove operate at a minimum Level of Service "D" at all times.*

Caltrans

In the Caltrans' *State Route 99 & Interstate 5 Corridor System Management Plan*, the 20-year concept level of service is "F".

Intersection Analysis

Intersection analyses were conducted using a methodology outlined in the Transportation Research Board's *Highway Capacity Manual 2010*. The methodology utilized is known as "operational analysis." This procedure calculates an average control delay per vehicle at an intersection, and assigns a level of service designation based upon the delay. Table 1 presents the level of service criteria for signalized and unsignalized intersections. Based upon the LOS policies described previously, a goal of LOS D was established for the study area intersections.

RESULTS OF EXISTING CONDITIONS ANALYSIS

Existing conditions were evaluated for weekday a.m. peak hour and p.m. peak hour.

TABLE 1 INTERSECTION LEVEL OF SERVICE CRITERIA		
Level of Service (LOS)	Total Delay Per Vehicle (seconds)	
	Signalized	Unsignalized
A	≤ 10	≤ 10
B	> 10 and ≤ 20	> 10 and ≤ 15
C	> 20 and ≤ 35	> 15 and ≤ 25
D	> 35 and ≤ 55	> 25 and ≤ 35
E	> 55 and ≤ 80	> 35 and ≤ 50
F	> 80	> 50

Source: Highway Capacity Manual 2010, Transportation Research Board.

Intersection Operations

Table 2 summarizes the existing peak hour operating conditions at the study area intersections. At unsignalized intersections, the average intersection level of service is utilized to determine conformity with the LOS goals. Individual movements may operate at worse levels of service.

During the a.m. peak hour, all of the three existing intersections meet the LOS D goal. During the p.m. peak hour, intersections 4 and 5 currently operate at worse than the LOS D goal.

TABLE 2 EXISTING INTERSECTION OPERATING CONDITIONS				
Intersection	A.M. Peak Hour		P.M. Peak Hour	
	Delay (Seconds)	LOS	Delay (Seconds)	LOS
4. Lewis Stein Road / Jocelyn Way and Sheldon Road (signalized)	38.5	D	146.0	F
5. West Stockton Boulevard / SR 99 Southbound Ramps and Sheldon Road (signalized)	32.5	C	60.7	E
6. SR 99 Northbound Ramps and Sheldon Road (signalized)	16.2	B	9.2	A

Source: DKS Associates, 2015.

INTRODUCTION TO ANALYSIS

PROJECT LAND USE AND CIRCULATION

Land Use

Project

The project is a residential apartment development of 324 units.

Access

The project site plan is illustrated in Figure 2.

Driveway 1 provides right-in / right-out access to Sheldon Road. Left turn movements can be accommodated by eastbound U-turns at West Stockton Boulevard, and by westbound U-turns at Jocelyn Way / Lewis Stein Road.

Driveway 2 connects to an extension of Masters Street into the site. This extension provides access to Melville Drive and the existing Masters Street. Masters Street will not be extended to the east at this time.

Driveway 3 provides full access to West Stockton Boulevard.

Each entry to the project is proposed to be gated.

Pedestrian access would be provided at the three access points. Pedestrian access may also be provided to Praline Way via a gate.

Trip Generation

Trip generation of the project was calculated from data in ITE *Trip Generation, Ninth Edition*. No adjustments were made for non-automotive mode access. The estimates are presented in Table 3.

Trip Distribution

The distribution of trips associated with the proposed school was derived from the regional SACSIM travel model, observations of travel patterns near the site, and knowledge of the proposed access locations associated with the site. Trip distribution varies by time of day and direction of travel. Figures 6 and 7 illustrate the project trip distribution.

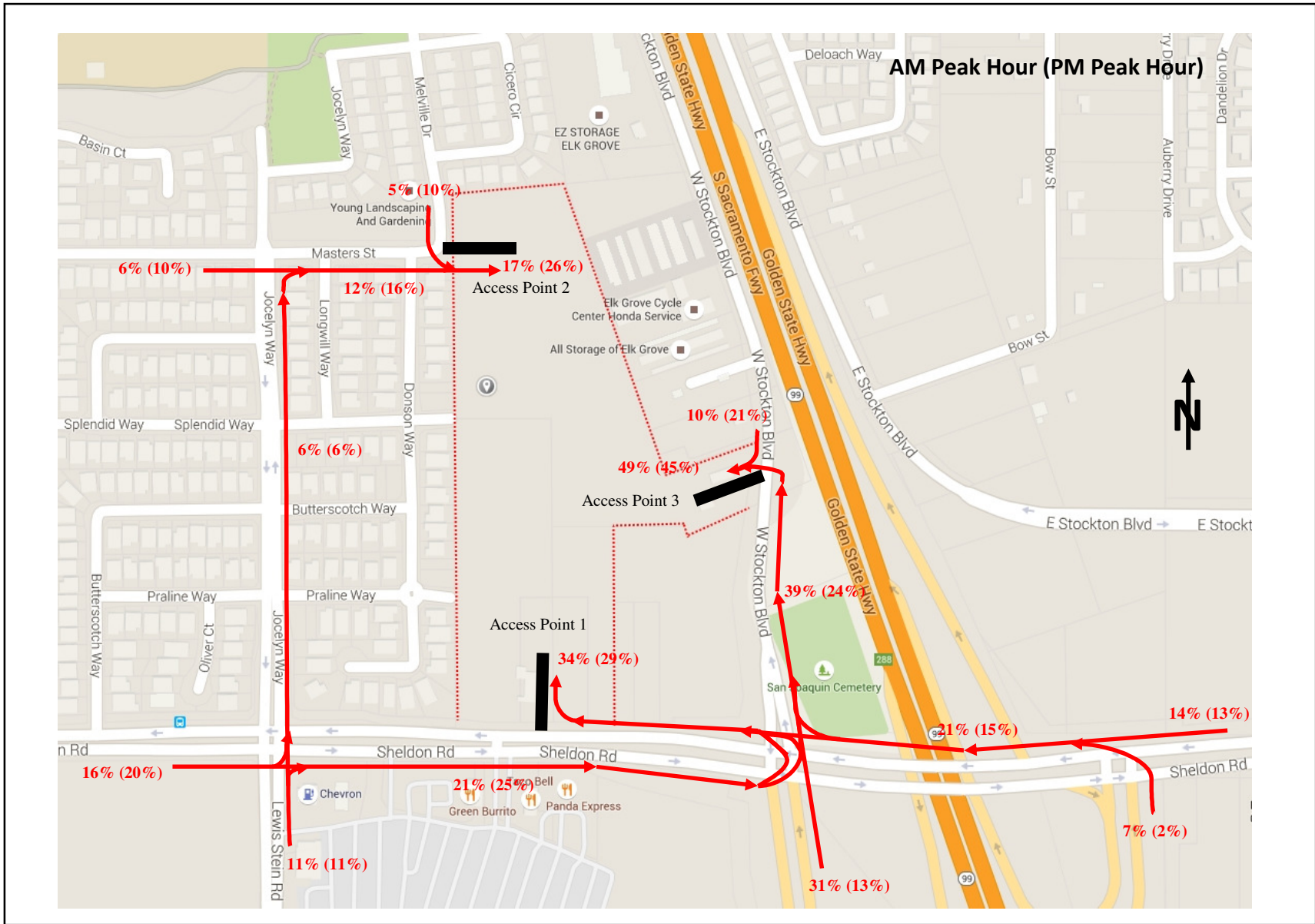


Figure 6
Existing Plus Project Entering Trip Distribution

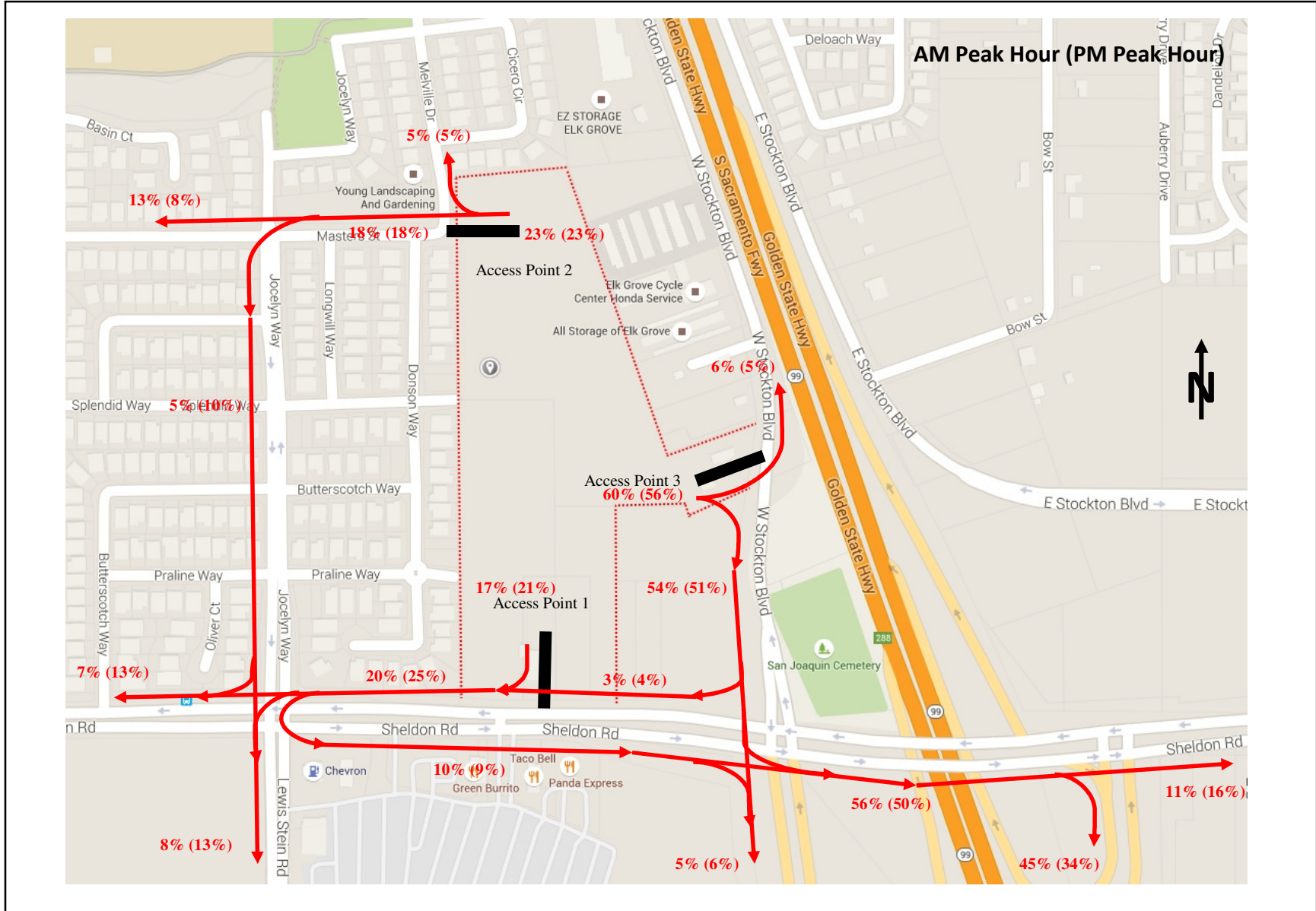


Figure 7
Existing Plus Project Exiting Trip Distribution

**TABLE 3
8151 SHELDON ROAD APARTMENTS
ESTIMATED VEHICULAR TRIP GENERATION**

Land Use	Daily	A.M. Peak Hour			P.M. Peak Hour		
		Entering	Exiting	Total	Entering	Exiting	Total
Vehicle Trips							
ITE Land Use Code 220 (Apartments), 324 dwelling units	2,087	32	130	162	127	69	196
Source: DKS Associates, 2015, and ITE <i>Trip Generation, Ninth Edition</i> , 2012.							

IMPACTS AND MITIGATION

METHOD OF ANALYSIS

Traffic impacts of the project are determined by adding the project traffic to existing traffic volumes. In this manner, the traffic and impacts associated with the project can be directly compared to known and measured conditions. Impacts are determined by comparing traffic operating conditions associated with the project to traffic operating conditions without the project.

THRESHOLDS OF SIGNIFICANCE

In accordance with CEQA, the effects of a project are evaluated to determine if they will result in a significant adverse impact on the environment. For purposes of this analysis, an impact is considered significant if implementation of the project would have the effects described below.

The standards of significance in this analysis are based upon current practice of the City of Sacramento. Standards defined in the City's *Traffic Impact Analysis Guidelines* (City of Sacramento, February, 1996) have been used, updated with the adopted LOS policies of the 2035 General Plan.

Intersections

A significant traffic impact occurs when:

- the traffic generated by a project degrades peak period LOS from an acceptable condition (LOS D) to an unacceptable condition (LOS E or F); or,
- the LOS (without project) is unacceptable (LOS E or F), and project generated traffic increases the peak period average vehicle delay by five seconds or more.

The City of Elk Grove utilizes the same criteria for the determination of impacts.

Transit

Impacts to the transit system are considered significant if the proposed project would:

- Adversely affect public transit operations; or,
- Fail to adequately provide access to transit.

Bicycle Facilities

Impacts to bicycle facilities are considered significant if the proposed project would:

- Adversely affect existing or planned bicycle facilities; or,
- Fail to adequately provide for access by bicycle.

Pedestrian Circulation

Impacts to pedestrian circulation are considered significant if the proposed project would:

- Adversely affect existing or planned pedestrian facilities; or,
- Fail to adequately provide for access by pedestrians.

Construction-Related Traffic Impacts

The project would have a temporarily significant impact during construction if it would:

- Degrade an intersection or roadway to an unacceptable level of service;
- Cause inconveniences to motorists due to prolonged road closures; or,
- Result in increased frequency of potential conflicts between vehicles, pedestrians, and bicyclists.

Traffic Volumes

Existing Plus Project

Figure 8 illustrates a.m. peak commuter hour and p.m. peak school hour traffic volumes associated with the existing plus project scenario.

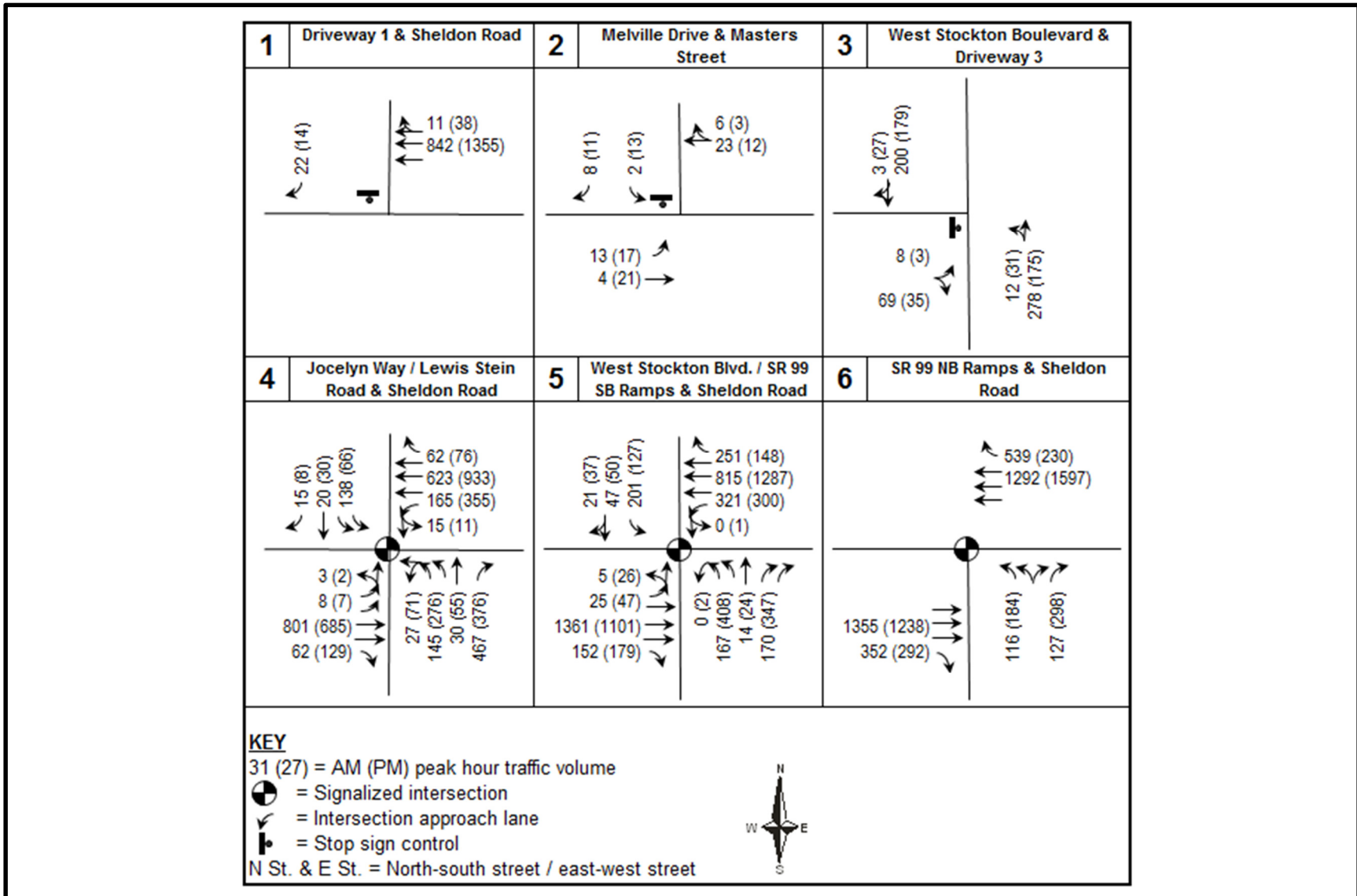


Figure 8
Existing Plus Project Peak Hour Traffic Counts and Intersection Geometry

Intersection Geometry

Existing Plus Project

Figure 8 illustrates existing plus project intersection geometry (number of approach lanes and traffic control).

Existing plus Project Analysis

Intersection Operations

Table 4 summarizes peak hour intersection operations for existing plus project scenario.

PROJECT-SPECIFIC IMPACTS AND MITIGATION MEASURES (EXISTING PLUS PROJECT)

Impact 1 Intersections

Table 4 presents the intersection operating conditions associated with the existing plus project scenario. The project would increase traffic volumes at study area intersections.

During the a.m. peak hour, all intersections would operate at LOS D or better.

During the p.m. peak hour, intersections 1, 2, 3, and 6 would operate at LOS D or better.

During the p.m. peak hour, intersection 4 would operate at LOS F. However, this intersection is currently operating at LOS F during the p.m. peak hour, and the increase in average delay at the intersection would be less than 5 seconds.

During the p.m. peak hour, intersection 5 would operate at LOS E. However, this intersection is currently operating at LOS E during the p.m. peak hour, and the increase in average delay at the intersection would be less than 5 seconds.

The impacts of the project would be *less than significant*.

Mitigation Measure

None required.

Impact 2 Pedestrian and Bicycle Circulation Impacts

The project would not remove any existing or planned pedestrian facility. The project would not remove any existing bicycle facility or any facility that is planned in the City of Sacramento or City of Elk Grove. The project would add pedestrian and bicycle demands within the project site and to and from nearby land uses. Continuous sidewalks are provided along Sheldon Road and residential areas to the north and west. Continuous sidewalks are provided to the Jacinto Creek Park and Irene B. West Elementary School. Crosswalks are located at the signalized intersections

of Sheldon Road with Jocelyn Way / Lewis Stein Road and with West Stockton Boulevard. Bikeways are provided along both sides of Sheldon Road, Jocelyn Way, and the Jacinto Creek bikeway is located just north of the site. The impacts of the project would be *less than significant*.

TABLE 4 EXISTING PLUS PROJECT INTERSECTION OPERATING CONDITIONS								
Intersection	Existing				Existing Plus Project			
	A.M. Peak Hour		P.M. Peak Hour		A.M. Peak Hour		P.M. Peak Hour	
	Delay (Seconds)	LOS	Delay (Seconds)	LOS	Delay (Seconds)	LOS	Delay (Seconds)	LOS
1. Driveway 1 and Sheldon Road (unsignalized) (intersection average) - <i>Southbound Right Turn</i>	-	-	-	-	0.3	A	0.2	A
	-	-	-	-	12.7	B	16.4	C
2. Melville Drive and Masters Street (unsignalized) (intersection average) - <i>Southbound</i> - <i>Eastbound Left Turn</i>	-	-	-	-	3.2	A	4.3	A
	-	-	-	-	8.5	A	8.7	A
	-	-	-	-	7.3	A	7.3	A
3. Melville Drive and Masters Street (unsignalized) (intersection average) - <i>Northbound Left Turn</i> - <i>Eastbound</i>	-	-	-	-	1.5	A	1.4	A
	-	-	-	-	7.7	A	7.7	A
	-	-	-	-	10.1	B	9.6	A
4. Lewis Stein Road / Jocelyn Way and Sheldon Road (signalized)	38.5	D	146.0	F	44.5	D	150.9	F
5. West Stockton Boulevard / SR 99 Southbound Ramps and Sheldon Road (signalized)	32.5	C	60.7	E	41.2	D	65.3	E
6. SR 99 Northbound Ramps and Sheldon Road (signalized)	16.2	B	9.2	A	15.1	B	9.3	A
<i>Source: DKS Associates, 2015.</i>								

Mitigation Measure

None required.

Impact 3 **Transit Impacts**

The project would not adversely affect existing or planned transit operations. Transit access is provided *e-tran* along Sheldon Road adjacent to the site. The project would add transit demands, although such demand is expected to be relatively low, and can be readily accommodated by the transit system. The impacts of the project would be *less than significant*.

Mitigation Measure

None required.

Impact 4 **Construction Impacts**

Construction may potentially include disruptions to the transportation network near the site, including the possibility of temporary lane closures, street closures, sidewalk closures, and bikeway closures. Pedestrian, bicycle, and transit access may be disrupted. Heavy vehicles will access the site and may need to be staged for construction. These activities could result in degraded roadway operating conditions

As required by City Code (City Code 12.20.030), the project is required to prepare a construction traffic and parking management plan prior to beginning of construction, to the satisfaction of the City Traffic Engineer and subject to review by all affected agencies. The plan shall ensure that acceptable operating conditions on local roadways and freeway facilities are maintained. At a minimum, the plan shall include:

- The number of truck trips, time, and day of street closures.
- Time of day of arrival and departure of trucks.
- Limitations on the size and type of trucks, provision of a staging area with a limitation on the number of trucks that can be waiting.
- Provision of a truck circulation pattern
- Provision of driveway access plan so that save vehicular, pedestrian, and bicycle movements are maintained (e.g., steel plates, minimum distances of open trenches, and private vehicle pick up and drop off areas).
- Maintain safe and efficient access routes for emergency vehicles.
- Manual traffic control when necessary.
- Proper advance warning and posted signage concerning street closures.
- Provisions for pedestrian safety.

A copy of the construction traffic management plan shall be submitted to local emergency response agencies and these agencies shall be notified at least 14 days before the commencement of construction that would partially or fully obstruct roadways. With the implementation of the traffic control plan, the impact of the project would be less than significant.

Mitigation Measure

None required.

SITE CIRCULATION AND ACCESS RECOMMENDATIONS

Figure 2 illustrates the site circulation plan.

GATED ACCESS

Gated access is proposed at all three entrances. The City requires a turn-around area in advance of the entry gate, which allows vehicles to safely and efficiently return to the City street system if entry is denied or not possible. This design will allow adequate space to prevent queuing onto the City street system / sidewalks during normal operations. A minimum throat depth of 50 feet from the gate to the nearest sidewalk / roadway will provide adequate space for the storage of two queued entering and two queued exiting vehicles.

DRIVEWAY 1

Right-in / right-out access is proposed to Sheldon Road. Exit delay with stop-sign control will be reasonable in the peak hours, at LOS B or C. Minimal exit queuing is expected.

The location of the driveway in relationship to the existing median left-turn lane could not be precisely determined due to the conceptual nature of the site plans. It is recommended that the Driveway 1 exit lane be located west of the gore point of the median left turn lane to prevent vehicles exiting the proposed apartment project continuing into the left turn lane to the commercial retail center across Sheldon Road.

Based on the intersection operating conditions, and consistent with other driveways in the site vicinity, acceleration and deceleration lanes are not required.

DRIVEWAY 2

Driveway 2 would include extension of Masters Street. It is recommended that the intersection of Masters Street and Melville Drive be controlled by a stop sign on the southbound Melville Drive approach. Delays and queuing will be very low due to the relatively low volumes anticipated at this location.

DRIVEWAY 3

Full access is proposed to West Stockton Boulevard. Little vehicular delay is anticipated. Entering left turn traffic will operate at LOS A, with an average queue of less than one vehicle. Exiting traffic will operate at LOS B or better. There will be adequate gaps in the traffic stream to permit left turn exiting vehicles to enter the traffic stream with minimal delay.

These calculations were made assuming no northbound left turn lane or two-way-left-turn-lane on West Stockton Boulevard. In accordance with the City Design and Procedures Manual, a left turn lane or two-way-left-turn-lane is not required, as West Stockton Boulevard is not designated as a Major Collector or Arterial in the 2035 General Plan (refer to Figure M4).

Future traffic volumes on West Stockton Boulevard were also reviewed to ascertain their potential effect on driveway operations. Year 2025 peak hour traffic volumes at the intersection of West Stockton Boulevard and Sheldon Road were obtained from the Sheldon Road Interchange engineering and environmental studies. With these future volumes, queuing on the southbound approach to Sheldon Road is not expected to extend to Driveway 3. The future extension of Masters Street to West Stockton Boulevard is not expected to substantially change traffic volumes or traffic patterns on West Stockton Boulevard.

MEMORANDUM

TO: Aelita Milatzo
 FROM: Vic Maslanka
 DATE: 11 March 2016
 SUBJECT: 8151 Sheldon Road Apartments – Information for Response to Caltrans Comments P 15221-000

This memorandum provides technical information in response to the Caltrans comment letter dated February 25, 2016.

Queuing at Freeway Exit Ramps

Table 1 summarizes queuing at the SR 99 Freeway exit ramp intersections. None of the queues are projected to exceed the available storage capacity. Synchro output is attached to this memorandum.

TABLE 1 EXISTING PLUS PROJECT PEAK HOUR FREEWAY RAMP TERMINI QUEUING				
Direction	Location	Available Storage Length (feet / lane)	Maximum Queue Length (feet / lane)	
			A.M. Peak Hour	P.M. Peak Hour
Northbound SR 99 Exit to Sheldon Road	Single Left Turn Lane	590	56	87
	Shared Left / Right Lane	590	41	73
	Single Right Turn Lane	590	37	69
Southbound SR 99 Exit to Sheldon Road	Double Left Turn Lane	310	59	160
	Single Through Lane	310	17	21
	Double Right Turn Lane	310	22	28

Source: DKS Associates, 2016.

Vehicle Miles of Travel (VMT)

Table 2 presents project vehicle miles of travel (VMT) for the a.m. peak hour, p.m. peak hour, and daily (weekday) time periods. The calculations are based upon the ITE vehicular trip generation from the transportation study, and average trip length statistics from SACOG's regional SACMET travel model (for the project traffic analysis zone). This is in accordance with the Caltrans request for VMT calculation based upon "O-D matrixes and trip generation".

It should be cautioned that these numbers should not be directly compared to average numbers calculated by the regional SACSIM travel model, as the SACSIM values are based upon a different methodology (tour-based rather than O-D matrix based) and different vehicular trip generation estimates.

Time Period	Vehicle Trips	Average Trip Length (miles)	Vehicle Miles of Travel
AM Peak Hour	162	8.78	1,422
PM Peak Hour	196	7.04	1,380
Daily	2,087	7.28	15,193

Source: DKS Associates, 2016.

Queues

5: SR 99 Southbound Rampws/West Stockton Boulevard & Sheldon Road

3/2/2016



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	30	1361	152	321	812	247	167	14	170	201	68
v/c Ratio	0.22	0.97	0.28	0.87	0.52	0.38	0.45	0.03	0.21	0.93	0.14
Control Delay	32.4	42.3	5.2	52.4	31.6	14.3	31.5	18.9	4.5	77.5	14.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	32.4	42.3	5.2	52.4	31.6	14.3	31.5	18.9	4.5	77.5	14.8
Queue Length 50th (ft)	11	193	0	70	115	9	32	4	0	80	14
Queue Length 95th (ft)	34	#288	37	#135	153	87	59	17	22	#194	41
Internal Link Dist (ft)		670			920			920			720
Turn Bay Length (ft)	285		410	680		155	315		315	230	
Base Capacity (vph)	136	1408	548	369	1564	658	369	458	814	217	480
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.22	0.97	0.28	0.87	0.52	0.38	0.45	0.03	0.21	0.93	0.14

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Queues

6: SR 99 Northbound Ramps & Sheldon Road

3/2/2016



Lane Group	EBT	EBR	WBT	WBR	NBL	NBT	NBR
Lane Group Flow (vph)	1355	352	1292	539	85	81	77
v/c Ratio	0.47	0.33	0.45	0.48	0.16	0.16	0.16
Control Delay	15.4	7.1	8.7	2.3	17.5	10.2	9.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	15.4	7.1	8.7	2.3	17.5	10.2	9.8
Queue Length 50th (ft)	139	35	97	0	25	10	9
Queue Length 95th (ft)	m153	m46	126	35	56	41	37
Internal Link Dist (ft)	920		920			920	
Turn Bay Length (ft)		645		485			595
Base Capacity (vph)	2894	1052	2894	1133	517	494	493
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.47	0.33	0.45	0.48	0.16	0.16	0.16

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Queues

5: SR 99 Southbound Rampws/West Stockton Boulevard & Sheldon Road

3/2/2016



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	73	1101	179	301	1287	148	410	24	347	127	87
v/c Ratio	0.62	0.81	0.32	1.05	0.89	0.26	1.02	0.05	0.35	0.62	0.18
Control Delay	53.0	26.7	5.2	92.0	41.8	14.7	82.1	16.8	3.6	40.5	12.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	53.0	26.7	5.2	92.0	41.8	14.7	82.1	16.8	3.6	40.5	12.2
Queue Length 50th (ft)	26	135	0	~65	194	16	~80	6	0	45	14
Queue Length 95th (ft)	#82	#184	39	#138	#258	m56	#160	21	28	#110	43
Internal Link Dist (ft)		670			920			920			720
Turn Bay Length (ft)	285		410	680		155	315		315	230	
Base Capacity (vph)	118	1356	553	286	1440	566	400	496	997	206	492
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.62	0.81	0.32	1.05	0.89	0.26	1.02	0.05	0.35	0.62	0.18

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

Queues

6: SR 99 Northbound Ramps & Sheldon Road

3/2/2016



Lane Group	EBT	EBR	WBT	WBR	NBL	NBT	NBR
Lane Group Flow (vph)	1238	292	1597	230	166	158	158
v/c Ratio	0.47	0.30	0.61	0.25	0.28	0.29	0.28
Control Delay	17.5	8.3	11.5	2.1	15.7	12.0	11.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	17.5	8.3	11.5	2.1	15.7	12.0	11.9
Queue Length 50th (ft)	126	17	136	0	44	30	29
Queue Length 95th (ft)	173	m62	177	27	87	73	69
Internal Link Dist (ft)	920		920			920	
Turn Bay Length (ft)		645		485			595
Base Capacity (vph)	2627	959	2627	929	588	539	555
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.47	0.30	0.61	0.25	0.28	0.29	0.28

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.



Appendix H

ERRATA AND RESPONSE TO COMMENTS



ERRATA AND RESPONSE TO COMMENTS

This Errata and Response to Comments document contains comments received during the public review period for the 8151 Sheldon Road Apartments (proposed project) Initial Study/Mitigated Negative Declaration (ISMND). The proposed project is located at the northwest corner of Sheldon Road with West Stockton Boulevard at the southern City of Sacramento boundary. The project site is located at 8151 Sheldon Road, and the parcels are identified as Assessor's Parcel Numbers (APN) 117-0220-023, -024, -038, -039, -040.

The proposed project includes the construction of a 324-unit apartment project on an approximately 19.7-acre site. The proposed apartment development would feature two-story, garden style Class A apartments with fully furnished 1-, 2-, and 3-bedroom units with resort style amenities. Additional proposed improvements include a clubhouse/leasing building, the extension of Masters Street through the project site, underground utilities, 551 on-site parking spaces, driveways, drive aisles, sidewalks and walkways, fencing, lighting, outdoor use areas, landscaping, and trash/recycling enclosures.

An ISMND was prepared for the proposed project pursuant to the California Environmental Quality Act (Public Resources Code Sections 21000 *et seq.*), CEQA Guidelines (Title 14, Section 15000 *et seq.* of the California Code of Regulations) and the Sacramento Local Environmental Regulations (Resolution 91-892) adopted by the City of Sacramento. The ISMND for the proposed project was prepared in January 2016. The City of Sacramento, as lead agency, released the ISMND for public review beginning on January 5, 2016 and ending on February 4, 2016 pursuant to California Environmental Quality Act (CEQA) Guidelines Section 15105. The ISMND and supporting documents were made available at the City of Sacramento Planning Department at 300 Richards Blvd, Third Floor, Sacramento, CA 95811 and online at the City of Sacramento website. According to CEQA Guidelines Sections 15073 and 15074, the lead agency must consider the comments received during consultation and review periods together with the ISMND. However, the CEQA Guidelines do not require the lead agency to send responses directly to commenters. Unlike within an Environmental Impact Report, comments received on an ISMND are not required to be attached to the ISMND, nor must the lead agency make specific written responses to public agencies. In addition, comments on an ISMND are typically responded to in the Staff Report prepared for project hearings. Nevertheless, the City of Sacramento as the lead agency has chosen to provide responses to all of the comments received during the public review process for the proposed project ISMND.

ERRATA

The Errata section identifies minor errors and omissions noted in the Public Review Draft ISMND. None of the noted errors or omissions, related to the Utilities discussion presented on Pages 6 and 56 of the Public Review Draft ISMND, requires recirculation of the document per Section 15073.5 of the California Environmental Quality Act Guidelines. As presented below, the revised ISMND text is identified as double underlined and deleted text is shown as ~~strike through~~. The removal of "1.1 acre" from the sentence below is also reflected on page 56 in the Hydrology and Water Quality discussion under Operation-Related Impacts.

Utilities

The project includes the installation of an underground storm drain system with inlets throughout the project site. Storm water from the project site would be collected by the project's storm drain system and directed to existing storm drains in Masters Street and Praline Way west of the project site. A ~~1.1-acre~~ detention basin would be installed in the northern portion of the project site, north of the Masters Street Extension through the project site, for water quality purposes. Overflows from the basin would enter the existing storm drain in Melville Drive west of the project site. Refer to Figure 4 in Appendix A for the grading and drainage plans.

The project site is served by the City of Sacramento, Department of Utilities District for water, and the Sacramento Area Sewer District (SASD) for sanitary sewer. The project's water supply network would tie-in to existing water lines in Masters Street, Splendid Way, and Praline Way. The project's sewer network would tie-in to an existing sewer line in Praline Way.

LIST OF COMMENTERS

The City of Sacramento received three comment letters on the ISMND for the proposed project during the public comment period. The comment letters were authored by the following State agency and local agencies:

Letter 1	Steven Hutchason, Wilton Rancheria
Letter 2	Stephanie Tadlock, Central Valley Regional Water Quality Control Board
Letter 3	Scott Morgan, Office of Planning and Research State Clearinghouse and Planning Unit

RESPONSE TO COMMENTS

The Response to Comments section includes responses to the comment letters submitted regarding the proposed project. Each comment letter received has been numbered at the top and bracketed to indicate how the letter has been divided into individual comments. Each comment is given a number with the letter number appearing first, followed by the comment number. For example, the first comment in Letter 1 would have the following format: 1-1. To the extent that any revisions to the ISMND text are required based on the comments received, new text is identified as double underlined and deleted text is shown as ~~strike through~~.

Letter 1

Wilton Rancheria



9728 Kent Street, Elk Grove, CA 95624

March 14, 2016

To: Helix Environmental Planning, Inc.
11 Natoma Street Suite 155
Folsom, CA 95630

RE: Sheldon Road Apartment Development

Dear: Carrie D. Wills,

Thank you for your letter dated February 9, 2016 regarding the proposed project. Wilton Rancheria ("Tribe") is a federally-recognized Tribe as listed in the Federal Register, Vol. 74, No. 132, p. 33468-33469, as "Wilton Rancheria of Wilton, California". The Tribe's Service Delivery Area ("SDA") as listed in the Federal Register, Vol. 78, No. 176, p. 55731, is Sacramento County. However, the Tribe's ancestral territory spans from Sacramento County to portions of the surrounding Counties. The Tribe is concerned about projects and undertakings that have potential to impact resources that are of cultural and environmental significance to the tribe.

After review of your letter we have determined the project lies within the Tribe's ancestral territory. We appreciate the opportunity to comment on this and any other projects within the Tribe's ancestral territory that may be in your jurisdiction.

The Environmental Resources Department (ERD) has identified resources that are of significance to the Tribe within your project area and in close proximity. The Tribe requests consultation on the following topics checked below, which shall be included in consultation subject to;

- Public Resources Code section 21080.3.2, subd. (a)
- Senate Bill 18,
- Section 106 of the National Historic Preservation Act,
- American Indian Religious Freedom Act,
- Archaeological Resources Protection Act,
- Native American Graves Protection and Repatriation Act (NAGPRA), and
- Executive Order 13175- Consultation and Coordination with Indian Tribal Governments: Section 5 (b) To the extent practicable and permitted by law, no agency shall promulgate any regulation that has tribal implication, that imposes substantial direct compliance costs on Indian tribal governments, and that is not required by statute, unless: (1) funds

Ph: 916-683-6000 | Fax: 916-683-6015 | www.wiltonrancheria-nsn.gov

1-1

1-1
Cont'd

necessary to pay the direct costs incurred by the Indian tribal government or the tribe in complying with the regulation are provided by the federal government:

- Alternatives to the project
- Project funding
- Recommended mitigation measures
- Native American Inspector present during ground disturbance
- Significant effects of the project

The ERD also requests consultation on the following discretionary topics checked below:

- Type of environmental review necessary
- Significance of tribal cultural resources, including any regulations, policies or standards used by your agency to determine significance of tribal cultural resources
- Significance of the project's impacts on tribal cultural resources
- NAGRPRRA Plan of Action:

- (1) The written plan of action is an integral part of the consultation process mandated by 43 CFR 10.5 whenever there is activity affecting or likely to affect Native American cultural items on Federal or tribal lands. The plan of action must document compliance with ARPA, especially 43 CFR 7.7 – 7.9, regarding requirements for permits on Indian lands.

1-2

Project alternatives and/or appropriate measures for preservation or mitigation that we may recommend, including, but not limited to:

- (1) Avoidance and preservation of the resources in place, pursuant to Public Resources Code section 21084.3, including, but not limited to, planning and construction to avoid the resources and protect the cultural and natural context, or planning greenspace, parks or other open space, to incorporate the resources with culturally appropriate protection and management criteria;
- (2) Treating the resources with culturally appropriate dignity taking into account the tribal cultural values and meaning of the resources, including but not limited to the following:
 - a. Protecting the cultural character and integrity of the resource;
 - b. Protection the traditional use of the resource; and
 - c. Protecting the confidentiality of the resource.
- (3) Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places.
- (4) Protecting the resource.

1-3

Additionally, the Tribe would like to receive any cultural resources assessments or other assessments that have been completed on all or part of the project's area of potential effect (APE), and area surrounding the APE including, but not limited to:

1. The results of any record search that may have been conducted at an Information Center of the California Historical Resources Information System (CHRIS), including, but not limited to:

1-3
Cont'd

- A listing of any and all known cultural resources have already been recorded on or adjacent to the APE;
 - Copies of any and all cultural resource records and study reports that may have been provided by the Information Center as part of the records search response;
 - If the probability is low, moderate, or high that cultural resources are located in the APE or surrounding the APE.
 - Whether the records search indicates a low, moderate or high probability that unrecorded cultural resources are located in the potential APE or surrounding the APE; and
 - If a survey is recommended by the Information Center to determine whether previously unrecorded cultural resources are present.
 - ✦ The Tribe would like to be present at any survey conducted on the Applicants behalf.
2. The results of any archaeological inventory survey that was conducted, including:
- Any reports that may contain site forms, site significance, and suggested mitigation measures.
 - Any reports or inventories found under the Native American Graves Protection and Repatriation Act.
 - ✦ All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum, and not be made available for public disclosure in accordance with Government Code Section 6254.10. All Wilton Rancheria correspondences shall be kept under this confidential section and only shared between the Tribe and lead agency.
3. The results of any Sacred Lands File (SFL) check conducted through Native American Heritage Commission. The request form can be found at http://www.nahc.ca.gov/slf_request.html. USGS 7.5-minute quadrangle name, township, range, and section required for the search.
4. Any ethnographic studies conducted for any area including all or part of the potential APE or areas surrounding the APE; and
5. Any geotechnical reports regarding all or part of the potential APE or areas surrounding the APE.
- The Tribe shall be notified before any geotechnical testing is planned. Geotechnical testing has potential to impact Tribal Cultural Resources and should be part of this consultation.

1-4

The information gathered will provide us with a better understanding of the project and will allow the Tribe to compare your records with our database. The below requested review fees are based on services provided by tribal staff time and general administrative expenses. The Tribe's fiscal year 2016 fee schedule is listed below:

- ❖ Requested document review fee \$450.00
- ❖ Onsite field investigation requested fee \$500.00
- ❖ Tribal Inspector rates are based on a different fee schedule
 - All payments shall be made out to Wilton Rancheria at the address above.

Thank you again for taking these matters into consideration, please contact me at (916) 683-6000 extension 2006 or via email at shutchason@wiltonrancheria-nsn.gov to set up a meeting to discuss the concerns of the Tribe on this project.

Sincerely,

Steven Hutchason
Executive Director
Environmental Resources Department

LETTER 1: STEVEN HUTCHASON, WILTON RANCHERIA

Response to Comment 1-1:

Pursuant to Public Resources Code (PRC) section 21080.3.1, on February 9, 2016 the City of Sacramento notified Steven Hutchason and Wilton Rancheria of the proposed project.

Under PRC section 21080.3.1 the California Native American tribe has 30 days to request consultation from the date of notice receipt. If the lead agency does not receive a request for consultation from the California Native American tribe, the City's obligations have been met per AB 52. After the representative for the Applicant initiated informal consultation with the tribes, the City of Sacramento received a letter from Wilton Rancheria.

The tribe identified that the project is within ancestral territory. They requested consultation on:

- Alternatives to the project,
- Project funding,
- Recommended mitigation measures, and
- Significant effects of the project.

The City provided the ISMND and the associated technical studies to the tribes at the beginning of the public review period. No response was received from Wilton Rancheria. The City has chosen to include this letter to address the concerns of Wilton Rancheria.

Response to Comment 1-2:

Wilton Rancheria also requested consultation on the following discretionary topics that were included in the ISMND for the proposed project.

The City provided the ISMND and the associated technical studies to the tribes at the beginning of the public review period. No response was received from Wilton Rancheria. The City has chosen to include this letter to address the concerns of Wilton Rancheria.

Response to Comment 1-3:

Wilton Rancheria also requested information regarding cultural resources assessment or other assessments that have been completed on all or part of the project's area of potential effect (APE), and area surrounding the APE.

The City provided the ISMND and the associated technical studies to the tribes at the beginning of the public review period. No response was received from Wilton Rancheria. The City has chosen to include this letter to address the concerns of Wilton Rancheria.

Response to Comment 1-4:

Wilton Rancheria provided their schedule of fees to the City. While the City appreciates the forefront nature of the information, the tribe did not request to monitor ground-disturbing activities,

and the City is not requiring tribal monitoring. No other consultation is anticipated to occur and no fees will be warranted.



EDMUND G. BROWN JR.
GOVERNOR

MATTHEW RODRIGUEZ
SECRETARY FOR
ENVIRONMENTAL PROTECTION

Central Valley Regional Water Quality Control Board

10 May 2016

Dana Mahaffey
City of Sacramento
300 Richards Boulevard, 3rd Floor
Sacramento, CA 95811

CERTIFIED MAIL
91 7199 9991 7035 8360 7955

**COMMENTS TO REQUEST FOR REVIEW FOR THE MITIGATED NEGATIVE
DECLARATION, 8151 SHELDON ROAD APARTMENTS (PN 16-007) PROJECT,
SCH# 2016042046, SACRAMENTO COUNTY**

Pursuant to the State Clearinghouse's 18 April 2016 request, the Central Valley Regional Water Quality Control Board (Central Valley Water Board) has reviewed the *Request for Review for the Mitigated Negative Declaration* for the 8151 Sheldon Road Apartments (PN 16-007) Project, located in Sacramento County.

Our agency is delegated with the responsibility of protecting the quality of surface and groundwaters of the state; therefore our comments will address concerns surrounding those issues.

I. Regulatory Setting

Basin Plan

The Central Valley Water Board is required to formulate and adopt Basin Plans for all areas within the Central Valley region under Section 13240 of the Porter-Cologne Water Quality Control Act. Each Basin Plan must contain water quality objectives to ensure the reasonable protection of beneficial uses, as well as a program of implementation for achieving water quality objectives with the Basin Plans. Federal regulations require each state to adopt water quality standards to protect the public health or welfare, enhance the quality of water and serve the purposes of the Clean Water Act. In California, the beneficial uses, water quality objectives, and the Antidegradation Policy are the State's water quality standards. Water quality standards are also contained in the National Toxics Rule, 40 CFR Section 131.36, and the California Toxics Rule, 40 CFR Section 131.38.

The Basin Plan is subject to modification as necessary, considering applicable laws, policies, technologies, water quality conditions and priorities. The original Basin Plans were adopted in 1975, and have been updated and revised periodically as required, using Basin Plan amendments. Once the Central Valley Water Board has adopted a Basin Plan amendment in noticed public hearings, it must be approved by the State Water Resources Control Board (State Water Board), Office of Administrative Law (OAL) and in some cases,

KARL E. LONGLEY ScD, P.E., CHAIR | PAMELA C. CREEDON P.E., BCEE, EXECUTIVE OFFICER

11020 Sun Center Drive #200, Rancho Cordova, CA 95670 | www.waterboards.ca.gov/centralvalley



2-1

8151 Sheldon Road Apartments (PN 16-007) - 2 -
Sacramento County

10 May 2016

2-1
Cont'd

the United States Environmental Protection Agency (USEPA). Basin Plan amendments only become effective after they have been approved by the OAL and in some cases, the USEPA. Every three (3) years, a review of the Basin Plan is completed that assesses the appropriateness of existing standards and evaluates and prioritizes Basin Planning issues.

For more information on the *Water Quality Control Plan for the Sacramento and San Joaquin River Basins*, please visit our website:
http://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/.

Antidegradation Considerations

All wastewater discharges must comply with the Antidegradation Policy (State Water Board Resolution 68-16) and the Antidegradation Implementation Policy contained in the Basin Plan. The Antidegradation Policy is available on page IV-15.01 at:

http://www.waterboards.ca.gov/centralvalleywater_issues/basin_plans/sacsjr.pdf

In part it states:

Any discharge of waste to high quality waters must apply best practicable treatment or control not only to prevent a condition of pollution or nuisance from occurring, but also to maintain the highest water quality possible consistent with the maximum benefit to the people of the State.

This information must be presented as an analysis of the impacts and potential impacts of the discharge on water quality, as measured by background concentrations and applicable water quality objectives.

The antidegradation analysis is a mandatory element in the National Pollutant Discharge Elimination System and land discharge Waste Discharge Requirements (WDRs) permitting processes. The environmental review document should evaluate potential impacts to both surface and groundwater quality.

II. Permitting Requirements

Construction Storm Water General Permit

Dischargers whose project disturb one or more acres of soil or where projects disturb less than one acre but are part of a larger common plan of development that in total disturbs one or more acres, are required to obtain coverage under the General Permit for Storm Water Discharges Associated with Construction Activities (Construction General Permit), Construction General Permit Order No. 2009-009-DWQ. Construction activity subject to this permit includes clearing, grading, grubbing, 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

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Cont'd

(SWPPP).

For more information on the Construction General Permit, visit the State Water Resources Control Board website at:
http://www.waterboards.ca.gov/water_issues/programs/stormwater/constpermits.shtml.

Phase I and II Municipal Separate Storm Sewer System (MS4) Permits¹

The Phase I and II MS4 permits require the Permittees reduce pollutants and runoff flows from new development and redevelopment using Best Management Practices (BMPs) to the maximum extent practicable (MEP). MS4 Permittees have their own development standards, also known as Low Impact Development (LID)/post-construction standards that include a hydromodification component. The MS4 permits also require specific design concepts for LID/post-construction BMPs in the early stages of a project during the entitlement and CEQA process and the development plan review process.

2-4

For more information on which Phase I MS4 Permit this project applies to, visit the Central Valley Water Board website at:
http://www.waterboards.ca.gov/centralvalley/water_issues/storm_water/municipal_permits/.

For more information on the Caltrans Phase I MS4 Permit, visit the State Water Resources Control Board at:
http://www.waterboards.ca.gov/water_issues/programs/stormwater/caltrans.shtml.

For more information on the Phase II MS4 permit and who it applies to, visit the State Water Resources Control Board at:
http://www.waterboards.ca.gov/water_issues/programs/stormwater/phase_ii_municipal.shtml.

Industrial Storm Water General Permit

Storm water discharges associated with industrial sites must comply with the regulations contained in the Industrial Storm Water General Permit Order No. 2014-0057-DWQ.

2-5

For more information on the Industrial Storm Water General Permit, visit the Central Valley Water Board website at:
http://www.waterboards.ca.gov/centralvalley/water_issues/storm_water/industrial_general_permits/index.shtml.

Clean Water Act Section 404 Permit

If the project will involve the discharge of dredged or fill material in navigable waters or wetlands, a permit pursuant to Section 404 of the Clean Water Act may be needed from the

2-6

¹ Municipal Permits = The Phase I Municipal Separate Storm Water System (MS4) Permit covers medium sized Municipalities (serving between 100,000 and 250,000 people) and large sized municipalities (serving over 250,000 people). The Phase II MS4 provides coverage for small municipalities, including non-traditional Small MS4s, which include military bases, public campuses, prisons and hospitals.

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United States Army Corps of Engineers (USACOE). If a Section 404 permit is required by the USACOE, the Central Valley Water Board will review the permit application to ensure that discharge will not violate water quality standards. If the project requires surface water drainage realignment, the applicant is advised to contact the Department of Fish and Game for information on Streambed Alteration Permit requirements.

If you have any questions regarding the Clean Water Act Section 404 permits, please contact the Regulatory Division of the Sacramento District of USACOE at (916) 557-5250.

2-7

Clean Water Act Section 401 Permit – Water Quality Certification

If an USACOE permit (e.g., Non-Reporting Nationwide Permit, Nationwide Permit, Letter of Permission, Individual Permit, Regional General Permit, Programmatic General Permit), or any other federal permit (e.g., Section 10 of the Rivers and Harbors Act or Section 9 from the United States Coast Guard), is required for this project due to the disturbance of waters of the United States (such as streams and wetlands), then a Water Quality Certification must be obtained from the Central Valley Water Board prior to initiation of project activities. There are no waivers for 401 Water Quality Certifications.

2-8

Waste Discharge Requirements – Discharges to Waters of the State

If USACOE determines that only non-jurisdictional waters of the State (i.e., "non-federal" waters of the State) are present in the proposed project area, the proposed project may require a Waste Discharge Requirement (WDR) permit to be issued by Central Valley Water Board. Under the California Porter-Cologne Water Quality Control Act, discharges to all waters of the State, including all wetlands and other waters of the State including, but not limited to, isolated wetlands, are subject to State regulation.

For more information on the Water Quality Certification and WDR processes, visit the Central Valley Water Board website at:
http://www.waterboards.ca.gov/centralvalley/help/business_help/permit2.shtml.

2-9

Dewatering Permit

If the proposed project includes construction or groundwater dewatering to be discharged to land, the proponent may apply for coverage under State Water Board General Water Quality Order (Low Risk General Order) 2003-0003 or the Central Valley Water Board's Waiver of Report of Waste Discharge and Waste Discharge Requirements (Low Risk Waiver) R5-2013-0145. Small temporary construction dewatering projects are projects that discharge groundwater to land from excavation activities or dewatering of underground utility vaults. Dischargers seeking coverage under the General Order or Waiver must file a Notice of Intent with the Central Valley Water Board prior to beginning discharge.

For more information regarding the Low Risk General Order and the application process, visit the Central Valley Water Board website at:

http://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2003/wqo/wqo2003-0003.pdf

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For more information regarding the Low Risk Waiver and the application process, visit the Central Valley Water Board website at:

http://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/waivers/r5-2013-0145_res.pdf

Regulatory Compliance for Commercially Irrigated Agriculture

If the property will be used for commercial irrigated agricultural, the discharger will be required to obtain regulatory coverage under the Irrigated Lands Regulatory Program. There are two options to comply:

1. **Obtain Coverage Under a Coalition Group.** Join the local Coalition Group that supports land owners with the implementation of the Irrigated Lands Regulatory Program. The Coalition Group conducts water quality monitoring and reporting to the Central Valley Water Board on behalf of its growers. The Coalition Groups charge an annual membership fee, which varies by Coalition Group. To find the Coalition Group in your area, visit the Central Valley Water Board's website at: http://www.waterboards.ca.gov/centralvalley/water_issues/irrigated_lands/for_growers/apply_coalition_group/index.shtml or contact water board staff at (916) 464-4611 or via email at IrrLands@waterboards.ca.gov.
2. **Obtain Coverage Under the General Waste Discharge Requirements for Individual Growers, General Order R5-2013-0100.** Dischargers not participating in a third-party group (Coalition) are regulated individually. Depending on the specific site conditions, growers may be required to monitor runoff from their property, install monitoring wells, and submit a notice of intent, farm plan, and other action plans regarding their actions to comply with their General Order. Yearly costs would include State administrative fees (for example, annual fees for farm sizes from 10-100 acres are currently \$1,084 + \$6.70/Acre); the cost to prepare annual monitoring reports; and water quality monitoring costs. To enroll as an Individual Discharger under the Irrigated Lands Regulatory Program, call the Central Valley Water Board phone line at (916) 464-4611 or e-mail board staff at IrrLands@waterboards.ca.gov.

2-10

Low or Limited Threat General NPDES Permit

If the proposed project includes construction dewatering and it is necessary to discharge the groundwater to waters of the United States, the proposed project will require coverage under a National Pollutant Discharge Elimination System (NPDES) permit. Dewatering discharges are typically considered a low or limited threat to water quality and may be covered under the General Order for *Dewatering and Other Low Threat Discharges to Surface Waters* (Low Threat General Order) or the General Order for *Limited Threat Discharges of Treated/Untreated Groundwater from Cleanup Sites, Wastewater from Superchlorination Projects, and Other Limited Threat Wastewaters to Surface Water*

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(Limited Threat General Order). A complete application must be submitted to the Central Valley Water Board to obtain coverage under these General NPDES permits.

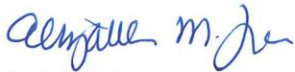
For more information regarding the Low Threat General Order and the application process, visit the Central Valley Water Board website at:

http://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/general_orders/r5-2013-0074.pdf

For more information regarding the Limited Threat General Order and the application process, visit the Central Valley Water Board website at:

http://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/general_orders/r5-2013-0073.pdf

If you have questions regarding these comments, please contact me at (916) 464-4644 or Stephanie.Tadlock@waterboards.ca.gov.



for Stephanie Tadlock
Environmental Scientist

cc: State Clearinghouse unit, Governor's Office of Planning and Research, Sacramento

LETTER 2: STEPHANIE TADLOCK, CENTRAL VALLEY WATER QUALITY CONTROL BOARD

Response to Comment 2-1

The comment provides background regarding the responsibilities of the Central Valley Regional Water Quality Control Board. The project site is located within the Water Quality Control Plan (Basin Plan) area for the Sacramento River and San Joaquin River Basins.

Response to Comment 2-2

This comment provides input on preventing degradation of high quality waters of the State. No wastewater discharge is anticipated to be released into high quality waters without treatment. Pollution prevention measures will be used at all times during construction and operation of the proposed project.

Response to Comment 2-3

This comment provides input regarding the necessary permits for construction, specifically for storm water discharge that may occur. The applicant will obtain this permit prior to any construction activities. The applicant and their chosen contractor will also be responsible for the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP).

Response to Comment 2-4

As described on page 54 of the IS/MND, within Section 6, Hydrology and Water Quality, the Stormwater Quality Improvement Plan (SQIP) outlines the priorities, key elements, strategies, and evaluation methods of the City's Stormwater Management program. The SQIP was prepared as part of the Sacramento County area-wide NPDES MS4 Permit. In addition, the Sacramento City Code Section 13.08.145 requires that when a property contributes drainage to the storm drain system or to the City Combined Sewer System (CSS), all stormwater and surface runoff drainage impacts resulting from the improvement or development must be fully mitigated to ensure that the improvement or development does not affect the function of the storm drain system or CSS. As discussed on page 56 of the IS/MND, conformance with City regulations and permit requirements along with implementation of BMPs would ensure that the proposed project would result in a less-than-significant impact related to stormwater absorption rates, discharges, flows, and water quality.

Response to Comment 2-5

The proposed project does not include industrial uses.

Response to Comment 2-6

As discussed on page 31 of the IS/MND, within Section 3, Biological Resources, there are only "intrastate isolated waters" within the project area, "with no apparent interstate or foreign commerce connection," which are not regulated by the U.S. Army Corps of Engineers. No waters of the U.S. are present. Therefore, the proposed project would not involve the discharge of dredged

or fill materials into any navigable waters or wetlands or any disturbance of waters of the U.S., and a Clean Water Act Section 404 Permit would not be required.

Response to Comment 2-7

As discussed above, there are no Waters of the U.S. within the project area.

Response to Comment 2-8

As discussed above, there are potential waters of the State within the project area. A Water Discharge Requirement permit is being drafted for submittal to the Central Valley Regional Water Quality Control Board.

Response to Comment 2-9

Dewatering is not anticipated to be required as a result of construction of the proposed project. However, should groundwater be encountered during construction and dewatering become necessary, the applicant would be required to file a Notice of Intent with the Central Valley Water Board to obtain a dewatering permit prior to beginning discharge of groundwater.

Response to Comment 2-10

The comment is noted; however, the proposed project does not include commercially irrigated agriculture.

Response to Comment 2-11

Dewatering is not anticipated to be required as a result of construction of the proposed project. However, should groundwater be encountered during construction and dewatering become necessary, the applicant would be required to seek the proper NPDES permit for dewatering activities.



EDMUND G. BROWN JR.
GOVERNOR

STATE OF CALIFORNIA
GOVERNOR'S OFFICE of PLANNING AND RESEARCH
STATE CLEARINGHOUSE AND PLANNING UNIT



KEN ALEX
DIRECTOR

May 18, 2016

Dana Mahaffey
City of Sacramento
300 Richards Blvd, 3rd Floor
Sacramento, CA 95811

Subject: 8151 Sheldon Road Apartments (PN 16-007)
SCH#: 2016042046

Dear Dana Mahaffey:

The State Clearinghouse submitted the above named Mitigated Negative Declaration to selected state agencies for review. On the enclosed Document Details Report please note that the Clearinghouse has listed the state agencies that reviewed your document. The review period closed on May 17, 2016, and the comments from the responding agency (ies) is (are) enclosed. If this comment package is not in order, please notify the State Clearinghouse immediately. Please refer to the project's ten-digit State Clearinghouse number in future correspondence so that we may respond promptly.

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

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

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

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

Sincerely,

Scott Morgan
Director, State Clearinghouse

Enclosures
cc: Resources Agency

1400 10th Street P.O. Box 3044 Sacramento, California 95812-3044
(916) 445-0613 FAX (916) 323-3018 www.opr.ca.gov

3-1

**Document Details Report
 State Clearinghouse Data Base**

SCH# 2016042046
Project Title 8151 Sheldon Road Apartments (PN 16-007)
Lead Agency Sacramento, City of

Type MND Mitigated Negative Declaration
Description The proposed project includes the construction of a 324 unit apartment project on an approximately 19.7-acre site. The proposed apartment development would feature two story, garden style Class A apartments with fully furnished 1-, 2-, and 3- bedroom units with resort style amenities. Additional proposed improvements include a clubhouse/leasing building, the extension of Masters Street through the project site, underground utilities, 551 on site parking spaces.

Lead Agency Contact

Name Dana Mahaffey
Agency City of Sacramento
Phone (916) 808-2762
email
Address 300 Richards Blvd, 3rd Floor
City Sacramento **State** CA **Zip** 95811
Fax

Project Location

County Sacramento
City Sacramento
Region
Lat / Long 38° 26' 25" N / 121° 24' 20" W
Cross Streets Sheldon Rd between Donson Way and W. Stockton Blvd
Parcel No. 117-0220-0234, -024, -038-040
Township 5E **Range** 23 **Section** 7N **Base** MtDiablo

Proximity to:

Highways 99
Airports
Railways UPRR
Waterways Laguna and Jacinto Creeks
Schools Cosumness River College
Land Use Vacant land/Multi family and General Commercial zoning; suburban center and suburban neighborhood (high)

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

Reviewing Agencies Resources Agency; Department of Fish and Wildlife, Region 2; Office of Historic Preservation; Department of Parks and Recreation; Department of Water Resources; California Highway Patrol; Caltrans, District 3 S; Department of Housing and Community Development; State Water Resources Control Board, Division of Water Rights; Regional Water Quality Control Bd., Region 5 (Sacramento); Native American Heritage Commission; Public Utilities Commission

Date Received 04/18/2016 **Start of Review** 04/18/2016 **End of Review** 05/17/2016

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

**LETTER 3: SCOTT MORGAN, OFFICE OF PLANNING AND RESEARCH STATE CLEARINGHOUSE
AND PLANNING UNIT**

Response to Comment 3-1

As described in this letter, the City has complied with State Clearinghouse review requirements, pursuant to the CEQA.