

RESOLUTION NO. 2014-139

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ELK GROVE
CERTIFYING THE ENVIRONMENTAL IMPACT REPORT FOR THE SILVERADO
VILLAGE PROJECT, EG-11-046; ASSESSORS PARCEL NUMBERS: 127-0010-002,
127-0010-017, 127-0010-040, 127-0010-104, 127-0010-105, & 127-0010-106**

WHEREAS, the Planning Department of the City of Elk Grove received an application on November 4, 2011 from Silverado Homes dba Vintara Holdings, LLC (the "Applicant") requesting establishment of a Special Planning Area, approval of a Tentative Subdivision Map, and establishment of a Development Agreement for the Silverado Village Project (the "Project"); and

WHEREAS, the proposed Project is located on real property in the incorporated portions of the City of Elk Grove more particularly described as APNs: 127-0010-002, 017, 040, 104, 105, & 106; and

WHEREAS, the California Environmental Quality Act (CEQA), requires local agencies to consider the potential environmental impacts of their decisions prior to taking action; and

WHEREAS, in compliance with Public Resources Code §21080.4, a Notice of Preparation (NOP) was prepared by the City of Elk Grove and was distributed to the State Clearinghouse, Office of Planning and Research, responsible agencies and other interested parties on January 25, 2013 with the comment period ending on February 26, 2013; and

WHEREAS, the City of Elk Grove distributed a Notice of Availability for the Project's Draft EIR on September 27, 2013, which started the 45-day public review period, ending on November 11, 2013; and

WHEREAS, the Draft EIR, provided herein as Exhibit A, was filed with the State Clearinghouse (SCH No. 2013012060) and was distributed to public agencies and other interested parties for public review and comment; and

WHEREAS, the City of Elk Grove prepared a Revised Final EIR (provided herein as Exhibit B), which consists of: (1) Draft EIR, (2) an errata to the Draft EIR, (3) comments received on the Draft EIR during the public review period, and (4) responses to comments received.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Elk Grove as follows:

1. Certification of the Revised Final EIR

A. The City Council hereby certifies that the Revised Final EIR has been completed in compliance with the requirements of the California Environmental Quality Act.

B. The City Council hereby certifies that the Final SEIR was presented to the City Council and that the City Council reviewed and considered the information contained in the Final SEIR prior to taking action on the Project.

C. The City Council hereby certifies that the Final SEIR reflects the independent judgment and analysis of the City Council.

2. Findings on Impacts

The City Council finds that the Revised Final EIR identifies potentially significant impacts that cannot be mitigated to a less than significant level and are thus considered significant and unavoidable. The City Council makes the findings with respect to these significant and unavoidable impacts as set forth in Exhibit C.

3. Findings on Alternatives

The City Council finds that the alternatives analyzed in the Revised Final EIR are rejected because the alternatives would not achieve the project objectives. The City Council makes the finding as set forth in Exhibit C, attached hereto and incorporated herein by reference.

4. Statement of Overriding Considerations


The City Council finds that there are no feasible mitigation measures or project alternatives that would mitigate or substantially lessen the impacts from the Project. Despite the occurrence of these significant effects, however, the City Council chooses to approve the project because, in its view, the environmental, social, and other benefits of the project will render the significant effects acceptable as described in Statement of Overriding Considerations as set forth in Exhibit C.

5. Adoption of the Mitigation Monitoring and Reporting Program

A. The City Council hereby finds that the proposed mitigation measures described in the EIR and Findings are feasible, and therefore will become binding upon the City and on future Applicants. The Mitigation Monitoring and Reporting Program is included as Exhibit D.

B. The City Council hereby adopts the Mitigation Monitoring and Reporting Program, as set forth in Exhibit D, attached hereto and incorporated herein by reference.

PASSED AND ADOPTED by the City Council of the City of Elk Grove this 25th day of June 2014.



GARY DAVIS, MAYOR of the
CITY OF ELK GROVE

ATTEST:



JASON LINDGREN, CITY CLERK

APPROVED AS TO FORM:



JONATHAN P. HOBBS,
CITY ATTORNEY

EXHIBIT A

**DRAFT
ENVIRONMENTAL IMPACT REPORT**

FOR

SILVERADO VILLAGE

SCH# 2013012060

SEPTEMBER 2013



Prepared for:

City of Elk Grove
Attn: Christopher Jordan
8401 Laguna Palms Way
Elk Grove, CA 95758

Prepared by:

De Novo Planning Group
4630 Brand Way
Sacramento, CA 95819
www.denovoplanning.com

D e N o v o P l a n n i n g G r o u p

A Land Use Planning, Design, and Environmental Firm

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INTRODUCTION

The City of Elk Grove (City) has determined that a project-level environmental impact report (EIR) is required for the proposed Silverado Village project (Project) pursuant to the requirements of the California Environmental Quality Act (CEQA).

This EIR is a Project EIR as defined in Section 15161 of the State CEQA Guidelines. A Project EIR is an EIR which examines the environmental impacts of a specific development project. This type of EIR should focus primarily on the changes in the environment that would result from the development project. The EIR shall examine all phases of the project including planning, construction and operation. The project EIR approach is appropriate for the Project because it allows comprehensive consideration of the reasonably anticipated scope of the Project, as described in greater detail in Section 2.0.

PROJECT DESCRIPTION

The following provides a brief summary and overview of the Project. The reader is referred to Section 2.0 for a more complete and thorough description of the components of the Project and for graphics illustrating the location of the Project site and components of the Project.

The Project proposes a 230-acre residential community located north of Bond Road and west of Waterman Road. The Project proposes 660 single family units, up to 125 independent/assisted living/memory care units, a community clubhouse, an 11.4-acre park and trail system, 93.7 acres of open space, including a 68.1-acre wetland preservation area and 14.7 acre detention basin, and supporting infrastructure. Figures 2-3 and 2-4 depict the key Project characteristics and Table 2-2 summarizes the proposed uses.

The Project site is designated by the General Plan Land Use Policy Map as Rural Residential, Low Density Residential, and Commercial/Office/Multi-Family. The Project site is zoned RD-2, RD-4, RD-5, RD- 5(F), and O.

The residential component of the Project would be developed in three villages. Villages 1 and 2 would include 393 single family residential uses. Village 3 would be a private senior community, with 267 single family patio homes, up to 125 units for independent, assisted, and/or memory-care in a multifamily lodge, and a Village clubhouse, atrium, and swimming pool. The lodge and clubhouse facilities would include retail, office, medical, and commercial uses to serve the community.

Primary access would be from Bond and Waterman Roads. There would also be a secondary point of access from Bond Road which would allow only right-turn-in and right-turn-out movements. The Project includes pedestrian and bicycle features to provide both internal connectivity as well as connections to adjacent bicycle and pedestrian facilities. Two emergency vehicle accesses would be provided. The Project's circulation system, including the internal street system, is described in Section 2.0.

Refer to Section 2.0, Project Description, for a more complete description of the details of the Project.

AREAS OF CONTROVERSY AND ISSUES TO BE RESOLVED

This Draft EIR addresses environmental impacts associated with the Project that are known to the City, were raised during the Notice of Preparation (NOP) process, or raised during preparation of the Draft EIR. The City received 16 written comment letters on the NOP for the proposed Silverado Village Draft EIR. A copy of each letter is provided in **Appendix A** of this Draft EIR. A public scoping meeting was held on February 8, 2013 to present the project description to the public and interested agencies, and to receive comments from the public and interested agencies regarding the scope of the environmental analysis to be included in the Draft EIR.

Aspects of the Project associated with environmental issues that could be of public concern include the following:

- Off-site flooding and drainage impacts, particularly to the Quail Ridge, Sheldon Estates, and Campbell Road neighborhoods and Laguna Creek. These issues are addressed in Section 3.8, Hydrology and Water Quality.
- Hydraulic impacts to Laguna Creek. This issue is addressed in Section 3.8, Hydrology and Water Quality.
- Stormwater quality. This issue is addressed in Section 3.5, Geology and Soils, and Section 3.8, Hydrology and Water Quality.
- Roadway capacity, including impacts to Bond Road and Waterman Road, and increased vehicle trips. This issue is addressed in Section 3.12, Transportation and Circulation.
- Potential for hazardous materials and contaminated soils to occur on the Project site. This issue is addressed in Section 3.7, Hazards and Hazardous Materials.
- Prior use of Project site for dumping. This issue is addressed in Section 3.7, Hazards and Hazardous Materials.
- Open space and sensitive habitat preservation. This issue is addressed in Section 3.3, Biological Resources.
- Aesthetic impacts to adjacent neighborhoods. This issue is addressed in Section 3.1, Aesthetics.
- Site lighting, with the recommendation that low sodium lights be made a condition of approval. This issue is addressed in Section 3.1, Aesthetics.
- Water supply. This issue is addressed in Section 3.13, Utilities.
- Groundwater quality. This issue is addressed in Section 3.8, Hydrology and Water Quality.

- Tree removal and location of trees that will be removed. This issue is addressed in Section 3.3, Biological Resources.
- Regional traffic impacts and effects on State highway facilities. This issue is addressed in Section 3.12, Transportation and Circulation.
- Overcrowding of schools and effects on Elk Grove Elementary School, including drop-off and pick-up areas. Potential impacts to schools were determined to be less than significant in the Initial Study (see Appendix A). A project's impacts on school facilities are fully mitigated by the payment of the requisite new school construction fees established pursuant to Government Code Section 65995.
- Public safety. This issue is addressed in Section 3.11, Public Services.
- Air quality. This issue is addressed in Section 3.2, Air Quality.
- Regional traffic impacts, including impacts to County roadways and Caltrans facilities (State Route 99, Interstate 5, and State Route 16). This issue is addressed in Section 3.12, Transportation and Circulation.
- Impacts to housing and surrounding housing developments. Potential impacts of the Project on surrounding housing developments are addressed in Sections 3.1, Aesthetics, 3.2, Air Quality, 3.8, Hydrology and Water Quality, 3.9, Land Use Planning, 3.10, Noise, and 3.12, Transportation and Circulation.

ALTERNATIVES TO THE PROPOSED PROJECT

Section 15126.6 of the CEQA Guidelines requires an EIR to describe a reasonable range of alternatives to the Project or to the location of the Project which would reduce or avoid significant impacts, and which could feasibly accomplish the basic objectives of the Project. The alternatives analyzed in this EIR include the following three alternatives in addition to the Project.

- Alternative 1: No Project (No Build) Alternative
- Alternative 2: Reduced Density and Reconfigured Project Alternative
- Alternative 3: Reconfigured Project Alternative

Analysis of an alternative location was considered, but dismissed as described in Section 5.0, Alternatives. Alternatives are described in detail in Section 5.0, Alternatives. Table ES-1 summarizes the comparative environmental effects of implementing each alternative.

ES EXECUTIVE SUMMARY

TABLE ES-1: COMPARISON OF ALTERNATIVE PROJECT IMPACTS TO THE PROPOSED PROJECT

ENVIRONMENTAL ISSUE	ALTERNATIVE 1 NO PROJECT	ALTERNATIVE 2 REVISED PROJECT	ALTERNATIVE 3 - RECONFIGURED PROJECT
AESTHETICS	Reduced in comparison to the Project	Reduced in comparison to the Project	Reduced in Comparison to the Project
AIR QUALITY	Reduced in comparison to the Project	Reduced in comparison to the Project	Comparable to the Proposed Project
BIOLOGICAL RESOURCES	Reduced in comparison to the Project	Reduced in comparison to the Project	Generally comparable to the Proposed Project, but reduced in association with impacts to trees of local importance
CULTURAL RESOURCES	Reduced in comparison to the Project	Reduced in comparison to the Project	Comparable to the Proposed Project
GEOLOGY AND SOILS	Reduced in comparison to the Project	Reduced in comparison to the Project	Comparable to the Proposed Project
GREENHOUSE GASES AND CLIMATE CHANGE	Reduced in comparison to the Project	Reduced in comparison to the Project	Comparable to the Proposed Project
HAZARDS AND HAZARDOUS MATERIALS	Reduced in comparison to the Project	Reduced in comparison to the Project	Comparable to the Proposed Project
HYDROLOGY AND WATER QUALITY	Reduced in comparison to the Project	Reduced in comparison to the Project	Comparable to the Proposed Project
NOISE	Reduced in comparison to the Project	Reduced in comparison to the Project	Comparable to the Proposed Project
TRANSPORTATION AND CIRCULATION	Reduced in comparison to the Project	Reduced in comparison to the Project	Comparable to the Proposed Project
Overall	Best in comparison to the Project in terms of overall environmental effects	Better than the Project terms of overall environmental effects	Better than, but most comparable to, the Project in terms of overall environmental effects

As shown in the table above, the Alternative 1 (No Project) is the environmentally superior alternative because it provides the greatest reduction of potential impacts in comparison to the Project. Since the environmentally superior alternative is the No Project Alternative, an environmentally superior alternative must be selected between the remaining alternatives consistent with the requirements of CEQA. Alternative 2 (Reduced Density and Reconfigured Project Alternative) is the environmentally superior alternative, when compared to the Project and Alternative 3.

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Summarized in Table ES-2 are the environmental impacts of the proposed Project, the impact level of significance prior to mitigation, the proposed mitigation measures and/or adopted policies and standard measures that are already in place to mitigate an impact, and the impact level of significance after mitigation.

TABLE ES-2: PROJECT IMPACTS AND PROPOSED MITIGATION MEASURES

ENVIRONMENTAL IMPACT	LEVEL OF SIGNIFICANCE WITHOUT MITIGATION	MITIGATION MEASURE	RESULTING LEVEL OF SIGNIFICANCE
AESTHETICS			
Impact 3.1-1: The Project would not substantially degrade the existing visual character or quality of the site and its surroundings.	LS	None required.	-
Impact 3.1-2: Project implementation may result in light and glare impacts.	PS	<p><i>Mitigation Measure 3.1-1 Outdoor lighting shall be designed so that light is not directed off the site and the light source is shielded downward from overhead viewing and from direct off-site viewing. Light spill and glare shall not exceed 0.1 foot-candle on adjacent properties. These requirements shall be shown on the master home plans for the single family units and the project improvement plans for the multifamily, clubhouse, and parks facilities.</i></p> <p><i>Mitigation Measure 3.1-2 Street light fixtures shall use low-pressure sodium lamps or other similar lighting fixture and shall be installed and shielded in such a manner that no light rays are emitted from the fixture at angles above the horizontal plane. High-intensity discharge lamps shall be prohibited. Offsite illumination shall not exceed two-foot candles. Street lighting plans shall be submitted with project improvement plans for City review and approval.</i></p>	LS
AIR QUALITY			
Impact 3.2-1: Project operations have the potential to cause a violation of an air quality standard or contribute substantially to an existing or projected air quality violation.	LS	None required.	-

CC – cumulatively considerable

LCC – less than cumulatively considerable

LS – less than significant

NI – No Impact

PS – potentially significant

S – significant

SU – significant and unavoidable

ENVIRONMENTAL IMPACT	LEVEL OF SIGNIFICANCE WITHOUT MITIGATION	MITIGATION MEASURE	RESULTING LEVEL OF SIGNIFICANCE
<p>Impact 3.2-2: Project construction has the potential to cause a violation of an air quality standard or contribute substantially to an existing or projected air quality violation.</p>	<p>PS</p>	<p>Mitigation Measure 3.2-1: To reduce construction-related emissions, the Project Applicant shall implement the following SMAQMD Basic Construction Emissions Control Measures:</p> <ul style="list-style-type: none"> • The following practices are required to control fugitive dust from a construction site. Control of fugitive dust is required by SMAQMD Rule 403 and enforced by SMAQMD staff. <ul style="list-style-type: none"> ○ 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, and 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 are required for exhaust emission control for 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. 	<p>LS</p>

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ENVIRONMENTAL IMPACT	LEVEL OF SIGNIFICANCE WITHOUT MITIGATION	MITIGATION MEASURE	RESULTING LEVEL OF SIGNIFICANCE
		<ul style="list-style-type: none"> ○ 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. • Inspect and maintain equipment to ensure work and fuel efficiencies. <ul style="list-style-type: none"> ○ 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. <p>Mitigation Measure 3.2-2: To reduce construction-related emissions, the Project Applicant shall implement the following SMAQMD Enhanced Emission Control Measures:</p> <ul style="list-style-type: none"> • The Project Applicant shall provide a plan for approval by the City of Elk Grove and SMAQMD demonstrating that the heavy-duty (50 horsepower [hp] or more) off-road vehicles to be used in the construction project, including owned, leased, and subcontractor vehicles, will achieve a project wide fleet-average 20% NOX reduction and 45% particulate reduction compared to the most recent California Air Resources Board (ARB) fleet average. Acceptable options for reducing emissions may include use of late model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, and/or other options as they become available. The SMAQMD’s Construction Mitigation Calculator can be used to identify an equipment fleet that achieves this reduction. • The Project Applicant shall submit to the City of Elk Grove and SMAQMD a comprehensive inventory of all off-road construction 	

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ENVIRONMENTAL IMPACT	LEVEL OF SIGNIFICANCE WITHOUT MITIGATION	MITIGATION MEASURE	RESULTING LEVEL OF SIGNIFICANCE
		<p>equipment, equal to or greater than 50 horsepower, that will be used an aggregate of 40 or more hours during any portion of the construction project. The inventory shall include the horsepower rating, engine model year, and projected hours of use for each piece of equipment. The inventory shall be updated and submitted monthly throughout the duration of the project, except that an inventory shall not be required for any 30-day period in which no construction activity occurs. At least 48 hours prior to the use of subject heavy-duty off-road equipment, the project representative shall provide the SMAQMD with the anticipated construction timeline including start date, and name and phone number of the project manager and on-site foreman. The SMAQMD's Model Equipment List can be used to submit this information.</p> <ul style="list-style-type: none"> The Project Applicant shall ensure that emissions from all off-road diesel powered equipment used on the project site do not exceed 40% opacity for more than three minutes in any one hour. Any equipment found to exceed 40 percent opacity (or Ringelmann 2.0) shall be repaired immediately. Non-compliant equipment will be documented and a summary provided to the lead agency and SMAQMD monthly. A visual survey of all in-operation equipment shall be made at least weekly, and a monthly summary of the visual survey results shall be submitted throughout the duration of the project, except that the monthly summary shall not be required for any 30-day period in which no construction activity occurs. The monthly summary shall include the quantity and type of vehicles surveyed as well as the dates of each survey. The SMAQMD and/or other officials may conduct periodic site inspections to determine compliance. Nothing in this section shall supersede other SMAQMD, state or federal rules or regulations. If at the time of construction, the SMAQMD has adopted a regulation 	

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ES EXECUTIVE SUMMARY

<i>ENVIRONMENTAL IMPACT</i>	<i>LEVEL OF SIGNIFICANCE WITHOUT MITIGATION</i>	<i>MITIGATION MEASURE</i>	<i>RESULTING LEVEL OF SIGNIFICANCE</i>
		<i>applicable to construction emissions, compliance with the regulation may completely or partially replace this mitigation. Consultation with the SMAQMD prior to construction will be necessary to make this determination.</i>	
Impact 3.2-3: The Project would not create carbon monoxide hotspot impacts.	LS	<i>None required.</i>	-
Impact 3.2-4: The Project has the potential for public exposure to toxic air contaminants.	LS	<i>None required.</i>	-
Impact 3.2-5: The Project has the potential for exposure of sensitive receptors to odors.	LS	<i>None required.</i>	-
BIOLOGICAL RESOURCES			
Impact 3.3-1: Invertebrates – The Project has the potential for substantial adverse effects, either directly or through habitat modifications, on species identified as candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.	PS	<i>Mitigation Measure 3.3-1: The Project Applicant shall comply with the Terms and Conditions, Reporting Requirements, and Conservation Recommendations in accordance with the USFWS Incidental Take Statement issued for the Project.</i>	LS
Impact 3.3-2: Reptiles and Amphibians – The Project has the potential for	LS	<i>None required.</i>	-

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<i>ENVIRONMENTAL IMPACT</i>	<i>LEVEL OF SIGNIFICANCE WITHOUT MITIGATION</i>	<i>MITIGATION MEASURE</i>	<i>RESULTING LEVEL OF SIGNIFICANCE</i>
<p>substantial adverse effects, either directly or through habitat modifications, on species identified as candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.</p>			
<p>Impact 3.3-3: Birds – The Project has the potential for substantial adverse effects, either directly or through habitat modifications, on species identified as candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.</p>	<p>PS</p>	<p><i>Mitigation Measure 3.3-2: Within 30 days prior to the start of any construction activity, a qualified biologist shall conduct a burrow survey to determine if burrowing owls are present within the Project site. If burrowing owls are observed on the site, measures such as flagging the burrow and avoiding disturbance, passive relocation, or active relocation to move owls from the site, shall be implemented to ensure that no owls or active burrows are inadvertently buried during construction. All measures shall be determined by a qualified biologist and approved by the CDFW.</i></p> <p><i>All burrowing owl surveys shall be conducted according to CDFW protocol. The protocol requires, at a minimum, four field surveys of the entire site and areas within 500 feet of the site by walking transects close enough that the entire site is visible. The survey should be at least three hours in length, either from one hour before sunrise to two hours after or two hours before sunset to one hour after. Surveys shall not be conducted during inclement weather, when burrowing owls are typically less active and visible.</i></p> <p><i>Mitigation Measure 3.3-3: If Project construction activities, including vegetation clearing, are to occur during the nesting season for birds protected under the California Fish and Game Code and Migratory Bird Treaty Act (approximately March 1-August 31) the Project Applicant shall retain a qualified biologist to perform preconstruction surveys for protected birds, including nesting raptors, on the Project site and in the immediate vicinity. At</i></p>	<p>LS</p>

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		<p><i>least two surveys shall be conducted no more than 15 days prior to the initiation of construction activities, including vegetation clearing. In the event that protected birds, including nesting raptors, are found on the Project site, offsite improvement corridors, or the immediate vicinity, the Project applicant shall:</i></p> <ul style="list-style-type: none"> <i>• Locate and map the location of the nest site. Within 2 working days of the surveys prepare a report and submit to the City and CDFW;</i> <i>• A no-disturbance buffer of 250 feet shall be established;</i> <i>• On-going weekly surveys shall be conducted to ensure that the no disturbance buffer is maintained. Construction can resume when a qualified biologist has confirmed that the birds have fledged.</i> <p><i>In the event of destruction of a nest with eggs, or if a juvenile or adult raptor should become stranded from the nest, injured or killed, the qualified biologist shall immediately notify the CDFW. The qualified biologist shall coordinate with the CDFW to have the injured raptor either transferred to a raptor recovery center or, in the case of mortality, transfer it to the CDFW within 48 hours of notification. If directed/authorized by the CDFW during the notification, the qualified biologist may transfer the injured raptors to a raptor recovery center.</i></p> <p><i>Mitigation Measure 3.3-4: Prior to the commencement of construction activities, the Project Applicant shall provide the City of Elk Grove with evidence that the Project is in compliance with the requirements of the City of Elk Grove Swainson's Hawk Chapter 16.130 of the Elk Grove Municipal Code. Compliance will require the Project Applicant to preserve 126.39 acres of suitable habitat. The suitability of the habitat for preservation purposes shall be determined by the CDFW in coordination with the City of Elk Grove. The proposed open space and nature preservation area located within the Project site may be utilized for a portion of the 126.39 acres if approved by the CDFW.</i></p>	

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		<p><i>Mitigation Measure 3.3-5: If construction activities are planned to begin during the Swainson's hawk nesting period (March 1 to September 15), a preconstruction survey and nesting season surveys for nesting Swainson's hawks shall be conducted throughout areas of suitable nesting habitat on the parcel and adjacent areas within 500 feet of the Project site. The preconstruction surveys shall be completed prior to the start of construction activities. The nesting season surveys shall be conducted once in April and once in May. If an active Swainson's hawk nest is observed, the biologist shall notify the City of Elk Grove and consult with the CDFW to determine whether project-related activities are likely to impact the nesting pair and to determine the appropriate protection measures to implement, which may include halting or postponing land clearing and construction activities until all young have fledged and additional nesting attempts no longer occur. If a nest tree is found on the Project site prior to construction and is proposed for removal, then appropriate permits from CDFW shall be obtained and mitigation implemented pursuant to CDFW guidelines.</i></p> <ul style="list-style-type: none"> • <i>Prior to issuance of building or grading permits, the Project Applicant shall provide Development Services, Planning Department written verification that a qualified biologist has been retained by the Project Applicant to perform the preconstruction survey. This action may be waived if the biologist will be contracted by the City at the Project Applicant's expense.</i> • <i>No earlier than 30 days before commencement of construction activities, including land clearing, the qualified biologist shall submit and certify to the Planning Director the results of the pre-construction survey. Failure to submit the required survey results will delay the approval to initiate construction activities, including land clearing.</i> • <i>No later than April 30, the qualified biologist shall submit and certify to the Planning Director the results of the 500-foot site perimeter</i> 	

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ES EXECUTIVE SUMMARY

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		<p><i>survey conducted in April. Failure to submit the required survey results will cause any construction activity to be halted until such results are submitted and approved by the Planning Director. If no construction activities have taken place, failure to submit the required survey results will delay the approval to initiate construction activities, including land clearing.</i></p> <ul style="list-style-type: none"> <i>No later than May 31, the qualified biologist shall submit and certify to the Planning Director the results of the 500-foot site perimeter survey conducted in May. Failure to submit the required survey results will cause any construction activity to be halted until such results are submitted and approved by the Planning Director. If no construction activities have taken place, failure to submit the required survey results will delay the approval to initiate construction activities, including land clearing.</i> 	
<p>Impact 3.3-4: Fish – The Project has the potential for substantial adverse effects, either directly or through habitat modifications, on species identified as candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.</p>	<p>LS</p>	<p><i>None required.</i></p>	<p>-</p>
<p>Impact 3.3-5: Mammals – The Project has the potential for substantial adverse effects, either directly or through habitat modifications, on species identified as</p>	<p>PS</p>	<p><i>Mitigation Measure 3.3-6: Up to thirty days prior to the any disturbance activities, including but not limited to the commencement of construction and/or removal of trees on or adjacent to the Project site, the Project Applicant shall retain a qualified biologist to conduct pre-construction bat survey(s) of potential diurnal roosting trees (e.g. trees 24" DBH and greater, snags, hollow</i></p>	<p>LS</p>

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<p>candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.</p>		<p>trees). During the survey(s) the qualified biologist will inspect all potential diurnal roosting trees within the entire area(s) where construction will and within a surrounding 100 foot-buffer area using the appropriate and most effective methodology (e.g. camera inspection, exit survey with night optics, acoustic survey) in determining presence or absence of bat species.</p> <p>If active roosts are found, no construction activities shall take place within 250 feet of the nest until the young have fledged. On-going weekly surveys shall be conducted to ensure that the no disturbance buffer is maintained. Construction can resume when a qualified biologist has confirmed that the young bats have fledged.</p>	
<p>Impact 3.3-6: Plants – The Project has the potential for substantial adverse effects, either directly or through habitat modifications, on species identified as candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.</p>	<p>PS</p>	<p>Mitigation Measure 3.3-7. Prior to the commencement of grading, the Project Applicant shall coordinate with the CNPS to ensure efforts are made to salvage portions of the habitat or plant populations of Dwarf downingia and Legenere that will be lost as a result of implementation of the Project. This shall include relocation/transplanting the plants and/or seed bank that would be affected by the Project to areas proposed for wetland creation or another appropriate area for either re-establishment after construction is complete or for planting.</p> <p>Mitigation Measure 3.3-8: Up to thirty days prior to any ground disturbance activities, the Project Applicant shall retain a qualified botanist to conduct confirmation plant survey(s) for Peruvian dodder, Slender Orcutt grass, and Sanford's arrowhead. These plants have not been observed on the Project site through previous surveys; however, appropriate habitat for these species is present. If the confirmation survey(s) reveal the presence of these plants, then the qualified botanist shall notify the City of Elk Grove and the appropriate regulatory agency with jurisdiction over the plant. If the confirmation survey(s) do not reveal the presence of these plants, then the Project Applicant is free to move forward with ground disturbance activities, subject to all permits and</p>	<p>LS</p>

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		<i>other Project mitigation requirements.</i>	
Impact 3.3-7: The Project has the potential to have a substantial adverse effect on wetlands, including federally protected as defined by Section 404 of the Clean Water Act, through direct removal, filling, hydrological interruption, or other means.	PS	<p><i>Mitigation Measure 3.3-9 Prior to any construction activities, the Project Applicant shall ensure that the Section 404 permit issued by the USACE, Section 401 Water Quality Certification issued by the RWQCB, and the Section 1602 Streambed Alteration Agreement issued by the CDFW are valid and active. If any of the above mentioned regulatory permits are deemed invalid or inactive by the issuing regulatory agency then the Project Applicant shall coordinate with the regulatory agency to receive updated permits and approvals to ensure that all Project activities are authorized under their respective regulations.</i></p> <p><i>Mitigation Measure 3.3-10 The Project Applicant shall comply with the requirements and recommendations in accordance with the Section 404 Permit issued by the USACE, the Section 401 Water Quality Certification issued by the RWQCB, and the Section 1602 Streambed Alteration Agreement issued by the CDFW for the Project.</i></p>	LS
Impact 3.3-8: The Project has the potential to have a substantial adverse effect on riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.	S	<p><i>Implement Mitigation Measures 3.3-9 and 3.3-10.</i></p>	SU
Impact 3.3-9: The Project would not interfere substantially with the	LS	<p><i>None required.</i></p>	-

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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.			
Impact 3.3-10: The Project has the potential to conflict with local policies or codes protecting biological resources, such as Chapter 19.12.	PS	<p><i>Mitigation Measure 3.3-11 Prior to any construction activities that would result in the removal of a protected tree as defined by the City of Elk Grove Tree Preservation and Protection Chapter, the Project Applicant shall:</i></p> <ul style="list-style-type: none"> • <i>Develop a detailed tree preservation plan for trees to be retained.</i> • <i>For trees to be preserved, the goal of project design should be to avoid grading, compaction, trenching, vehicle traffic, material storage or any other disturbance in the protection zones of the trees.</i> • <i>Under the direct supervision of an ISA Certified Arborist, install the CMU wall on pier footings as opposed to a continuous footing where the construction of the proposed CMU wall will occur within tree protection zones. A steel beam, plate, or equivalent can span over tree roots (Figure 8.6) so that the wall "floats" over the soil. Dig all pier locations by hand to a depth of 3 feet and move piers as necessary to avoid roots larger than one inch in diameter.</i> • <i>Prior to construction, conduct a meeting between the Arborist, all contractors, subcontractors, and project managers to discuss tree preservation guidelines.</i> • <i>Prior to any construction activity on site, identify trees to be preserved and install tree protection fencing in a circle centered at the tree trunk with a radius equal to the maximum drip line radius or as far from the trunk as possible where structures are located. This fenced area is defined as the tree protection zone.</i> • <i>Tree protection fences should be made of chain link with posts sunk</i> 	LS

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		<p><i>into the ground. These fences should not be removed or moved until construction is complete. No soil or above ground disturbance shall occur within the fenced area. No soil, material storage, spoil, waste or washout water shall be deposited within the fenced areas.</i></p> <ul style="list-style-type: none"> • <i>Any work that is to occur within the protection zones of the trees should be monitored by the Consulting Arborist.</i> • <i>If injury should occur to any tree during construction, the Consulting Arborist should be consulted as soon as possible so that appropriate treatments can be applied.</i> • <i>Any pruning required for construction or recommended in this report should be performed by an ISA Certified Arborist or Tree Worker.</i> • <i>All trees on the property should be irrigated every other week during the spring, summer, and fall months to a depth of at least two feet under the trees' canopies.</i> <p><i>Mitigation Measure 3.3-12 Prior to the removal of any trees, the Project Applicant shall compensate for the direct loss of protected trees as defined in the City of Elk Grove Tree Preservation and Protection Chapter at a ratio of 1 inch planted for every inch lost, or the equivalent credit obtained from a tree mitigation bank.</i></p>	
<p>Impact 3.3-11: The Project has the potential to conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.</p>	<p>NI</p>	<p><i>None required.</i></p>	<p>-</p>

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CULTURAL RESOURCES			
<p>Impact 3.4-1: Project implementation may cause a substantial adverse change to a significant historical or archaeological resource, or directly or indirectly destroy or disturb a unique paleontological resource or human remains.</p>	<p>PS</p>	<p><i>Mitigation Measure 3.4-1: When site grading or earthwork begins, the route of the redwood stave pipe and any related pipeline shall be exposed and mapped. The feature shall be completely photographed and documented with a form filed with the North Central Information Center.</i></p> <p><i>The Elk Grove Historical Society shall be provided with a copy of the photographs and documentation of the pipeline. The Elk Grove Historical Society shall be consulted as to whether it wishes to obtain a pipe segment for display. If the Elk Grove Historical Society identifies that it would like to have a segment of the pipe, the Applicant shall deliver a segment to the Elk Grove Historical Society.</i></p> <p><i>Following completion of consultation with the Elk Grove Historical Society and documentation of the pipeline, the remaining pipeline may be removed from the Project site.</i></p> <p><i>Mitigation Measure 3.4-2: If any cultural resources, including prehistoric or historic artifacts, or other indications of archaeological resources, or human remains are found during grading and construction activities, all work shall be halted immediately within a 200-foot radius of the discovery.</i></p> <ul style="list-style-type: none"> - <i>If cultural resources are identified, an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards in prehistoric or historical archaeology, as appropriate, shall be consulted to evaluate the find(s). Work cannot continue at the discovery site until the archaeologist conducts sufficient research and data collection to make a determination that the resource is either 1) not cultural in origin; or 2) not potentially significant or eligible for listing on the NRHP or CRHR.</i> 	<p>LS</p>

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		<ul style="list-style-type: none"> - If a potentially eligible resource is encountered, then the archaeologist shall identify mitigation recommendations. The City and Project Applicant shall consider the recommendations and the Project Applicant shall implement all measures deemed feasible and appropriate. Such measures may include avoidance, preservation in place, excavation, documentation, curation, data recovery, and other appropriate measures. The implementation of mitigation shall be formally documented in writing and submitted to the City Planning Department as verification that the provisions in CEQA for managing unanticipated discoveries have been met. - If Native American resources are identified, a Native American monitor, following the Guidelines for Monitors/Consultants of Native American Cultural, Religious, and Burial Sites established by the Native American Heritage Commission, may also be required and, if required, shall be retained at the Applicant's expense. - If human remains are discovered, all work shall be halted immediately within 200 feet of the discovery, the County Coroner must be notified, according to Section 5097.98 of the State Public Resources Code and Section 7050.5 of California's Health and Safety Code. If the remains are determined to be Native American, the coroner will notify the Native American Heritage Commission, and the procedures outlined in CEQA Section 15064.5(d) and (e) shall be followed. 	
GEOLOGY AND SOILS			
Impact 3.5-1: The Project would not expose people or structures to potential substantial adverse effects involving strong seismic ground shaking or seismic	LS	None required.	-

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related ground failure.			
Impact 3.5-2: Implementation and construction of the Project may result in substantial soil erosion or the loss of topsoil.	PS	<p>Mitigation Measure 3.5-1: <i>The Project Applicant shall submit a Notice of Intent (NOI) and Storm Water Pollution Prevention Plan (SWPPP) to the RWQCB in accordance with the NPDES General Construction Permit requirements. The SWPPP shall be designed to control pollutant discharges utilizing Best Management Practices (BMPs) and technology to reduce erosion and sediments. BMPs may consist of a wide variety of measures taken to reduce pollutants in stormwater runoff from the Project site. Measures shall include temporary erosion control measures (such as silt fences, staked straw bales/wattles, silt/sediment basins and traps, check dams, geofabric, sandbag dikes, and temporary revegetation or other ground cover) that will be employed to control erosion from disturbed areas. Final selection of BMPs will be subject to approval by the City of Elk Grove and the RWQCB. The SWPPP will be kept on site during construction activity and will be made available upon request to representatives of the RWQCB.</i></p> <p>Mitigation Measure 3.5-2: <i>The Project Applicant shall prepare and submit a Post-Construction Stormwater Quality Control Plan in accordance with the most recent version of the Stormwater Quality Design Manual for the Sacramento Region. Post-construction source and treatment controls shall be designed in accordance with the City of Elk Grove Improvement Standards and the Stormwater Quality Design Manual. The design of post-construction source and treatment controls shall be submitted for approval with the improvement plans regardless of whether they constitute private or public improvements.</i></p> <p><i>Drainage from all paved surfaces, including streets, parking lots, driveways, and roofs shall be routed either through swales, buffer strips, or sand filters or treated with a filtering system prior to discharge to the storm drain system. Landscaping shall be designed to effect some treatment, along with the use of a Stormwater Management filter to permanently sequester hydrocarbons, if</i></p>	

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		<p><i>necessary. Permeable pavers and pavement shall be utilized to construct the facilities, where appropriate.</i></p> <p><i>A separate maintenance manual describing proper maintenance practices for the specific treatment controls to be constructed shall also be submitted. If the maintenance manual needs revisions, Applicant shall make the requested revisions in a timely manner.</i></p>	
<p>Impact 3.5-3: The Project has the potential to be located on a geologic unit or soil that is unstable, or that could become unstable as a result of Project implementation, and potentially result in landslide, lateral spreading, subsidence, liquefaction or collapse.</p>	PS	<p><i>Mitigation Measure 3.5-3: A certified geotechnical engineer shall be retained to perform a geotechnical engineering evaluation of the grading and foundation plans for the Silverado Village Project. The geotechnical report shall identify measures as necessary to address bearing capacity, liquefaction, lateral spreading, expansive soils, and subsidence, and to ensure stable soil conditions. The grading and improvement plans, as well as the building plans shall be designed in accordance with the recommendations provided in the geotechnical evaluation. The Project Applicant shall adhere to the recommendations provided in the geotechnical engineering report.</i></p>	LS
<p>Impact 3.5-4: The Project has the potential to be located on expansive soils, potentially creating substantial risks to life or property.</p>	PS	<p><i>Implement Mitigation Measure 3.5-3.</i></p>	LS
<p>Impact 3.5-5: The Project has the potential to locate septic facilities on soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems.</p>	PS	<p><i>Mitigation Measure 3.5-4: If a septic system is planned for installation at the 5.5-acre park site, the ability of the soils to accommodate a septic system shall be evaluated by a licensed engineer. If the soils do not have the capacity to adequately percolate and absorb septic tank waste, any restroom facilities on the park site shall be connected to the public sewer system or restroom facilities shall be prohibited.</i></p>	LS

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GREENHOUSE GASES AND CLIMATE CHANGE			
<p>Impact 3.6-1: The Project may generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment, or conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.</p>	<p>PS</p>	<p><i>Mitigation Measure 3.6-1: Prior to the issuance of building permits, the Project shall demonstrate compliance with the following:</i></p> <ul style="list-style-type: none"> • <i>Achieve Tier 1 of Title 24, Part 11, green building standards to exceed minimum Title 24 energy efficiency standards by 15%.</i> • <i>Incorporate the use of energy-efficient appliances and equipment that maximize efficiency in new buildings and facilities.</i> • <i>Incorporate the use of high-albedo material for outdoor surfaces to the greatest extent feasible, including but not limited to parking lots, median barriers, roadway improvements, and sidewalks.</i> • <i>Prewiring or conduit for solar photovoltaics shall be provided in all non-residential structures.</i> • <i>Utilize drought-tolerant vegetation in landscape areas, and design grading improvements to maximize runoff into designated landscape and planter areas.</i> • <i>Achieve a minimum waste diversion rate of 65%, which shall be demonstrated through the Project's Waste Management Plan, for all construction and demolition activities.</i> • <i>Utilize recycled concrete in base material for new road construction to the greatest extent feasible.</i> • <i>Provide prewiring for plug-in electric vehicles.</i> • <i>Provide a solar option for homebuyers.</i> 	<p>LS</p>

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HAZARDS AND HAZARDOUS MATERIALS			
Impact 3.7-1: The Project has the potential to create a significant hazard through the routine transport, use, or disposal of hazardous materials or through the reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.	PS	<p><i>Mitigation Measure 3.7-1: All abandoned wells on the Project site shall be destroyed in accordance with the requirements of the Sacramento County Environmental Health Division.</i></p> <p><i>Mitigation Measure 3.7-2: If at any time during construction an existing septic system is encountered, the system shall be removed and destroyed in accordance with the requirements of the Sacramento County Environmental Health Division.</i></p> <p><i>Mitigation Measure 3.7-3: If at any time during construction, soil staining, soil odors, or potentially hazardous non-soil artifacts are encountered, the Applicant shall cease construction in the vicinity of the discovery. The Applicant shall have a licensed geotechnical engineer evaluate the soil conditions and, if potentially hazardous conditions exist, submit recommendations to the City of Elk Grove Public Works Department to address potentially hazardous conditions. Upon acceptance of recommendations by the City, the Applicant shall implement recommendations.</i></p>	LS
Impact 3.7-2: The Project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.	NI	<i>None required.</i>	-
Impact 3.7-3: The Project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation	NI	<i>None required.</i>	-

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plan.			
HYDROLOGY AND WATER QUALITY			
Impact 3.8-1: The Project could result in water quality impacts associated with erosion, siltation, or pollution, including the potential to violate water quality standards or waste discharge requirements during construction.	PS	Implement Mitigation Measures 3.5-1 and 3.5-2.	LS
Impact 3.8-2: The Project could result in water quality impacts associated with erosion, siltation, or pollution, including the potential to violate water quality standards or waste discharge requirements during operation.	PS	Implement Mitigation Measure 3.5-2.	LS
Impact 3.8.3: The Project would not significantly deplete groundwater supplies nor interfere substantially with groundwater recharge.	LS	None required.	-
Impact 3.8-4: The Project would alter the existing drainage pattern in a manner which would not result in flooding, but could create or contribute runoff in excess of the capacity of stormwater drainage systems.	PS	Mitigation Measure 3.8-1: Prior to approval of grading and improvement plans for the lots in Village 1-A that are served by the Bond Road Trunk Drainage System, the Project Applicant shall enter into an agreement with the City to fund the fair-share cost for the incremental increase in the Bond Road Trunk Drainage system that needed to accommodate the Project. The incremental increase shall be calculated based on any additional amount above the previously identified upsizing required for the Bond Road Trunk Drainage	LS

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		<i>System in the City's Master Drainage Plan. The agreement shall identify the timing for the drainage system improvements and shall require that no building permits be issued for the Lots in Village 1-A that are served by the Bond Road Trunk Drainage System Improvements until such improvements have been completed.</i>	
Impact 3.8.5 The Project would not otherwise substantially degrade water quality.	LS	<i>None required.</i>	-
LAND USE			
Impact 3.9-1: Implementation of the Project may conflict with an applicable land use plan, policy, or regulation of an agency with jurisdiction over the project adopted to avoid or mitigate an environmental effect.	LS	<i>None required.</i>	-
NOISE			
Impact 3.10-1: Potential to expose persons to, or generate noise levels in excess of applicable standards or to result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without project – Off-site traffic noise.	LS	<i>None required.</i>	-

CC – cumulatively considerable

LCC – less than cumulatively considerable

LS – less than significant

NI – No Impact

PS – potentially significant

S – significant

SU – significant and unavoidable

<i>ENVIRONMENTAL IMPACT</i>	<i>LEVEL OF SIGNIFICANCE WITHOUT MITIGATION</i>	<i>MITIGATION MEASURE</i>	<i>RESULTING LEVEL OF SIGNIFICANCE</i>
<p>Impact 3.10-2: Exposure of persons to, or generation of noise levels in excess of applicable standards - Exposure of Project residents to Exterior Traffic Noise.</p>	<p>PS</p>	<p><i>Mitigation Measure 3.10-1: Development plans for the Project shall include the following noise attenuation features:</i></p> <ul style="list-style-type: none"> • <i>A uniform 9-foot tall noise barrier should be constructed along the south property lines of all proposed residential uses adjacent to Bond Road to reduce future traffic noise levels to 60 dB Ldn or less within proposed backyards. The barrier shall be constructed of solid materials, such as a masonry wall, earthen berm, or combination of the two, and shall wrap at the ends as indicated in Figure 3.10-1.</i> • <i>A uniform 6-foot tall noise barrier shall be constructed along the eastern property lines of Waterman Road to reduce future traffic noise levels to 60 dB Ldn or less at proposed backyard areas located adjacent to that roadway. The barrier shall be constructed of solid materials, such as a masonry wall, earthen berm, or combination of the two, and shall wrap at the ends as indicated in Figure 3.10-1.</i> <p><i>Mitigation Measure 3.10-2: Development plans for the Project shall include the following noise attenuation features:</i></p> <ul style="list-style-type: none"> • <i>Air conditioning shall be included in all residences constructed in the Silverado Village development to allow occupants to close doors and windows as desired to achieve additional acoustic isolation from traffic noise in the project vicinity.</i> • <i>All second floor windows within 162 feet of Bond Road shall have a minimum STC rating of 30.</i> 	<p>LS</p>
<p>Impact 3.10-3: Potential to expose persons to, or generate noise levels in excess of applicable standards or to result in a substantial temporary or periodic increase in ambient noise levels in the</p>	<p>LS</p>	<p><i>None required.</i></p>	<p>-</p>

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ES EXECUTIVE SUMMARY

<i>ENVIRONMENTAL IMPACT</i>	<i>LEVEL OF SIGNIFICANCE WITHOUT MITIGATION</i>	<i>MITIGATION MEASURE</i>	<i>RESULTING LEVEL OF SIGNIFICANCE</i>
project vicinity above levels existing without project – Park Noise.			
Impact 3.10-4: Potential to expose persons to, or generate noise levels in excess of applicable standards, result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without project, or result in vibration and groundborne noise - Construction Noise.	PS	<p><i>Mitigation Measure 3.10-3: The following measures shall be followed throughout all phases of construction that are within 250 feet of existing residences:</i></p> <ul style="list-style-type: none"> • <i>Construction equipment shall be well maintained and used judiciously to be as quiet as practical. Equip all internal combustion engine-driven equipment with mufflers, which are in good condition and appropriate for the equipment.</i> • <i>Use "quiet" models of air compressors and other stationary noise sources where technology exists.</i> • <i>Locate stationary noise-generating equipment and construction staging areas a minimum of 100 feet from sensitive receptors, including neighboring residential uses, when sensitive receptors adjoin or are near a construction area.</i> • <i>Construction activity within 150 feet of residential uses shall be limited to the hours of 7 a.m. to 7 p.m. whenever such activity is adjacent to residential uses.</i> • <i>Limit idling of internal combustion engines to no more than 5 minutes.</i> 	LS
PUBLIC SERVICES AND RECREATION			
Impact 3.11-1: The Project would not have a significant effect on fire protection services or facilities.	LS	<i>None required.</i>	-
Impact 3.11-2: The Project would not	LS	<i>None required.</i>	-

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<i>ENVIRONMENTAL IMPACT</i>	<i>LEVEL OF SIGNIFICANCE WITHOUT MITIGATION</i>	<i>MITIGATION MEASURE</i>	<i>RESULTING LEVEL OF SIGNIFICANCE</i>
have a significant effect on police services or facilities.			
Impact 3.11-3: The Project may result in significant environmental impacts associated with the construction and operation of parks and recreation facilities.	LS	<i>Implement Mitigation Measures 3.1-1 through 3.10-3.</i>	LS
TRANSPORTATION AND CIRCULATION			
Impact 3.12-1: Potential to conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system: Study Area Intersections.	LS	<i>None required.</i>	-
Impact 3.12-2: Potential to conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system: Freeways.	S	<i>None feasible.</i>	SU
Impact 3.12-3: Potential to substantially increase hazards due to a design feature.	LS	<i>None required.</i>	-
Impact 3.12-4: Potential to result in inadequate emergency access.	LS	<i>None required.</i>	-

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ES EXECUTIVE SUMMARY

<i>ENVIRONMENTAL IMPACT</i>	<i>LEVEL OF SIGNIFICANCE WITHOUT MITIGATION</i>	<i>MITIGATION MEASURE</i>	<i>RESULTING LEVEL OF SIGNIFICANCE</i>
Impact 3.12-5: Potential to disrupt or interfere with existing or planned bicycle or pedestrian facilities.	LS	<i>None required.</i>	-
Impact 3.12-6: Potential to disrupt or interfere with existing or planned transit facilities.	LS	<i>None required.</i>	-
UTILITIES			
Impact 3.13-1: The Project would generate wastewater that would be treated at an existing wastewater treatment plant.	LS	<i>None required.</i>	-
Impact 3.13-2: The Project would connect to existing wastewater infrastructure.	LS	<i>None required.</i>	-
Impact 3.13-3: The Project would not require construction of new or expanded water treatment facilities and would connect to existing water treatment and conveyance infrastructure.	LS	<i>None required.</i>	-
Impact 3.13-4: The Project would be adequately served by existing water supply sources under existing and cumulative conditions.	LS	<i>None required.</i>	-

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<i>ENVIRONMENTAL IMPACT</i>	<i>LEVEL OF SIGNIFICANCE WITHOUT MITIGATION</i>	<i>MITIGATION MEASURE</i>	<i>RESULTING LEVEL OF SIGNIFICANCE</i>
Impact 3.13-5: The Project would be served by a landfill for solid waste disposal needs and will comply with laws and regulations related to solid waste.	LS	None required.	-

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SU – significant and unavoidable

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This section summarizes the purpose of the Environmental Impact Report (EIR) for the Silverado Village project (Project). The following discussion addresses the environmental procedures that are to be followed according to State law, the intended uses of the EIR, the EIR scope and organization, and a summary of the agency and public comments received during the public review period for the Notice of Preparation (NOP).

1.1 PURPOSE AND INTENDED USES OF THE EIR

The City of Elk Grove, as lead agency, determined that the proposed Project is a "project" within the definition of CEQA. CEQA requires the preparation of an environmental impact report prior to approving any project, which may have a significant impact on the environment. For the purposes of CEQA, the term "project" refers to the whole of an action, which has the potential for resulting in a direct physical change or a reasonably foreseeable indirect physical change in the environment (CEQA Guidelines Section 15378[a]).

An EIR must disclose the expected environmental impacts, including impacts that cannot be avoided, growth-inducing effects, impacts found not to be significant, and significant cumulative impacts, as well as identify mitigation measures and alternatives to a project that could reduce or avoid its adverse environmental impacts. CEQA requires government agencies to consider and, where feasible, minimize environmental impacts of proposed development. CEQA further requires public agencies to balance a variety of public objectives, including economic, environmental, and social factors in making a decision to approve a development project with significant and unavoidable environmental impacts.

The City of Elk Grove, as the lead agency, has prepared this Draft EIR to provide the public and responsible and trustee agencies with an objective analysis of the potential environmental impacts resulting from construction and operation of the Project. The environmental review process enables interested parties to evaluate the Project in terms of its environmental consequences, to examine and recommend methods to eliminate or reduce potential adverse impacts, and to consider a reasonable range of alternatives to the Project. While CEQA requires that consideration be given to avoiding adverse environmental effects, the lead agency must balance adverse environmental effects against other public objectives, including the economic and social benefits of a project, in determining whether the Project should be approved.

This EIR will be used by the City to determine whether to approve, modify, or deny the Project and associated approvals in light of the Project's environmental effects. The EIR will be used as the primary environmental document to evaluate full Project development, along with all associated infrastructure improvements, and permitting actions associated with the Project. All of the actions and components of the Project are described in detail in Section 2.0 of this Draft EIR.

1.0 INTRODUCTION

1.2 TYPE OF EIR

This EIR is a Project EIR as defined in Section 15161 of the State CEQA Guidelines. A Project EIR is an EIR which examines the environmental impacts of a specific development project. This type of EIR focuses primarily on the changes in the environment that would result from the development project. A Project EIR examines all phases of a project including *planning, construction, and operation*. The Project EIR approach is appropriate for the Project because it allows comprehensive consideration of the reasonably anticipated scope of the Project, as described in greater detail in Section 2.0.

1.3 KNOWN RESPONSIBLE AND TRUSTEE AGENCIES

As required by CEQA, this EIR identifies lead, responsible, and trustee agencies. The City of Elk Grove is the “Lead Agency” for the Project because it holds principal responsibility for approving the Project. The term “Responsible Agency” includes all public agencies other than the Lead Agency that have discretionary approval power over the Project or an aspect of the Project (CEQA Guidelines Section 15381). For the purpose of CEQA, a “Trustee” agency has jurisdiction by law over natural resources that are held in trust for the people of the State of California (CEQA Guidelines Section 15386).

The following agencies are considered Responsible or Trustee Agencies for the Project, and may be required to issue permits or approve certain aspects of the Project:

- California Department of Fish & Wildlife (CDFW), 1602 Streambed Alteration Agreement.
- Central Valley Regional Water Quality Control Board (CVRWQCB), General Permit for Discharges of Storm Water Associated with Construction Activity, Storm Water Pollution Prevention Plan (SWPPP) approval prior to construction activities, and permitting of isolated wetlands under the State’s Porter-Cologne Act.
- Elk Grove Water District, Water Supply Assessment.
- Sacramento Metropolitan Air Quality Management District - Approval of construction-related air quality permits.
- U.S. Army Corps of Engineers (USACE) – Issuance of 404 permit under the Clean Water Act for the discharge of fill material into waters of the United States and use of seasonal wetlands as a detention basin; and
- U.S. Fish and Wildlife Service (USFWS) - Consultation under the Endangered Species Act to determine impacts to special-status species and Incidental Take Statement.

1.4 ENVIRONMENTAL REVIEW PROCESS

The review and certification process for the EIR involves the following general procedural steps:

NOTICE OF PREPARATION

The City circulated a Notice of Preparation (NOP) of an EIR for the Project on January 25, 2013 to trustee and responsible agencies, the State Clearinghouse, and the public. A public scoping meeting was held on February 8, 2013 to present the Project description to the public and interested agencies, and to receive comments from the public and interested agencies regarding the scope of the environmental analysis to be included in the Draft EIR. Concerns raised in response to the NOP were considered during preparation of the Draft EIR. The NOP and comments provided by interested parties in response to the NOP are presented in **Appendix A**.

DRAFT EIR

This document constitutes the Draft EIR. The Draft EIR contains a description of the Project, description of the environmental setting, identification of Project impacts, and mitigation measures for impacts found to be significant, as well as an analysis of Project alternatives, identification of significant irreversible environmental changes, growth-inducing impacts, and cumulative impacts. This Draft EIR identifies issues determined to have no impact or a less than significant impact, and provides detailed analysis of potentially significant and significant impacts. Comments received in response to the NOP were considered in preparing the analysis in this EIR. Upon completion of the Draft EIR, the City has filed the Notice of Completion (NOC) with the State Clearinghouse of the Governor's Office of Planning and Research to begin the public review period.

PUBLIC NOTICE/PUBLIC REVIEW

The City has provided a public notice of availability for the Draft EIR, and invites comment from the general public, agencies, organizations, and other interested parties. Consistent with CEQA, the review period for this Draft EIR is forty-five (45) days. Public comment on the Draft EIR will be accepted in written form and orally at a public meeting before the City of Elk Grove Planning Commission. All comments or questions regarding the Draft EIR should be addressed to:

City of Elk Grove
Planning Department
c/o Christopher Jordan, AICP
8401 Laguna Palms Way
Elk Grove, CA 95758

Printed copies of the Draft EIR and Draft EIR appendices can be viewed at the City of Elk Grove Planning Department located at 8401 Laguna Palms Way. CD copies of the Draft EIR and Draft EIR appendices are also available at the City of Elk Grove Planning Department located at 8401 Laguna Palms Way. The Draft EIR and Draft EIR appendices can be viewed online at:

[http:// egplanning.org/environmental/](http://egplanning.org/environmental/)

1.0 INTRODUCTION

RESPONSE TO COMMENTS/FINAL EIR

Following the public review period, a Final EIR will be prepared. The Final EIR will respond to written comments received during the public review period and to oral comments received at a public hearing during such review period.

CERTIFICATION OF THE EIR/PROJECT CONSIDERATION

The City will review and consider the Final EIR. If the City finds that the Final EIR is "adequate and complete", the City Council may certify the Final EIR in accordance with CEQA. The rule of adequacy generally holds that an EIR can be certified if:

- 1) The EIR shows a good faith effort at full disclosure of environmental information; and
- 2) The EIR provides sufficient analysis to allow decisions to be made regarding the proposed project in contemplation of environmental considerations.

The level of detail contained throughout this EIR is consistent with Section 15151 of the CEQA Guidelines and recent court decisions, which provide the standard of adequacy on which this document is based. Section 15151 of the CEQA Guidelines states as follows:

An EIR should be prepared with a sufficient degree of analysis to provide decision makers with information which enables them to make a decision which intelligently takes account of environmental consequences. An evaluation of the environmental effects of a proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in the light of what is reasonably feasible. Disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among the experts. The courts have looked not for perfection but for adequacy, completeness, and a good faith effort at full disclosure.

Following review and consideration of the Final EIR, the City may take action to approve, modify, or reject the Project. A Mitigation Monitoring Program, as described below, would also be adopted in accordance with Public Resources Code Section 21081.6(a) and CEQA Guidelines Section 15097 for mitigation measures that have been incorporated into or imposed upon the Project to reduce or avoid significant effects on the environment. This Mitigation Monitoring Program will be designed to ensure that these measures are carried out during Project implementation, in a manner that is consistent with the EIR.

1.5 ORGANIZATION AND SCOPE

Sections 15122 through 15132 of the State CEQA Guidelines identify the content requirements for Draft and Final EIRs. An EIR must include a description of the environmental setting, an environmental impact analysis, mitigation measures, alternatives, significant irreversible environmental changes, growth-inducing impacts, and cumulative impacts. Discussion of the environmental issues addressed in the Draft EIR was established through review of environmental and planning documentation developed for the Project, environmental and planning

documentation prepared for recent projects located within the City of Elk Grove, applicable local and regional planning documents, and responses to the Notice of Preparation (NOP).

This Draft EIR is organized in the following manner:

EXECUTIVE SUMMARY

This Executive Summary summarizes the characteristics of the Project, known areas of controversy and issues to be resolved, and provides a concise summary matrix of the Project's environmental impacts and possible mitigation measures. This chapter identifies alternatives that reduce or avoid at least one significant environmental effect of the Project.

CHAPTER 1.0 – INTRODUCTION

Chapter 1.0 briefly describes the purpose of the environmental evaluation, identifies the lead, trustee, and responsible agencies, summarizes the process associated with preparation and certification of an EIR, and identifies the scope and organization of the Draft EIR.

CHAPTER 2.0 – PROJECT DESCRIPTION

Chapter 2.0 provides a detailed description of the Project, including the location, intended objectives, background information, the physical and technical characteristics, including the decisions subject to CEQA, related infrastructure improvements, and a list of related agency action requirements.

CHAPTER 3.0 - ENVIRONMENTAL SETTING, IMPACTS AND MITIGATION MEASURES

Chapter 3.0 contains an analysis of environmental topic areas as identified below. Each subchapter addressing a topical area is organized as follows:

Environmental Setting. A description of the existing environment as it pertains to the topical area.

Regulatory Setting. A description of the regulatory environment that may be applicable to the Project.

Impacts and Mitigation Measures. Identification of the thresholds of significance by which impacts are determined, a description of Project-related impacts associated with the environmental topic, identification of appropriate mitigation measures, and a conclusion as to the significance of each impact after the incorporation of mitigation measures.

The following environmental topics are addressed in this section:

- Aesthetics
- Air Quality
- Biological Resources
- Cultural Resources
- Geology and Soils

1.0 INTRODUCTION

- Greenhouse Gases and Climate Change
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use Planning
- Noise
- Public Services and Recreation
- Transportation and Circulation
- Utilities

CHAPTER 4.0 – OTHER CEQA-REQUIRED TOPICS

Chapter 4.0 evaluates and describes the following CEQA required topics: impacts determined not to be significant and, thus, not analyzed in detail in the EIR, cumulative impacts, significant and irreversible impacts, growth-inducing effects, and significant and unavoidable environmental effects.

CHAPTER 5.0 - ALTERNATIVES TO THE PROJECT

State CEQA Guidelines Section 15126.6 requires that an EIR describe a range of reasonable alternatives to the Project, which could feasibly attain the basic objectives of the Project and avoid and/or lessen any significant environmental effects of the Project. Chapter 5.0 provides a comparative analysis between the environmental impacts of the Project and the selected alternatives.

CHAPTER 6 - REPORT PREPARERS

This section lists all authors and agencies that assisted in the preparation of the EIR, by name, title, and company or agency affiliation.

APPENDICES

This section includes all notices and other procedural documents pertinent to the EIR, as well as technical material prepared to support the analysis.

1.6 SIGNIFICANCE CRITERIA

In general, CEQA Guidelines define a significant effect on the environment as “a substantial, or potentially substantial” adverse change in the physical environment. A potential impact is considered significant if a project would substantially degrade the environmental quality of land, air, water, minerals, flora, fauna, ambient noise, and objects of historic and aesthetic significance (CEQA Guidelines §§15360, 15382).

Definitions of significance vary with the physical condition affected and the setting in which the change occurs. The CEQA Guidelines set forth physical impacts that trigger the requirement to make “mandatory findings of significance” (CEQA Guidelines §15065).

This CEQA document relies on three levels of impact significance:

1. Less than significant impact, for which no mitigation measures are warranted;
2. Significant impact that can be mitigated to a level that is less than significant; and,
3. Significant impact that cannot be mitigated to a level that is less than significant. Such impacts are significant and unavoidable.

Each resource area uses a distinct set of significance criteria. The significance criteria are identified at the beginning of the impacts discussion for each resource area. These significance criteria promote consistent evaluation of impacts for all alternatives considered, even though significance criteria are necessarily different for each resource considered.

1.7 COMMENTS RECEIVED ON THE NOTICE OF PREPARATION

The City received 16 written comment letters on the NOP for the proposed Silverado Village Draft EIR. A copy of each letter is provided in **Appendix A** of this Draft EIR. A public scoping meeting was held on February 8, 2013 to present the project description to the public and interested agencies, and to receive comments from the public and interested agencies regarding the scope of the environmental analysis to be included in the Draft EIR.

1. Cosumnes Fire Department (January 31, 2013)
2. Central Valley Flood Protection Board (February 15, 2013)
3. Central Valley Regional Water Quality Control Board (February 19, 2013)
4. California Department of Transportation (February 25, 2013)
5. SMUD (February 26, 2013)
6. Sacramento County (February 26, 2013)
7. Vince and Bonnie Tancreto (February 7, 2013)
8. PG&E (forwarded July 3, 2012 e-mail)
9. Mark E. White (February 12, 2013)
10. Lynn Wheat (February 22, 2013)
11. Juline Fujii (February 25, 2013)
12. Regina Reichenberg (February 23, 2013)
13. Shirley Peters, Greater Sheldon Road Estates Homeowners Association (February 24, 2013)
14. Lysa Voight, P.E. (February 25, 2013)
15. Betty Walters (February 25, 2013)
16. Nina Stevens (February 26, 2013)
17. David Sizzler (March 1, 2013)
18. Steven M. Lee (not dated)

1.0 INTRODUCTION

1.9 AREAS OF CONTROVERSY

Aspects of the Project associated with environmental issues that could be of public concern include the following:

- Off-site flooding and drainage impacts, particularly to the Quail Ridge, Sheldon Estates, and Campbell Road neighborhoods and Laguna Creek. These issues are addressed in Section 3.8, Hydrology and Water Quality.
- Hydraulic impacts to Laguna Creek. This issue is addressed in Section 3.8, Hydrology and Water Quality.
- Stormwater quality. This issue is addressed in Section 3.5, Geology and Soils, and Section 3.8, Hydrology and Water Quality.
- Roadway capacity, including impacts to Bond Road and Waterman Road, and increased vehicle trips. This issue is addressed in Section 3.12, Transportation and Circulation.
- Potential for hazardous materials and contaminated soils to occur on the Project site. This issue is addressed in Section 3.7, Hazards and Hazardous Materials.
- Prior use of Project site for dumping. This issue is addressed in Section 3.7, Hazards and Hazardous Materials.
- Open space and sensitive habitat preservation. This issue is addressed in Section 3.3, Biological Resources.
- Aesthetic impacts to adjacent neighborhoods. This issue is addressed in Section 3.1, Aesthetics.
- Site lighting, with the recommendation that low sodium lights be made a condition of approval. This issue is addressed in Section 3.1, Aesthetics.
- Water supply. This issue is addressed in Section 3.13, Utilities.
- Groundwater quality. This issue is addressed in Section 3.8, Hydrology and Water Quality.
- Tree removal and location of trees that will be removed. This issue is addressed in Section 3.3, Biological Resources.
- Regional traffic impacts and effects on State highway facilities. This issue is addressed in Section 3.12, Transportation and Circulation.
- Overcrowding of schools and effects on Elk Grove Elementary School, including drop-off and pick-up areas. Potential impacts to schools were determined to be less than significant in the Initial Study (see Appendix A). Under the provisions of SB 50, a project's impacts on school facilities are fully mitigated via the payment of the requisite new school construction fees established pursuant to Government Code Section 65995.

- **Public safety.** This issue is addressed in Section 3.11, Public Services.
- **Air quality.** This issue is addressed in Section 3.2, Air Quality.
- **Regional traffic impacts, including impacts to County roadways and Caltrans facilities (State Route 99, Interstate 5, and State Route 16).** This issue is addressed in Section 3.12, Transportation and Circulation.
- **Impacts to housing and surrounding housing developments.** Potential impacts of the Project on surrounding housing developments are addressed in Sections 3.1, Aesthetics, 3.2, Air Quality, 3.8, Hydrology and Water Quality, 3.9, Land Use Planning, 3.10, Noise, and 3.12, Transportation and Circulation.

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This chapter provides a comprehensive description of the Project, including proposed land uses, infrastructure improvements, project objectives, and requested entitlements. Figures referenced throughout this section are located at the end of the chapter.

2.1 PROJECT LOCATION AND ENVIRONMENTAL SETTING

PROJECT LOCATION

The Project site consists of approximately 230 acres located at the northwest corner of Bond Road and Waterman Road in the City of Elk Grove. The Project site has approximately 2,134 linear feet of frontage along Bond Road and 1,760 linear feet of frontage along Waterman Road. Figure 2-1 shows the Project’s regional location. Figure 2-2 shows the Project vicinity.

PROJECT SITE AND SURROUNDING LAND USES

The Project site is vacant and characterized by relatively level topography, with the exception of areas with earthen berms which generally rise in height from three to five feet, several man-made ponds, and a large depression. The elevation of the Project site ranges from 39 to 71 feet above mean sea level. Whitehouse Creek traverses the property from the northern boundary, flowing in a southwesterly direction into a series of ponds located in the western portion of the Project site. Surface runoff flows towards the south and southwest into topographic lows that include portions of Whitehouse Creek, seasonal wetlands, vernal pools, ephemeral drainages, and the onsite ponds. The large ponds appear to be the result of past berming and grading activities.

Historically, the Project site has been utilized for agricultural and industrial uses. The Project site has been vacant since the acquisition of the property by the Sacramento Area Sewer District (SASD), formerly the Sacramento County Sanitation District.

Vegetation growing on the Project site includes annual grasslands and trees along the western property line shared with the Quail Ridge development, along the northern property line, and several scattered in the southwest corner of the Project site and along the western property line.

The Project site is generally bounded by Waterman Road, vacant land, rural residential uses, and Laguna Creek to the east; Waterman Square Apartments adjacent the southeast corner; Bond Road and single family residential uses to the south; and single family residential development to the west, with a vacant area adjacent to the northwest. General Plan and Zoning designations and land uses adjacent to the Project site are summarized in Table 2-1.

TABLE 2-1: PROJECT AND SURROUNDING AREA LAND USE DESIGNATIONS

LOCATION	GENERAL PLAN LAND USE	ZONING	ACTUAL USE OF PROPERTY
On-Site	Rural Residential, Low Density Residential, Commercial/Office/Multi-Family	RD-2, RD-4, RD-5, RD-5(F), and O	Vacant
North	Rural Residential	AR-2	Sheldon Road Ranch Estates
South	Low Density Residential	RD-5	Fallbrook Subdivision and Summer Place

2.0 PROJECT DESCRIPTION

LOCATION	GENERAL PLAN LAND USE	ZONING	ACTUAL USE OF PROPERTY
			Subdivision
East	Estate Residential	AG-80, AR-5, AR-5(F), AR-10	Apartment complex; single-family residences
West	Rural Residential; Low Density Residential	RD-2, RD-4, RD-5, AR-5, RD-2, RD-5, RD-5(F), AR-5(F)	Quail Ranch Estates, rural residential uses, and vacant land

2.2 PROJECT BACKGROUND

The 230 acre Project site is currently owned by the SASD and was declared as surplus property in 2000 as the property no longer was part of the district's future plans. A Purchase and Sale Agreement was entered into between Centex Homes and SASD in 2004 which was amended in 2007 and assigned to Vintara Holdings (Silverado Homes) in April of 2009. In 2012, the Project applicant, Vintara Holdings LLC/Silverado Homes submitted an application to develop the Silverado Village project.

2.3 PROJECT GOALS AND OBJECTIVES

Consistent with CEQA Guidelines Section 15124(b), a clear statement of objectives and the underlying purpose of the Project shall be discussed.

The City has identified the following objectives for the Silverado Village project:

- Create a high-quality residential development that is consistent with the General Plan;
- Provide a residential development that would assist the City in meeting its housing needs, including a range of housing types to serve the senior population;
- Emphasize preservation of open space and sensitive habitats;
- implement the City's Trail System Master Plan through providing an on-site trails network that is accessible by the general public and provides opportunities for connectivity with future trails on adjacent property; and
- Create a dual purpose stormwater/open space area.

The Project applicant, Vintara Holdings LLC/Silverado Homes, has submitted the following Project Objectives for the Silverado Village project.

- Consistency with the General Plan;
- Compatibility with adjacent neighborhoods;
- Respect the Project site's existing natural features; and

- Creation of a unique age-restricted community that provides a mix of housing types and amenities, including the village core, club house, and swim facility.

2.4 PROJECT DESCRIPTION

The Project is proposed as a 230-acre residential community located north of Bond Road and west of Waterman Road. The Project proposes 660 single family units, up to 125 independent/assisted living/memory care units, a community clubhouse, a park and trail system, open space, and supporting infrastructure. Figures 2-3 and 2-4 depict the key Project characteristics and Table 2-2 summarizes the proposed uses.

TABLE 2-2: LAND USE SUMMARY

PROPOSED USE	ACRES (GROSS)	DWELLING UNITS	NON-RESIDENTIAL SQUARE FEET	AVERAGE DENSITY (UNITS/ACRE)	ACREAGE AS PERCENTAGE OF TOTAL
Single Family Residential					
Neighborhood 1-A	21.5	99		4.6	
Neighborhood 1-B	8.6	36		4.2	
Neighborhood 2-A	39.0	196		5.0	
Neighborhood 2-B	12.3	62		5.0	
Neighborhood 3 – cottages ¹	33.7	267		7.9	
<i>Subtotal</i>	<i>115.1</i>	<i>660</i>		<i>5.7</i>	<i>50.0%</i>
Multifamily Residential					
Multifamily Lodge ¹	2.5	125 ²	7,500 – 15,200	50.0	1.1%
Community Facilities					
Clubhouse & Atrium	2.1		12,500		0.9%
Open Space					
Wetland Preservation	68.1				
Open Space	10.3				
Detention Area	14.7				
Overland Release	0.6				
<i>Subtotal</i>	<i>93.7</i>				<i>40.7%</i>
Parks and Trails					
Neighborhood Parks	6.1		4,000		
Trail Corridor	2.2				
Landscape and Entries	3.1				
<i>Subtotal</i>	<i>11.4</i>				<i>5.0%</i>
Roads	5.1				2.2%
TOTAL	230	660 single family and up to 125 multifamily	24,000 – 31,700	5.28 – developed area	100.0%

¹Age-restricted

²Up to 125 units

2.0 PROJECT DESCRIPTION

RESIDENTIAL USES

The Project would be developed with three distinct residential villages. Figure 2-3 identifies the primary components of the Project.

Village 1

Village 1, located along the western boundary of the Project site abutting Quail Ranch Estates to the west and Bond Road to the south, includes 135 single-family detached homes with a typical dimension of 60' by 105' and a minimum lot size of 6,300 square feet (s.f.). The lots abutting Quail Ranch Estates along the western property line are sized to match the width of these off-site lots to the extent possible with dimensions ranging from 63' to 78' wide by 110' deep.

Village 2

Village 2 is located to the west of Waterman Road, south of the proposed detention basin and open space, and north of Village 3. An open space parcel separates Village 2 from Village 1. Village 2 includes 258 single-family detached homes with a typical dimension of 55' by 105' and a minimum lot size of 5,775 s.f.

Village 3

Village 3 is located in the southeast corner of the Project site, adjacent to Village 1 to the west and Village 2 to the north, and is west of Waterman Road and north of Bond Road. Village 3 is age-restricted to adults 55 and over. Village 3 includes a maximum of 267 active adult patio homes on a typical lot size of 4,265 s.f. with a typical dimension of 50' by 92.5' as measured from the centerline of the internal private streets to the rear property line. These homes would be single-family detached and generally one story.

Within the "village core" a lodge facility and clubhouse are proposed. The lodge would have a maximum of 125 units for independent living, assisted living, and/or memory care for seniors. The approximately 6,500 s.f. clubhouse and associated swim facility would be located adjacent to the lodge, serving as a recreation, community gathering, activity, and information hub for area residents.

OPEN SPACE AND PARKS

The Project includes the following open space and parks uses:

- A 67.6-acre wetland habitat preserve area and a 6.3-acre open space parcel, providing 73.9 acres of open space in the northern portion of the Project site.
- A 3.9-acre open space corridor along the eastern boundary of the Project site from the existing multifamily lot to the south to the proposed Silverado Drive at the north.
- A 14.7-acre stormwater detention area and 0.6-acre overland release area are designated between Villages 1 and 2 to improve storage for the 100-year storm event, improve flood protection and water quality for urban runoff and provide an open space buffer between villages.
- Up to 6.1 acres of parkland to serve the residents of Villages 1 and 2.

- A 3.1-acre public trail system, including an east-west trail corridor between the northernmost road in the development and the open space and park to the north, and a north-south trail corridor along the eastern edge of the detention basin.

CIRCULATION NETWORK

Vehicle Circulation

The Project's circulation system provides access to the three villages, with 5.2 acres of public roads and a 0.3-acre private road entry to the Village Center. Primary access would be from Bond and Waterman Roads. There would also be a secondary point of access from Bond Road which would allow only right-turn-in and right-turn-out movements.

Silverado Drive would be the primary residential collector through the Project site from Bond Road to Waterman Road, with local residential streets providing access to Villages 1 and 2. Access to Village 3 would be from the Village Center Lane connection to Silverado Drive. The proposed on-site vehicle roadway network is shown in Figure 2-3. The Project would make the following improvements to Bond Road and Waterman Road:

1. Expanded intersection at Silverado Drive and Waterman Road.
2. Modification of the existing traffic signal at the intersection of Bond Road/Crowell Drive/Silverado Drive to accommodate the fourth leg.
3. Reconstruction of deteriorated curb, gutter, sidewalk, and/or pavement along the Project's frontage.
4. A westbound right-turn pocket for Silverado Drive on Bond Road.
5. An expanded intersection at Silverado Drive and Bond Road, with the southbound accommodating a right-turn lane and a shared through/left-turn lane.
6. A northbound left-turn pocket for Silverado Drive on Waterman Road.

EMERGENCY VEHICLE ACCESS

A 42' wide Emergency Vehicle Access (EVA) with a 5' pedestrian walkway will be located at terminus of Bob White Court located in the Quail Ranch community to the interior street within Village 1. "Knockdown" bollards shall be placed to prevent non-emergency vehicular access.

A 26' EVA and pedestrian connection will be provided from Village 3 to Bond Road.

Pedestrian and Bicycle Connectivity

The Project includes pedestrian and bicycle features to provide both internal connectivity as well as connections to adjacent bicycle and pedestrian facilities. Pedestrian features include separated sidewalks, off-street trails, paseos, and other features as follows:

1. A separated, meandering sidewalk and designated bicycle lane along Waterman Road.

2.0 PROJECT DESCRIPTION

2. An off-street trail, consisting of a 10 foot paved trail along Silverado Drive from Bond Road to Lot “K” park.
3. An off-street trail, consisting of a 10 foot paved trail with 2 foot decomposed granite shoulder (each side) and 6 foot landscape buffer east side along Silverado Drive and M Drive from lot “K” park to lot “G” park.
4. An off-street trail, consisting of a 10 foot paved trail with 2 foot decomposed granite shoulder (each side), a 4 foot landscape buffer south side and an equestrian trail on the north side from the western project boundary through lot “G” park to Waterman Road.
5. An enhanced pedestrian walk from Bob White Court to Lot “K” park, following I & J streets, consisting of a separated walk on the north and west sides of the roads with a 6 foot landscape buffer and 5 foot walk.
6. Paseos at Lot “W” and Bob White Court consisting of a 10 foot wide paved area with landscaping.
7. Internal paseos within Village 3 that consist of a 4 foot wide meandering walk.
8. Enhanced pedestrian cross-walks at the following intersections where trails cross roads or other enhanced pedestrian connections are provided. “Enhanced pedestrian cross-walks” shall consist of colored pavers, colored and stamped concrete or asphalt or other such enhancement, with pedestrian cross-walk striping.
9. Trail crossing/crosswalk at Waterman Road and Silverado Drive.

Silverado Drive, the primary road through the Project site, would include designated bike lanes (Class 2 bikeways) that connect to the bike lanes on Bond Road and Waterman Road. The Project’s local residential streets would serve as Class 3 bikeways.

Transit

The Project would be served by the City’s e-tran transit system. Commuter Route 58, which provides service to downtown Sacramento, and Neighborhood Route 160, which provides local service to multiple shopping locations and schools, have stops along Bond Road adjacent the Project site.

INFRASTRUCTURE AND PUBLIC SERVICES

Water

Domestic water service for the Project site would be provided by Elk Grove Water Works. The Project would connect to existing water lines adjacent the Project site, including the 8-inch line located under Bob White Court, the 18-inch line under Waterman Road, and the 24-inch line under Bond Road. Water service is described in more detail in Section 3.13.

Sewer

Wastewater treatment and conveyance would be provided by the Sacramento Area Sanitation District. The Project would connect in two locations to the existing 15-inch sanitary sewer line located under Bond Road. Wastewater service is described in more detail in Section 3.13. Specific details regarding public restroom facilities at the 5.5-acre park proposed in the north portion of the Project site have not been determined at this time. If developed, the restrooms may be served by a septic system.

Electricity

Sacramento Metropolitan Utility District (SMUD) would provide electrical service to the Project. SMUD estimates demand for the Project is approximately 4 megawatts. The Project will connect to existing SMUD infrastructure with new 12 kilovolt (kV) distribution facilities, which will require a minimum standard 12.5 overhead/underground easement along all streets throughout the Project site. The Project will connect to existing overhead sub-transmission (69kV) and distribution (12kV) lines along north side of Bond Road. Existing overhead and underground distribution (12kV) facilities near southeast corner of the Project site along the west side of Waterman Road will remain in place. A 93-foot power line easement is also located along the eastern Project site boundary and contains existing electrical distribution lines.

Natural Gas

Pacific Gas & Electric would provide natural gas service. Project improvements would involve the extension of natural gas distribution lines from surrounding infrastructure tie-ins within the right-of-way along Bond and Waterman Roads onto the Project site.

Telephone

Frontier Communication would provide telephone service. Project improvements would involve the extension of telephone lines from surrounding telephone system infrastructure within the right-of-way along Bond and Waterman Roads onto the Project site.

School

Primary and secondary schools serving the Project site are administered by the Elk Grove Unified School District.

Fire Protection and Parks/Recreation

Fire protection and parks/recreation services would be provided by the Cosumnes (formerly Elk Grove) Community Services District.

Stormwater Drainage

Stormwater drainage facilities would be developed on-site and would connect to the City of Elk Grove. The Project includes a 14.7-acre detention basin and 0.6-acre overland release area. From the on-site stormwater facilities, run-off would be conveyed to the City of Elk Grove storm drainage and flood control system. Further discussion and details are provided in Section 3.8, Hydrology and Water Quality.

2.0 PROJECT DESCRIPTION

SPECIAL PLANNING AREA

The Silverado Village Special Planning Area (SPA) zoning designation will establish development standards and design guidelines to ensure quality and consistency in the design and implementation of the Project. The SPA document is regulatory in nature and will serve as zoning for the Project site. Development plans, subdivision maps, and site plans for the Project must be consistent with both the SPA and the City of Elk Grove General Plan.

Village 1

PERMITTED USES

Permitted uses are the same as those allowed in the City of Elk Grove RD-5 Zone. The RD-5 zone allows single family uses, as proposed by the Project.

DEVELOPMENT STANDARDS

A minimum lot size of 6,300 s.f. will be required, with typical dimensions of 60' wide by 105' deep. Irregular lots may vary from the typical dimensions. Front, side, and rear yard setbacks will be consistent with the RD-5 zone, with the exception of site specific standards provided by the SPA.

SITE SPECIFIC DEVELOPMENT STANDARDS AND DESIGN GUIDELINES

The SPA includes the following site specific requirements for Village 1:

1. Lots abutting the western boundary adjacent to the Quail Ranch community shall be a minimum of 63' x 110', with lot widths matching the adjacent off-site lots to the extent possible.
2. Minimum rear yard setback for the primary dwelling for lots adjacent to the Quail Ranch community shall be 20 feet. Accessory structures shall comply with the development standards of the Citywide Code.
3. Lots abutting the Quail Ranch neighborhood shall be limited to single story homes.
4. A solid masonry wall a minimum of six feet in height shall be constructed at the westerly property line abutting the Quail Ranch neighborhood.
5. A pedestrian only connection with Emergency Vehicle Access (EVA) with "knockdown" bollards shall be extended 110 feet from the terminus of Bob White Court located in the Quail Ranch community to the interior street within Village 1.
6. Lots abutting the detention area and parks (i.e., lot 99) shall have rear yard fence designs that enables views of the open space areas while providing security and privacy for the homeowners. Wood fences at these locations are prohibited.

Village 2

PERMITTED USES

Permitted uses are the same as those allowed in the City of Elk Grove RD-5 Zone. The RD-5 zone allows single family uses, as proposed by the Project.

DEVELOPMENT STANDARDS

A minimum lot size of 5,775 s.f. will be required, with typical dimensions of 55' wide by 105' deep. Irregular lots may vary from the typical dimensions. Front, side, and rear yard setbacks will be consistent with the RD-5 zone, with the exception of site specific standards provided by the SPA.

SITE SPECIFIC DEVELOPMENT STANDARDS AND DESIGN GUIDELINES

Site specific development standards for Village 2 include a traffic circle at the intersection of Silverado Drive and A Street, a 10' paved hike/bike trail within a landscape corridor on the north side of Silverado Drive, and a 10' paved hike/bike trail along the eastern edge of the detention basin.

Village 3

VILLAGE CORE

The SPA designates a Village Core at the center of Village 3, which corresponds to the Commercial/Office/Multi-family use designated by the City's General Plan. The Village Core area is planned for recreational amenities, including a clubhouse and pool, and a residential lodge.

PERMITTED USES

Patio homes permitted uses include single family homes, paseos, exclusive use areas, and common areas, including community gardens.

Clubhouse, Recreation, and Swim Facility (Village Core) permitted uses include restaurant and dining, swimming, fitness, and supporting recreation uses, offices, 3rd party services.

Lodge Facility (Village Core) permitted uses include independent living apartments, assisted living apartments, specialized care (memory care) units, restaurant, on-site amenities such as a beauty salon, doctor's office, crafts room, kitchen, and laundry room, and general retail and office uses.

DEVELOPMENT STANDARDS

Patio Homes

The typical patio home lot size will be 4,625 s.f. (50' to 60' wide by 92.5' long), with no minimum required lot size and maximum densities of 8.0 du/ac. Front and side setbacks require 18 feet from the street to garage door, 12 feet from street to front living area, 10 feet from street to covered porch, and 12 feet from a second frontage street. There is an interior side setback of 5 feet and a rear setback of 10 feet will be required, with typical dimensions of 60' wide by 105' deep. Irregular lots may vary from the typical dimensions. Front, side, and rear yard setbacks will be consistent with the RD-5 zone, with the exception of site specific standards provided by the SPA.

Village Core

There is a maximum density of 30.0 du/ac and no minimum lot size in the Village Core. Front and side setbacks include a building to building setback of 20 feet and street side and interior side setbacks of 15 feet. The maximum building height is 48 feet.

2.0 PROJECT DESCRIPTION

SITE SPECIFIC DEVELOPMENT STANDARDS AND DESIGN GUIDELINES

The SPA includes the following site specific requirements for Village 3:

1. Internal roadway design standards following a simple grid pattern with private streets designed to accommodate and off-street trails and paseos.
2. Parking requirements include 2.25 spaces per patio home or non-covered and resident guest parking and 1 space for every 1.5 living units in the lodge.
3. Specific street standards including, but not limited to, a minimum of 75' offset between intersections, reduced street section of 26', and shared private driveways.
4. Curbside sidewalks are not required, as pedestrian walkways and paseos are provided within the community.
5. Open space and landscaping amenities including paseos at the rear of some yards, mini-parks, common areas, and pedestrian connections between the village and surrounding community and trail system.

2.5 USES OF THE EIR AND REQUIRED AGENCY APPROVALS

The City is the Lead Agency for the Project, pursuant to the State Guidelines for Implementation of the California Environmental Quality Act (CEQA), Section 15050.

CITY OF ELK GROVE

Implementation of the Project requires the following entitlements and approvals from the City:

- Certification of the EIR;
- Establishment of the Silverado Village Special Planning Area (Silverado Village SPA) which will establish development standards, design guidelines, and allowed uses for the Project site, as provided by Section 23.16.100 of the City's Municipal Code;
- A rezone of the Project site from the existing zoning of RD-2, RD-4, RD-5, and Open Space to Silverado Village SPA;
- A Tentative Subdivision Map to subdivide the Project site to accommodate:
 - 660 single-family residential lots on 115.1 acres;
 - An age restricted-multi-family lodge of up to 125 units and Village Center on 4.6 acres;
 - 77.3 acres of open space and nature preservation area;
 - Up to 5.5 acres of parks;
 - 3.5 acres of landscape entry/corridors;
 - A stormwater detention area of 14.7 acres and overland release area of 0.6 acres; and
 - 5.5 acres of roads;

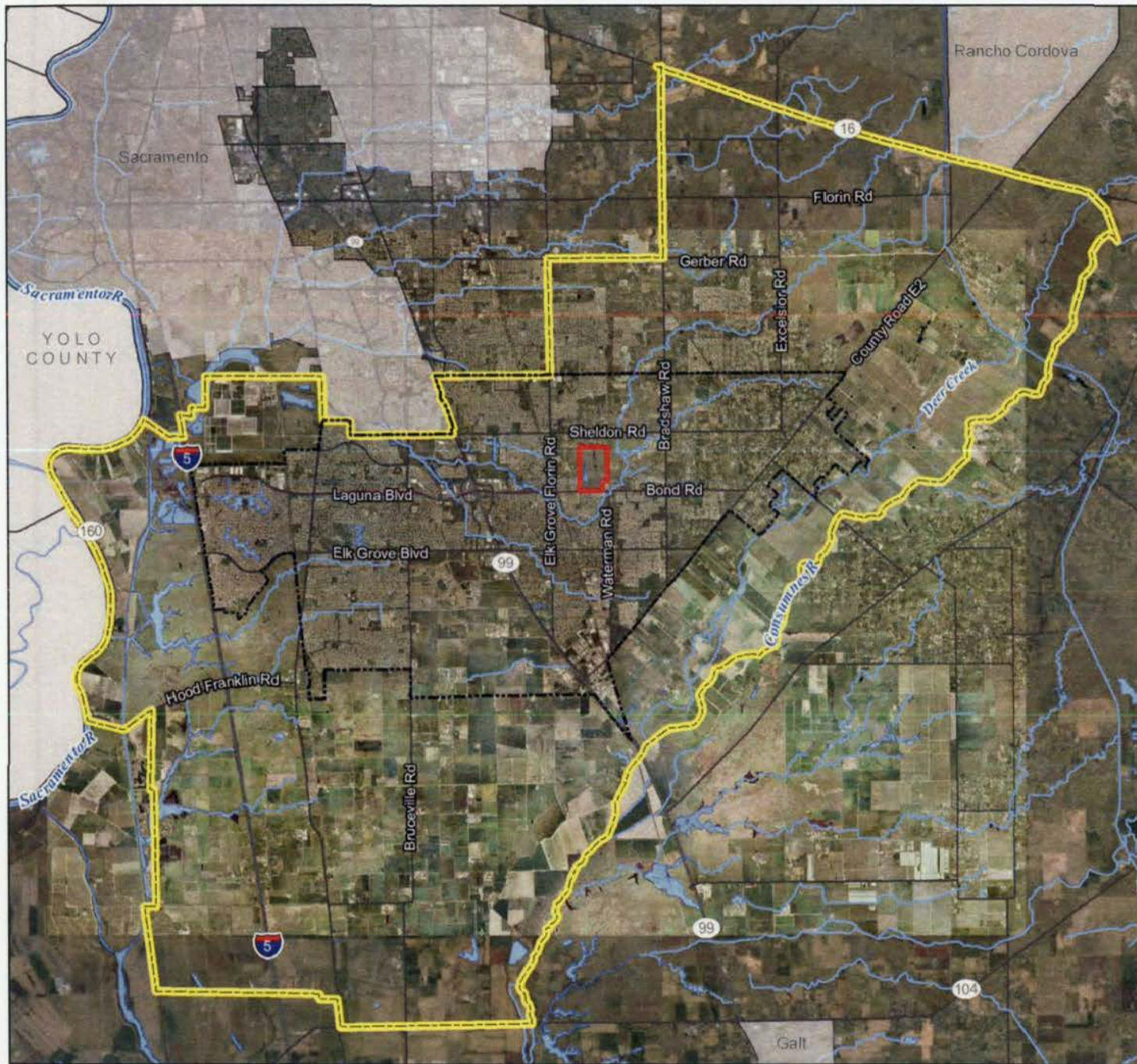
- A Development Agreement requiring the Project to conform to the Silverado Village SPA; and.
- Design review.

OTHER AGENCIES


Permits and approvals that the Applicant has obtained or may be required to obtain include, but are not limited to:

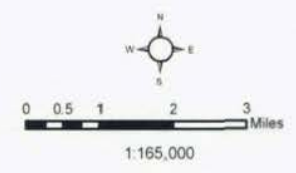
- California Department of Fish & Wildlife - 1602 Streambed Alteration Agreement.
- Central Valley Regional Water Quality Control Board - General Permit for Discharges of Storm Water Associated with Construction Activity, Storm Water Pollution Prevention Plan approval prior to construction activities, and permitting of isolated wetlands under the State's Porter-Cologne Act.
- Central Valley Flood Protection Board– Board permit for activities associated with Laguna Creek.
- Elk Grove Water District - Water Supply Assessment.
- Sacramento Metropolitan Air Quality Management District - Approval of construction-related air quality permits.
- U.S. Army Corps of Engineers– Issuance of 404 permit under the Clean Water Act for the discharge of fill material into waters of the United States and use of seasonal wetlands as a detention basin; and
- U.S. Fish and Wildlife Service - Consultation under the Endangered Species Act to determine impacts to special-status species and Incidental Take Statement.

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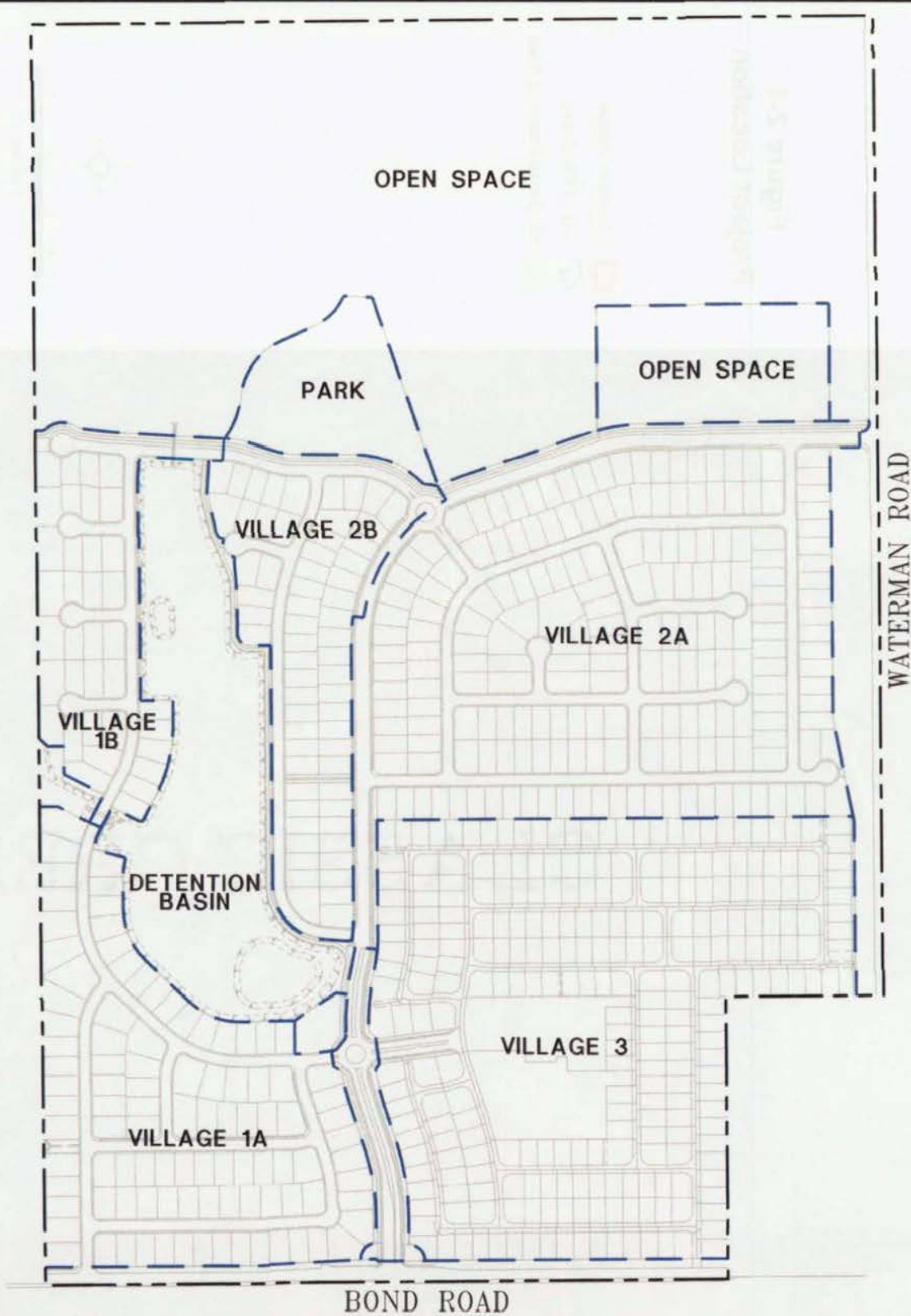


**Figure 2-1
Project Location**

-  Silverado Village
-  City of Elk Grove
-  Elk Grove Planning Area



Data sources: Sacramento County GIS data library, City of Elk Grove GIS, ESRI's StreetMap North America, ArcGIS Online Bing Aerials.
Map date: December 6, 2012.



De Novo Planning Group

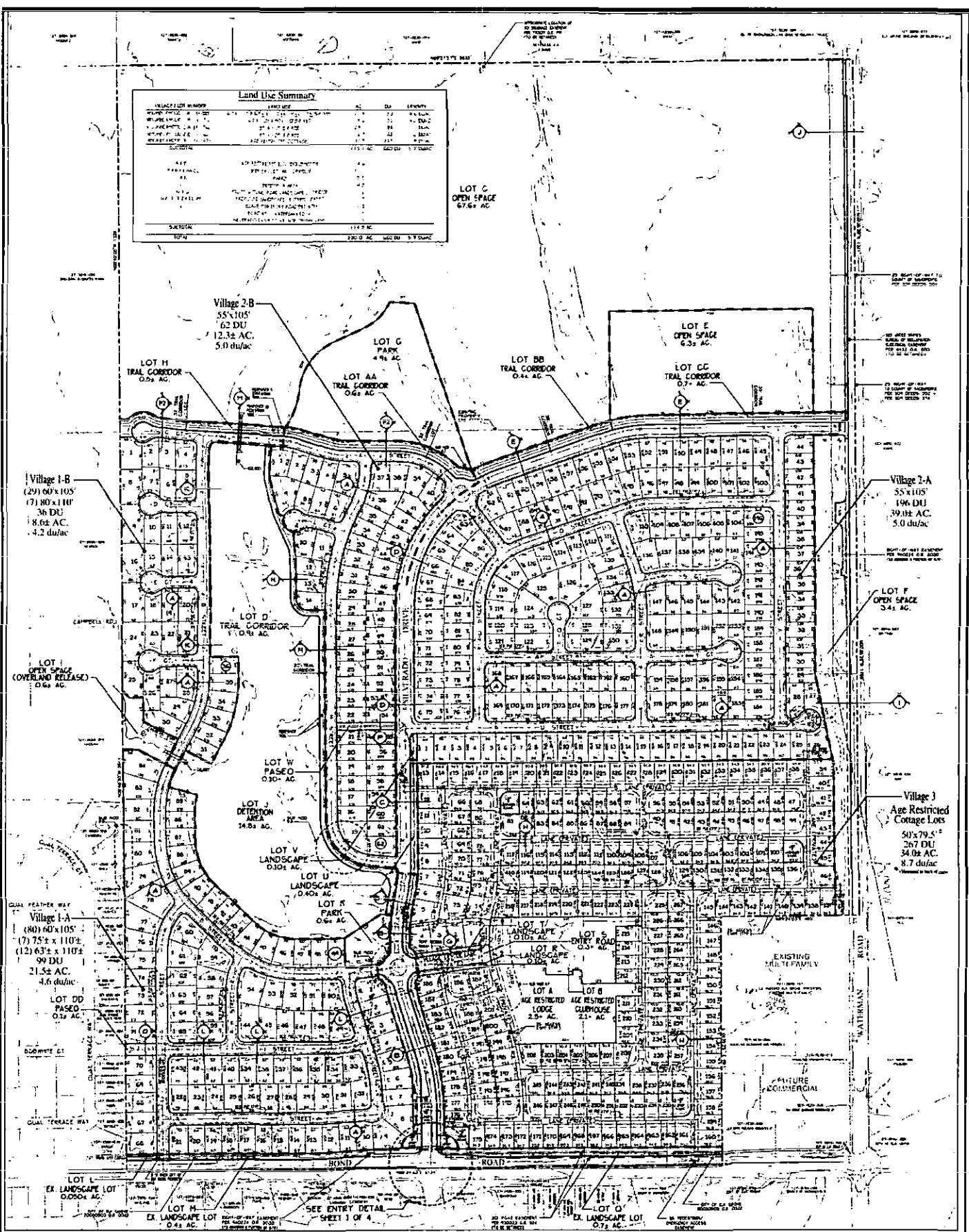
A Land Use Planning, Design, and Environmental Firm



Figure 2-2
Conceptual Site Plan

Source: Wood and Rodgers, 2013

Land Use Summary			
LAND USE GROUP	DESCRIPTION	AC	DU
RESIDENTIAL	RESIDENTIAL	115.0	5,700
COMMERCIAL	COMMERCIAL	1.0	0
INDUSTRIAL	INDUSTRIAL	0.0	0
OPEN SPACE	OPEN SPACE	114.0	0
TOTAL	TOTAL	230.0	5,700



De Novo Planning Group
 A Land Use Planning, Design, and Environmental Firm

Figure 2-3
 Detailed Site Plan

Source: Wood Rodgers, 2013

This section describes the existing visual resources of the Project area and describes the regulatory framework related to aesthetic and visual resources. This section concludes with an evaluation of the impacts and recommendations for mitigating impacts. Information in this section is based on site surveys conducted by De Novo Planning Group in 2012, ground and aerial photographs, and the following reference documents: *City of Elk Grove General Plan* (City of Elk Grove 2003a), *City of Elk Grove General Plan Environmental Impact Report* (General Plan EIR) (City of Elk Grove 2003b), *City of Elk Grove Municipal Code, Title 23 Zoning Code* (City of Elk Grove 2013), *Elk Grove Design Guidelines* (City of Elk Grove 2007), and information provided by the Project applicant, including the October 2012 Silverado Village Project Description and Silverado Village Special Planning Area (SPA) document.

Comments regarding this topic received in response to the Notice of Preparation identified concerns associated with the following issues (see Appendix A for complete comments):

- Aesthetic effect of Project on neighboring uses, including visual compatibility with lot sizes.
- Site lighting, with the recommendation that low sodium lights be made a condition of approval.

3.1.1 ENVIRONMENTAL SETTING

VISUAL CHARACTERISTICS

Project Site

The Project site is approximately 230 acres located at the northwest corner of Bond Road and Waterman Road (see Figure 2-2). The Project site is currently vacant and covered with low grasses. Vegetation growing on the site includes annual grasslands and trees along the western property line shared with Quail Ride, along the northern property line, and several scattered in the southwest corner of the site and along the western property line. Whitehouse Creek traverses the property from the northern boundary, flowing in a southwesterly direction into a series of ponds eventually discharging into the north branch of Laguna Creek. On-site ponds appear to be the result of past berming and grading activities. Power transmission line structures are located on the site adjacent to Waterman Road and power poles are located along Bond Road. Full street improvements are located on the Bond Road frontage of the site, including a meandering sidewalk, and landscaping.

Adjacent Land Uses

Uses adjacent to and in the vicinity of the Project site include roadways, residential subdivisions, multifamily apartments, agricultural/rural residential uses, and vacant land. Adjacent lands north and east of the site are generally characterized as *agricultural residential and vacant*. The Waterman Square Apartments and the vacant property are located to the immediate southeast of the Project site. Waterman Road, vacant land, and rural residential uses are located east of the site. North of the site are developed rural residential homes zoned AR-2 on Armaria, Saint Anthony, and Saint Jude Courts.

A mixture of residential development types and vacant land are adjacent to the site to the west. The Quail Ranch single family subdivision is located adjacent the southern portion of the site's western boundary. Single family homes in Quail Ranch are zoned RD-2, RD-3, and RD-5, with the

3.1 AESTHETICS AND VISUAL RESOURCES

smaller RD-5 lots primarily located adjacent to the site's western boundary. Existing rural residential development is along Campbell Road (which terminates into the site) located west central of the site, and vacant land is located adjacent the northern portion of the site's western boundary.

Adjacent lands south of the site are characterized as low density residential. Bond Road, single family residential subdivisions, and a Sacramento County office building are located to the south. Open space lands are located along Laguna Creek, south of Bond Road.

Views of the Project Site

Current views across the Project site include gently rolling areas and relatively level areas of annual grassland, depending on the viewpoint. Views are most prominent for drivers, pedestrians, and bicyclists travelling on Waterman and Bond Roads and from the Waterman Square Apartments at the southeast corner of the site. Land east of the site, across Waterman Road, and properties north of the site have generally unobstructed views of the site. The Project site is somewhat visible over the rear yard fences of the existing residential subdivision homes south of the site, across Bond Road. Similarly, views of the southwest portion of the site is generally visible from either the rear yard fences or through the more open style fencing of the homes on the east side of Quail Terrace Way in the existing Quail Ranch residential subdivision. Views from the west are limited in some areas due to the trees along the Project site/Quail Ranch boundary. Bob White Court terminates from the Quail Ranch subdivision at the Project site and provides views of the Project site from Quail Ranch.

Campbell Road terminates at the western boundary of the Project site. Views of the Project site from the northernmost of the two 5-acre lots at the terminus of Campbell Road would be largely obstructed by a corridor of established trees. The vacant southern lot has unobstructed views of the site. Vacant land is also at the northwest corner, adjacent to the site. This land presently has unobstructed views of the site. Presently, no roads serve this property.

Lands to the north of the Project site are developed with Agricultural Residential development, 2-acre lots. The opportunities to view the Project site from the north are limited to those eight residences at the end of Country Hill Drive, Saint Jude, Saint Anthony and Armaria Courts that back onto the site. These residences have large trees that largely block views of the site from the homes, although the site would be visible from other locations on these lots.

Light and Glare

Street lighting is provided within the developed areas of the City, either by the City or through private ownership. In new developments, the City itself does not install streetlights. Rather, the City requires developers to install lights and dedicate them to the City.

There are no existing sources of light or glare located on the Project site as it is vacant. The segment of Bond Road, which runs along the southern edge of the Project boundary, and has elevated street lights. The Waterman Square Apartments southeast of the Project site has security lighting in the parking areas and the vacant land zoned for shopping center would have parking lot and security lighting when developed. The Quail Ranch subdivision to the west and the subdivision to the south have street lighting as well as lighting associated with residential uses, including outdoor lighting and safety lights.

Scenic Vistas and Significant Features

The Project site is not designated as a scenic vista. The topography and visual features of the Project site are typical of undeveloped lands in eastern Elk Grove and do not include any significant geological, man-made, or other features.

3.1.2 REGULATORY SETTING

LOCAL

City of Elk Grove General Plan

The following applicable policies and actions related to aesthetics are taken from the Land Use, Parks, Trails and Open Space, and Conservation and Air Quality Elements of the City of Elk Grove General Plan.

Policy CAQ-8 Large trees (both native and non-native) are an important aesthetic (and, in some cases, biological) resource. Trees which function as an important part of the City's or a neighborhood's aesthetic character or as natural habitat should be retained to the extent possible during the development of new structures, roadways (public and private, including roadway widening), parks, drainage channels, and other uses and structures. If trees cannot be preserved onsite, offsite mitigation or payment of an in-lieu fee may be required by the City. Where possible, trees planted for mitigation should be located in the same watershed as the trees, which were removed. Trees that cannot be protected shall be replaced either on-site or off-site as required by the City.

CAQ-8-Action 1 When reviewing native or non-native trees for preservation, consider the following criteria:

- Aesthetic value
- Biological value
- Shade
- Water quality benefits
- Runoff reduction
- Air quality (pollutant reduction)
- Health of the tree(s)
- Suitability for preservation in place
- Safety hazards posed by the tree(s)

Policy PTO-15 The City views open space lands of all types as important resource which should be preserved in the region, and supports the establishment of multipurpose open space areas to address a variety of needs, including, but not limited to:

- Maintenance of agricultural uses;
- Wildlife habitat
- Recreational open space
- Aesthetic benefits
- Flood control

3.1 AESTHETICS AND VISUAL RESOURCES

To the extent possible, lands protected in accordance with this policy should be in proximity to Elk Grove, to facilitate use of these areas by Elk Grove residents, assist in mitigation of habitat loss within the city, and provide an open space resource close to the urbanized areas of Elk Grove.

Policy CAQ-7 Encourage development clustering where clustering would facilitate on-site protection of woodlands, grasslands, wetlands, stream corridors, scenic areas, or other appropriate natural features as open space, provided that:

1. Urban infrastructure capacity is available for urban use.
2. On-site resource protection is appropriate and consistent with other General Plan Policies.
3. The architecture and scale of development is appropriate for the area.
4. Development rights for the open space area are permanently dedicated and appropriate long-term management is provided for by either a public agency, homeowners association, or other appropriate entity.

Policy CAQ-17 The City recognizes the value of naturally vegetated stream corridors, commensurate with flood control and public acceptance, to assist in removal of pollutants, provide native and endangered species habitat and provide community amenities.

Policy PTO-16 Stream corridors, floodways, electrical transmission corridors, and similar features shall be considered for inclusion in the citywide trails and open space system.

Policy LU-35 The City of Elk Grove shall require that new development—including commercial, office, industrial, and residential development— is of high quality and reflects the City's desire to create a high quality, attractive, functional, and efficient built environment.

LU-35-Action 2 The Design Guidelines shall include a provision to minimize the use of reflective materials in building design in order to reduce the potential impacts of daytime glare.

LU-35-Action 3 The Citywide Design Guidelines shall include provisions for the design of outdoor light fixtures to be directed/shielded downward and screened to avoid nighttime lighting spillover effects on adjacent land uses and nighttime sky glow conditions.

City of Elk Grove Zoning Code

Title 23, Zoning, of the City Municipal Code (Zoning Code) carries out the policies of the Elk Grove General Plan by classifying and regulating the uses of land and structures within the City, consistent with the General Plan. The Zoning Code is adopted to protect and to promote the public health, safety, comfort, convenience, prosperity, and general welfare of residents and businesses in the City [Ord. 8-2011 §3(B), eff. 6-24-2011].

The Zoning Code provides standards for multifamily and non-residential lighting (Chapter 23.56). For instance, all outdoor lighting must be constructed with full shielding, and automatic timing devices are required for all new outdoor light fixtures with the off-hours defined as between 10:00 p.m. and 6:00 a.m. The Zoning Code regulates the level of illumination resulting from development during hours of darkness and states that new outdoor lighting fixtures must be energy efficient

with a rated average bulb life of not less than 10,000 hours. Zoning regulations also include development and design standards for the location of signs along roadways to achieve an aesthetically pleasing appearance (Section 23.62).

Design Guidelines

The City conducts Design Review to ensure quality development in keeping with the desired character of the City and in accordance with the City's design objectives as promulgated in the Design Guidelines and to ensure that the appearance of development will be compatible and harmonious with the use and enjoyment of surrounding properties. Design Review approval is required for single-family residential subdivision maps, multi-family residential development, and public/quasi-public (parks). This Aesthetics chapter will focus on those guidelines that are applicable to the Project and are adopted for the purpose of avoiding or mitigating an environmental aesthetic effect.

RESIDENTIAL SUBDIVISIONS

Guideline 12 encourages neighborhood design that incorporates existing natural features of the property including creeks, drainage canals, riparian habitats, and significant mature vegetation. Guideline 18 requires that where rear yards of single-family homes abut designated open space areas, rear yard fencing shall be open view and remain open in perpetuity. Special consideration shall be given to screening for privacy/nuisance issues associated with headlights from adjacent roadways. Guideline 23 requires street lighting along local residential streets to be designed at a pedestrian scale with a maximum height of 14 feet.

MASTER HOME PLANS

The Design Guidelines establish design, architectural, and landscaping requirements for master home plans. Guideline 1 requires a streetscape variety, including a minimum of five floor plans with at least three elevations each for subdivisions with more than 200 units. Guideline 2 requires *adjacent models/floor plans to vary from one another through differing building height, mass, shape, and roof form*. A minimum of one home plan in each master plan series is required to be single-story. Guidelines 17 through 20 establish landscaping and tree planting requirements, including that trees to be planted in the front yard area of each single-family residential lot, address lawn areas, and address the use of groundcover, shrubs, and hedges to soften appearance of structures or hide fences or walls.

MULTI-FAMILY DEVELOPMENT

Building placement and orientation on all multi-family sites shall take into consideration the residential use from a physical and functional perspective, relationship and compatibility with surrounding uses, and the visual impact and experience for residents, visitors, and passersby.

Site lighting for multi-family projects include lighting of project entries, drive aisles and parking areas, pedestrian and for the architectural enhancement of the development. Guideline 24 *requires exterior lighting to be pedestrian in scale with a maximum height of 14 feet*. Guideline 25 states that exterior site lighting shall be designed so that light is not directed off the site and the light source is shielded downward from direct off-site viewing. Specifically, light features shall be located and designed with cut-off lenses to avoid light spill and glare on adjacent properties. In order to minimize light trespass on residential properties directly abutting a multi-family site, illumination measured at the nearest residential property line shall not exceed the moon's

3.1 AESTHETICS AND VISUAL RESOURCES

potential ambient illumination of one-tenth (0.1) foot-candle. Guideline 26 encourages use of low-level bollard lighting for illumination of pedestrian walkways. Guideline 27 states that outdoor light fixtures used to illuminate architectural and landscape features shall use a narrow cone of light for the purpose of confining the light to the object of interest and minimize light trespass and glare. Guidelines 18 and 19 apply the same standards to building lighting.

3.1.3 IMPACTS AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE

Consistent with Appendix G of the CEQA Guidelines, the Project will have significant impact on aesthetics if it will:

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

The aesthetics topics from Appendix G (scenic vista and scenic resources) were dismissed in the Initial Study prepared for the Silverado Village SPA as the Project was determined to have no potential for impact to scenic vistas or resources.

IMPACTS AND MITIGATION MEASURES

Impact 3.1-1: The Project would not substantially degrade the existing visual character or quality of the site and its surroundings. (less than significant)

The Project would convert approximately 60% of the site from its undeveloped state, with areas of level and gently rolling topography with annual grasslands, to urbanized uses that include single family residential neighborhoods, parks, and a multifamily lodge and clubhouse. Project implementation would alter the existing visual character of the site, as described below.

The Project will designate 92.7 acres (40% of the site) for open space uses. The majority of the northern portion of the property will remain undeveloped and designated for permanent natural open space, comprised of a 68.1 acre preserve area to protect sensitive wetland habitat and a 6.4 acre open space parcel. Preservation of grasslands, wetlands, and stream corridors in open space is compatible with General Plan Focused Goal 1-9, Guiding Goal 5, and Policies PTO-15, and CAQ-7 and CAQ-17, which all address preservation of the rural character of Elk Grove through clustering development to preserve open space and protect grasslands, wetlands, and stream corridors. A 3.9-acre open space parcel under the existing transmission lines along Waterman Road is also designated on the eastern edge of the property from the proposed Silverado Drive to existing Waterman Square apartments. This open space designation is consistent with General Plan Policy PTO-16 which encourages inclusion of transmission corridors in open space and trail systems.

The proposed open space uses are compatible with the rural character and appearance of the existing 2-acre agricultural-residential development north of the site. Most of these lots have buildings and landscaping covering roughly one-half of the lot with the remainder open and

covered in native grass, similar to the open space of the Project site. The land directly east of the *proposed open space*, across Waterman Road is presently vacant but also designated for agricultural-residential development. The proposed open space and clustering of development in the remainder of the site is consistent with General Plan Focused Goal 5 and Policy PTO-15 in preserving the rural character of surrounding properties north and east of the Project site. The full development of the Project site under its Low Density Residential, Rural Residential, and Commercial/Office/Multifamily land use designations would allow for low density residential development, as well as a small area of commercial/office/multifamily uses on the central and southern portions of the site and rural residential development on the northern portion of the site.

The property west of the proposed open space is presently vacant but zoned for Low Density Residential at RD-2, RD-4 and RD-5 intensity. Currently views onto the site are unobstructed. Views of open space are compatible with and will provide a visual buffer and transition between this planned low density residential and existing agricultural residential to the north.

Development in the central and southern portion of the site would result in a change in the visual character of the site from vacant land covered with native grasses to suburban residential development. Very few trees are located on the site (19 trees were identified in the Tree Survey) and those that are present outside of the open space areas are located in the southwest corner of the site and along the Project boundary shared with the Quail Ranch subdivision. General Plan Focused Goal 4-2, 5-2, and Policy CAQ-8 define oaks and large trees as an important part of the City's aesthetic character to be retained to the extent possible and where trees cannot be preserved onsite, offsite mitigation or payment of in-lieu fees may be required. CAQ-8-Action 1 notes that when considering trees for preservation their aesthetic value should be one of the criteria considered. The Project will remove ten trees; the removal of eight of these trees was recommended by the Tree Survey due to poor prognosis based on health, structural concerns, or proximity to adjacent trees.

As noted above, General Plan Policy CAQ-7 encourages clustering of development, as proposed, to facilitate protection of natural features such as open space, provided that the architecture and scale of development is appropriate for the area. Proposed development in Villages 1 and 2 is comprised of single family subdivisions fairly typical of the Quail Ranch subdivision west of the site and subdivisions south of Bond Road. Lots in Village 1 are proposed at a typical size 6,300 sq. ft., except adjacent to Quail Ranch, where they are slightly larger to match the width of the abutting lots. Lots in Village 2 are proposed at a typical size of 5,775 sq. ft. The Project limits homes adjacent to Quail Ranch to one story in height to both prevent second story units in the SPA from views into the rear yards in Quail Ranch, thus preserving privacy, and also to reduce the visual impact and massing adjacent to Quail Ranch. A 6-foot solid masonry wall is to be constructed at the property line abutting Quail Ranch (except where emergency access is proposed at Bob White Court). The proposed housing types and street layout are also similar to these adjoining subdivisions. Proposed Villages 1 and 2 are compatible with the character and appearance of the existing low density residential subdivisions west and south of the site.

Village 1 also abuts Agricultural Residential 5-acre lots west of the site, at the terminus of Campbell Road. These lots are presently surrounded by a mixture of land uses, few of which are rural. Although the Project will not serve to preserve the rural character of the Campbell Road

3.1 AESTHETICS AND VISUAL RESOURCES

residences, it will be compatible with the character and appearance of the existing and planned low density residential development presently surrounding these residences.

The age-restricted Village 3 proposed at the southeastern corner of the Project site adjacent to the Waterman Square Apartments and vacant land zoned for Shopping Center would be comprised of smaller lots that would be visible on the frontages of Bond and Waterman Roads. The single-family detached, one-story active adult patio homes are proposed to be on lots of 4,625 sq. ft. The internal street pattern proposed for this village would be traditional, with narrow streets on a grid pattern, no sidewalks, and an off-street system of pedestrian paseos providing access to the Village Core. The SPA development standards require a minimum rear yard depth of 10 feet, thus the patio homes along Bond Road could be slightly closer than a typical RD-5 subdivision with a 15 foot rear yard minimum (EGMC Table 23.30-2B). The SPA eliminates traditional rear yard fencing for interior lots but defers to the Zoning Code for perimeter rear yard fencing requirements, such as where lots back on to Bond and Waterman Roads. The EGMC Section 23.52.050 address height limits for rear yard fences and walls with a maximum permitted height of six feet, Table 23.54-1 defers minimum setback and corresponding landscape standards be determined in conjunction with required design review. EGMC Section 23.54.050 requires perimeter landscaping adjoining all streets have street trees planted at a maximum spacing of fifty feet on center. See Section 3.10 of this EIR for discussion of noise attenuation. The street improvements, including a meandering sidewalk and landscaping, are already installed on the Project side of the Bond Road frontage.

Village 3 would be visible from the Agricultural Residential 5-acre properties east of Waterman although visibility in this case is more limited. The southeast corner of Village 3 would not be visible behind the Waterman Square Apartments or behind the shopping center when it is constructed. The open space setback along the entire Waterman Road Project frontage under the transmission lines provides viewing distance and a near view continuation of the open rural character. Elk Grove Design Guideline #18 requires that where rear yards of single-family homes abut designated open space areas, rear yard fencing shall be open view and remain open in perpetuity. The single story height limitation for Village 3 as well as perimeter Project fencing and required street trees would provide further screening.

The Agricultural Residential 5-acre properties east of Waterman Road would also have views of Village 2, north of Village 3. However, Village 2 has an open space parcel under the transmission lines providing even greater viewing distance and a near view continuation of the open rural character. These homes will also be screened from view by fencing, although units are not limited to single-story in this village and would be visible from a distance over the perimeter fence.

Village 3 represents the most departure from the character of surrounding single family development in that the patio homes are on smaller lots. However, this is compatible with the density of the adjacent Waterman Square Apartments. Consistent with General Plan Policy CAQ-7, clustered development creates a scale of development that is appropriate for the area. Visibility of Village 3 would be limited over the rear yard fences of the subdivision south of Bond Road, except for two-story units. Bond Road and developed street improvements and landscaping on both sides provide distance and softening of views of Village 3. The visibility of Village 3 from agricultural residential development east of Waterman Road would be similarly softened by Waterman Road

itself, the open space setback under the transmission lines, limitation to single story units, and perimeter fencing.

The City's Design Guidelines require that development be harmonious with surrounding uses and include measures to ensure high-quality design, through site layout, building height and massing, other architectural details, and landscaping.

In summary, the Project would be visually compatible with the rural character of agricultural residential development north and east of the site by preserving the north third of the site in open space and providing visual screening of Village 2 via an adequate open space setback along Waterman Road under transmission lines. Village 1 is designed with a similar low density residential (RD-5) character to adjacent subdivisions west and south and is generally visually compatible with nearby development. Village 3 would be setback with a meandering sidewalk and landscaping between the village and Waterman Road and Bond Road and is visually compatible with the adjacent Waterman Square Apartments.

The General Plan Draft EIR anticipated urbanization of the City and identified that implementation of the General Plan would result in a significant and unavoidable impact associated with conversion of the region's rural landscape to residential, commercial, and other land uses even with implementation of mitigating General Plan policies and actions (Policies CAQ-8 and LU-34 and associated implementing actions), related to preservation of scenic resources and providing a built environment of high visual quality (Impact 4.13.1; City of Elk Grove, 2003b, pp. 4.13-5 – 4.13-60). The Project is consistent with General Plan policies related to visual character including Policy CAQ-8 and LU-34, including actions related to tree loss and mitigation and the design of development.

The Project would be compatible with the surrounding developments and is consistent with the City's policies and requirements related to visual resources. Impacts to the existing visual character or quality of the site and its surroundings would be less than significant.

Impact 3.1-2: Project implementation may result in light and glare impacts. (less than significant with mitigation)

Development of the Project would introduce new sources of light and glare to the presently vacant site.

New sources of daytime glare would occur primarily from the windshields of vehicles travelling to and from the Project site and parked at the site and from light bouncing off of reflective building surfaces such as headlamps reflecting off large windows. All Village Core building and parking areas are located within the interior of the Project site, and would not be significantly visible to any of the glare-sensitive land uses in the Project vicinity; however, they could result in internal glare effects if reflective materials were used on the clubhouse and lodge facilities. Project access roads are designed to align opposite access roads serving surrounding development on Bond Road and at the property line on Waterman Road. The development to the south, west, and north will not directly face the interior streets or residential lots of the Project. Additionally, as described above, the Project includes an open space setback along Waterman Road with lots backing onto this setback, which would provide visual distance and block potential glare to Agricultural Residential areas east of the Project site. Similarly, lots in Village 1 back onto surrounding perimeter properties thus blocking windshield glare. While the required setbacks, perimeter

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fencing, and landscaping would reduce the potential for daytime glare impacts, there is the potential for reflective materials to be used on the clubhouse and lodge facilities resulting in increased daytime glare.

New light sources introduced by the Project would include street lighting, parking lot lights, and security related lighting. These new light sources could result in adverse affects to adjacent land uses through the “spilling over” of light into these areas and intensified nighttime lighting conditions in the Project vicinity. A detailed lighting plan has not been prepared for the Project, but for the purposes of this analysis, it has been conservatively assumed that exterior lighting would be located throughout most of the outdoor areas of the developed portions of the site. This includes, but is not necessarily limited to: street lighting in the residential areas; exterior lighting on homes and residences; lighting for the interior multi-use trail network; park lighting; parking lot and security lighting in the Village Core. While the City’s Design Guidelines require outdoor lighting for multifamily residential development and non-residential development to be shielded in order to not spill over on adjacent lots, there is no requirement for shielding of single family residential lighting. Light sources from the proposed development may have a significant adverse impact on the surrounding areas, by introducing nuisance light into the area and decreasing the visibility of nighttime skies. On-site light sources may create light spillover and night sky impacts on surrounding land uses in the absence of mitigation.

The potential for increased daytime glare and spillover of nighttime lighting to adjacent lots is considered a potentially significant impact.

MITIGATION MEASURES

Mitigation Measure 3.1-1 *Outdoor lighting shall be designed so that light is not directed off the site and the light source is shielded downward from overhead viewing and from direct off-site viewing. Light spill and glare shall not exceed 0.1 foot-candle on adjacent properties. These requirements shall be shown on the master home plans for the single family units and the project improvement plans for the multifamily, clubhouse, and parks facilities.*

Timing/Implementation: Prior to issuance of building permits.

Enforcement/Monitoring: City of Elk Grove Planning Department.

Mitigation Measure 3.1-2 *Street light fixtures shall use low-pressure sodium lamps or other similar lighting fixture and shall be installed and shielded in such a manner that no light rays are emitted from the fixture at angles above the horizontal plane. High-intensity discharge lamps shall be prohibited. Offsite illumination shall not exceed two-foot candles. Street lighting plans shall be submitted with project improvement plans for City review and approval.*

Timing/Implementation: Prior to approval of facility improvement plans for project roadways.

Enforcement/Monitoring: City of Elk Grove Planning Department.

Mitigation Measure 3.1-3 *Exterior building materials on multifamily and nonresidential structures shall be composed of at least 50 percent low-reflectance non-polished surfaces. All bare metallic surfaces shall be painted with flat finishes to reduce reflected glare.*

Timing/Implementation: Prior to issuance of building permits.

Enforcement/Monitoring: City of Elk Grove Planning Department.

SIGNIFICANCE AFTER MITIGATION

Implementation of Mitigation Measures 3.1-1 and 3.1-2 would ensure that all exterior lighting associated with the Project is properly shielded and directed downward in order to eliminate light spillage onto adjacent properties, and reduce impacts to “dark skies” to the greatest extent feasible. Mitigation Measure 3.1-3 would reduce potential daytime glare impacts by ensuring that the multifamily and clubhouse facilities minimize use of reflect surfaces. Implementation of Mitigation Measures 3.1-1 through 3.1-3 would reduce potential daytime glare and nighttime lighting impacts to a less than significant level.

3.1 AESTHETICS AND VISUAL RESOURCES

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This section describes the regional air quality, current attainment status of the air basin, local sensitive receptors, emission sources, and impacts that are likely to result from Project implementation. Following this discussion is an assessment of consistency of the Project with applicable policies and local plans. The Greenhouse Gases and Climate Change analysis is located in a separate section of this Draft EIR.

3.2.1 EXISTING SETTING

SACRAMENTO VALLEY AIR BASIN

The City of Elk Grove is located within the Sacramento Valley Air Basin (SVAB). The SVAB is the northern half of California's Great Valley and is bordered on three sides (west, north, and east) by mountain ranges, with peaks in the eastern range above 9,000 feet. The SVAB is approximately 13,700 square miles and essentially a smooth valley floor with elevations ranging from 40 to 500 feet. The rolling valley is interrupted by the Sutter Buttes, an area of 80 square miles in northern Sutter County, which rise abruptly to more than 2,100 feet above the valley floor.

Climate

The climate in the Elk Grove area is considered Mediterranean, which is characterized by hot, dry summers and cool, wet winters. Within the Project area, temperatures range from an average January low of approximately 36°F to an average July high of approximately 96°F. Between mid-April and mid-October, significant precipitation is unlikely and high temperatures often peak at over 100 degrees Fahrenheit (F) with lows in the high 50s and low 60s.

Winters are fairly mild, with the most rainfall coming in January. Rainfall averages approximately 26 inches annually and occurs predominantly from October to May. During the winter, highs are typically in the 60s with lows in the 30s. "Tule fog" (thick ground fog) is often present during the autumn and winter months. The typical seasonal pattern is for North Pacific cyclonic storms to periodically sweep into the area from October through April and for high pressure to dominate over the area and to deflect storms from May to October.

Air Movement

As with all of Central California, climate in the SVAB is dominated by the strength and location of a semi-permanent, subtropical high-pressure cell over the northeastern Pacific Ocean. Climate is also affected by the temperature moderating effects of the nearby oceanic heat reservoir. Warm summers, cool winters, rainfall, daytime onshore breezes, and moderate humidity characterize regional climatic conditions.

In summer, when the high-pressure cell is strongest, temperatures are very warm and humidity is low. The daily incursion of the sea breeze into the Central Valley, however, creates persistent breezes that moderate the summer heat. In winter, when the high-pressure cell is weakest, conditions are characterized by occasional rainstorms interspersed with stagnant conditions and sometimes heavy fog.

Airflow patterns in the basin can be characterized by one of eight directional types, the most frequent being northwesterly, that is to say, predominant surface wind flows are from the

3.2 AIR QUALITY

south/southeast. These wind flows generally occur at speeds of approximately 9-10 mph (WRCC 2007, CARB 1992). The northwesterly flow is predominant in spring and summer, but seasonal variations do occur. Calm conditions dominate the winter months.

Inversions occur in the SVAB with great frequency in all seasons. The most stable inversions occur in late summer and fall. The summertime inversions are often the result of marine air pushing under an overlying warm air mass. These are termed "marine inversions" and are generally accompanied by brisk afternoon winds, which provide good air circulation.

In contrast, many autumn inversions are the result of warm air subsiding in a high-pressure cell where accompanying light winds do not provide adequate dispersion. Autumn inversions limit vertical mixing, creating a very stable layer of air with very light or calm winds. These inversions are usually present on clear cold nights during late fall and winter. In the morning, these ground based inversions are weakened and eventually eliminated by solar heating. As a result, they are strongest in the late night and early morning, when ground-level temperatures are coldest and solar radiation is low.

Seasonal Pollution Variations

Carbon monoxide, oxides of nitrogen, particulate matters, and lead particulate concentrations in the late fall and winter are highest when there is little interchange of air between the valley and the coast and when humidity is high following winter rains. This type of weather is associated with radiation fog, known as tule fog, when temperature inversions at ground level persist over the entire valley for several weeks and air movement is virtually absent.

Pollution potential is relatively high due to the combination of air pollutant emissions sources, transport of pollutants into the area and meteorological conditions that are conducive to high levels of air pollution. Elevated levels of particulate matter (primarily fine particulates or PM_{2.5}) and ground-level ozone are of most concern to regional air quality officials.

Local carbon monoxide "hot spots" are important to a lesser extent. Ground-level ozone, the principal component of smog, is not directly emitted into the atmosphere but is formed by the reaction of reactive organic gases (ROG) and nitrogen oxides (NOx) (known as ozone precursor pollutants) in the presence of strong sunlight. Ozone levels are highest during late spring through early fall, when weather conditions are conducive and emissions of the precursor pollutants are highest.

Surface-based inversions that form during late fall and winter nights cause localized air pollution problems (PM₁₀ and carbon monoxide) near the emission sources because of poor dispersion conditions. Emission sources are primarily from automobiles. Conditions are exacerbated during drought-year winters.

CRITERIA POLLUTANTS

The United States Environmental Protection Agency (EPA) uses six "criteria pollutants" as indicators of air quality, and has established for each of them a maximum concentration above which adverse effects on human health may occur. These threshold concentrations are called National Ambient Air Quality Standards (NAAQS). Each criteria pollutant is described below.

Ozone (O₃) is a photochemical oxidant and the major component of smog. While O₃ in the upper atmosphere is beneficial to life by shielding the earth from harmful ultraviolet radiation from the sun, high concentrations of O₃ at ground level are a major health and environmental concern. O₃ is not emitted directly into the air but is formed through complex chemical reactions between precursor emissions of volatile organic compounds (VOC) and oxides of nitrogen (NO_x) in the presence of sunlight. These reactions are stimulated by sunlight and temperature so that peak O₃ levels occur typically during the warmer times of the year. Both VOCs and NO_x are emitted by transportation and industrial sources. VOCs are emitted from sources as diverse as autos, chemical manufacturing, dry cleaners, paint shops and other sources using solvents.

The reactivity of O₃ causes health problems because it damages lung tissue, reduces lung function and sensitizes the lungs to other irritants. Scientific evidence indicates that ambient levels of O₃ not only affect people with impaired respiratory systems, such as asthmatics, but healthy adults and children as well. Exposure to O₃ for several hours at relatively low concentrations has been found to significantly reduce lung function and induce respiratory inflammation in normal, healthy people during exercise. This decrease in lung function generally is accompanied by symptoms including chest pain, coughing, sneezing and pulmonary congestion.

Carbon monoxide (CO) is a colorless, odorless and poisonous gas produced by incomplete burning of carbon in fuels. When CO enters the bloodstream, it reduces the delivery of oxygen to the body's organs and tissues. Health threats are most serious for those who suffer from cardiovascular disease, particularly those with angina or peripheral vascular disease. Exposure to elevated CO levels can cause impairment of visual perception, manual dexterity, learning ability and performance of complex tasks.

Nitrogen dioxide (NO₂) is a brownish, highly reactive gas that is present in all urban atmospheres. NO₂ can irritate the lungs, cause bronchitis and pneumonia, and lower resistance to respiratory infections. Nitrogen oxides are an important precursor both to ozone (O₃) and acid rain, and may affect both terrestrial and aquatic ecosystems. The major mechanism for the formation of NO₂ in the atmosphere is the oxidation of the primary air pollutant nitric oxide (NO_x). NO_x plays a major role, together with VOCs, in the atmospheric reactions that produce O₃. NO_x forms when fuel is burned at high temperatures. The two major emission sources are transportation and stationary fuel combustion sources such as electric utility and industrial boilers.

Sulfur dioxide (SO₂) affects breathing and may aggravate existing respiratory and cardiovascular disease in high doses. Sensitive populations include asthmatics, individuals with bronchitis or emphysema, children and the elderly. SO₂ is also a primary contributor to acid deposition, or acid rain, which causes acidification of lakes and streams and can damage trees, crops, historic buildings and statues. In addition, sulfur compounds in the air contribute to visibility impairment in large parts of the country. Ambient SO₂ results largely from stationary sources such as coal and oil combustion, steel mills, refineries, pulp and paper mills and from nonferrous smelters.

Particulate matter (PM) includes dust, dirt, soot, smoke and liquid droplets directly emitted into the air by sources such as factories, power plants, cars, construction activity, fires and natural windblown dust. Particles formed in the atmosphere by condensation or the transformation of emitted gases such as SO₂ and VOCs are also considered particulate matter.

3.2 AIR QUALITY

Based on studies of human populations exposed to high concentrations of particles (sometimes in the presence of SO₂) and laboratory studies of animals and humans, there are major effects of concern for human health. These include effects on breathing and respiratory symptoms, aggravation of existing respiratory and cardiovascular disease, alterations in the body's defense systems against foreign materials, damage to lung tissue, carcinogenesis and premature death.

Respirable particulate matter (PM₁₀) consists of small particles, less than 10 microns in diameter, of dust, smoke, or droplets of liquid which penetrate the human respiratory system and cause irritation by themselves, or in combination with other gases. Particulate matter is caused primarily by dust from grading and excavation activities, from agricultural activities (as created by soil preparation activities, fertilizer and pesticide spraying, weed burning and animal husbandry), and from motor vehicles, particularly diesel-powered vehicles. PM₁₀ causes a greater health risk than larger particles, since these fine particles can more easily penetrate the defenses of the human respiratory system.

Fine particulate matter (PM_{2.5}) consists of fine particles, which are less than 2.5 microns in size. Similar to PM₁₀, these particles are primarily the result of combustion in motor vehicles, particularly diesel engines, as well as from industrial sources and residential/agricultural activities such as burning. It is also formed through the reaction of other pollutants. As with PM₁₀, these particulates can increase the chance of respiratory disease, and cause lung damage and cancer. In 1997, the EPA created new Federal air quality standards for PM_{2.5}.

The major subgroups of the population that appear to be most sensitive to the effects of particulate matter include individuals with chronic obstructive pulmonary or cardiovascular disease or influenza, asthmatics, the elderly and children. Particulate matter also impacts soils and damages materials, and is a major cause of visibility impairment.

Lead (Pb) exposure can occur through multiple pathways, including inhalation of air and ingestion of Pb in food, water, soil or dust. Excessive Pb exposure can cause seizures, mental retardation and/or behavioral disorders. Low doses of Pb can lead to central nervous system damage. Recent studies have also shown that Pb may be a factor in high blood pressure and subsequent heart disease.

ODORS

Typically odors are regarded as a nuisance rather than a health hazard. However, manifestations of a person's reaction to foul odors can range from psychological (e.g., irritation, anger, or anxiety) to physiological (e.g., circulatory and respiratory effects, nausea, vomiting, and headache).

With respect to odors, the human nose is the sole sensing device. The ability to detect odors varies considerably among the population and overall is quite subjective. Some individuals have the ability to smell minute quantities of specific substances; others may not have the same sensitivity but may have sensitivities to odors of other substances. In addition, people may have different reactions to the same odor; in fact, an odor that is offensive to one person (e.g., from a fast-food restaurant) may be perfectly acceptable to another.

It is also important to note that an unfamiliar odor is more easily detected and is more likely to cause complaints than a familiar one. This is because of the phenomenon known as odor fatigue,

in which a person can become desensitized to almost any odor and recognition only occurs with an alteration in the intensity.

Quality and intensity are two properties present in any odor. The quality of an odor indicates the nature of the smell experience. For instance, if a person describes an odor as flowery or sweet, then the person is describing the quality of the odor. Intensity refers to the strength of the odor. For example, a person may use the word “strong” to describe the intensity of an odor. Odor intensity depends on the odorant concentration in the air.

When an odorous sample is progressively diluted, the odorant concentration decreases. As this occurs, the odor intensity weakens and eventually becomes so low that the detection or recognition of the odor is quite difficult. At some point during dilution, the concentration of the odorant reaches a detection threshold. An odorant concentration below the detection threshold means that the concentration in the air is not detectable by the average human.

SENSITIVE RECEPTORS

A sensitive receptor is a location where human populations, especially children, seniors, and sick persons, are present and where there is a reasonable expectation of continuous human exposure to pollutants. Examples of sensitive receptors include residences, hospitals, and schools. Potential sensitive receptors in the vicinity of the Project include single family and multi-family residences.

AMBIENT AIR QUALITY

Both the U.S. Environmental Protection Agency (U.S. EPA) and the California Air Resources Board (CARB) have established ambient air quality standards for common pollutants. These ambient air quality standards represent safe levels of contaminants that avoid specific adverse health effects associated with each pollutant.

The federal and California state ambient air quality standards are summarized in Table 3.2-1 for important pollutants. The federal and state ambient standards were developed independently, although both processes attempted to avoid health-related effects. As a result, the federal and state standards differ in some cases. In general, the California state standards are more stringent. This is particularly true for ozone and particulate matter between 2.5 and 10 microns in diameter (PM₁₀).

TABLE 3.2-1: FEDERAL AND STATE AMBIENT AIR QUALITY STANDARDS

POLLUTANT	AVERAGING TIME	FEDERAL PRIMARY STANDARD	STATE STANDARD
Ozone	1-Hour	--	0.09 ppm
	8-Hour	0.075 ppm	0.070 ppm
Carbon Monoxide	8-Hour	9.0 ppm	9.0 ppm
	1-Hour	35.0 ppm	20.0 ppm
Nitrogen Dioxide	Annual	0.053 ppm	0.03 ppm
	1-Hour	0.100 ppm	0.18 ppm
Sulfur Dioxide	Annual	0.03 ppm	--
	24-Hour	0.14 ppm	0.04 ppm
	1-Hour	75 ppb	0.25 ppm
PM ₁₀	Annual	--	20 ug/m ³
	24-Hour	150 ug/m ³	50 ug/m ³
PM _{2.5}	Annual	15 ug/m ³	12 ug/m ³
	24-Hour	35 ug/m ³	--

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POLLUTANT	AVERAGING TIME	FEDERAL PRIMARY STANDARD	STATE STANDARD
Lead	30-Day Avg.	--	1.5 ug/m3
	3-Month Avg.	1.5 ug/m3	--

Notes: ppm = parts per million, ppb = parts per billion, ug/m3 = Micrograms per Cubic Meter

Source: California Air Resources Board, 2013 (www.arb.ca.gov/research/aaqs/caaqs/caaqs.htm) and USEPA, 2013 (www.epa.gov/air/criteria.html)

The State of California regularly reviews scientific literature regarding the health effects and exposure to PM and other pollutants. On May 3, 2002, CARB staff recommended lowering the level of the annual standard for PM₁₀ and establishing a new annual standard for PM_{2.5}. The new standards became effective on July 5, 2003, with another revision on November 29, 2005.

In addition to the criteria pollutants discussed above, Toxic Air Contaminants (TACs) are another group of pollutants of concern. TACs are injurious in small quantities and are regulated despite the absence of criteria documents. The identification, regulation and monitoring of TACs is relatively recent compared to that for criteria pollutants. Unlike criteria pollutants, TACs are regulated on the basis of risk rather than specification of safe levels of contamination.

Existing air quality concerns in the Project area are related to increases of regional criteria air pollutants (e.g., ozone and particulate matter), exposure to toxic air contaminants, odors, and increases in greenhouse gas emissions contributing to climate change. The primary source of ozone (smog) pollution is motor vehicles which account for 70 percent of the ozone in the region. Particulate matter is caused by dust, primarily dust generated from construction and grading activities, and smoke which is emitted from fireplaces, wood-burning stoves, and agricultural burning.

Attainment Status

In accordance with the California Clean Air Act (CCAA), the CARB is required to designate areas of the state as attainment, nonattainment, or unclassified with respect to applicable standards. An "attainment" designation for an area signifies that pollutant concentrations did not violate the applicable standard in that area. A "nonattainment" designation indicates that a pollutant concentration violated the applicable standard at least once, excluding those occasions when a violation was caused by an exceptional event, as defined in the criteria.

Depending on the frequency and severity of pollutants exceeding applicable standards, the nonattainment designation can be further classified as serious nonattainment, severe nonattainment, or extreme nonattainment, with extreme nonattainment being the most severe of the classifications. An "unclassified" designation signifies that the data do not support either an attainment or nonattainment status. The CCAA divides districts into moderate, serious, and severe air pollution categories, with increasingly stringent control requirements mandated for each category.

The U.S. EPA designates areas for ozone (O₃), carbon monoxide (CO), and nitrogen dioxide (NO₂) as "does not meet the primary standards," "cannot be classified," or "better than national standards." For sulfur dioxide (SO₂), areas are designated as "does not meet the primary standards," "does not meet the secondary standards," "cannot be classified," or "better than

national standards.” However, the CARB terminology of attainment, nonattainment, and unclassified is more frequently used.

Sacramento County has a state and federal designation of Nonattainment for Ozone, PM₁₀, and PM_{2.5}, and is designated either Unclassified or Attainment for all other criteria pollutants. Table 3.2-2 presents the state and federal attainment status for Sacramento County.

TABLE 3.2-2: STATE AND NATIONAL ATTAINMENT STATUS

CRITERIA POLLUTANTS	STATE DESIGNATIONS	NATIONAL DESIGNATIONS
Ozone	Nonattainment - Serious	Nonattainment
PM ₁₀	Nonattainment	Nonattainment
PM _{2.5}	Nonattainment	Nonattainment
Carbon Monoxide	Attainment	Unclassified/Attainment
Nitrogen Dioxide	Attainment	Unclassified/Attainment
Sulfur Dioxide	Attainment	Unclassified
Sulfates	Attainment	-
Lead	Attainment	-
Hydrogen Sulfide	Unclassified	-
Visibility Reducing Particles	Unclassified	-

Source: California Air Resources Board 2013

Sacramento Valley Air Basin Monitoring

The SVAB consists of 13 counties covering approximately 13,700 square miles. The SVAB stretches about 200 miles long in a north-south direction, and has a maximum width of about 150 miles, although the width of the valley floor only averages about 50 miles. Topography in the SVAB varies drastically with valley floor, rolling foothills, and mountains. Elevations range from 40 feet to over 9,000 feet.

CARB maintains numerous air quality monitoring sites throughout each county in the Air Basin to measure ozone, PM_{2.5}, and PM₁₀. It is important to note that the federal ozone 1-hour standard was revoked by the EPA and is no longer applicable for federal standards. Data obtained from the monitoring sites throughout the SVAB between 2008 and 2010 is summarized in Tables 3.2-3 through 3.2-5.

TABLE 3.2-3 SVAB AMBIENT AIR QUALITY MONITORING DATA SUMMARY - OZONE 2008-2010

Year	Days > Standard				1-Hour Observations			8-Hour Averages				Year Coverage	
	State		National		Max.	State	Nat'l	State		National			
	1-Hr	8-Hr	1-Hr	'08 8-Hr		D.V. ¹	D.V. ²	Max.	D.V. ¹	Max.	'08 D.V. ²	Min	Max
2010	15	46	0	29	0.124	0.13	0.132	0.112	0.116	0.112	0.102	85	100
2009	30	65	1	45	0.247	0.13	0.132	0.104	0.116	0.104	0.100	86	100
2008	41	78	9	54	0.166	0.14	0.133	0.123	0.116	0.123	0.102	0	100

Notes: All concentrations expressed in parts per million. The national 1-hour ozone standard was revoked in June 2005 and is no longer in effect. Statistics related to the revoked standard are shown in italics. D.V.¹ = State Designation Value. D.V.² = National Design Value.

Sources: California Air Resources Board Aerometric Data Analysis and Management System (ADAM) Air Pollution Summaries, 2013.

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TABLE 3.2--4 SVAB AMBIENT AIR QUALITY MONITORING DATA SUMMARY - PM_{2.5} 2008-2010

Year	Est. Days > Nat'l '06 Std.	Annual Average		Nat'l Ann. Std. D.V. ¹	State Annual D.V. ²	Nat'l '06 Std. 98th Percentile	Nat'l '06 24-Hr Std. D.V. ¹	High 24-Hour Average		Year Coverage	
		Nat'l	State					Nat'l	State	Min.	Max.
2010	1.1	8.8	10.9	11.5	19	29.0	51	72.2	92.3	46	100
2009	8.9	10.7	15.5	12.4	19	38.7	59	49.8	71.7	78	100
2008	36.5	16.4	18.9	13.4	19	97.1	69	200.2	200.2	83	100

Notes: All concentrations expressed in parts per million. State and national statistics may differ for the following reasons: State statistics are based on California approved samplers, whereas national statistics are based on samplers using federal reference or equivalent methods. State and national statistics may therefore be based on different samplers. State criteria for ensuring that data are sufficiently complete for calculating valid annual averages are more stringent than the national criteria. D.V.¹ = State Designation Value. D.V.² = National Design Value

Sources: California Air Resources Board Aerometric Data Analysis and Management System (ADAM) Air Pollution Summaries, 2013.

TABLE 3.2-5: SVAB AMBIENT AIR QUALITY MONITORING DATA SUMMARY - PM₁₀ 2008-2010

Year	Est. Days > Std.		Annual Average		3-Year Average		High 24-Hr Average		Year Coverage
	Nat'l	State	Nat'l	State	Nat'l	State	Nat'l	State	
2010	0.0	12.2	20.5	21.0	26	33	87.4	87.4	100
2009	0.0	18.4	25.6	26.4	28	33	76.0	76.0	100
2008	6.6	68.7	32.9	33.4	28	33	236.7	232.0	100

Notes: The national annual average PM₁₀ standard was revoked in December 2006 and is no longer in effect. An exceedance is not necessarily a violation. Statistics may include data that are related to an exceptional event. State and national statistics may differ for the following reasons: State statistics are based on California approved samplers, whereas national statistics are based on samplers using federal reference or equivalent methods. State and national statistics may therefore be based on different samplers. National statistics are based on standard conditions. State criteria for ensuring that data are sufficiently complete for calculating valid annual averages are more stringent than the national criteria.

Sources: California Air Resources Board Aerometric Data Analysis and Management System (ADAM) Air Pollution Summaries, 2013.

3.2.2 REGULATORY SETTING

FEDERAL

Clean Air Act

The Federal Clean Air Act (CAA) was first signed into law in 1970. In 1977, and again in 1990, the law was substantially amended. The CAA is the foundation for a national air pollution control effort, and it is composed of the following basic elements: NAAQS for criteria air pollutants, hazardous air pollutant standards, state attainment plans, motor vehicle emissions standards, stationary source emissions standards and permits, acid rain control measures, stratospheric ozone protection, and enforcement provisions.

The EPA is responsible for administering the CAA. The CAA requires the EPA to set NAAQS for several problem air pollutants based on human health and welfare criteria. Two types of NAAQS were established: primary standards, which protect public health, and secondary standards, which protect the public welfare from non-health-related adverse effects such as visibility reduction.

The law recognizes the importance for each state to locally carry out the requirements of the FCAA, as special consideration of local industries, geography, housing patterns, etc. are needed to have full comprehension of the local pollution control problems. As a result, the EPA requires each state to develop a State Implementation Plan (SIP) that explains how each state will implement the FCAA within their jurisdiction. A SIP is a collection of rules and regulations that a particular state will implement to control air quality within their jurisdiction. CARB is the state agency that is responsible for preparing the California SIP.

STATE

California Clean Air Act

The California Clean Air Act (CCAA) was first signed into law in 1988. The CCAA provides a comprehensive framework for air quality planning and regulation, and spells out, in statute, the state's air quality goals, planning and regulatory strategies, and performance. CARB is the agency responsible for administering the CCAA. CARB established ambient air quality standards pursuant to the California Health and Safety Code (CH&SC) [§39606(b)], which are similar to the federal standards.

Air Quality Standards

NAAQS are determined by the EPA. The standards include both primary and secondary ambient air quality standards. Primary standards are established with a safety margin. Secondary standards are more stringent than primary standards and are intended to protect public health and welfare. States have the ability to set standards that are more stringent than the federal standards. As such, California established more stringent ambient air quality standards. The state and federal primary standards for major pollutants are shown in Table 3.2-1.

CARB Mobile-Source Regulation

The State of California is responsible for controlling emissions from the operation of motor vehicles in the state. Rather than mandating the use of specific technology or the reliance on a specific fuel, the CARB's motor vehicle standards specify the allowable grams of pollution per mile driven. In other words, the regulations focus on the reductions needed rather than on the manner in which they are achieved. Towards this end, the CARB has adopted regulations which required auto manufacturers to phase in less polluting vehicles.

Tanner Air Toxics Act

California regulates TACs primarily through the Tanner Air Toxics Act (AB 1807) and the Air Toxics Hot Spots Information and Assessment Act of 1987 (AB 2588). The Tanner Act sets forth a formal procedure for ARB to designate substances as TACs. This includes research, public participation, and scientific peer review before ARB can designate a substance as a TAC. To date, ARB has identified more than 21 TACs and has adopted EPA's list of HAPs as TACs. Most recently, diesel PM was added to the ARB list of TACs. Once a TAC is identified, ARB then adopts an Airborne Toxics Control Measure (ATCM) for sources that emit that particular TAC. If there is a safe threshold for a substance at which there is no toxic effect, the control measure must reduce exposure below that threshold. If there is no safe threshold, the measure must incorporate BACT to minimize emissions.

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The AB 2588 requires that existing facilities that emit toxic substances above a specified level prepare a toxic-emission inventory, prepare a risk assessment if emissions are significant, notify the public of significant risk levels, and prepare and implement risk reduction measures. ARB has adopted diesel exhaust control measures and more stringent emission standards for various on-road mobile sources of emissions, including transit buses and off-road diesel equipment (e.g., tractors, generators). In February 2000, ARB adopted a new public-transit bus-fleet rule and emission standards for new urban buses. These rules and standards provide for (1) more stringent emission standards for some new urban bus engines, beginning with 2002 model year engines; (2) zero-emission bus demonstration and purchase requirements applicable to transit agencies; and (3) reporting requirements under which transit agencies must demonstrate compliance with the urban transit bus fleet rule. Upcoming milestones include the low-sulfur diesel-fuel requirement, and tighter emission standards for heavy-duty diesel trucks (2007) and off-road diesel equipment (2011) nationwide.

LOCAL

Sacramento Metropolitan Air Quality Management District

The Sacramento Metropolitan Air Quality Management District (SMAQMD) coordinates the work of government agencies, businesses, and private citizens to achieve and maintain healthy air quality for the Sacramento area, including the City of Elk Grove. SMAQMD develops market-based programs to reduce emissions associated with mobile sources, processes permits, ensures compliance with permit conditions and with SMAQMD rules and regulations, and conducts long-term planning related to air quality.

As a nonattainment area, the region is also required to submit rate-of-progress milestone evaluations in accordance with the CAAA. These milestone reports include compliance demonstrations that the requirements have been met for the Sacramento nonattainment area. The air quality attainment plans and reports present comprehensive strategies to reduce ROG, NOX, and PM10 emissions from stationary, area, mobile, and indirect sources. Such strategies include the adoption of rules and regulations; enhancement of CEQA participation; implementation of a new and modified indirect source review program; adoption of local air quality plans; and stationary-, mobile-, and indirect-source control measures.

Sacramento Area Regional Ozone Attainment Plan

The greater Sacramento region is designated nonattainment for both federal and State and ozone standards. The federal 8-hour ozone regulations require that areas classified as serious or above submit a reasonable further progress (RFP) demonstration plan that shows a minimum of 18 percent volatile organic compound (and/or NOx) emission reductions over the first six years following the 2002 baseline year and then an average of 3 percent reductions per year for each subsequent three-year period out to the attainment year. The Sacramento Regional 8-Hour Ozone 2011 Reasonable Further Progress Plan includes the information and analyses to fulfill Clean Air Act requirements for demonstrating RFP toward attaining the 8-hour ozone National Ambient Air Quality Standards (NAAQS) for the Sacramento region through 2011. In addition, this plan establishes an updated emissions inventory and maintains existing motor vehicle emission budgets for transportation conformity purposes. The plan indicates that despite meeting the 2011 progress

target, the Sacramento region cannot meet the 2013 attainment date for serious nonattainment areas. Section 181(b)(3) of the CAA permits a state to request that the USEPA reclassify or “bump up” a nonattainment area to a higher classification and extend the time allowed for attainment. This bump-up process is appropriate for areas that must rely on longer-term strategies to achieve the emission reductions needed for attainment. Therefore, the air districts in the Sacramento region submitted a letter to CARB in February 2008 to request a voluntary reclassification (bump-up) of the Sacramento federal nonattainment area from a serious to a severe 8-hour ozone nonattainment area with an extended attainment deadline of June 15, 2019. On May 5, 2010, the USEPA approved the request effective June 4, 2010.

Sacramento Area Regional PM₁₀ Attainment Plan

The greater Sacramento region is designated nonattainment for both federal and State PM₁₀ and PM_{2.5} standards. SMAQMD has prepared the PM₁₀ Implementation/Maintenance Plan and Re-Designation Request for Sacramento County in compliance with the federal CAA requirements pertaining to PM₁₀ nonattainment areas. The purpose of this plan is to fulfill the requirements for the USEPA to re-designate the County from nonattainment to attainment of the PM₁₀ NAAQS by preparing the following plan elements and tasks:

- Document the extent of the PM₁₀ problem in Sacramento County.
- Determine the emission inventory sources contributing to the PM₁₀ problem.
- Identify the appropriate control measures that achieved attainment of the PM₁₀ NAAQS.
- Demonstrate maintenance of the PM₁₀ NAAQS.
- Request formal re-designation to attainment of the PM₁₀ NAAQS.

SMAQMD has also adopted various rules and regulations pertaining to the control of emissions from area and stationary sources. Some of the more pertinent regulatory requirements applicable to the proposed SDMP are identified as follows:

- **Rule 402: Nuisance.** The purpose of this rule is to limit emissions which cause injury, detriment, nuisance or annoyance to any considerable number of persons or the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause or have natural tendency to cause injury or damage to business or property.
- **Rule 403: Fugitive Dust.** The purpose of this rule is to require that reasonable precautions be taken so as not to cause or allow the emissions of fugitive dust from non-combustion sources from being airborne beyond the property line from which the emission originates.

3.2.3 IMPACTS AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE

Consistent with Appendix G of the CEQA Guidelines, the Project will have a significant impact on the environment associated with air quality if it will:

- Conflict with or obstruct implementation of the applicable air quality plan;
- Cause a violation of any air quality standard or contribute substantially to an existing or projected air quality violation;

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- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors);
- Expose sensitive receptors to substantial pollutant concentrations;
- Create objectionable odors affecting a substantial number of people.

IMPACTS AND MITIGATION MEASURES

Impact 3.2-1: Project operations have the potential to cause a violation of an air quality standard or contribute substantially to an existing or projected air quality violation. (less than significant)

The Project would be a direct and indirect source of air pollution, in that it would generate and attract vehicle trips in the region (mobile source emissions) and it would increase area source emissions and energy consumption. The mobile source emissions would be entirely from vehicles, while the area source emissions would be primarily from the use of natural gas fuel combustion, hearth fuel combustion, landscape fuel combustion, consumer products, and architectural coatings.

The Project is anticipated to be operational in 2016. This operational date assumes that full land use entitlements and improvements plans are approved by April 2014 allowing grading activities to commence. The site improvements are estimated to be completed through the paving phase by July 2015 allowing buildings to begin construction. Building construction requires a minimum of six months per unit, which would allow occupancy of buildings to occur in January 2016. (Note: Economic conditions will ultimately drive the construction schedules and it is possible for the Project proponent to build small phases of site improvements under more compact construction schedule which would allow building construction to start earlier than anticipated. It is also possible that economic conditions do not justify construction until a later date which would put the operational date beyond 2016.)

The Project is larger in scope and size than the SMAQMD's Operational CAP Screening Levels, therefore, a quantification of the maximum daily mass emissions of ROG, NO_x, PM₁₀, and PM_{2.5} that will be generated by the Project's operational activities (expressed in pounds per day [lbs./day]) has been performed. The California Emission Estimator Model (CalEEMod)TM (v.2011.1.14) was used to estimate Project-level operational emissions for the Project. Table 3.2-6 shows the emissions, which include mobile source, area source, and energy emissions of criteria pollutants that would result from operations of the Project. The full calculations, inputs, and assumptions are provided in Appendix B.

TABLE 3.2-6: OPERATIONAL EMISSIONS (UNMITIGATED)

SOURCE	ROG	NOx	PM10 TOTAL	PM2.5 TOTAL
Summer (maximum daily lbs/day)				
Area	31.27	0.78	0.36	0.36
Energy	0.147*	1.34*	0.10*	0.10*
Mobile	27.92	48.90	48.28	3.58
Total	59.34*	51.02*	48.74*	4.04*
Winter (maximum lbs/day)				
Area	31.27	0.78	0.36	0.36
Energy	0.147*	1.34*	0.10*	0.10*
Mobile	27.38	51.31	48.30	3.59
Total	58.79*	53.43*	48.76*	4.05*

Note: *Natural gas energy use/emission factor manually corrected for "Retirement Community Land Use Category" by three decimal places per CalEEMod User Tip 24 and personal communications with Ian McMillian from South Coast Air Quality Management District on 5/24/13). Model outputs in Appendix B reflect the uncorrected outputs.

Sources: CalEEMod (v.2011.1.1)

As shown in the table above, operational ROG and NOx emissions do not exceed the 65 pound per day threshold of significance for ROG and NOx. The SMAQMD has determined that projects with emissions that do not exceed this threshold will not have a significant impact relative to air quality emissions.

Some basic mitigation was input into the model to reflect measures the Project would implement related to greenhouse gas reduction consistent with the Climate Action Plan. See Section 3.6, Greenhouse Gases/Climate Change for a discussion of measures to reduce greenhouse gas emissions. These mitigation measures also have benefits for emissions of criteria pollutants, predominately ROG and NOx. As such, the California Emission Estimator Model (CalEEMod)TM (v.2011.1.14) was used to estimate Project-level operational emissions for the Project with the implementation of mitigation measures. Mitigation inputs included the following:

Area Source:

- Only using natural gas burning fireplaces/hearths
- Low VOC architectural coatings and cleaning supplies

Energy Source

- Exceed Title 24 requirements
- Install high efficiency appliances (refrigerator, fans, washers)

Table 3.2-7 shows the Project-level operational emissions, which include area, energy, and mobile source emissions that would result from operations of the Project with mitigation.

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TABLE 3.2-7: OPERATIONAL EMISSIONS (MITIGATED)

SOURCE	ROG	NOx	PM10 TOTAL	PM2.5 TOTAL
Summer (maximum daily lbs/day)				
Area	29.51	0.78	0.36	0.36
Energy	0.123	1.122	0.085	0.085
Mobile	27.92	48.90	48.28	3.58
Total	57.55*	50.80*	48.725*	4.025*
Winter (maximum lbs/day)				
Area	29.51	0.78	0.36	0.36
Energy	0.123	1.122	0.085	0.085
Mobile	27.38	51.31	48.30	3.59
Total	57.013*	53.212*	48.745*	4.035*

Note: *Natural gas energy use/emission factor manually corrected for "Retirement Community Land Use Category" by three decimal places per CalEEMod User Tip 24 and personal communications with Ian McMillian from South Coast Air Quality Management District on 5/24/13. Model outputs in the Appendix B reflect the uncorrected outputs.

Sources: CalEEMod (v.2011.1.1)

As shown in the table above, emissions are further reduced with the inclusion of these mitigation measures. The emission with, or without the mitigation, is below the thresholds of significance established by the SMAQMD. As such, implementation of the Project would have a less than significant impact relative to this topic.

Impact 3.2-2: Project construction has the potential to cause a violation of an air quality standard or contribute substantially to an existing or projected air quality violation. (less than significant with mitigation)

Construction Activities/Schedule: Construction activities will consist of multiple phases over several years. These construction activities can be described as site improvements (grading, underground infrastructure, and topside improvements) and vertical construction (building construction and architectural coatings).

Site Improvements: The construction of site improvements may be performed as one task, but may be broken into two or more separate phases. The exact construction schedule is largely dependent on the economic conditions of the region and the ability for the market to absorb the proposed residential units. For purposes of this analysis it is assumed that site improvements are installed in one phase. This approach will present a more conservative and worst-case scenario.

The site improvement phase of construction will begin with site preparation. This step will include the use of dozers, backhoes, and loaders to strip (clear and grub) all organic materials and the upper half-inch to inch of soil from the Project site. This task will generally take a month or less to complete and will include vehicle trips from construction workers. Given that the Project site lacks significant vegetation, this step will likely be less than the assumed month.

After the site is striped of organic materials grading will begin. This activity will involve the use of excavators, graders, dozers, scrappers, loaders, and backhoes to move soil around the Project site to create specific engineered grade elevations and soil compaction levels. Grading the Project site would take approximately six months and will include vehicle trips from construction workers.

(Note: It would be possible to grade the site under a more compacted schedule with extra equipment operating.)

The next step involves the installation of underground infrastructure. This step will involve the use of excavators to dig trenches, place pipe and conduit, bury pipe and conduit, and compact trench soil. Underground infrastructure installation would take approximately four months and will include vehicle trips from construction workers. (Note: It would be possible to install the underground infrastructure under a more compacted schedule with extra equipment operating.)

The last task is to install the topside improvements, which includes pouring concrete curbs, gutters, sidewalks, and driveway aprons and then paving of all streets and parking lots. This task will involve the use of pavers, paving equipment, and rollers and will take approximately four months and will include vehicle trips from construction workers. (Note: It would be possible to install the underground infrastructure under a more compacted schedule with extra equipment operating.)

Building Construction/Architectural Coatings: Building construction involves the vertical construction of structures and landscaping around the structures. This task will involve the use of forklifts, generator sets, welders and small tractors/loaders/backhoes. The exact construction schedule is largely dependent on the economic conditions of the region and the ability of the market to absorb residential units. For purposes of this analysis it is assumed that the residential units will be absorbed at a rate of 70-75 units per year, which means that the 660 units will be fully absorbed in approximately nine years of sales. The actual absorption may be much shorter or much longer. Architectural coatings involve the interior and exterior painting associated with the structures. This task will generally begin four or five months after construction begins on the structure and will generally be completed with the completions of the building.

Construction Emissions: The Project is larger in scope and size than the SMAQMD’s NOX Construction Screening Levels, therefore, a quantification of the maximum daily mass emissions of ROG, NOX, PM10, and PM2.5 that will be emitted by Project construction (expressed in pounds per day) has been performed. In addition, total emissions expressed in tons have been quantified. The California Emission Estimator Model (CalEEMod)TM (v.2011.1.14) was used to estimate construction emissions for the Project. Table 3.2-8 shows the construction emissions for the construction years 2014 and 2015.

TABLE 3.2-8: CONSTRUCTION EMISSIONS (UNMITIGATED)

YEAR	ROG	NOX	FUGITIVE PM10	EXHAUST PM10	PM10 TOTAL	FUGITIVE PM2.5	EXHAUST PM2.5	PM2.5 TOTAL
Summer (maximum daily lbs/day)								
2014	11.31	90.73	25.22	4.18	28.83	9.94	4.18	13.55
2015	17.59	44.66	7.42	2.55	9.92	0.31	2.55	2.81
2016	16.91	40.77	7.42	2.24	9.65	0.31	2.24	2.54
2017	16.28	37.21	7.42	1.99	9.40	0.31	1.99	2.30
2018	15.69	33.94	7.42	1.76	9.17	0.11	1.73	1.84
2019	15.18	31.05	7.42	1.55	8.96	0.11	1.52	1.63
2020	14.74	28.49	7.42	1.36	8.78	0.11	1.33	1.44
2021	14.34	26.02	7.42	1.19	8.61	0.11	1.16	1.27
2022	14.02	23.97	7.42	1.05	8.47	0.11	1.03	1.14
2023	13.74	22.16	7.42	0.93	8.35	0.11	0.91	1.02

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YEAR	ROG	NOx	FUGITIVE PM10	EXHAUST PM10	PM10 TOTAL	FUGITIVE PM2.5	EXHAUST PM2.5	PM2.5 TOTAL
2024	13.50	20.60	7.42	0.84	8.26	0.11	0.81	0.92
Winter (maximum lbs/day)								
2014	11.31	90.74	25.22	4.18	28.83	9.94	4.18	13.55
2015	17.70	45.02	7.42	2.55	9.92	0.31	2.55	2.81
2016	17.01	41.06	7.42	2.24	9.66	0.31	2.24	2.55
2017	16.37	37.45	7.42	1.99	9.41	0.31	1.99	2.30
2018	15.76	34.13	7.42	1.76	9.18	0.11	1.73	1.84
2019	15.25	31.19	7.42	1.55	8.97	0.11	1.52	1.63
2020	14.80	28.59	7.42	1.37	8.78	0.11	1.34	1.45
2021	14.39	26.09	7.42	1.20	8.61	0.11	1.17	1.28
2022	14.08	24.00	7.42	1.06	8.47	0.11	1.03	1.14
2023	13.79	22.17	7.42	0.93	8.35	0.11	0.91	1.02
2024	13.55	20.58	7.42	0.84	8.26	0.11	0.82	0.93
Annual (tons/year)								
2014	0.85	6.80	0.77	0.32	1.09	0.35	0.32	0.66
2015	0.93	2.20	0.15	0.16	0.32	0.01	0.16	0.17
2016	2.18	5.33	0.79	0.29	1.08	0.04	0.29	0.33
2017	2.09	4.85	0.79	0.26	1.05	0.04	0.26	0.30
2018	2.03	4.44	0.79	0.23	1.02	0.01	0.23	0.24
2019	1.96	4.06	0.79	0.20	0.99	0.01	0.20	0.21
2020	1.91	3.73	0.79	0.18	0.97	0.01	0.17	0.19
2021	1.85	3.40	0.79	0.16	0.95	0.01	0.15	0.17
2022	1.80	3.12	0.79	0.14	0.93	0.01	0.13	0.15
2023	1.77	2.88	0.79	0.12	0.91	0.01	0.12	0.13
2024	0.94	1.45	0.43	0.06	0.49	0.01	0.06	0.07
Total	18.31	42.26	7.67	2.12	9.80	0.51	2.09	2.62

Sources: CalEEMod (v.2011.1.1)

NOx Emissions Analysis: The SMAQMD has established a NOx construction threshold of 85 pounds/day. If the Project's maximum daily NOx emissions will exceed the SMAQMD's threshold of significance for construction-generated NOx, the Project will have a significant impact on air quality and all feasible mitigation are required to be implemented to reduce NOx emissions. As shown in Table 3.2-8 above, NOx emissions in construction year 2014 are estimated to be 90.73 pounds per day (maximum daily) in the summer and 90.74 pounds per day (maximum daily) in the winter. This is an exceedance of the SMAQMD's 85 pound per day threshold of significance. NOx emissions exceed the threshold in 2014 largely as a result of construction equipment emissions during site preparation and site grading activities. NOx emissions drop below the threshold from 2015 through the end of construction in 2024.

For projects that will generate maximum daily NOx emissions that exceed the SMAQMD's threshold of significance, even with implementation of the Basic Construction Emission Control Practices, the SMAQMD recommends implementation of the Enhanced Exhaust Control Practices for off-road construction equipment. The SMAQMD considers implementation of the Enhanced Exhaust Control Practices to achieve a 20% reduction for NOx from off-road construction equipment exhaust when compared to the state fleet average. With the implementation of Enhanced Exhaust Control Practices the 2014 NOx emissions would drop to 72.58 in the summer, 72.59 in the winter, and 5.44 tons per year, which is below the SMAQMD threshold of significance. All other construction years would remain below the threshold of significance.

The 2014 exceedance of SMAQMD’s threshold of significance for construction-generated NOx is a potentially significant impact.

MITIGATION MEASURES

Mitigation Measure 3.2-1: *To reduce construction-related emissions, the Project Applicant shall implement the following SMAQMD Basic Construction Emissions Control Measures:*

- *The following practices are required to control fugitive dust from a construction site. Control of fugitive dust is required by SMAQMD Rule 403 and enforced by SMAQMD staff.*
 - *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, and 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 are required for exhaust emission control for 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.*
- *Inspect and maintain equipment 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.*

Timing/Implementation: Throughout all grading and construction activities.

Enforcement/Monitoring: City of Elk Grove Planning Department/Sacramento Metropolitan Air Quality Management District

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Mitigation Measure 3.2-2: *To reduce construction-related emissions, the Project Applicant shall implement the following SMAQMD Enhanced Emission Control Measures:*

- *The Project Applicant shall provide a plan for approval by the City of Elk Grove and SMAQMD demonstrating that the heavy-duty (50 horsepower [hp] or more) off-road vehicles to be used in the construction project, including owned, leased, and subcontractor vehicles, will achieve a project wide fleet-average 20% NOX reduction and 45% particulate reduction compared to the most recent California Air Resources Board (ARB) fleet average. Acceptable options for reducing emissions may include use of late model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, and/or other options as they become available. The SMAQMD's Construction Mitigation Calculator can be used to identify an equipment fleet that achieves this reduction.*
- *The Project Applicant shall submit to the City of Elk Grove and SMAQMD a comprehensive inventory of all off-road construction equipment, equal to or greater than 50 horsepower, that will be used on aggregate of 40 or more hours during any portion of the construction project. The inventory shall include the horsepower rating, engine model year, and projected hours of use for each piece of equipment. The inventory shall be updated and submitted monthly throughout the duration of the project, except that an inventory shall not be required for any 30-day period in which no construction activity occurs. At least 48 hours prior to the use of subject heavy-duty off-road equipment, the project representative shall provide the SMAQMD with the anticipated construction timeline including start date, and name and phone number of the project manager and on-site foreman. The SMAQMD's Model Equipment List can be used to submit this information.*
- *The Project Applicant shall ensure that emissions from all off-road diesel powered equipment used on the project site do not exceed 40% opacity for more than three minutes in any one hour. Any equipment found to exceed 40 percent opacity (or Ringelmann 2.0) shall be repaired immediately. Non-compliant equipment will be documented and a summary provided to the lead agency and SMAQMD monthly. A visual survey of all in-operation equipment shall be made at least weekly, and a monthly summary of the visual survey results shall be submitted throughout the duration of the project, except that the monthly summary shall not be required for any 30-day period in which no construction activity occurs. The monthly summary shall include the quantity and type of vehicles surveyed as well as the dates of each survey. The SMAQMD and/or other officials may conduct periodic site inspections to determine compliance. Nothing in this section shall supersede other SMAQMD, state or federal rules or regulations.*
- *If at the time of construction, the SMAQMD has adopted a regulation applicable to construction emissions, compliance with the regulation may completely or partially replace this mitigation. Consultation with the SMAQMD prior to construction will be necessary to make this determination.*

Timing/Implementation: Submittal of plan and inventory prior to issuance of grading permits and/or approval of improvement plans. Adherence to measures throughout all grading and construction activities.

Enforcement/Monitoring: City of Elk Grove Planning Department/Sacramento Metropolitan Air Quality Management District

Conclusion: Mitigation Measures 3.2-1 and 3.2-2 require the implementation of the SMAQMD Basic Construction Emission Control Measures and the Enhanced Exhaust Control Practices to achieve a 20% reduction in NO_x. With the implementation of the following mitigation measures, the Project would have a less than significant impact related to construction NO_x emissions.

PM Emissions Analysis: During typical construction projects the majority of particulate matter emissions (i.e., PM₁₀ and PM_{2.5}) are generated in the form of fugitive dust during ground disturbance activities, most of which is generated during the grading phase. PM emissions are also generated in the form of equipment exhaust and reentrained road dust from vehicle travel on paved and unpaved surfaces.

The SMAQMD recommends that PM₁₀ emissions be addressed as a localized pollutant. Thus, the SMAQMD considers PM₁₀ emissions to be a significant impact at the project level if they will exceed the SMAQMD's concentration-based threshold of significance at an off-site receptor location. Because PM_{2.5} is a subset of PM₁₀, the SMAQMD assumes that construction projects that do not generate concentrations of PM₁₀ that exceed the SMAQMD's concentration-based threshold of significance will also be considered less-than-significant for PM_{2.5} impacts.

The SMAQMD has a screening level of analysis that can be performed to determine if PM modeling is necessary. However, projects that meet the following two conditions are considered by the SMAQMD to not have the potential to exceed or contribute to the SMAQMD's concentration-based threshold of significance for PM₁₀ (and, therefore, PM_{2.5}) at an off-site location. Thus, the PM₁₀ emission concentrations generated by construction projects that meet the above criteria shall be considered a less-than-significant impact to air quality. The conditions are as follows:

- The project will implement all Basic Construction Emission Control Practices, and
- The maximum daily disturbed area (i.e., grading, excavation, cut and fill) will not exceed 15 acres.

The Project meets the above conditions.

Conclusion: Mitigation Measures 3.2-1 and 3.2-2 require the implementation of all Basic Construction Emission Control Practices. Additionally, the grading phase of construction consists of approximately 150 acres of grading spanning six months (131 working days), which is equal to 1.15 acres graded per working day. In reality, it is anticipated that the grading activities would require disturbance of between 2 and 15 acres per day in order to effectively grade the Project site. With the implementation of Mitigation Measures 3.2-1 and 3.2-2, the Project would have a less than significant impact related to construction PM emissions.

Impact 3.2-3: The Project would not create carbon monoxide hotspot impacts. (less than significant)

Project traffic would increase concentrations of carbon monoxide along streets providing access to the Project site. Carbon monoxide is a local pollutant (i.e., high concentrations are normally only found very near sources). The major source of carbon monoxide, a colorless, odorless, poisonous

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gas, is automobile traffic. Elevated concentrations (i.e. hotspots), therefore, are usually only found near areas of high traffic volume and congestion.

The SMAQMD recommends utilizing a screening approach for analyzing CO concentrations to determine if dispersion modeling is warranted. The methodology provides lead agencies with a conservative indication of whether project-generated vehicle trips will result in the generation of CO emissions that contribute to an exceedance of the thresholds of significance. The SMAQMD's recommended screening criteria are divided into two tiers, as described below. The screening criteria have been developed to help lead agencies analyze potential CO impacts.

First Tier: The Project will result in a less than significant impact to air quality for local CO if:

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

For the Project, the first tier is not met because the operations at the Sheldon Road/Waterman Road intersection are LOS E (36 second delay) under the existing and existing plus Project conditions. While the delay does not increase with the Project, the Project would add additional traffic to the intersection. The intersection is not programmed for improvement at this time. The screening approach requires that if the first tier of screening criteria is not met then the second tier of screening criteria shall be examined.

Second Tier: If all of the following criteria are met, the Project will result in a less than significant impact to air quality for local CO.

- The Project will not result in an affected intersection experiencing more than 31,600 vehicles per hour;
- 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
- 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 Project screens out under the second tier because it meets all three criteria. First, the Sheldon Road/Waterman Road intersection, which operates at an LOS E under existing plus Project conditions, will only experience 1,676 PM peak hour vehicles per hour, and 1,515 AM peak hour vehicles per hour. Both of these are significantly below the 31,600 vehicles per hour threshold. Secondly, the Sheldon Road/Waterman Road intersection does not include 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. Lastly, the mix of vehicle types at the Sheldon Road/Waterman Road intersection is not anticipated to be substantially different from the County average (Fehr and Peers, 2013). As such, the Project screens out satisfactorily under tier 2.

The traffic study for the Project examined Level of Service (LOS) for both road segments and intersections affected by the Project. No existing or future street segments are forecast to operate

at an unacceptable LOS E or worse with the recommended mitigation. There is one intersection that is currently operating at a LOS E (existing conditions), and is projected to continue to operate at a LOS E (existing plus Project conditions) with the buildout of the Project. The SMAQMD's *screening approach for analyzing CO concentrations* was used to analyze CO impacts for the Project. The Project screens out satisfactorily under tier 2. Since the Project is within an attainment area for carbon monoxide (ambient air quality standards are currently attained) and in an area with low background concentrations, changes in carbon monoxide levels resulting from the Project would not result in violations of the ambient air quality standards, and would represent a less than significant impact.

Impact 3.2-4: The Project has the potential for public exposure to toxic air contaminants. (less than significant)

A toxic air contaminant (TAC) is defined as an air pollutant that may cause or contribute to an increase in mortality or in serious illness, or that may pose a hazard to human health. TACs are usually present in minute quantities in the ambient air. However, their high toxicity or health risk may pose a threat to public health even at very low concentrations. In general, for those TACs that may cause cancer, there is no concentration that does not present some risk. This contrasts with the criteria pollutants for which acceptable levels of exposure can be determined and for which the state and federal governments have set ambient air quality standards.

Mobil Source Air Toxics: Controlling toxic air emissions became a national priority with the passage of the CAA Amendments (of 1990, whereby Congress mandated that the EPA regulate 188 air toxics, also known as hazardous air pollutants. The EPA has assessed this expansive list in their latest rule on the Control of Hazardous Air Pollutants from Mobile Sources (Federal Register, Vol. 72, No. 37, page 8430, February 26, 2007) and identified a group of 93 compounds emitted from mobile sources. In addition, EPA identified seven compounds with significant contributions from mobile sources that are among the national and regional-scale cancer risk drivers from their 1999 National Air Toxics Assessment. These are acrolein, benzene, 1,3-butadiene, diesel particulate matter plus diesel exhaust organic gases (diesel PM), formaldehyde, naphthalene, and polycyclic organic matter.

The 2007 EPA rule requires controls that will dramatically decrease Mobile Source Air Toxics (MSAT) emissions through cleaner fuels and cleaner engines. According to an FHWA analysis using EPA's MOBILE6.2 model, even if vehicle activity (VMT) increases by 145 percent, a combined reduction of 72 percent in the total annual emission rate for the priority MSAT is projected from 1999 to 2050. California maintains stricter standards for clean fuels and emissions compared to the national standards, therefore it is expected that MSAT trends in California will decrease consistent with or more than the U.S. EPA's national projections.

Currently, CARB monitors toxics throughout northern California from 17 monitoring sites, all of which are located in areas with major transportation routes. There are currently no toxic air monitoring sites located in Elk Grove. The closest toxic air monitoring site to Elk Grove is in the City of Roseville.

Air toxics are of concern in areas with major transportation routes where there is a high volume of large diesel truck trips. The Project is not located adjacent to major transportation route. The

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closest major transportation route is SR 99 located approximately two miles to the west of the Project site. The Project site is beyond the screening distance from SR 99 and is not considered a concern for the Project. Consequently, this impact is considered less than significant.

Sensitive Land Uses: The California Air Resources Board (CARB) published the *Air Quality and Land Use Handbook: A Community Health Perspective* (2007) to provide information to local planners and decision-makers about land use compatibility issues associated with emissions from industrial, commercial and mobile sources of air pollution. The CARB Handbook indicates that mobile sources continue to be the largest overall contributors to the State's air pollution problems, representing the greatest air pollution health risk to most Californians. The most serious pollutants on a statewide basis include diesel exhaust particulate matter (diesel PM), benzene, and 1,3-butadiene, all of which are emitted by motor vehicles. These mobile source air toxics are largely associated with freeways and high traffic roads. Non-mobile source air toxics are largely associated with industrial and commercial uses. **Table 3.2-9** provides the California Air Resources Board minimum separation recommendations on siting sensitive land uses.

TABLE 3.2-9: CARB MINIMUM SEPARATION RECOMMENDATIONS ON SITING SENSITIVE LAND USES

Source Category	Advisory Recommendations
Freeways and High-Traffic Roads	<ul style="list-style-type: none"> • Avoid siting new sensitive land uses within 500 feet of a freeway, urban roads with 100,000 vehicles/day, or rural roads with 50,000 vehicles/day.¹
Distribution Centers	<ul style="list-style-type: none"> • Avoid siting new sensitive land uses within 1,000 feet of a distribution center (that accommodates more than 100 trucks per day, more than 40 trucks with operating transport refrigeration units (TRUs) per day, or where TRU unit operations exceed 300 hours per week). • Take into account the configuration of existing distribution centers and avoid locating residences and other new sensitive land uses near entry and exit points.
Rail Yards	<ul style="list-style-type: none"> • Avoid siting new sensitive land uses within 1,000 feet of a major service and maintenance rail yard. • Within one mile of a rail yard, consider possible siting limitations and mitigation approaches.
Ports	<ul style="list-style-type: none"> • Avoid siting of new sensitive land uses immediately downwind of ports in the most heavily impacted zones. Consult local air districts or the CARB on the status of pending analyses of health risks.
Refineries	<ul style="list-style-type: none"> • Avoid siting new sensitive land uses immediately downwind of petroleum refineries. Consult with local air districts and other local agencies to determine an appropriate separation.
Chrome Platers	<ul style="list-style-type: none"> • Avoid siting new sensitive land uses within 1,000 feet of a chrome plater.
Dry Cleaners Using Perchloro-ethylene	<ul style="list-style-type: none"> • Avoid siting new sensitive land uses within 300 feet of any dry cleaning operation. For operations with two or more machines, provide 500 feet. For operations with 3 or more machines, consult with the local air district. • Do not site new sensitive land uses in the same building with perc dry cleaning operations.
Gasoline Dispensing Facilities	<ul style="list-style-type: none"> • Avoid siting new sensitive land uses within 300 feet of a large gas station (defined as a facility with a throughput of 3.6 million gallons per year or greater). A 50 foot separation is recommended for typical gas dispensing facilities.

Sources: *Air Quality and Land Use Handbook: A Community Health Perspective*" (CARB 2005)

The Project includes residential uses which are considered sensitive land uses. There are no source categories listed above that are proposed. Additionally, there are no source categories listed above that are within screening distances and minimum separation distances required for sensitive uses. The Project is consistent with the *CARB Minimum Separation Recommendations on Siting Sensitive Land Uses* (2005). Implementation of the Project would not result in an increased exposure of

sensitive receptors to localized concentrations of TACs. This Project would have a less than significant impact relative to this topic.

Impact 3.2-5: The Project has the potential for exposure of sensitive receptors to odors. (less than significant)

While offensive odors rarely cause any physical harm, they can be very unpleasant, leading to considerable distress among the public and often generating citizen complaints to local governments and the SMAQMD. The general nuisance rule (Heath and Safety Code §41700) and SMAQMD's Rule 402 is the basis for the threshold.

Examples of facilities that are known producers of odors include: Wastewater Treatment Facilities, Chemical Manufacturing, Sanitary Landfill, Fiberglass Manufacturing, Transfer Station, Painting/Coating Operations (e.g. auto body shops), Composting Facility, Food Processing Facility, Petroleum Refinery, Feed Lot/Dairy, Asphalt Batch Plant, and Rendering Plant.

If a project would locate receptors and known odor sources in proximity to each other further analysis may be warranted; however, if a project would not locate receptors and known odor sources in proximity to each other, then further analysis is not warranted. The Project is not located in proximity to a known odor source and does not warrant further analysis. Additionally, implementation of the Project would not directly create or generate objectionable odors.

Persons residing in the immediate vicinity of Project may be subject to temporary odors typically associated with construction activities (diesel exhaust, hot asphalt, etc.). However, any odors generated by construction activities would be minor and would be short and temporary in duration. This is considered a less than significant impact.

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This section describes the regulatory setting, regional biological resources, and impacts that are likely to result from Project implementation. This section is based in part on the following technical studies: *Results of a Focused Plant Survey on the Elk Ridge Estates Site, Located in the City of Elk Grove, California* (Christian J. Singer August 20, 2004), *Vintara Park Section 7 Biological Assessment* (Foothill Associates, November 15, 2004), *Section 7 Consultation: Formal Endangered Species Consultation on the Proposed Vintara Park* (April 6, 2005), California Fish and Game Code, Section 1602 *Agreement Regarding Proposed Stream Alteration: Notification No. 1600-2006-0097-R2* (April 20, 2006), Section 401 Certification: Regional Water Quality Control Board WDID#5A34CR00247 (October 23, 2007), Section 404 Permit: *Department of the Army Permit SPK-2001-00584* (April 1, 2008), *Vintara Park Preserve Operations and Management Plan* (Foothill Associates, February 29, 2008), *Wetland Mitigation Plan Vintara Park, Elk Grove, California Regulatory #200100584* (Foothill Associates, February 29, 2008). The technical studies and regulatory permits address the development on the Project site associated with the previously proposed Vintara Park. A peer review of the technical studies was conducted by De Novo Planning Group’s biologist, Steve McMurtry, in February 2013. In April 2013, a site visit was conducted during the flowering season by Mr. McMurtry to verify biological conditions and to determine if the conditions presented in the technical studies have changed. The existing technical studies were determined to be consistent with the conditions observed during the April 2013 site visit.

Comments received in response to the NOP identified concerns regarding open space, sensitive habitat preservation, and removal of trees, including the location of tree removal. The comments are located in Appendix A.

3.3-1 ENVIRONMENTAL SETTING

REGIONAL SETTING

The City of Elk Grove is located within the Sacramento Valley and Bay/Delta bioregions, and is adjacent to the Sierra bioregion(east), and the Bay/Delta bioregion (southwest).

Sacramento Valley Bioregion

The Sacramento Valley bioregion is a watershed of the Sierra Nevada that encompasses the northern end of the great Central Valley, stretching from Redding in the north to the southeast corner of Sacramento County. The bioregion is generally flat, and is rich in agriculture. The south-central portion of Sacramento County falls within this bioregion, which has a climate that is characterized by hot dry summers and cool wet winters. Oak woodlands, riparian forests, vernal pools, freshwater marshes, and grasslands provide the major natural vegetation of the bioregion. This bioregion is the most prominent wintering area for waterfowl, attracting significant numbers of ducks and geese to its seasonal marshes along the Pacific Flyway. Common waterfowl species include northern pintails, snow geese, tundra swans, sandhill cranes, mallards, grebes, peregrine falcons, heron, egrets, and hawks. Black-tailed deer, coyotes, river otters, muskrats, beavers, ospreys, bald eagles, salmon, steelhead, and swallowtail butterflies are some of the wildlife that are common in this bioregion.

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Bay Area/Delta Bioregion

The Bay Area/Delta bioregion extends from the Pacific Ocean to the Sacramento Valley and San Joaquin Valley bioregions to the northeast and southeast, and a short stretch of the eastern boundary joins the Sierra Bioregion at Amador and Calaveras counties. The bioregion is bounded by the Klamath/North Coast on the north and the Central Coast Bioregion to the south. The Bay Area/Delta Bioregion is one of the most populous areas of the state, encompassing the San Francisco Bay Area and the Sacramento-San Joaquin River Delta. The water that flows through the Delta supplies two-thirds of California's drinking water, irrigating farmland, and sustaining fish and wildlife and their habitat. The bioregion fans out from San Francisco Bay in a jagged semi-circle that takes in all or part of 12 counties: Alameda, Contra Costa, Marin, Napa, San Francisco, San Joaquin, San Mateo, Santa Clara, Solano, Sonoma, and parts of Sacramento, and Yolo. The habitats and vegetation of the Bay Area/Delta bioregion are as varied as the geography.

Sacramento County

Sacramento County lies in the middle of the Central Valley bordered by Contra Costa and San Joaquin counties on the south, Amador and El Dorado counties on the east, Placer and Sutter counties on the north, and Yolo and Solano counties on the west. The County extends from the low delta lands between the Sacramento and San Joaquin Rivers north to the foothills of the Sierra Nevada Mountains. Plant communities predominant in this region include agricultural croplands, annual grassland, deltaic marsh (freshwater, brackish, and salt), horticultural/landscaped, fallow agricultural lands, oak woodland, open water (rivers, creeks, sloughs, etc.), riparian, and seasonal wetland.

City of Elk Grove

The City of Elk Grove encompasses approximately 93,560 acres within Sacramento County. The City of Elk Grove is located within the USGS 7.5 minute Bruceville, Buffalo Creek, Carmichael, Clarksburg, Courtland, Elk Grove, Florin, Galt, and Sloughhouse quadrangles. Elevations within the City of Elk Grove range from sea level to approximately 150 feet above mean sea level (MSL). Plant communities within the City of Elk Grove include agricultural cropland, annual grassland, fallow agricultural land, horticultural/landscape, irrigation ditches, irrigated pastures, open waters, perennial and seasonal marshes, riparian woodlands, seasonal wetlands, and vernal pools. Land uses throughout the City of Elk Grove vary; the predominant land uses include agricultural, commercial, and residential.

LOCAL SETTING

Land Use

Historically, the Project site has been graded by previous property owners to create several berms and undulating topography, and it is unknown for what purpose these land alterations were conducted. Historical photographs of the area suggest that these activities occurred sometime between 1937 and 1957.

The land is currently unused open space. It is located within the Whitehouse Creek watershed, and Whitehouse Creek enters the Project site at the central northern boundary, flowing southwest eventually discharging into the series of bermed ponds along the western side of the Project site. The ponds discharge via a concrete weir and grassy swale off site to the west. This swale is connected to roadside ditches along Campbell Road and flows through a pond, residential areas, and industrial/commercial areas, eventually connecting with Laguna Creek to the west near State Route 99.

Land uses surrounding the Project site include rural residential development and open space to the east and west at the northern boundary, and residential development to the north, south, as well as east and west of the southern boundary.

Soils

The Natural Resource Conservation Service (NRCS) has mapped three soil units on the Project site. The soil units include: Redding gravelly loam, 0 to 8% slopes; San Joaquin silt loam, 0 to 3% slopes; and San Joaquin-Durixeralfs complex, 0 to 1% slopes. These soils units and their general characteristics are discussed below.

- **Redding gravelly loam, 0-8% slopes:** Redding gravelly loam is a moderately deep and well-drained soil that is found on high terraces and terrace remnants. Permeability of Redding gravelly loam is very slow. Soils of this type usually support annual grasses and forbs. This soil series contains a single, unnamed hydric inclusion that is found in depressions.
- **San Joaquin silt loam, 0 to 3% slopes:** San Joaquin silt loam is a moderately deep and moderately well drained soil that is found on low terraces. San Joaquin soil has a very slow permeability rate. This soil unit is commonly used as rangelands, or dry types of croplands. This soil series contains a single, Galt hydric inclusion that is found in depressions.
- **San Joaquin-Durixeralfs complex, 0 to 1% slopes:** San Joaquin –Durixeralfs complex is composed of 55% San Joaquin soil type and 45% Durixeralfs and is generally found on low terraces. The areas that have been left relatively undisturbed when leveled have San Joaquin soil. The cut areas where most of the original soil surface has been removed is where the Durixeralfs is located. San Joaquin soil is moderately well drained with slow permeability. Durixeralfs are altered soils that are shallow to moderately deep, with slow permeability. Vegetation typically occurring on San Joaquin-Durixeralfs complex in uncultivated areas is mainly annual grasses and forbs. This soil series contains a single, Galt hydric inclusion that is found in depressions.

Topography, Drainage and Hydrology

Topography on the Project site has been modified extensively due to grading and excavation activities that were associated with past activities of the previous land owners, and the reason for creation of the uneven landscape is unknown. The landscape is undulating with many earthen berms and dikes, as well as upland excavated ditches and pond basins. The elevation ranges from 39 to 71 feet above mean sea level. Surface runoff flows towards the south and southwest into

3.3 BIOLOGICAL RESOURCES

topographic lows that include portions of Whitehouse Creek, seasonal wetlands, vernal pools, ephemeral drainages and the ponds. A large portion of the surface runoff discharged onto the Project site is received from adjacent urban areas. The discharge of water from the Project site occurs when the ponds are significantly inundated and exits the Project site via a weir located along the western Project site boundary. From the west the flows continue via overland swales and roadside ditches, eventually discharging into Laguna Creek to the west.

Biological Communities

The Project site supports five habitat types, including annual grassland, Whitehouse Creek and associated ponds, vernal pools, seasonal wetlands, and ephemeral drainages. These communities provide habitat for a number of common species of wildlife and provide potentially suitable habitat for special-status species. Each of the biological communities including associated common plant and wildlife species observed, or species that are expected to occur within these communities, are described below.

ANNUAL GRASSLAND

The primary habitat type occurring on the Project site is annual grassland, characterized typically by an assemblage of non-native grasses and forbs. All other habitat types occurring on the Project site are surrounded by annual grassland habitat. Much of the vegetation composing the annual grassland community is common to the Central Valley. Dominant species observed on the Project site include Fitch's tarweed (*Hemizonia fitchii*), medusa head (*Taeniatherum caput-medusae*), tarweed (*Holocarpa virgata*), filaree (*Erodium* ssp.), foxtail fescue (*Vulpia myuros*), yellow star-thistle (*Centaurea solstitialis*), and wildoat (*Avena fatua*).

WHITEHOUSE CREEK AND PONDS

Whitehouse Creek flows onto the Project site from the north and drains into several ponds that dominate the western portion of the Project site. The creek and ponds are part of a riverine system, in which flows and water levels are dependent on seasonal rainfall, storm water runoff, and periodic discharges associated with urban use activities of the residential areas to the north. The ponds on the Project site are supported by channeled water from Whitehouse Creek, and several berms separate the ponds into three sections. These ponds are seasonal and retain water into late spring/early summer. The ponds were observed to be predominantly vegetated with spikerush (*Eleocharis macrostachya*). Additional plant species observed within the creek and ponds include curly dock (*Rumex crispus*), annual ryegrass (*Lolium multiflorum*), sedge (*Carex* sp.), coyote thistle (*Eryngium vaseyi*), and vinegar-weed (*Trichostema lanceolata*).

Whitehouse Creek and associated ponds are not considered listed vernal pool crustacean habitat. These features have been heavily modified and were not likely historical habitat for these species. Though listed vernal pool crustaceans can occasionally occur in seasonal wetlands and ponds, it is believed that the extended periods of inundation in the ponds create conditions not favorable to the establishment of a viable population of these species. The size and depth of the ponds create habitat suitable for animal species that may heavily prey on vernal pool crustaceans. Potential predators observed within the ponds include Pacific treefrogs (*Hyla regilla*), bullfrogs (*Rana*

catesbeiana), cinnamon teal (*Anas cyanoptera*), killdeer (*Charadrius vociferous*), black-necked stilts (*Himantopus mexicanus*), and American avocets (*Recurvirostra americana*). Vernal pool fairy shrimp and vernal pool tadpole shrimp are typically found in vernal pools that pond to an average depth of 6 (± 4) inches (Helm, 1998). The ponds on the Project site pool to a depth of approximately two feet. Though clam shrimp (*Cyzicus californicus*) have been observed in the larger of the three ponds, this species is known to occur in natural ponds and is considered restricted to habitats that are fairly deep and moderate in size having long ponding durations (Helm, 1998).

VERNAL POOL

Vernal pool communities are a unique type of seasonal wetland located within annual grassland habitat, where the area exhibits gently sloping to nearly level topography. They are characterized as shallow depressions underlain by an impermeable layer, such as clay hardpan or bedrock, which causes them to inundate with water seasonally. Vernal pools provide habitat for various plants and animal species and are usually dominated by annual herbs and grasses adapted to these unique conditions.

Vernal pools are distributed throughout the Project site, and plant species found in the pools include coyote thistle, annual hairgrass (*Deschampsia danthonioides*), woolly marbles (*Psilocarphus brevissimus*), annual rabbits-foot grass (*Polypogon monspeliensis*), and white-headed navarretia (*Navarretia leucocephala*). All of the vernal pools exhibit typical characteristics of vernal pool crustacean habitat.

SEASONAL WETLANDS

Depressional and riverine seasonal wetlands are interspersed throughout the Project site, and are largely man-made features derived from the earth moving activities associated with the Project site's historic use as a waste water treatment facility. These features are underlain with soil having slow permeability, and inundate during the rainy season. Plant species observed within the seasonal wetland habitat include tall flatsedge (*Cyperus eragrostis*), perennial ryegrass (*Lolium perenne*), curly dock (*Rumex crispus*), western manna grass (*Glyceria occidentalis*), and pale spikerush.

The seasonal wetlands on the Project site are not considered vernal pool crustacean habitat since they are not deep enough to retain water seasonally, or are not shallow enough to provide the drying out period required for vernal pool crustaceans. The seasonal wetlands associated with on-site berms east of the ponds, are not considered vernal pool crustacean habitat because they do not pool water. The seasonal wetlands located west of the ponds and associated with Whitehouse Creek are also not vernal pool crustacean habitat since they are part of a flowing riverine system, which is not characteristic of vernal pool crustacean habitat.

EPHEMERAL DRAINAGE

Ephemeral drainages are characterized as having well defined channels that collect and convey storm water during and shortly after storm events. These areas usually are sparsely vegetated due

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to the scouring effect of rapid flows and seasonal water availability. A few of the species observed along the margins of the ephemeral drainages include coyote thistle, annual ryegrass, curly dock, and annual hairgrass. The ephemeral drainage features on the Project site are hydrologically connected to the ponds and are not considered vernal pool crustacean habitat due to their lack of ponding.

WILDLIFE

The annual grassland community supports breeding, foraging, and shelter habitat for several species of wildlife. Species observed in this habitat during the field surveys include western meadowlark (*Sturnella neglecta*), black-tailed jackrabbit (*Lepus californicus*), and a coyote (*Canis latrans*). Several raptors were also observed on the Project site including a foraging northern harrier (*Circus cyaneus*), two soaring red-tail hawks (*Buteo jamaicensis*), two soaring turkey vultures (*Cathartes aura*), and a Cooper's hawk (*Accipiter cooperii*) was perched on a transmission tower.

The seasonal wetland and ephemeral drainage habitat supports a number of wildlife species by providing a supply of water, nesting, and foraging habitat. Species expected to occur within this community include resident and migratory birds, various amphibians and reptiles, and foraging mammals. During the field surveys two ring-necked pheasants (*Phasianus colchicus*), a male and a female, were observed in the seasonal wetland habitat in the northwest section of the Project site.

The vernal pool habitat provides shelter, food, and water for a number of animal species. Some common animals that are expected to use this habitat include numerous species of aquatic invertebrates, amphibians, and resident and migratory birds.

SPECIAL-STATUS SPECIES

Special-status species are generally defined as: 1) species listed as a candidate, threatened, or endangered under the federal or state Endangered Species Act; 2) species considered rare or endangered under the California Environmental Quality Act; 3) plants listed as rare under California Fish and Game Code; 4) plants considered "rare, threatened, or endangered in California" by the California Native Plant Society (Lists 1B and 2); 5) animals listed as "species of special concern" by the state; and 6) animals fully protected in California by the Fish and Game Code.

The following discussion is based on a background search of special-status species that are documented in the California Natural Diversity Database (CNDDDB). The background search was regional in scope and focused on the documented occurrences within a five mile radius of the Project site. The CNDDDB search revealed 20 special status species and two sensitive natural communities (Great Valley Valley Oak Riparian Forest and Northern Valley Hardpan Vernal Pool). Table 3.3-1 provides a list of the special-status plant species and Table 3.3-2 provides a list of the special-status animal species. Figure 3.3-1 illustrates the locations for the documented occurrences within a five mile radius of the Project site.

TABLE 3.3-1: CNDDDB DOCUMENTED SPECIAL-STATUS SPECIES OCCURRENCES WITHIN A 5-MILE RADIUS

SPECIES	STATUS	HABITAT	BLOOMING PERIOD	POTENTIAL HABITAT
Plants				
<i>Cuscuta obtusiflora</i> var. <i>glandulosa</i> Peruvian dodder	--;--;2.2	Marshes and Swamps (freshwater)	July to October	Habitat is present.
<i>Downingia pusilla</i> dwarf downingia	--;--;2.2	Valley and foothills grasslands (mesic sites) vernal pools vernal lake and pool margins with a variety of associates.	March to May	Habitat is present. Documented on site
<i>Gratiola heterosepala</i> Boggs Lake hedge-hyssop	--;CE;1B.1	Marshes and Swamps (freshwater) vernal pools clay soils usually in vernal pools and sometimes on lake margins	April to August	Habitat is present. Documented on site
<i>Legenere limosa</i> legenere	--;--;1B.1	Vernal pools. Many historical occurrences are extirpated. In beds of vernal pools. 1-880M.	April to June	Habitat is present. Documented on site
<i>Orcuttia tenuis</i> slender Orcutt grass	FT;CE;1B.1	Valley and foothill grassland vernal pool wetland	May to September	Habitat is present.
<i>Sagittaria sanfordii</i> Sanford's arrowhead	--;--;1B.2	Marsh and swamp wetland	May to October	Habitat is present.

SOURCE: CDFW CALIFORNIA NATURAL DIVERSITY DATABASE, MARCH 2013.

FE	Federal Endangered	CR	California Rare (Protected by Native Plant Protection Act)
FT	Federal Threatened	CSC	CDFW Species of Special Concern
FC	Federal Candidate	CC	State candidate for listing
FPD	Federal proposed for delisting	1B	CNPS - Rare, Threatened, or Endangered
FPT	Federal proposed threatened	2	CNPS - Rare, Threatened, or Endangered in California, but more Common Elsewhere.
FD	Federal delisted		
CE	California Endangered Species		
CT	California Threatened		
CD	California Delisted		

TABLE 3.3-2: SPECIAL STATUS ANIMALS WITHIN 5-MILE RADIUS OF PROJECT SITE

	STATE STATUS	HABITAT ASSOCIATION	POTENTIAL HABITAT
INVERTEBRATES			
<i>Branchinecta lynchi</i> vernal pool fairy shrimp	FT;--	Vernal pools or other seasonal wetlands.	Habitat is present.
<i>Branchinecta mesovallensis</i> midvalley fairy shrimp	--;--	Vernal pools or other seasonal wetlands.	Habitat is present.
<i>Desmocerus californicus dimorphus</i> valley elderberry longhorn beetle	FT;--	Dependent upon elderberry plant (<i>Sambucus mexicana</i>) as primary host species	Habitat is not present.
<i>Lepidurus packardii</i> vernal pool tadpole shrimp	FE;--	Vernal pools or other seasonal wetlands.	Habitat is present.
<i>Linderiella occidentalis</i>	--;--	Vernal pools or other seasonal wetlands.	Habitat is

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	STATE STATUS	HABITAT ASSOCIATION	POTENTIAL HABITAT
California linderiella			present.
AMPHIBIANS & REPTILES			
<i>Emys marmorata</i> western pond turtle	--;CSC	Ponds, rivers, streams, wetlands, and irrigation ditches with associated marsh habitat.	Habitat not present.
<i>Thamnophis gigas</i> giant garter snake	FT;CT	Rivers, canals, irrigation ditches, rice fields, and other aquatic habitats with slow moving water and heavy emergent vegetation.	Habitat not present.
BIRDS			
<i>Agelaius tricolor</i> tricolored blackbird	--;CSC	Colonial nester in cattails, bulrush, or blackberries associated with wetland or drainage habitats.	Foraging habitat is present.
<i>Nycticorax nycticorax</i> black-crowned night heron	--;CSC	Colonial nester, usually in trees, occasionally in tule patches. Rookery sites located adjacent to foraging areas: lake margins, mud-bordered bays, marshy spots.	Habitat not present.
<i>Accipiter cooperii</i> Cooper's hawk	--;CSC	Woodland, chiefly of open, interrupted or marginal type. Nests mainly in riparian growths of deciduous trees, as in canyon bottoms on river flood plains; also, lives in oaks.	Foraging habitat is present.
<i>Athene cunicularia</i> burrowing owl	--;CSC	Nests in abandoned ground squirrel burrows associated with open grassland habitats.	Foraging and nesting habitat is present.
<i>Buteo Swainsoni</i> Swainson's hawk	--;CT	Nests in tall cottonwoods, valley oaks or willows. Forages in fields, cropland, irrigated pasture, and grassland often near riparian corridors.	Foraging and nesting habitat is present.
<i>Elanus leucurus</i> white-tailed kite	--;CSC	Nests in riparian corridors along streams and rivers, and forages in nearby grasslands and fields.	Foraging habitat is present.
<i>Falco columbarius</i> Merlin	--;CSC	It is not known to nest in California, but it is a winter transient throughout most of California with wintering populations in the Central Valley.	Foraging habitat is present.

SOURCE: CDFW CALIFORNIA NATURAL DIVERSITY DATABASE, MARCH 2013.

Abbreviations:		MBTA	Protected by Migratory Bird Treaty Act
FE	Federal Endangered	CE	California Endangered Species
FT	Federal Threatened	CT	California Threatened
FC	Federal Candidate	CD	California Delisted
FSC	USFWS Birds of Conservation Concern	CSC	CDFW Species of Special Concern/CDFW Special
FPD	Federal proposed for delisting	Animals	
FPT	Federal proposed threatened	CC	State candidate for listing
FD	Federal delisted	FP	Fully Protected

3.3.2 REGULATORY SETTING

Regulatory agencies whose responsibility includes the oversight of the natural resources of the state and nation include the CDFW, USFWS, USACE, and the National Marine Fisheries Service. These agencies often respond to declines in the quantity of a particular habitat or plant or animal species by developing protective measures for those species or habitat type. The following is an overview of the federal, state and local regulations that are applicable to subsequent projects under the Project.

FEDERAL

Federal Endangered Species Act

The Federal Endangered Species Act (FESA), passed in 1973, defines an endangered species as any species or subspecies that is in danger of extinction throughout all or a significant portion of its range. A threatened species is defined as any species or subspecies that is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.

Section 9(a)(1) of the ESA prohibits the take of endangered and threatened fish and wildlife species without special exemption. Take is defined as harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or to attempt to engage in any such conduct. Harass is defined by the USFWS as an intentional or negligent act or omission which creates the likelihood of injury to a listed species by annoying it to such an extent as to significantly disrupt normal behavioral patterns which include, but are not limited to, breeding, feeding, or sheltering. Harm is defined by the USFWS to include significant habitat modification or degradation that results in death or injury to listed species by impairing behavioral patterns including breeding, feeding, or sheltering. Incidental take is defined as take that is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity. Under the terms of Section 7(b)(4) and Section 7(0)(2), taking that is incidental to and not intended as part of the agency action is not considered to be prohibited taking under the Act provided that such taking is in compliance with an Incidental Take Statement.

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. Section 3503.5 of the California Fish and Game Code states that it is "unlawful to take, possess, or destroy any birds in the order Falconiformes or Strigiformes or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto."

Federal Bald and Golden Eagle Protection Act

The Federal Bald and Golden Eagle Protection Act provides regulations to protect bald and golden eagles as well as their nests and eggs from willful damage or injury.

Clean Water Act – Section 404

Section 404 of the CWA regulates all discharges of dredged or fill material into waters of the U.S. Discharges of fill material includes the 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; and fill for intake and outfall pipes and subaqueous utility lines [33 C.F.R. §323.2(f)].

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Waters of the U.S. include lakes, rivers, streams, intermittent drainages, mudflats, sandflats, wetlands, sloughs, and wet meadows [33 C.F.R. §328.3(a)]. 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)]. Waters of the U.S. exhibit a defined bed and bank and ordinary high water mark (OHWM). The OHWM is defined by the USACE 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)].

The USACE is the agency responsible for administering the permit process for activities that affect waters of the U.S. Executive Order 11990 is a federal implementation policy, which is intended to result in no net loss of wetlands.

Clean Water Act – Section 401

Section 401 of the CWA (33 U.S.C. 1341) requires an applicant who is seeking a 404 permit to first obtain a water quality certification from the Regional Water Quality Control Board. To obtain the water quality certification, the Regional Water Quality Control Board must indicate that the proposed fill would be consistent with the standards set forth by the state.

Rivers and Harbors Act of 1899

The Rivers and Harbors Act prohibits the obstruction or alteration of any navigable water of the United States. Requires authorization from the USACE for any excavation or deposition of materials into these waters or for any work that could affect the course, location, condition, or capacity of rivers or harbors.

Department of Transportation Act - Section 4(f)

Section 4(f) has been part of Federal law since 1966. It was enacted as Section 4(f) of the Department of Transportation (DOT) Act of 1966 and set forth in Title 49 United States Code (U.S.C.), Section 1653(f). In January 1983, as part of an overall recodification of the DOT Act, Section 4(f) was amended and codified in 49 U.S.C. Section 303. This law established policy on lands, wildlife and waterfowl refuges, and historic sites.

STATE

Fish and Game Code §2050-2097 - California Endangered Species Act

The California Endangered Species Act (CESA) protects certain plant and animal species when they are of special ecological, educational, historical, recreational, aesthetic, economic, and scientific value to the people of the State. CESA established that it is State policy to conserve, protect, restore, and enhance endangered species and their habitats.

CESA requires state agencies to consult with the California Department of Fish and Wildlife (CDFW) when preparing California Environmental Quality Act (CEQA) documents to ensure that the state lead agency actions do not jeopardize the existence of listed species. It 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.

To be consistent with Federal regulations, CESA created the categories of "threatened" and "endangered" species. It converted all "rare" animals into the Act as threatened species, but did not do so for rare plants. Thus, there are three listing categories for plants in California: rare, threatened, and endangered. Under State law, plant and animal species may be formally designated by official listing by the California Fish and Game Commission.

Fish and Game Code §1900-1913 California Native Plant Protection Act

In 1977 the State Legislature passed the Native Plant Protection Act (NPPA) in recognition of rare and endangered plants of the state. The intent of the law was to preserve, protect, and enhance endangered plants. The NPPA gave the California Fish and Game Commission the power to designate native plants as endangered or rare, and to require permits for collecting, transporting, or selling such plants. The NPPA includes provisions that prohibit the taking of plants designated as "rare" from the wild, and a salvage mandate for landowners, which requires notification of the CDFW 10 days in advance of approving a building site.

Fish and Game Code §3503, 3503.5, 3800 - Predatory Birds

Under the California Fish and Game Code, all predatory birds in the order Falconiformes or Strigiformes in California, generally called "raptors," are protected. The law indicates that it is unlawful to take, possess, or destroy the nest or eggs of any such bird unless it is in accordance with the code. Any activity that would cause a nest to be abandoned or cause a reduction or loss in a reproductive effort is considered a take. This generally includes construction activities.

Fish and Game Code §1601-1603 – Streambed Alteration

Under the California Fish and Game Code, CDFW has jurisdiction over any proposed activities that would divert or obstruct the natural flow or change the bed, channel, or bank of any lake or stream. Private landowners or Project applicants must obtain a "Streambed Alteration Agreement" from CDFW prior to any alteration of a lake bed, stream channel, or their banks. Through this agreement, the CDFW may impose conditions to limit and fully mitigate impacts on fish and wildlife resources. These agreements are usually initiated through the local CDFW warden and will specify timing and construction conditions, including any mitigation necessary to protect fish and wildlife from impacts of the work.

Public Resources Code § 21000 - California Environmental Quality Act

The California Environmental Quality Act (CEQA) identifies that a species that is not listed on the federal or state endangered species list may be considered rare or endangered if the species meets certain criteria. Under CEQA public agencies must determine if a project would adversely

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affect a species that is not protected by FESA or CESA. Species that are not listed under FESA or CESA, but are otherwise eligible for listing (i.e. candidate, or proposed) may be protected by the local government until the opportunity to list the species arises for the responsible agency.

Species that may be considered for review are included on a list of "Species of Special Concern," developed by the CDFW. Additionally, the California Native Plant Society (CNPS) maintains a list of plant species native to California that have low numbers, limited distribution, or are otherwise threatened with extinction. This information is published in the Inventory of Rare and Endangered Vascular Plants of California. List 1A contains plants that are believed to be extinct. List 1B contains plants that are rare, threatened, or endangered in California and elsewhere. List 2 contains plants that are rare, threatened, or endangered in California, but more numerous elsewhere. List 3 contains plants where additional information is needed. List 4 contains plants with a limited distribution.

California Wetlands Conservation Policy

In August 1993, the Governor announced the "California Wetlands Conservation Policy" which ensures no net loss in wetlands and provides a framework to achieve a long-term increase in wetland acreage and value, reduce procedural complexity associated with state and federal programs, and focus on landowner incentive programs and cooperative planning efforts to conserve and restore wetlands. The Governor also signed Executive Order W-59-93, which incorporates the goals and objectives contained in the new policy and directs the Resources Agency to establish an Interagency Task Force to direct and coordinate administration and implementation of the policy.

Natural Community Conservation Planning Act

The Natural Community Conservation Planning Act provides long-term protection of species and habitats through regional, multi-species planning before the special measures of the CESA become necessary.

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act authorizes the SWRCB to regulate state water quality and protect beneficial uses.

LOCAL

City of Elk Grove General Plan

The City of Elk Grove General Plan guides development within the City limits, and those areas outside the City limits that are contemplated for annexation. Policies CAQ-7 through CAQ-11 of the Conservation and Air Quality Element identify the City's policies and associated actions for the conservation of native and non-native habitats, plants, and animals. Policy CAQ-11 encourages preservation of areas where special-status plant species, special-status animal species, and critical habitat occur. CAQ-11 Action 1 establishes requirements for the evaluation and mitigation of

impacts to special-status species and identifies that potentially significant impacts may be mitigated through replacement or restoration of habitat on- or off-site.

City of Elk Grove Swainson’s Hawk Ordinance

Chapter 16.130 of the City Municipal Code requires mitigation for the loss of Swainson’s hawk habitat at a 1:1 ratio. Mitigation can be achieved through the payment of a fee which is used to fund the City’s Swainson’s hawk habitat restoration program. Other options for achieving mitigation through the Code include the direct transfer to the City of a Swainson’s hawk habitat conservation easement along with an easement monitoring endowment or the purchase of credits at a CDFW approved conservation bank. The site must be surveyed to determine whether it is suitable Swainson’s hawk foraging habitat.

City of Elk Grove Tree Preservation and Protection Ordinance

The Tree Preservation and Protection Ordinance was codified in Chapter 19.12 of the City Municipal Code and strives to protect and preserve landmark trees and trees of local importance which include coast live oak (*Quercus agrifolia*), valley oak (*Quercus lobata*), blue oak (*Quercus douglasii*), interior live oak (*Quercus wislizenii*), oracle oak (*Quercus moreha*), California sycamore (*Platanus racemosa*), and California black walnut (*Juglans hindsii*) with a single trunk 6 inches dbh or greater or a multi-trunk with a combined dbh of 6 inches or greater. Chapter 19.12 requires mitigation for the removal of landmark trees, trees of local importance, secured trees, and trees in the right-of-way or on City property. Mitigation may include on-site or off-site replacement, payment of an in-lieu fee, credit for existing smaller trees, and/or on-site or off-site relocation.

3.3-3 IMPACTS AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE

Consistent with Appendix G of the CEQA Guidelines, the Project will have a significant impact on biological resources if it will:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service;
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service;
- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;

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- 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 codes protecting biological resources, such as Chapter 19.12;
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

IMPACTS AND MITIGATION

Impact 3.3-1: Invertebrates – The Project has the potential for substantial adverse effects, either directly or through habitat modifications, on species identified as candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service. (less than significant with mitigation)

Special-status invertebrates that are documented within the a five-mile radius of Project include: vernal pool fairy shrimp (*Branchinecta lynchi*), midvalley fairy shrimp (*Branchinecta mesovallensis*), valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*), vernal pool tadpole shrimp (*Lepidurus packardii*), and California linderiella (*Linderiella occidentalis*).

Valley Elderberry Longhorn Beetle: The valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*) is a federal threatened insect that is dependent upon the elderberry plant (*Sambucus* sp.) as a primary host species. Elderberry shrubs are a common component of riparian areas throughout the Sacramento Valley region; however it is not present on the Project site. The valley elderberry longhorn beetle is not likely to be affected by the proposed Project due to the absence of appropriate habitat and potential impacts to this species are less than significant.

Vernal Pool Crustaceans: Vernal pool crustaceans are found in ephemeral freshwater habitats, and their life cycles have adapted to the unique habitat conditions of vernal pools. Following the winter rains vernal pool become inundated, and in conjunction with the appropriate environmental cues (temperature, total dissolved solids, alkalinity, pH, etc.), the hatching of vernal pool crustacean eggs is initiated. Vernal pool crustaceans then mature rapidly into adults.

There are four special-status freshwater crustaceans, two of which are federal listed, that are documented within five miles of the Project site and have been determined to potentially occur in the vernal pools and seasonal wetlands on the Project site: vernal pool fairy shrimp (*Branchinecta lynchi*), vernal pool tadpole shrimp (*Lepidurus packardii*), midvalley fairy shrimp (*Branchinecta mesovallensis*), and California linderiella (*Linderiella occidentalis*).

Suitable habitat for these vernal pool crustaceans is present on the Project site. Protocol-level surveys were not conducted in the preparation of the Biological Assessment for this Project. In

accordance with USFWS policy, given the presence of potential habitat and the absence of protocol surveys, these species are presumed present on the Project site.

Direct Effects: The Project will result in the direct loss of 5.05 acres of federally listed crustacean habitat, and the death of an unknown number of vernal pool fairy shrimp and vernal pool tadpole shrimp through the direct filling of vernal pools and vernal swales within the Project site. The midvalley fairy shrimp and California linderiella are both non-listed, but they are considered special status species, and the Project will result in a direct loss of habitat and death of an unknown number of these species.

Indirect Effects: The Project would result in indirect effects to all vernal pool tadpole shrimp, vernal pool fairy shrimp, midvalley fairy shrimp, and California linderiella, in the form of death, injury, and harm, found in vernal pools that are supported by associated upland areas and swales, and all habitat otherwise damaged by loss of watershed, human intrusion, introduced species, and pollution that will be caused by the Project. The Project would result in indirect effects to 3.73 acres of federally-listed crustacean habitat.

Cumulative Effects: Because the vernal pool tadpole shrimp, vernal pool fairy shrimp, midvalley fairy shrimp, and California linderiella are endemic to vernal pools in the Central Valley, coast ranges, and a limited number of sites in the transverse range and Santa Rosa Plateau of California, the USFWS anticipates that a wide range of activities will affect these species. Such activities include, but are not limited to, urban, water, flood control, highway and utility projects, chemical contaminants, as well as conversion of vernal pools to agricultural use.

Conclusion: A Section 7 Consultation was initiated for the incidental take of vernal pool tadpole shrimp, vernal pool fairy shrimp in association with the Project. The USFWS reviewed the status of the vernal pool tadpole shrimp, vernal pool fairy shrimp, the environmental baseline, the effects of the Project and the cumulative effects and provided their biological opinion that the Project is not likely to jeopardize the continued existence of these two listed species. They also indicated that the Project site is not located within proposed or designated critical habitat for the vernal pool fairy shrimp or the vernal pool tadpole shrimp, and, therefore, none will be affected.

The USFWS anticipates incidental take of the vernal pool fairy shrimp and vernal pool tadpole shrimp will be difficult to detect or quantify. The cryptic nature of these species and their relatively small body size make the finding of a dead specimen unlikely. The species occur in habitats that make them difficult to detect. Due to the difficulty in quantifying the number of individuals that will be taken as a result of the Project, the USFWS is quantifying take incidental to the Project as the number of acres of vernal pools/ponded depressions (vernal pool habitat) that will become unsuitable for vernal pool crustaceans due to the Project. Therefore, the USFWS estimates that all vernal pool fairy shrimp and vernal pool tadpole shrimp inhabiting 8.78 acres of vernal pool habitat will be harassed, harmed, injured, or killed, as a result of the Project.

The USFWS determined that the incidental take associated with the Project on vernal pool fairy shrimp and vernal pool tadpole shrimp is exempted from prohibitions of take under Section 9 of the ESA. The UFWS also determined that this level of anticipated take is not likely to result in

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jeopardy to the federally-listed species or result in destruction or adverse modification of proposed or designated critical habitat.

The USFWS provided a requirement to implement reasonable and prudent measures necessary and appropriate to minimize the effect of the Project on vernal pool fairy shrimp and vernal pool tadpole shrimp. This includes the following:

1. The effects to listed vernal pool crustaceans from habitat loss shall be minimized.
2. The effects to listed vernal pool crustaceans from construction activities at the Project shall be minimized.

These reasonable and prudent measures and addressed through more detailed terms and conditions and reporting requirements, in addition to several conservation recommendations. These USFWS requirements are non-discretionary, and must be implemented so that they become binding conditions of any grant or permit issued to the Project proponent, as appropriate, in order for the exemption in Section 7(0)(2) to apply. The USACE has a continuing duty to regulate the activity covered by this incidental take statement.

While the midvalley fairy shrimp and California linderiella are not federal or state listed and not addressed within the Section 7 Consultation or another permitting document, these special status species occupy the same vernal pool habitat as is mentioned for the federally listed vernal pool tadpole shrimp and vernal pool fairy shrimp and will have similar impacts. Similar to the above impact discussion, it is estimated that all midvalley fairy shrimp and California linderiella inhabiting 8.78 acres of vernal pool habitat will be affected as a result of the Project.

Impacts to vernal pool tadpole shrimp, vernal pool fairy shrimp, midvalley fairy shrimp, and California linderiella are potentially significant.

MITIGATION MEASURES

Mitigation Measure 3.3-1: The Project Applicant shall comply with the Terms and Conditions, Reporting Requirements, and Conservation Recommendations in accordance with the USFWS Incidental Take Statement issued for the Project.

Timing/Implementation: As specified in the permit and throughout all earthmoving and construction activities.

Enforcement/Monitoring: City of Elk Grove Planning Department.

Implementation of Mitigation Measure 3.3-1 requires the Project to adhere to the USFWS Incidental Take Permit which requires the preservation of existing vernal pool habitat at a 2:1 ratio (17.56 acres of wetted vernal pool crustacean habitat to be preserved to compensate for 5.05 directly-affected acres and 3.73 indirectly affected acres), measures to address stormwater quality, notification procedures in the event of death or harm of a listed species, and constructed monitoring to ensure compliance with construction-related impact avoidance measures. This measure will ensure that the potential impacts to vernal pool tadpole shrimp, vernal pool fairy shrimp, midvalley fairy shrimp, and California linderiella are reduced to a less than significant level.

Impact 3.3-2: Reptiles and Amphibians – The Project has the potential for substantial adverse effects, either directly or through habitat modifications, on species identified as candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service. (less than significant)

Special-status reptiles and amphibians that are documented within a five-mile radius of Project site include: western pond turtle (*Emys marmorata*) and giant garter snake (*Thamnophis gigas*).

Western Pond Turtle: The western pond turtle (*Emys marmorata*) is a California species of special concern. Its favored habitats include streams, large rivers and canals with slow-moving water, aquatic vegetation, and open basking sites. Although the turtles must live near water, they can tolerate drought by burrowing into the muddy beds of dried drainages. This species feeds mainly on invertebrates such as insects and worms, but will also consume small fish, frogs, mammals and some plants. Western pond turtle predators include raccoons, coyotes, raptors, weasels, large fish, and bullfrogs. This species breeds from mid to late spring in adjacent open grasslands or sandy banks.

The presence of water on the Project site is variable throughout the year and is largely rainwater driven, with standing water remaining in the on-site ponds until May or June. These water levels are dependent on storm water inflows from Whitehouse Creek and periodic discharges related to urban use activities associated with the residential area to the north. At the time of the rare plant survey conducted on July 6, 2004, the ponds were dry. Due to the limited source of suitable freshwater habitat available throughout the active period for western pond turtle, this species is not expected to occur on the Project site. Based on this lack of suitable habitat, and results of the field surveys, the Project is not expected to impact western pond turtle. As such, implementation of the Project would have a **less than significant** on western pond turtle.

Giant Garter Snake: The giant garter snake (*Thamnophis gigas*) (GGS) is a large aquatic snake that can reach lengths of 4.5 feet or greater, and is endemic to wetland habitat of the Central Valley. The giant garter snake inhabits marshes, sloughs, ponds, small lakes, low gradient streams, other waterways and agricultural wetlands such as irrigation and drainage canals and rice fields, and the adjacent uplands. Essential habitat components consist of adequate water during the snake's active period, (early spring through mid-fall) to provide a prey base and cover; emergent, herbaceous wetland vegetation, such as cattails and bulrushes, for escape cover and foraging habitat; upland habitat for basking, cover, and retreat sites; and higher elevation uplands for cover and refuge from flood waters.

GGS typically enter suitable hibernation sites, such as burrows, rubble piles, or canal banks during October, and emerge in late March or early April. They may utilize canals that retain water throughout the summer months, which also contain adequate emergent vegetation which provides cover. These canals must also have an abundant food supply such as small fish, tadpoles, and frogs.

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Most important to GGS's survival is the availability of permanent water sources that contain emergent vegetation as well as an abundant food supply. Suitable overwintering habitat should also be located in close proximity to its foraging habitat. This species of snake is commonly observed in close proximity to a combination of permanent and seasonal freshwater sources.

Four CNDDDB records for the GGS are located within five miles of the Project site. No sightings of GGS were observed during the six field surveys of the Project site, all of which occurred during the critical period (May 1 – October 1) for this species, as determined by the USFWS. Furthermore the presence of water on the Project site is variable throughout the year and is largely rainwater driven, with standing water remaining in the on-site ponds until March or June. These water levels are dependent on storm water inflows from Whitehouse Creek and periodic discharges related to urban use activities associated with the residential area to the north. At the time of the rare plant survey conducted on July 6, 2004, the ponds were dry. Due to the limited source of suitable freshwater habitat available throughout the active period for GGS and absence of an abundant food supply observed in the wetland areas, this species is not expected to occur on the Project site. Based on this lack of suitable habitat, and results of the field surveys, the Project is not expected to impact GGS.

Critical habitat has not been formally proposed for giant garter snake. The Project is therefore not expected to result in adverse modification of critical habitat for this federally threatened species. Implementation of the Project would have a less than significant on giant garter snake.

Other Species Considered But Not Documented: Other species considered that are not documented within a five-mile radius of the Project site but considered in this analysis include: California redlegged frog (*Rana aurara draytonii*) and California tiger salamander (*Ambystoma californiense*).

Suitable freshwater habitat for federally listed California red-legged frog is not present on the Project site, so it was determined that the Project would not affect this species.

The vernal pools on the Project site may be suitable for breeding California tiger salamanders; however this species has not been observed on the Project site during field surveys of aquatic habitat nor are any documented within a five mile radius. Based on the urbanized development surrounding most of the Project site, negative survey results, and the lack of known occurrences in the vicinity, this species is not expected to be present in the and therefore it was determined that the Project would not affect this species. Implementation of the Project would have a less than significant on California red-legged frog and California tiger salamander.

Impact 3.3-3: Birds – The Project has the potential for substantial adverse effects, either directly or through habitat modifications, on species identified as candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service. (less than significant with mitigation)

Special-status birds that are documented within a five-mile radius of the Project site include: tri-colored blackbird (*Agelaius tricolor*), black-crowned night heron (*Nycticorax nycticorax*), burrowing owl (*Athene cunicularia*), Swainson's hawk (*Buteo swainsoni*), white-tailed kite (*Elanus leucurus*), Merlin (*Falco columbarius*), and Cooper's hawk (*Accipiter cooperii*).

Tri-colored blackbird (*Agelaius tricolor*) is a California species of special concern. This species typically nests in freshwater marsh or other areas with dense, emergent vegetation. Occasionally, the birds may be found nesting in other types of dense vegetation. This species is a common resident throughout the Central Valley. Tri-colored blackbirds nest in emergent wetlands with dense cattails or tules, and also in thickets of blackberry and willow. Nesting habitat for this species is not present on the Project site. The closest documented tri-colored blackbird is located along Laguna Creek less than a half a mile to the northeast of the Project site. The grasslands within the Project site could provide foraging habitat for tri-colored blackbirds at that location. The Project includes 64.5 acres of open space preserve, which will maintain approximately one third of the Project site in open space and available for foraging by this species. The location of the open space preserve on the Project site is the closest portion of the Project site to the documented tri-colored blackbirds along Laguna Creek to the northeast of the Project site. With the open space preserve the Project would have a less than significant impact on foraging habitat for this species.

Black-crowned night heron (*Nycticorax nycticorax*) is a California species of special concern. This species typically nests in freshwater and saltwater wetlands. They nest in colonies on platforms of sticks in a group of trees, or on the ground in protected locations such as islands or reedbeds. The closest documented Black-crowned night heron is located almost five miles west of the Project site. The Project site does not contain nesting or foraging habitat for this species.

Burrowing owl (*Athene cunicularia*) is a California species of special concern. Burrowing owls in the Project vicinity are typically found in annual and perennial grasslands. Burrows are the essential component of burrowing owl habitat. Both natural and artificial burrows provide protection, shelter, and nests for burrowing owls. Burrowing owls typically use burrows made by fossorial mammals, such as ground squirrels or badgers, but also may use man-made structures, such as cement culverts; cement, asphalt, or wood debris piles; or openings beneath cement or asphalt pavement.

Burrowing owls are documented approximately three miles to the southwest, five miles to the west, and three miles to the northwest of the Project site. While this species has not been observed on the Project site, suitable habitat is present within the annual grasslands habitat. This

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species could occupy the Project site at some point in the future and construction activities could cause a potentially significant impact. Impacts to burrowing owl are potentially significant.

Raptors and Migratory Birds: The Cooper's hawk (*Accipiter cooperii*), white-tailed kite (*Elanus leucurus*), and Merlin (*Falco columbarius*) are all raptors that are documented within a five mile radius of the Project site. These birds are protected by a variety of laws that prevent the harassment and willful take of these species. Specifically, they are protected under the Fish and Game Code §3503.5, which prohibits destruction of active raptor nests. There are numerous other protected raptors and migratory birds that are not mapped, but may be present in the vicinity at times.

The Cooper's hawk requires woodland habitat, chiefly of open, interrupted or marginal type. They nest mainly in riparian growths of deciduous trees, as in canyon bottoms on river flood plains; also, lives in oaks. The Project site lacks the appropriate habitat for Cooper's hawk.

White-tailed kite nests in shrubs (in Delta) and trees adjacent to grasslands oak woodland, edges of riparian habitats which are used for foraging. The annual grassland throughout the Project site is appropriate foraging habitat for white-tailed kite. Trees on and adjacent to the Project site could provide nesting habitat for this species.

The Merlin is not known to nest in California, but it is a winter transient throughout most of California with wintering populations in the Central Valley. The annual grassland throughout the Project site is appropriate foraging habitat for Merlin.

While not documented in the CNDDDB within the vicinity of the Project site, there are other raptors such as the American kestrel, northern harriers, red-tailed hawk, and great-horned owl which are known to occur within the region. The nests of these and all raptor species are protected under the Section 3503.5 of the Fish and Game Code.

Migratory birds forage and nest in multiple habitats such as annual grasslands, wetlands, riparian, and oak woodlands. The nests of all migratory birds are protected under the MBTA, which makes it illegal to destroy any active migratory bird nest.

Trees on and adjacent to the Project site could provide nesting habitat for a variety of birds protected under the MBTA. Additionally, the annual grassland and wetland habitat throughout the Project site is appropriate foraging habitat for a variety of birds protected under the MBTA.

The Project will directly impact the annual grassland and wetland habitat, and will require the removal of some trees on the Project site. There are a variety of raptors and/or birds protected by the MBTA that could utilize this habitat for nesting or foraging. Construction activities that occur during the nesting season (generally March 1-August 31) would disturb nesting sites for birds protected by the MBTA and CFGC. This is a potentially significant impact.

Swainson's hawk (*Buteo swainsoni*) is state-listed as a threatened species. The Swainson's hawk is a long distance migrator, nesting in northwestern Canada, the western U.S., and Mexico. This species migrate to wintering grounds in the open pampas and agricultural areas of South America

(Argentina, Uruguay, southern Brazil). Some individuals or small groups (20-30 birds) may winter in the U.S., including California (Delta Islands). This round trip journey may exceed 14,000 miles. The birds return to the nesting grounds in early March. By mid-September, the young are ready to travel to their wintering grounds.

Swainson's hawks nest throughout most of the Central Valley floor, although nesting habitat is fragmented and unevenly distributed. More than 85 percent of the known nests in the Central Valley are within riparian systems in Sacramento, Sutter, Yolo, and San Joaquin counties. Much of the potential nesting habitat remaining in this area is in riparian forests, although isolated and roadside trees are also used. Nest sites are generally adjacent to or within easy flying distance to alfalfa or hay fields or other habitats or agricultural crops which provide an abundant and available prey source.

Open fields and pastures are the primary foraging areas. Major prey items for Central Valley birds include: California voles, valley pocket gophers, deer mice, California ground squirrel, mourning doves, ring-necked pheasants, meadowlarks, other passerines, grasshoppers, crickets, and beetles. They generally search for prey by soaring in open country and agricultural fields. Often several hawks may be seen foraging together following tractors or other farm equipment capturing prey escaping from farming operations. During the breeding season, they eat mainly small rodents and reptiles, whereas during migration vast numbers of insects are consumed. Preferred foraging habitats for Swainson's hawks include: *alfalfa; fallow fields; beet, tomato, and other low-growing row or field crops; dry-land and irrigated pasture; rice land (during the non-flooded period); and cereal grain crops (including corn after harvest)*. Unsuitable foraging habitat types include crops where prey species (even if present) are not available due to vegetation characteristics (e.g. *vineyards, mature orchards, and cotton fields, dense vegetation*).

Nesting Habitat: Estep (2009) noted that in Elk Grove the Swainson's hawk usually nests in large native trees such as valley oak (*Quercus lobata*), cottonwood (*Populus fremontia*), walnut (*Juglans californica*), and willow (*Salix* spp.), and occasionally in nonnative trees, such as eucalyptus (*Eucalyptus* spp.). Estep (2009) characterized several different nesting habitat types within the City of Elk Grove including: Riparian, Isolated Trees, Roadside Trees, Tree Row, Rural Residential, Eucalyptus Groves, Farmyard Trees, and Urban Trees.

The Project site and immediate vicinity contain mature trees that fall into the nesting habitat categories of isolated trees, roadside trees, and tree rows. Less than one percent of the Project site contains the trees described above and the remainder of the Project site does not contain trees that provide potential nesting habitat.

The majority of the documented Swainson's hawk nests are located to the south of Grant Line Road along the Cosumnes River and Deer Creek, which is approximately four miles to the southeast of the Project site. There are also numerous documented Swainson's hawk nests located west of SR 99. There are no documented nests on the Project site.

There was no physical evidence of nesting within the trees located on, or immediately adjacent to, the Project site. The potential for nesting on the Project site is not considered highly likely due to

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the fact that the area is fragmented with development. Nevertheless, the potential for these trees to be used by Swainson's hawk for nesting is possible due to the fact that the Project site is a fairly large continuous tract of foraging habitat that is available. Implementation of the Project would have a potentially significant impact on Swainson's hawk nesting habitat.

Foraging Habitat: The Project site is mapped by Estep (2009) as "Grassland, Pastureland, or Cropland" and it falls under the category of "Uncultivated Grasslands." Estep (2009) describes this type as consisting of uncultivated annual grassland habitat that is regularly or irregularly grazed by livestock and that has retained most topographical and other natural features (e.g., vernal pools and swales, native oak trees, etc.). Estep (2009) classifies this habitat as suitable foraging habitat for Swainson's hawk. Approximately 7.4 percent of the Elk Grove study area is classified as such.

The Project site contains 203.55 acres of open dry pasture and the remainder is composed of water features. The 203.55 acres of open dry pasture is appropriate foraging habitat for Swainson's hawk, while remainder (water features) are not considered foraging habitat. The Project includes development of approximately 126.39 acres of foraging habitat and 8.31 acres of water feature for single-family residential lots, age-restricted multi-family units and Village Center, parks, landscape entry/corridors, and major roads. Implementation of the Project would have a potentially significant impact on Swainson's hawk foraging habitat.

Conclusion: Implementation of the Project would require removal of 126.39 acres of Swainson's hawk foraging habitat. In addition, it is possible that Swainson's hawk could occupy and nest in trees on the Project site prior to the commencement of construction and any construction activities could disrupt nesting. The removal of the foraging habitat would also make it less likely that Swainson's hawk would nest in the trees on the Project site, or in the immediate vicinity. Impacts to Swainson's hawk are potentially significant.

The following mitigation measures address potential impacts to burrowing owls, migratory birds and raptors, and Swainson's hawk.

Mitigation Measure 3.3-2: *Within 30 days prior to the start of any construction activity, a qualified biologist shall conduct a burrow survey to determine if burrowing owls are present within the Project site. If burrowing owls are observed on the site, measures such as flagging the burrow and avoiding disturbance, passive relocation, or active relocation to move owls from the site, shall be implemented to ensure that no owls or active burrows are inadvertently buried during construction. All measures shall be determined by a qualified biologist and approved by the CDFW.*

All burrowing owl surveys shall be conducted according to CDFW protocol. The protocol requires, at a minimum, four field surveys of the entire site and areas within 500 feet of the site by walking transects close enough that the entire site is visible. The survey should be at least three hours in length, either from one hour before sunrise to two hours after or two hours before sunset to one hour after. Surveys shall not be conducted during inclement weather, when burrowing owls are typically less active and visible.

Timing/Implementation: *Prior to issuance of grading permits or approval of improvement plans, whichever occurs first.*

Enforcement/Monitoring: City of Elk Grove Planning Department.

Mitigation Measure 3.3-3: *If Project construction activities, including vegetation clearing, are to occur during the nesting season for birds protected under the California Fish and Game Code and Migratory Bird Treaty Act (approximately March 1-August 31) the Project Applicant shall retain a qualified biologist to perform preconstruction surveys for protected birds, including nesting raptors, on the Project site and in the immediate vicinity. At least two surveys shall be conducted no more than 15 days prior to the initiation of construction activities, including vegetation clearing. In the event that protected birds, including nesting raptors, are found on the Project site, offsite improvement corridors, or the immediate vicinity, the Project applicant shall:*

- *Locate and map the location of the nest site. Within 2 working days of the surveys prepare a report and submit to the City and CDFW;*
- *A no-disturbance buffer of 250 feet shall be established;*
- *On-going weekly surveys shall be conducted to ensure that the no disturbance buffer is maintained. Construction can resume when a qualified biologist has confirmed that the birds have fledged.*

In the event of destruction of a nest with eggs, or if a juvenile or adult raptor should become stranded from the nest, injured or killed, the qualified biologist shall immediately notify the CDFW. The qualified biologist shall coordinate with the CDFW to have the injured raptor either transferred to a raptor recovery center or, in the case of mortality, transfer it to the CDFW within 48 hours of notification. If directed/authorized by the CDFW during the notification, the qualified biologist may transfer the injured raptors to a raptor recovery center.

Timing/Implementation: Prior to issuance of grading permits or approval of improvement plans, whichever occurs first.

Enforcement/Monitoring: City of Elk Grove Planning Department.

Mitigation Measure 3.3-4: *Prior to the commencement of construction activities, the Project Applicant shall provide the City of Elk Grove with evidence that the Project is in compliance with the requirements of the City of Elk Grove Swainson’s Hawk Chapter 16.130 of the Elk Grove Municipal Code. Compliance will require the Project Applicant to preserve 126.39 acres of suitable habitat. The suitability of the habitat for preservation purposes shall be determined by the CDFW in coordination with the City of Elk Grove. The proposed open space and nature preservation area located within the Project site may be utilized for a portion of the 126.39 acres if approved by the CDFW.*

Timing/Implementation: Prior to issuance of grading permits or approval of improvement plans, whichever occurs first.

Enforcement/Monitoring: City of Elk Grove Planning Department.

Mitigation Measure 3.3-5: *If construction activities are planned to begin during the Swainson's hawk nesting period (March 1 to September 15), a preconstruction survey and nesting season surveys for nesting Swainson’s hawks shall be conducted throughout areas of suitable nesting*

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habitat on the parcel and adjacent areas within 500 feet of the Project site. The pre-construction surveys shall be completed prior to the start of construction activities. The nesting season surveys shall be conducted once in April and once in May. If an active Swainson's hawk nest is observed, the biologist shall notify the City of Elk Grove and consult with the CDFW to determine whether project-related activities are likely to impact the nesting pair and to determine the appropriate protection measures to implement, which may include halting or postponing land clearing and construction activities until all young have fledged and additional nesting attempts no longer occur. If a nest tree is found on the Project site prior to construction and is proposed for removal, then appropriate permits from CDFW shall be obtained and mitigation implemented pursuant to CDFW guidelines.

- Prior to issuance of building or grading permits, the Project Applicant shall provide Development Services, Planning Department written verification that a qualified biologist has been retained by the Project Applicant to perform the preconstruction survey. This action may be waived if the biologist will be contracted by the City at the Project Applicant's expense.*
- No earlier than 30 days before commencement of construction activities, including land clearing, the qualified biologist shall submit and certify to the Planning Director the results of the pre-construction survey. Failure to submit the required survey results will delay the approval to initiate construction activities, including land clearing.*
- No later than April 30, the qualified biologist shall submit and certify to the Planning Director the results of the 500-foot site perimeter survey conducted in April. Failure to submit the required survey results will cause any construction activity to be halted until such results are submitted and approved by the Planning Director. If no construction activities have taken place, failure to submit the required survey results will delay the approval to initiate construction activities, including land clearing.*
- No later than May 31, the qualified biologist shall submit and certify to the Planning Director the results of the 500-foot site perimeter survey conducted in May. Failure to submit the required survey results will cause any construction activity to be halted until such results are submitted and approved by the Planning Director. If no construction activities have taken place, failure to submit the required survey results will delay the approval to initiate construction activities, including land clearing.*

Timing/Implementation: Prior to issuance of grading permits or approval of improvement plans, whichever occurs first, and throughout Project construction.

Enforcement/Monitoring: City of Elk Grove Planning Department.

Mitigation Measure 3.3-2 will ensure that if burrowing owls are present on the Project site, the burrowing owls will be avoided or relocated. Mitigation Measures 3.3-3 will ensure that if migratory birds or raptors are nesting on the Project site, the nests will not be significantly disturbed during construction activities. Mitigation Measure 3.3-4 requires the Project Applicant to preserve 126.39 acres of suitable Swainson's hawk habitat. Mitigation Measure 3.3-5 will

ensure that if Swainson’s hawk is nesting on the Project site, the nests will not be significantly disturbed during construction activities. Implementation of Mitigation Measures 3.3-2, 3.3-3, 3.3-4, and 3.3-5 will ensure that the potential impacts to burrowing owls, Swainson’s hawk, and other raptors and migratory birds are reduced to a less than significant level.

Impact 3.3-4: Fish – The Project has the potential for substantial adverse effects, either directly or through habitat modifications, on species identified as candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service. (less than significant)

The Project site is located within the City of Elk Grove, northwest of the intersection of Bond and Waterman road, in the Hydrologic Unit Code (HUC) 18020109. The region has been identified as Essential Fish Habitat (EFH) for Chinook salmon in Amendment 14 to the Pacific Coast Salmon Plan. Chinook salmon are well documented on the Sacramento River past the confluence of Laguna Creek, which connects upstream to Whitehouse Creek. Foothills Associates prepare an assessment of essential fish habitat for the Project site in 2005 and determined that special-status fish species are not likely to be found in the Project area.

Chinook salmon do not utilize Whitehouse Creek in the Project vicinity. Whitehouse Creek is ephemeral in nature and the Project site provides no favorable substrate for spawning and rearing. Due to these limitations, Chinook salmon are not likely to be present on the Project site. Implementation of the Project would have a less than significant on Chinook salmon.

Impact 3.3-5: Mammals – The Project has the potential for substantial adverse effects, either directly or through habitat modifications, on species identified as candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service. (less than significant with mitigation)

There are no CNDDDB documented special-status mammals within a five-mile radius of the Project site. There are, however, several species of bats that are known to occupy the region. Several bat species roost in abandoned buildings, rock crevices, under bark, hollow trees, culverts, under bridges, or other dark crevices.

Although there is no documented occurrences of special-status bats on the Project site, and none have been observed, there is suitable roosting habitat for special-status bat species within the trees located on or immediately adjacent to the Project site. Changes in their habitat including increase in noise and vibrations can affect the survivorship of the young, if construction occurs adjacent to maternity colonies during spring and summer breeding and the subsequent raising of young. This is a potentially significant impact.

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MITIGATION MEASURES

Mitigation Measure 3.3-6: *Up to thirty days prior to the any disturbance activities, including but not limited to the commencement of construction and/or removal of trees on or adjacent to the Project site, the Project Applicant shall retain a qualified biologist to conduct pre-construction bat survey(s) of potential diurnal roosting trees (e.g. trees 24" DBH and greater, snags, hollow trees). During the survey(s) the qualified biologist will inspect all potential diurnal roosting trees within the entire area(s) where construction will and within a surrounding 100 foot-buffer area using the appropriate and most effective methodology (e.g. camera inspection, exit survey with night optics, acoustic survey) in determining presence or absence of bat species.*

If active roosts are found, no construction activities shall take place within 250 feet of the nest until the young have fledged. On-going weekly surveys shall be conducted to ensure that the no disturbance buffer is maintained. Construction can resume when a qualified biologist has confirmed that the young bats have fledged.

Timing/Implementation: Prior to issuance of grading permits or approval of improvement plans, whichever occurs first.

Enforcement/Monitoring: City of Elk Grove Planning Department.

Implementation of the Mitigation Measure 3.3-6 would reduce impact to special-status bat species to a *less than significant* level.

Impact 3.3-6: Plants – The Project has the potential for substantial adverse effects, either directly or through habitat modifications, on species identified as candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service. (less than significant with mitigation)

The California Natural Diversity Data Base (CNDDDB) search identified six documented special-status plant species within a five-mile radius of Project site include: Peruvian dodder (*Cuscuta obtusiflora* var. *glandulosa*), Dwarf downingia (*Downingia pusilla*), Boggs Lake hedge-hyssop (*Gratiola heterosepala*), Legenere (*Legenere limosa*), Slender Orcutt grass (*Orcuttia tenuis*), and Sanford's arrowhead (*Sagittaria sanfordii*).

Four field surveys were conducted in May and September of 2003, a focused rare plant survey was performed in May 5, 2004, a focused Orcutt grass survey was performed on July 6, 2004, and a field survey was performed on June 20, 2007. Subsequently, a survey was performed by De Novo Planning Group in April 2013 to verify conditions. Determinations regarding presence/absence of plant species are based on CNDDDB records and surveys. The surveys were conducted within the appropriate floristic period for plants known to occur in the region, including each of the six special status plant species documented within a five-mile radius of the Project site.

Peruvian dodder (*Cuscuta obtusiflora* var. *glandulosa*) is designated as rare plant rank 2.2 by CNPS. Peruvian dodder grows in vernal pools as well as mesic sites within grassland. This annual

herb or vine (parasitic) member of the morning glory family (Convolvulaceae) produces small, white flowers from July to October. Suitable habitat is present in seasonal wetland and vernal pool throughout the Project site. This species, however, was not observed on the Project site.

Dwarf downingia (*Downingia pusilla*) is designated as rare plant rank 2.2 by CNPS. Dwarf downingia grows in vernal pools as well as mesic sites within grassland. This annual herbaceous member of the bellflower family (Campanulaceae) produces small, white flowers from March to May (CNPS 2011). Suitable habitat is present in seasonal wetland, vernal pool, and grassland communities throughout the Project site. This species was documented on the Project site during surveys performed in 1991. The record indicates that there was two concentration of plant mapped, one of which is on the Project site and one is located to the northeast of the Project site. The record describes six populations in natural pools, and two populations in scraped depressions. The record further noted that there were 300 plants observed collectively within the populations.

Boggs Lake hedge-hyssop (*Gratiola heterosepala*) is designated as rare plant rank 1B.2 by CNPS (rare or endangered in California and elsewhere) and is State-listed as endangered. It is a semiaquatic annual herb in the snapdragon family (Scrophulariaceae) that produces small, white flowers from April to August. Suitable habitat consists of marshes, swamps, lake margins, and vernal pools with clay soils. Suitable habitat is present in wetland communities throughout the Project site. This species was documented on the Project site during surveys performed in 1991. The record indicates that there were 20 individual plants found in nearly barren portion of a vernal pool.

Legenere (*Legenere limosa*) is a delicate, annual herb in the bellflower family (Campanulaceae). It designated as rare plant rank 1B.1 by CNPS. It produces small, white flowers from April to June and grows in vernal pools). Suitable habitat is present in wetland communities throughout the Project site. This species was documented on the Project site during surveys performed in 1991. The record indicates that there were five sub-populations found in natural vernal pools and five in disturbed/created seasonal depressions. The record further noted that there were thousands of plants observed collectively within the sub-populations.

Slender Orcutt grass (*Orcuttia tenuis*) is designated as rare plant rank 1B.1 by CNPS; it is State-listed as endangered and federally listed as threatened. Slender Orcutt grass produces small, inconspicuous flowers from May to September. This annual herb in the grass family (Poaceae) is a blue-green, loosely tufted grass that is hairy and covered in a sticky, aromatic secretion. Slender Orcutt grass occurs in the bottom of deep vernal pools. Suitable habitat is present in vernal pools and other wetland habitats throughout the Project site. This species, however, was not observed on the Project site.

Sanford's arrowhead (*Sagittaria sanfordii*) is designated as rare plant rank 1B.2 by CNPS. It is a rhizomatous, emergent herb in the water-plantain family (Alismataceae) that produces white flowers. Its blooming period is between May and October. This plant species grows in shallow, standing fresh water and sluggish waterways associated with marshes, swamps, ponds, vernal pools, lakes, reservoirs, sloughs, ditches, canals, and other water bodies. Suitable habitat is present

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in wetland communities throughout the Project site. This species, however, was not observed on the Project site.

Conclusion: There are three special status plants documented on the Project site and each is associated with the vernal pool habitat. The three plants includes Dwarf downingia (CNPS 2.2 by CNPS), Legenere (CNPS 1B.2), and Boggs Lake hedge-hyssop (CNPS 1B.2 and State-listed as endangered).

The Project site contains 1.41 acres of seasonal wetland, 10 acres of vernal pool, 0.02 acres of ephemeral drainage, 14.64 acres of pond, and 0.38 acres of creek. The Project would involve impacts on a total of 8.31 acres of this habitat, including 1.09 acres of seasonal wetlands, 4.94 acres of vernal pools, 2.25 acres of bermed pond, 0.01 acre of Whitehouse Creek and 0.02 acre of ephemeral drainage. The 8.31 acres of habitat to be disturbed is habitat for the three species documented on the Project site.

The documented location of the Boggs Lake hedge-hyssop, which is a State-listed endangered species, is in the northwestern portion of the Project site in the area designated for open space. This species will not be directly affected by the Project because the open space area will remain intact.

The documented locations of the Dwarf downingia and Legenere are in portions of the Project site that are proposed for disturbance. Impacts to these species are potentially significant.

In addition, the Project site contains the appropriate habitat for three plants that have not been observed on the Project site through previous field surveys. This includes: Peruvian dodder (*Cuscuta obtusiflora* var. *glandulosa*), Slender Orcutt grass (*Orcuttia tenuis*), and Sanford's arrowhead (*Sagittaria sanfordii*). While these plants have not been observed on the Project site, a confirmation survey prior to construction would ensure that these species are not impacted.

MITIGATION MEASURES

Mitigation Measure 3.3-7: *Prior to the commencement of grading, the Project Applicant shall coordinate with the CNPS to ensure efforts are made to salvage portions of the habitat or plant populations of Dwarf downingia and Legenere that will be lost as a result of implementation of the Project. This shall include relocation/transplanting the plants and/or seed bank that would be affected by the Project to areas proposed for wetland creation or another appropriate area for either re-establishment after construction is complete or for planting.*

Timing/Implementation: Prior to issuance of grading permits or approval of improvement plans, whichever occurs first.

Enforcement/Monitoring: City of Elk Grove Planning Department.

Mitigation Measure 3.3-8: *Up to thirty days prior to any ground disturbance activities, the Project Applicant shall retain a qualified botanist to conduct confirmation plant survey(s) for Peruvian dodder, Slender Orcutt grass, and Sanford's arrowhead. These plants have not been observed on the Project site through previous surveys; however, appropriate habitat for these species is present.*

If the confirmation survey(s) reveal the presence of these plants, then the qualified botanist shall notify the City of Elk Grove and the appropriate regulatory agency with jurisdiction over the plant. If the confirmation survey(s) do not reveal the presence of these plants, then the Project Applicant is free to move forward with ground disturbance activities, subject to all permits and other Project mitigation requirements.

Timing/Implementation: Prior to issuance of grading permits or approval of improvement plans, whichever occurs first.

Enforcement/Monitoring: City of Elk Grove Planning Department.

Mitigation Measure 3.3-7 requires coordination with the CNPS (the listing organization) to relocate/transplant individuals and/or the seed bank from areas where these species are located (vernal pool habitat). The mitigation measure will require coordination with CNPS only because these species listings are limited to CNPS listings. These species are not listed under federal or state law and do not require a permit from a regulatory agency. The relocation/transplanting efforts will minimize the potential impact to the extent practicable. Implementation of the Mitigation Measure 3.3-7 would reduce potential impacts to Dwarf downingia and Legenere to a less than significant level.

Mitigation Measure 3.3-8 requires confirmation plant surveys prior to ground disturbance for three plants that have appropriate habitat on the Project site, but have not been observed during previous field surveys. These include: Peruvian dodder, Slender Orcutt grass, and Sanford’s arrowhead. Implementation of Mitigation Measure 3.3-8 would reduce the potential impact on these special-status plant species to a *less than significant* level.

Impact 3.3-7: The Project has the potential to have a substantial adverse effect on wetlands, including federally protected as defined by Section 404 of the Clean Water Act, through direct removal, filling, hydrological interruption, or other means. (less than significant with mitigation)

A delineation of waters of the United States was prepared for the Project by Gibson & Skordal and digitized and reclassified by Foothill Associates. The delineation has been verified by the USACE and a 404 permit was issued.

The Gibson & Skordal wetland delineation documented 141 vernal pool features, 34 seasonal wetland features, three pond features, two ephemeral drainages, and White House Creek, which collectively total 26.45 acres of jurisdictional area located on the Project site (see Figure 3.3-2). Table 3.3-4 summarizes the types and acreages of the jurisdictional features, as well as the acreages directly impacted by the Project.

3.3 BIOLOGICAL RESOURCES

TABLE 3.3-3: WATERS OF THE US

CLASSIFICATION	ACREAGE	DIRECT IMPACT ACREAGE	PRESERVED ACREAGE
WETLANDS			
Seasonal Wetland	1.41	1.09	0.32
Vernal Pool	10.00	4.94	5.06
OTHER WATERS			
Ephemeral Drainage	0.02	0.02	0.00
Pond	14.64	2.25	*12.39
Creek	0.38	0.01	0.37
Total	26.45	8.31	5.75

*THE 12.39-ACRES OF POND WILL BE INDIRECTLY IMPACTED, AS IT WILL BE USED AS A DETENTION BASIN FOR STORM DRAINAGE. THIS ACREAGE IS NOT COUNTED IN THE TOTAL PRESERVED ACREAGE.
SOURCE: FOOTHILL ASSOCIATES, 2005.

The Project would involve the discharge of fill material into 8.31 acres of waters of the United States, including 1.09 acres of seasonal wetlands, 4.94 acres of vernal pools, 2.25 acres of pond, 0.01 acre of Whitehouse Creek, and 0.02 acre of ephemeral drainage. In addition, 64.45 acres of avoided area containing 5.75 acres of waters of the United States would be preserved in perpetuity. The proposed detention design will utilize 12.39 acres of bermed pond to control/detain runoff within the residential subdivision. The above referenced discharge of fill material into waters of the US is a potentially significant impact.

The USACE verified the wetland delineation and authorized the discharge of fill through a Section 404 permit. The CDFW issued a Section 1602 Streambed Alteration Agreement to address impacts to Whitehouse Creek. Implementation of the Section 404 permit and Section 1602 Streambed Alteration Agreement conditions is necessary to address potentially significant impacts to waters of the U.S.

MITIGATION MEASURES

Mitigation Measure 3.3-9 Prior to any construction activities, the Project Applicant shall ensure that the Section 404 permit issued by the USACE, Section 401 Water Quality Certification issued by the RWQCB, and the Section 1602 Streambed Alteration Agreement issued by the CDFW are valid and active. If any of the above mentioned regulatory permits are deemed invalid or inactive by the issuing regulatory agency then the Project Applicant shall coordinate with the regulatory agency to receive updated permits and approvals to ensure that all Project activities are authorized under their respective regulations.

Timing/Implementation: Prior to issuance of grading permits or approval of improvement plans, whichever occurs first.

Enforcement/Monitoring: City of Elk Grove Planning Department.

Mitigation Measure 3.3-10 The Project Applicant shall comply with the requirements and recommendations in accordance with the Section 404 Permit issued by the USACE, the Section 401

Water Quality Certification issued by the RWQCB, and the Section 1602 Streambed Alteration Agreement issued by the CDFW for the Project.

Timing/Implementation: Prior to issuance of grading permits or approval of improvement plans, whichever occurs first.

Enforcement/Monitoring: City of Elk Grove Planning Department.

The Section 404 permit requires the Project Applicant to establish, maintain, and monitor a 64.45-acre preserve on the northern portion of the Project site, containing 5.75 acres of avoided and preserved waters of the United States, including 5.06 acres of avoided and preserved vernal pools, 0.32 acres of avoided and preserved seasonal wetland, and 0.37 acres of avoided and preserved Whitehouse Creek. The Section 404 permit requires the Project to compensate for the direct loss of 8.31 acres of waters of the U.S., including 4.94 acres of vernal pools, 1.09 acres of seasonal wetland, 2.25 acres of pond, 0.02 acres of ephemeral drainage and 0.01 acre of creek through creating 8.80 acres of wetlands (6.17 acres of vernal pools and 2.63 acres of seasonal wetlands) within the on-site preserve area and creating 2.08 acres of seasonal wetlands off-site. The Section 404 permit requires the Project Applicant to create 6.25 acres of seasonal wetlands off-site to compensate for the indirect loss of functions associated with 12.39 acres of bermed pond that would be impacted by the Project. Specific requirements for the operation and maintenance of the preserve are included in the Section 404 permit to ensure long-term viability of on-site mitigation. The Section 1602 Streambed Alteration Agreement requires mitigation for loss of 2.25 acres of aquatic habitat and includes specific measures to address potential impacts to special-status species. Implementation of Measures 3.3-9 and 3.3-10 would ensure that potential impacts to wetlands, including waters of the U.S., are less than significant.

Impact 3.3-8: The Project has the potential to have a substantial adverse effect on riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service. (significant and unavoidable)

The CNDDDB documents two sensitive natural communities within a five mile radius of the Project site including: Great Valley Valley Oak Riparian Forest and Northern Hardpan Valley Hardpan Vernal Pool. The Project site does not contain Great Valley Valley Oak Riparian Forest; however, it does contain Northern Hardpan Valley Hardpan Vernal Pool. The Northern Hardpan Valley Hardpan Vernal Pool is found primarily on old alluvial terraces on the east side of the Great Valley from Tulare or Fresno County north to Shasta County (Holland 1986). This community is dominated by annual grasses and herbs that grow in and out of the water. Germination and growth begin with winter rains, often continuing even when inundated. These pools gradually evaporate during spring, leaving concentric bands of vegetation that colorfully encircle the drying pools (Holland 1986).

3.3 BIOLOGICAL RESOURCES

This community is typically found through mounded terrain where soils are very acidic, iron and silicemented hardpan soils. Winter rainfall perches on the hardpan, forming pools in the depressions. Evaporation (not runoff) empties the pools in spring (Holland 1986).

The Gibson & Skordal (2012) wetland delineation documented 141 vernal pool features, 34 seasonal wetland features, three pond features, two ephemeral drainages, and White House Creek, which collectively total 26.45 acres of jurisdictional area located on the Project site. All of these features collectively contribute to the unique Northern Valley Hardpan Vernal Pool characteristics of the Project site.

The Project would involve the discharge of fill material into 8.31 acres of the 26.45 acres described above. This includes discharge of fill into 1.09 acres of seasonal wetlands, 4.94 acres of vernal pools, 2.25 acres of bermed pond, 0.01 acre of Whitehouse Creek and 0.02 acre of ephemeral drainage. In addition, 64.45 acres of avoided area containing 5.64 acres of waters of the United States would be preserved in perpetuity. The proposed detention design will utilize 12.39 acres of bermed pond to control/detain runoff within the residential subdivision. The above referenced discharge of fill material into the Northern Valley Hardpan Vernal Pool is a potentially significant impact. While there are mitigation measures presented in this EIR that are intended to minimize the impacts to the extent feasible, there is a finite quantity of Northern Valley Hardpan Vernal Pool in California and the Elk Grove area, the Project would result in a reduction in that finite quantity. The loss of the habitat cannot be mitigated to a level of insignificance. Implementation of the Project would result in a **significant and unavoidable** impact on Northern Valley Hardpan Vernal Pool.

Impact 3.3-9: The Project would not 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. (less than significant)

Wildlife movement corridors are routes frequently utilized by wildlife that provide shelter and sufficient food supplies to support wildlife species during migration. Movement corridors generally consist of riparian, woodlands, or forested habitats that span contiguous acres of undisturbed habitat. Wildlife movement corridors are an important element of resident species home ranges, including deer and coyote. Implementation of the Project would not interfere with the movement of any fish or wildlife species or impede the use of native nursery sites or corridors. Implementation of the Project would have a **less than significant** relative to this topic.

Impact 3.3-10: The Project has the potential to conflict with local policies or codes protecting biological resources, such as Chapter 19.12. (less than significant with mitigation)

The City of Elk Grove Tree Preservation and Protection Chapter strives to protect and preserve trees of local importance which include coast live oak (*Quercus agrifolia*), valley oak (*Quercus lobata*), blue oak (*Quercus douglasii*), interior live oak (*Quercus wislizenii*), oracle oak (*Quercus moreha*), California sycamore (*Platanus racemosa*), and California black walnut (*Juglans hindsii*)

with a single trunk 6 inches dbh or greater or a multi-trunk with a combined dbh of 6 inches or greater. The Chapter requires mitigation for the removal of trees of local importance with dimensions described above and trees that have been selected for preservation, which may be impacted by utility installation and/or improvements associated with this Project. Current policies require that every inch lost will be mitigated by an inch planted or equivalent credit obtained from a tree mitigation bank.

The Tree Associates performed an inventory of on-site trees, and off-site trees with greater than 25% of their canopies overhanging the Project site, providing the species, dbh information, and health assessment for each tree. The inventory also included an assessment of the suitability of on-site trees for preservation and the potential impacts to trees from the construction of a proposed wall along the Project site boundary. Kelly McGlothlin, ISA Certified Arborist #8324, visited the Project site and evaluated the trees on December 22, 2011.

Table 3.3-4 presents the results of the assessment of the wall construction for each tree. While construction plans were not yet available, it is assumed that the CMU wall will be installed along the western Project site boundary and that the footing of the wall will measure four feet wide. Trees located under the proposed footprint of the wall, or within three feet of the wall, are indicated by 'Under Footprint' in the Impact Severity Rating field. Trees located far enough away from the wall that will not be impacted by its construction are indicated by 'N/A' in the Impact Severity Rating field. Trees located at least three feet away from the wall, and whose driplines are located within the proposed construction zone of the sound wall, may be able to be preserved provided that specific arborist recommendations are followed. For those trees that cannot be preserved through the design of the CMU wall, the City of Elk Grove Tree Preservation and Protection Chapter will require compensatory mitigation at a ratio of one inch planted for every inch lost or an equivalent credit obtained from a tree mitigation bank.

The Project could result in a potentially significant impact associated with the removal of protected trees.

3.3 BIOLOGICAL RESOURCES

TABLE 3.3-4: POTENTIAL CMU WALL CONSTRUCTION IMPACT EVALUATION

TREE #	SPECIES*	DIAMETER (INCHES)	MAX DRIPLINE (FEET)	DISTANCE FROM PROP LINE (FEET)	LOCATION	TPZ	SUITABLE FOR PRESERVATION? (ON-SITE TREES ONLY)	IMPACT SEVERITY RATING (FOR WALL ONLY)
1	valley oak <i>Quercus lobata</i>	14	19	23	On-site	19	Yes pending further inspection	N/A
1a	European white birch <i>Betula pendula</i>	6 est.	10	5 est.	Off-site	10		High
2	valley oak <i>Quercus lobata</i>	6	8	15	On-site	8	Remove if #1 preserved	N/A
2a	palm <i>Washingtonia sp.</i>	18 est.	5	1 est.	Off-site	5		Under footprint
3	valley oak <i>Quercus lobata</i>	13	17	15	On-site	17	Yes	Low to Moderate
4	valley oak <i>Quercus lobata</i>	15 @ 3'	15	27	On-site	15	Remove if #5 preserved	N/A
5	valley oak <i>Quercus lobata</i>	10	13	27	On-site	13	Yes	N/A
6	valley oak <i>Quercus lobata</i>	4,4,3,2,2	9	26	On-site	9	No	N/A
7	valley oak <i>Quercus lobata</i>	8	14	23	On-site	14	Remove #7 or #8	N/A
8	valley oak <i>Quercus lobata</i>	10 @ 4'	17	22	On-site	17	Remove #7 or #8	N/A
9	valley oak <i>Quercus lobata</i>	6,4	14	20	On-site	14	No	N/A
10	valley oak <i>Quercus lobata</i>	10	13	17	On-site	13	Yes	N/A
11	valley oak <i>Quercus lobata</i>	9	13	26	On-site	13	Remove #11 or #12	N/A
12	valley oak <i>Quercus lobata</i>	6,8	15	25	On-site	15	Remove #11 or #12	N/A
13	valley oak <i>Quercus lobata</i>	6	11	39	On-site	11	Yes	N/A
14	valley oak <i>Quercus lobata</i>	16 @ 2.5'	15	23	On-site	16	No	N/A

TREE #	SPECIES*	DIAMETER (INCHES)	MAX DRIPLINE (FEET)	DISTANCE FROM PROP LINE (FEET)	LOCATION	TPZ	SUITABLE FOR PRESERVATION? (ON-SITE TREES ONLY)	IMPACT SEVERITY RATING (FOR WALL ONLY)
17	valley oak Quercus lobata	44 @ 3.5'	38	>50	On-site	44	No	N/A
18	valley oak Quercus lobata	4,4	6	>50	On-site	6	Yes	N/A
19	valley oak Quercus lobata	9	9	>50	On-site	9	Yes	N/A
A	coast redwood Sequoia sempervirens	8 est.	8	2 est.	Off-site	6		Under footprint
B	coast redwood Sequoia sempervirens	6 est.	7	2 est.	Off-site	5		Under footprint
C	coast redwood Sequoia sempervirens	7 est.	6	2 est.	Off-site	5		Under footprint
D	coast redwood Sequoia sempervirens	7 est.	6	2 est.	Off-site	5		Under footprint
E	California black walnut Juglans californica hindsii	20 est.	18	2 est.	Off-site	20		Under footprint
F	European white birch Betula pendula	5 est.	8	2 est.	Off-site	8		Under footprint
G	valley oak Quercus lobata	20,18 est.	23	3 est.	Off-site	23		Under footprint
H	valley oak Quercus lobata	13 est.	17	4 est.	Off-site	17		Under footprint
I	Mt. Atlas pistache Pistacia atlantica	Multi-trunks	11	5 est.	Off-site	11		High
J	Mt. Atlas pistache Pistacia atlantica	Multi-trunks	6	1 est.	Off-site	6		Under footprint
K	Mt. Atlas pistache Pistacia atlantica	Multi-trunks	6	1 est.	Off-site	6		Under footprint
L	Mt. Atlas pistache Pistacia atlantica	12,15 est.	22	0	Off-site	22		Under footprint

3.3 BIOLOGICAL RESOURCES

TREE #	SPECIES*	DIAMETER (INCHES)	MAX DRIPLINE (FEET)	DISTANCE FROM PROP LINE (FEET)	LOCATION	TPZ	SUITABLE FOR PRESERVATION? (ON-SITE TREES ONLY)	IMPACT SEVERITY RATING (FOR WALL ONLY)
M	Mt. Atlas pistache Pistacia atlantica	12,14 est.	21	0	Off-site	21		Under footprint
N	Mt. Atlas pistache Pistacia atlantica	16,12,7 est.	18	0	Off-site	18		Under footprint
O	Mt. Atlas pistache Pistacia atlantica	Multi-trunks	9	4 est.	Off-site	9		Under footprint
P	Mt. Atlas pistache Pistacia atlantica	Multi-trunks	11	2 est.	Off-site	11		Under footprint
Q	Mt. Atlas pistache Pistacia atlantica	Multi-trunks	12	1 est.	Off-site	12		Under footprint
R	Mt. Atlas pistache Pistacia atlantica	Multi-trunks	11	1 est.	Off-site	11		Under footprint
S	Mt. Atlas pistache Pistacia atlantica	Multi-trunks	11	1 est.	Off-site	11		Under footprint

SOURCE: TREE ASSOCIATES, 2012.

MITIGATION MEASURES

Mitigation Measure 3.3-11 *Prior to any construction activities that would result in the removal of a protected tree as defined by the City of Elk Grove Tree Preservation and Protection Chapter, the Project Applicant shall:*

- *Develop a detailed tree preservation plan for trees to be retained.*
- *For trees to be preserved, the goal of project design should be to avoid grading, compaction, trenching, vehicle traffic, material storage or any other disturbance in the protection zones of the trees.*
- *Under the direct supervision of an ISA Certified Arborist, install the CMU wall on pier footings as opposed to a continuous footing where the construction of the proposed CMU wall will occur within tree protection zones. A steel beam, plate, or equivalent can span over tree roots (Figure 8.6) so that the wall “floats” over the soil. Dig all pier locations by hand to a depth of 3 feet and move piers as necessary to avoid roots larger than one inch in diameter.*
- *Prior to construction, conduct a meeting between the Arborist, all contractors, subcontractors, and project managers to discuss tree preservation guidelines.*
- *Prior to any construction activity on site, identify trees to be preserved and install tree protection fencing in a circle centered at the tree trunk with a radius equal to the maximum drip line radius or as far from the trunk as possible where structures are located. This fenced area is defined as the tree protection zone.*
- *Tree protection fences should be made of chain link with posts sunk into the ground. These fences should not be removed or moved until construction is complete. No soil or above ground disturbance shall occur within the fenced area. No soil, material storage, spoil, waste or washout water shall be deposited within the fenced areas.*
- *Any work that is to occur within the protection zones of the trees should be monitored by the Consulting Arborist.*
- *If injury should occur to any tree during construction, the Consulting Arborist should be consulted as soon as possible so that appropriate treatments can be applied.*
- *Any pruning required for construction or recommended in this report should be performed by an ISA Certified Arborist or Tree Worker.*
- *All trees on the property should be irrigated every other week during the spring, summer, and fall months to a depth of at least two feet under the trees’ canopies.*

Timing/Implementation: Prior to issuance of grading permits or approval of improvement plans, whichever occurs first.

Enforcement/Monitoring: City of Elk Grove Planning Department.

Mitigation Measure 3.3-12 *Prior to the removal of any trees, the Project Applicant shall compensate for the direct loss of protected trees as defined in the City of Elk Grove Tree Preservation and Protection Chapter at a ratio of 1 inch planted for every inch lost, or the equivalent credit obtained from a tree mitigation bank.*

3.3 BIOLOGICAL RESOURCES

Timing/Implementation: Prior to issuance of grading permits and/or approval of improvement plans.

Enforcement/Monitoring: City of Elk Grove Planning Department.

Mitigation Measures 3.3-11 and 3.3-12 will ensure that the potential impacts to protected trees are minimized to the extent possible and that the Project compensated for the loss of any trees in compliance with the City of Elk Grove Tree Preservation and Protection Chapter. With implementation of these mitigation measures, the potentially significant impacts to protected trees will be reduced to a **less than significant** level.

Impact 3.3-11: The Project has the potential to conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. (no impact)

There is no adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional or state habitat conservation plan that applies to Elk Grove at this time. Therefore, there is no conflict and **no impact** would occur.

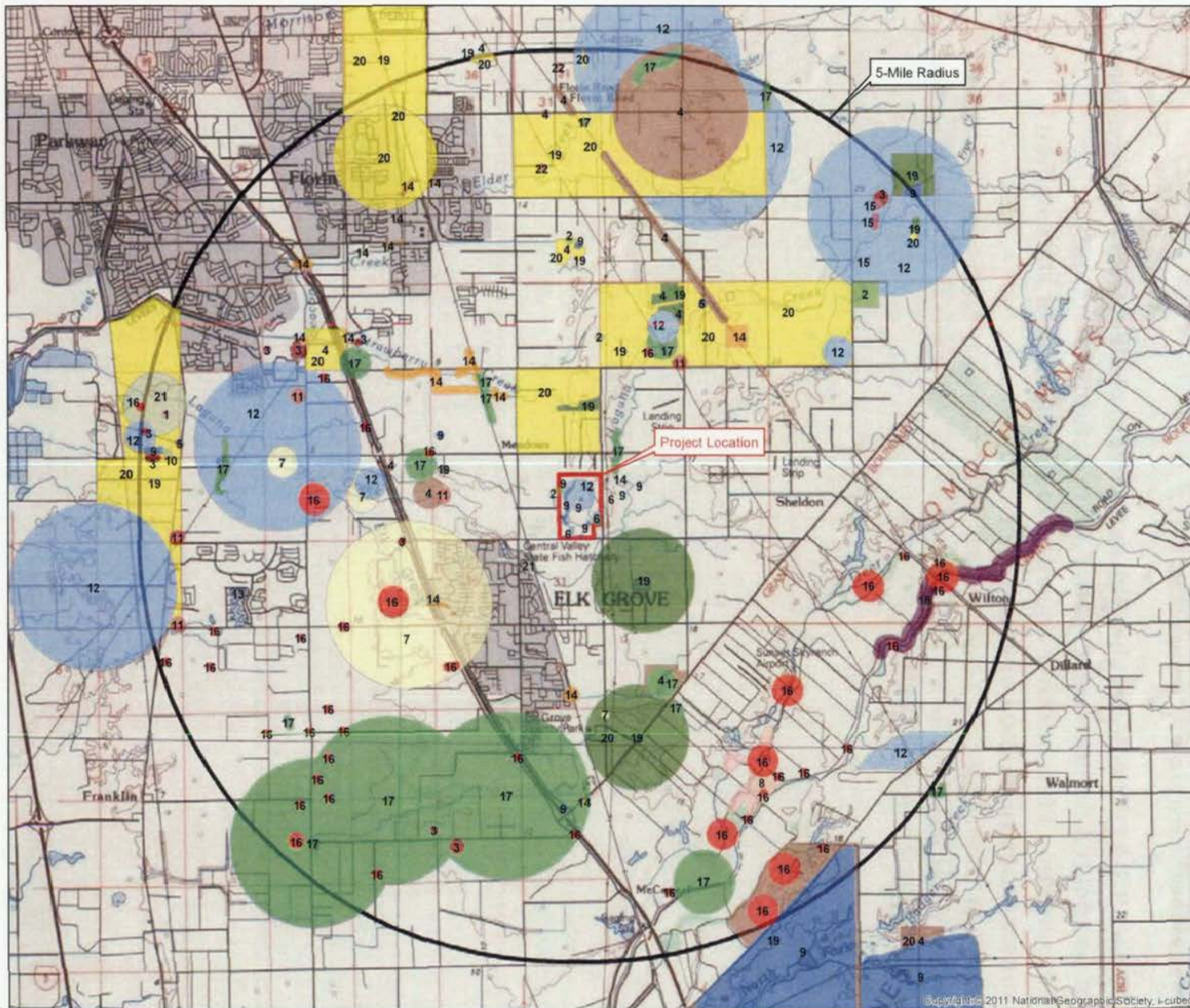


Figure 3.3-1:
Special Status Species
(5-mile Radius)

Map Label - Common Name - Occurrence Count

- 1 - black-crowned night heron - 1
- 2 - Boggs Lake hedge-hyssop - 4
- 3 - burrowing owl - 7
- 4 - California linderiella - 12
- 5 - Cooper's hawk - 2
- 6 - dwarf downingia - 2
- 7 - giant garter snake - 4
- 8 - Great Valley Valley Oak Riparian Forest - 1
- 9 - legenera - 8
- 10 - merlin - 1
- 11 - midvalley fairy shrimp - 5
- 12 - Northern Hardpan Vernal Pool - 11
- 13 - Peruvian dodder - 1
- 14 - Sanford's arrowhead - 10
- 15 - slender Orcutt grass - 2
- 16 - Swainson's hawk - 39
- 17 - tricolored blackbird - 18
- 18 - valley elderberry longhorn beetle - 1
- 19 - vernal pool fairy shrimp - 14
- 20 - vernal pool tadpole shrimp - 15
- 21 - western pond turtle - 2
- 22 - white-tailed kite - 2



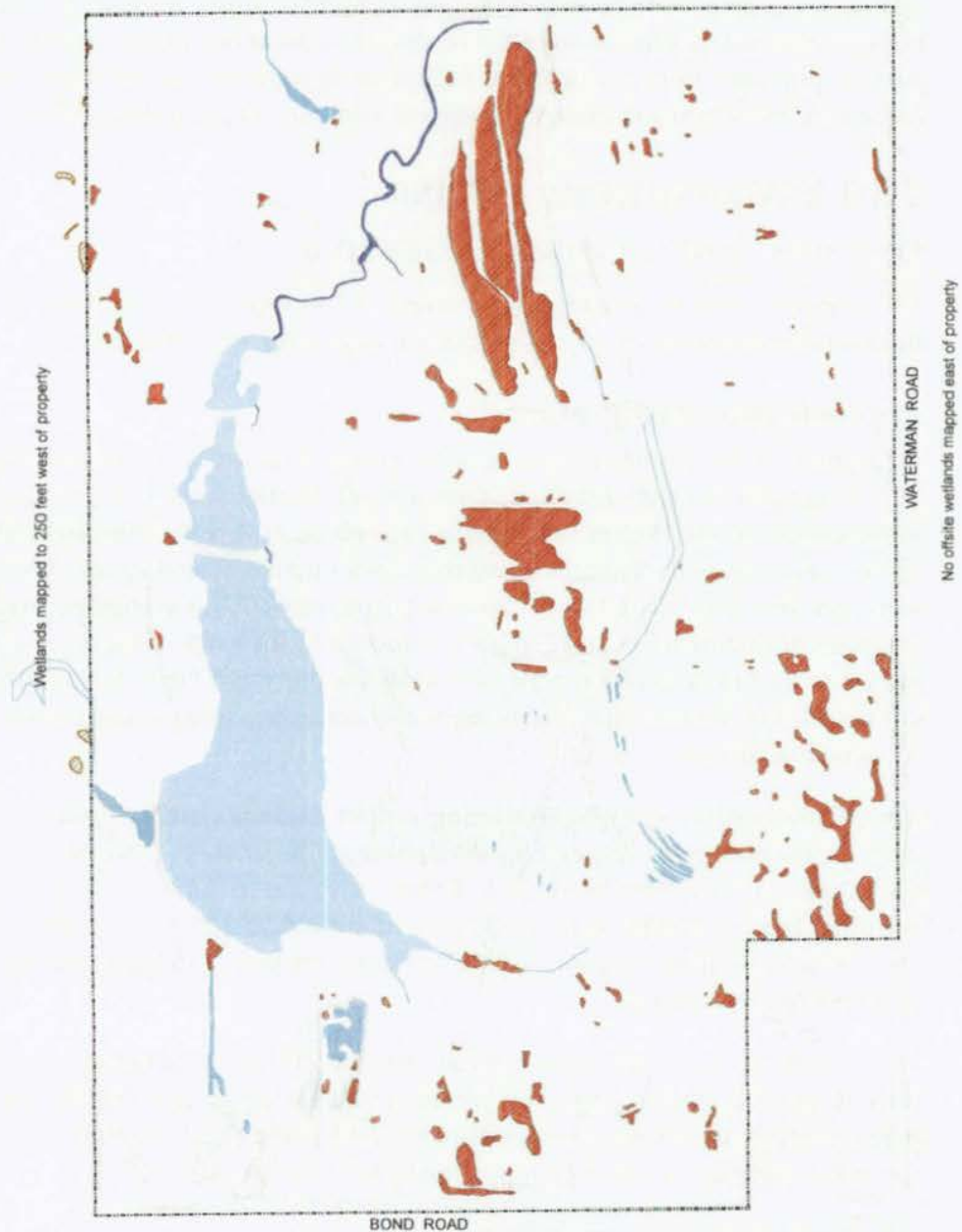
0 2,400 4,800 7,200
Feet

1:75,000

Data sources: California Department of Fish and Wildlife California Natural Diversity Database, March 5, 2013; ArcGIS Online USGS Topo Map Service, Copyright 2011 National Geographic, Inc. Map date: March 24, 2013.

De Nava Planning Group
"Let The Planning, Design, and Environmental Flow"

No offsite wetlands mapped north of property



No offsite wetlands mapped south of property

ONSITE WATERS OF THE U.S.		OTHER FEATURES	NOTES
CLASSIFICATION	ACREAGE		
Seasonal Wetland	1.41	Vernal Pool Crustacean Habitat	• Wetlands were digitized from Gibson & Scoville's 2002 wetland delineation and redigitized by Foothill Associates.
Vernal Pool	10.00	Project Boundary	• Digital base data provided by McKay and Serris. Contour interval is 1 foot.
Ephemeral Drainage	0.02	Adjacent Waters of the U.S.	• Wetlands west of property were mapped by aerial photo interpretation. No offsite wetland mapping was performed north, east, or south of property as major roads and development were adjacent.
Creek	0.58	Seasonal Wetland	• Hydrologic unit code for this area is 16020102.
Pond	14.94	Vernal Pool	
TOTAL	26.95		

Figure 3.3-2: Wetlands

This section provides a background discussion of the prehistoric period background, ethnographic background, historic period background, known cultural resources in the region, the regulatory setting, an impact analysis, and mitigation measures. There were no comments received during the public review period for the NOP related to cultural resources. Information in this section is derived primarily from the *Cultural Resources Review for the Silverado Project Area* (Peak & Associates, Inc. 2013) and the *Archaeological Inventory Survey* (Jensen 2004).

3.4.1 ENVIRONMENTAL SETTING

CULTURAL AND HISTORICAL SETTING

The following cultural and historical setting of the region is taken from the *Cultural Resources Review for the Silverado Project Area* (Peak & Associates, Inc. 2013, pp. 2-5).

Archeological Background

Excavations in the Cosumnes River locality, especially at the stratified Windmill mound (CA-SAC-107), suggested three temporally distinct cultural traditions: Early, Transitional, and Late. Previous investigations in the Project region have focused upon very detailed archival research of Spanish sources, and the archeological investigations at a number of small sites. A reexamination of earlier work has also been undertaken. Several of the previously investigated sites probably represent satellite encampments or small villages associated with major villages. The majority of the sites appear to be relatively late in time, and probably represent Plains Miwok. The activities practiced are varied, but detailed studies on the faunal collection suggest seasonality of occupation and a focus on fish species.

Some Early Horizon and Middle Horizon central California archeological sites appear at least in part, contemporaneous, based on existing radiocarbon dates. Cultural materials recovered from CA-SJO-68, an Early Horizon site, are thought to relate to date to 4350±250 B.P or 2350 B.C. On the other hand, a Middle Horizon component at CA-CCO-308 dates to 4450±400 B.P. or 2450 B.C. The antiquity of other Early and Middle Horizon sites demonstrate an overlap of the two horizons by a millennium or more.

The Middle Horizon likely represents an intrusion of ancestral Miwok speaking people into the lower Cosumnes, Mokelumne, and Sacramento River areas from the Bay Area. The Early Horizon may represent older Yokuts settlements or perhaps the speakers of an Utian language who were somehow replaced by a shift of population(s) from the bay.

Ethnological Background

The Eastern Miwok represent one of the two main divisions of the Miwokan subgroup of the Utian language family. The Plains Miwok, one of five separate cultural and linguistic groups of the Eastern Miwok, occupied the lower reaches of the Mokelumne, Cosumnes, and Sacramento Rivers including the area of south Sacramento County surrounding the Project area. Linguistic studies and the application of a lexicostatistic model for language divergence suggest that Plains Miwok was a distinct linguistic entity for the last 2000 years. This result led researchers such as Richard Levy to conclude that the Plains Miwok inhabited the Sacramento Delta for a considerable period of time.

3.4 CULTURAL RESOURCES

The political organization of the Plains Miwok centered on the tribelet. Tribelets were comprised of 300 to 500 individuals. Each tribelet was thought to control a specific area of resources and usually consisted of several villages or hamlets. Each tribelet also was divided along lineages that apparently localized to a specific geographic setting and most likely represented a village site and associated satellite sites where the seasonal collection of resources occurred. Descent was through males. Settlement were estimated to contain roughly 21 individuals.

The diet of the Plains Miwok emphasized the collection of floral resources such as acorns, buckeye, digger pine nuts, seeds from the native grasses, and various fresh greens. Faunal resources such as tule elk, pronghorn antelope, deer, jackrabbits, cottontails, beaver, gray squirrels, woodrats, quail, and waterfowl were hunted. Fishing, particularly salmon and sturgeon, contributed significantly to the Plains Miwok diet. The primary method of collecting fish was by nets, but the use of bone hooks, harpoons, and obsidian-tipped spears is also known ethnographically.

Both twined and coiled basketry were manufactured by the Eastern Miwok. The uses of baskets included the collection and storage of seeds, basketry cradles, and gaming. Tule mats were also known to have been used by the Plains Miwok primarily as a floor covering. Other uses of tule included the manufacture of the tule balsa, a water craft in which native people navigated and exploited adjacent delta and major river systems.

Four main types of structures were known among the Eastern Miwok, depending on the environmental setting. In the mountains, the primary structure was a conical structure of bark slabs. At lower elevations the structures consisted of thatched structures, semi-subterranean earth-covered dwellings and two types of assembly houses used for ceremonial purposes.

Bennyhoff characterized the Plains Miwok as intensive hunter-gatherers, with an emphasis upon gathering. The seasonal availability of floral resources defined the limits of the group's economic pursuits. Hunting and fishing subsistence pursuits apparently accommodated the given distribution of resources. The Plains Miwok territory covered six seasonally productive biotic communities and as such native people could apparently afford to pick and chose the resources they ranked highest from each of these zones. The subsequent storage of floral resources (such as acorns in granaries) allowed for a more stable use of the resource base. The acorn was apparently the subsistence base needed to provide an unusually productive environment as earlier non-acorn using peoples who resided in the same geographic setting apparently suffered some seasonal deprivation. Such an emphasis upon the gathering of acorns is consistent with the population increase evident during the Upper Emergent Period in California.

The study of piscine (fish) remains from both CA-SAC-65 and CA-SAC-145 indicates that small villages away from the major rivers appear to concentrate on the collection of piscine species (particularly the Sacramento perch) that inhabited slow-moving waters.

Historical Background

The Project area lies a few miles north of the Sheldon and Daylor grant (Rancho Omochumnes). Both men were assistants of John Sutter, with Jared Sheldon becoming a naturalized citizen of Mexico to obtain a land grant. Sheldon was awarded the grant in 1841, but this grant proved defective and another was issued in 1844. William Daylor oversaw ranch operations as Sheldon pursued several other business ventures.

The name of Elk Grove was originally applied to a spot about a mile away from the eventual location of the town. James Hall built a hotel there in 1850 and named it after his home town in Missouri. This hotel burned down in 1857. The eventual site of Elk Grove was on the ranch of Major James Buckner, who also built a hotel on the site in 1850. The hotel was owned successively by Buckner, Phineas Woodward, Mrs. Jared Erwin, and Nicholas Christophel.

The site became a town after the railroad was constructed. A farmer named Everson saw potential commercial opportunities for a town at this location, but none of the residents, including Everson, had the money available to construct the necessary buildings. Everson persuaded the citizens to pool their money to form the Elk Grove Building Company in 1876. The profits from the first building, the Chittenden and Everson general merchandise store, fueled further construction which, in turn, brought in merchants from outside the area. Only four years later, the town boasted the original general store and one other, two hotels, a flouring mill, the railroad depot, a hardware store, a meat market, a furniture factory, two drug stores, a harness shop, a grain and hay warehouse, a dressmaking shop, two millinery shops, a boot shop, a wagon factory, and a blacksmith. The town continued to grow, first as a commercial center for the farmers in the area and recently as a suburban residential zone for greater Sacramento.

PROJECT SETTING AND RESOURCES

The Project area is located in the east half of section 30, Township 7 North, Range 6 East, mapped on the Elk Grove 7.5' United States Geological Survey (USGS) topographic quadrangle. See Chapter 2.0 for a description of the Project location and existing condition of the Project site.

A field survey of the Project site to identify cultural and historic resources was undertaken in 2004 by Peter H. Jensen, PhD and documented in the *Archaeological Inventory Survey* (Jensen 2004). In 2013, Peak & Associates, Inc. completed the *Cultural Resource Review for the Silverado Project Area* (Peak & Associates 2013).

Archaeological Inventory Survey - 2004

The Project area was reviewed in 2004 by Sean Jensen and the findings documented in the *Archaeological Inventory Survey* (Jensen 2004). Jensen's methodology included review of data at the North Central Information Center, published documents, and unpublished documents relevant to regional prehistory, ethnography, and early historic developments. Jensen also consulted with the Native American Heritage Commission and Native American representatives.

Jensen found that while the Project site had not been previously surveyed for cultural resources, surveys in the vicinity of the Project site identified a dairy complex (temporary designation SL-1) approximately 1/4-mile northeast of the northeast corner of the Project site and a segment of the Hurley-Tracy electrical transmission line (designation SL-4) located approximately 1/10-mile east of the eastern boundary of the Project site, east of Waterman Road.

Jensen did not receive any response from the Native American contacts.

Jensen surveyed the area to determine whether any cultural resources were present on the Project site. The survey identified that previous use of the Project site had created "checks" and earthen dams and berms to retain water at various locations. The survey concluded that the

3.4 CULTURAL RESOURCES

features had been created in association with ranching activities on the Project site. No mention was made of the previous use of the property related to winery runoff water storage. The survey noted that structures had been located on the southwestern portion of the property and had been removed. The electrical transmission line along the western border of the property, west of Waterman Road, was noted.

The Jensen survey did not identify any prehistoric or historic-period sites or features on or immediately adjacent to the Project site. The Jensen report did not identify any improvements or features on the Project site, apart from the earthen berms, dams, and ponds. The survey did identify that it was an inventory-level surface survey and that cultural materials could potentially be encountered on or below the surface during construction work.

Cultural Resource Review for the Silverado Project Area - 2013

Peak & Associates reviewed the Jensen report in 2013 and prepared an updated Cultural Resource Review for the Project site. Peak & Associates provided a more detailed history of the Project site and performed a field survey.

PROJECT SITE HISTORY

In 1911, the Project area was owned by three different individuals. The northern 80 acres was part of a 640-acre tract held by W.E. Dixon. The western 98 acres were owned by F.W. Bond. The remaining southeastern section of the property was owned by E.S. Miller. The residence on the property was built on the lands controlled by Bond by 1909 based on review of historical USGS topographical maps.

In 2011, Wallace-Kuhl & Associates reviewed a history of the Project site, dated October 7, 2008, prepared by Mr. Dan Wukmir, Sacramento Area Sanitation District. According to the history, the Project site has been owned by a series of sanitation districts since 1944. The Elk Grove Sanitation District owned the property from approximately 1944 to 1975. The Elk Grove Sanitation District was dissolved and annexed to the former Central Sanitation District in 1975. The Central Sanitation District was dissolved and consolidated into the County Sanitation District No. 1 in 1978. In 2008, the County Sanitation District No. 1 became the Sacramento Area Sewer District.

The Project site was used for farming and grazing until 1934. Some of the pond and berm features on the Project site were likely associated with the farming and grazing activities.

In 1944, the properties were purchased by wineries on behalf the Elk Grove Sanitation District and the existing ponds were used as evaporation ponds for winery waste. The north-central portion of the Project site was developed with winery wastewater oxidation ponds after 1934. The pond levees were raised in 1974 to prevent discharges to Laguna Creek. In 1976, the discharges from the wineries were diverted to the former Central Sanitation District's system. The Wallace-Kuhl & Associates history noted that at some point, a large portion of the Project site was "extensively dammed with berms," however, it was not known if they were associated with the winery ponds or to hold water for grazing cattle.

As mentioned above, a residence was built on the southwestern portion of the Project site in the early 1900s on the land held by Bond. The residence was destroyed by a fire prior to 1975 and was replaced with a paved two-acre yard with several portable structures. Independent Disposal

Services (IDS) used the southwestern portion of the Project site from 1963 to the late 1980s. The IDS area was reportedly used for offices and truck maintenance. The report noted that aboveground storage tanks were stored on a concrete pad. In addition, there was a concrete truck washing area with concrete basins, which were cleaned out daily.

FIELD SURVEY

A spot-check general coverage survey was undertaken on March 11 and 12, 2013 by Michael Lawson from Peak and Associates. The survey noted that disturbance to the Project site is extensive from the use by the Sanitation Districts from the 1940s to the 1970s.

The Peak & Associates survey identified one resource within the Project site: a section of wire-wrapped redwood stave pipe is visible in the southern portion of the Project site, at the edge of the former location of a reservoir, about 2-3 feet below the ground surface. Only a small section of the pipe is exposed.

The survey did not identify any other cultural or historical resources.

3.4.2 REGULATORY SETTING

FEDERAL

National Historic Preservation Act

The National Historic Preservation Act was enacted in 1966 as a means to protect cultural resources that are eligible to be listed on the National Register of Historic Places (NRHP). The law sets forth criterion that is used to evaluate the eligibility of cultural resources. The NRHP is composed of districts, sites, buildings, structures, objects, architecture, archaeology, engineering, and culture that are significant to American History.

Virtually any physical evidence of past human activity can be considered a cultural resource. Although not all such resources are considered to be significant and eligible for listing, they often provide the only means of reconstructing the human history of a given site or region, particularly where there is no written history of that area or that period. Consequently, their significance is judged largely in terms of their historical or archaeological interpretive values. Along with research values, cultural resources can be significant, in part, for their aesthetic, educational, cultural and religious values.

STATE

California Register of Historic Resources

The California Register of Historical Resources (CRHR) was established in 1992 and codified in the Public Resource Code §5020, 5024 and 21085. The law creates several categories of properties that may be eligible for the CRHR. Certain properties are included in the program automatically, including: properties listed in the NRHP; properties eligible for listing in the NRHP; and certain classes of State Historical Landmarks. Determining the CRHR eligibility of historic and prehistoric properties is guided by CCR §§15064.5(b) and Public Resources Code (PRC) §§21083.2 and

3.4 CULTURAL RESOURCES

21084.1. NRHP eligibility is based on similar criteria outlined in Section 106 of the NHPA (16 U.S. Code [USC] 470).

Cultural resources, under CRHR and NRHP guidelines, are defined as buildings, sites, structures, or objects that may have historical, architectural, archaeological, cultural, or scientific importance. A cultural resource may be eligible for listing on the CRHR and/or NRHP if it:

- is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
- is associated with the lives of persons important in our past;
- embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual or possesses high artistic values; or
- has yielded, or may be likely to yield, information important in prehistory or history.

If a prehistoric or historic period cultural resource does not meet any of the four CRHR criteria, but does meet the definition of a "unique" site as outlined in PRC §21083.2, it may still be treated as a significant resource if it is: an archaeological artifact, object or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

- it contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information,
- it has a special and particular quality such as being the oldest of its type or the best available example of its type, or
- it is directly associated with a scientifically recognized important prehistoric or historic event.

California Environmental Quality Act

CEQA Guidelines §15064.5 provides guidance for determining the significance of impacts to archaeological and historical resources. Demolition or material alteration of a historical resource, including archaeological sites, is generally considered a significant impact. Determining the CRHR eligibility of historic and prehistoric properties is guided by CCR §§15064.5(b) and Public Resources Code (PRC) §§21083.2 and 21084.1. NRHP eligibility is based on similar criteria outlined in Section 106 of the NHPA (16 U.S. Code [USC] 470).

CEQA also provides for the protection of Native American human remains (CCR §15064.5[d]). Native American human remains are also protected under the Native American Graves Protection and Repatriation Act of 1990 (25 USC 3001 et seq.), which requires federal agencies and certain recipients of federal funds to document Native American human remains and cultural items within their collections, notify Native American groups of their holdings, and provide an opportunity for repatriation of these materials. This act also requires plans for dealing with potential future collections of Native American human remains and associated funerary objects, sacred objects, and objects of cultural patrimony that might be uncovered as a result of development projects overseen or funded by the federal government.

Assembly Bill 978

in 2001, Assembly Bill (AB) 978 expanded the reach of Native American Graves Protection and Repatriation Act of 1990 and established a state commission with statutory powers to assure that federal and state laws regarding the repatriation of Native American human remains and items of patrimony are fully complied with. In addition, AB 978 also included non-federally recognized tribes for repatriation.

LOCAL

City of Elk Grove General Plan

The City General Plan contains the following goals and policies that are relevant to Project in terms of cultural resources:

Policy HR-1 Encourage the preservation and enhancement of existing historical and archaeological resources in the City.

Policy HR-6 Protect and preserve prehistoric and historic archaeological resources throughout the City.

HR-6-Action 1 In areas identified in the Background Report as having a significant potential for containing archaeological or paleontological artifacts, require completion of a detailed on-site study as part of the environmental review process. Implement all recommended mitigation measures.

3.4.3 IMPACTS AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE

Consistent with Appendix G of the CEQA Guidelines, the Project will have a significant impact on cultural resources if it will:

- Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines §15064.5;
- Cause a substantial adverse change in the significance of archaeological resource pursuant to CEQA Guidelines §15064.5;
- Directly or indirectly destroy a unique paleontological resource; and/or
- Disturb any human remains, including those interred outside of formal cemeteries.

3.4 CULTURAL RESOURCES

IMPACTS AND MITIGATION MEASURES

Impact 3.4-1: Project implementation may cause a substantial adverse change to a significant historical or archaeological resource, or directly or indirectly destroy or disturb a unique paleontological resource or human remains. (Less than Significant with Mitigation)

As described above, the Project site is located in an area known to have cultural and historical resources. The Project site is located in an area identified as sensitive for cultural resources in the General Plan EIR (City of Elk Grove 2003b, Figure 4.11-1). The General Plan EIR analyzed potential impacts to cultural resources associated with buildout of the General Plan and concluded that impacts would be less than significant with implementation of General Plan Policies HR-1, HR-2, HR-3, HR-4, and HR-6 and associated implementing actions (City of Elk Grove 2003b, Impact 4.11.2, pp. 4.11-8 and 4.11-9). The Project is consistent with these policies and actions, to the extent that they pertain to development projects. HR-6 Action 1 of the General Plan requires a detailed on-site cultural resources study for development projects in areas identified as having a significant potential for containing archaeological or paleontological artifacts and also requires that recommended mitigation measures be implemented.

Two field surveys were conducted on the Project site, consistent with HR-6 Action 1. During the field surveys conducted on the Project site, no significant historical, cultural, or prehistorical resources were identified. However, a partially uncovered wire-wrapped redwood stave pipe was identified on the Project site. This type of pipe was used in water and sewer applications in the early 1900's.

Winemaking began in the Elk Grove area in the late 1880s. With a population of only 900 in the 1930s, there were three wineries present in the area. In the late 1930s, the odor from the runoff water from the wineries that was stored in ponds between Railroad Street and Kent Street, became difficult to tolerate. The Elk Grove Sanitary District had three pumping stations built near the ponds and wineries in about 1940. The runoff water was then transported through redwood pipes to the disposal site within the current Project site (Armstrong 2007: 143-147).

The wire-wrapped redwood pipe is partially buried and cannot be fully evaluated and documented until it has been unearthed. Peak & Associates indicated that the pipe is not likely to be considered an important resource, but recommends that the pipe and any related pipeline be recorded for the permanent record with a form filed with the North Central Information Center.

There is also the possibility that a site may exist on the Project site and be totally obscured by vegetation, fill, or other historic activities, leaving no surface evidence. Impacts to cultural and historic resources are potentially significant.

MITIGATION MEASURES

Mitigation Measure 3.4-1: *When site grading or earthwork begins, the route of the redwood stave pipe and any related pipeline shall be exposed and mapped. The feature shall be completely photographed and documented with a form filed with the North Central Information Center.*

The Elk Grove Historical Society shall be provided with a copy of the photographs and documentation of the pipeline. The Elk Grove Historical Society shall be consulted as to whether it wishes to obtain a pipe segment for display. If the Elk Grove Historical Society identifies that it would like to have a segment of the pipe, the Applicant shall deliver a segment to the Elk Grove Historical Society.

Following completion of consultation with the Elk Grove Historical Society and documentation of the pipeline, the remaining pipeline may be removed from the Project site.

Timing/Implementation: As a condition of Project approval and implemented during all ground-disturbing activities

Enforcement/Monitoring: City of Elk Grove Planning Department

Mitigation Measure 3.4-2: *If any cultural resources, including prehistoric or historic artifacts, or other indications of archaeological resources, or human remains are found during grading and construction activities, all work shall be halted immediately within a 200-foot radius of the discovery.*

- *If cultural resources are identified, an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards in prehistoric or historical archaeology, as appropriate, shall be consulted to evaluate the find(s). Work cannot continue at the discovery site until the archaeologist conducts sufficient research and data collection to make a determination that the resource is either 1) not cultural in origin; or 2) not potentially significant or eligible for listing on the NRHP or CRHR.*
- *If a potentially eligible resource is encountered, then the archaeologist shall identify mitigation recommendations. The City and Project Applicant shall consider the recommendations and the Project Applicant shall implement all measures deemed feasible and appropriate. Such measures may include avoidance, preservation in place, excavation, documentation, curation, data recovery, and other appropriate measures. The implementation of mitigation shall be formally documented in writing and submitted to the City Planning Department as verification that the provisions in CEQA for managing unanticipated discoveries have been met.*
- *If Native American resources are identified, a Native American monitor, following the Guidelines for Monitors/Consultants of Native American Cultural, Religious, and Burial Sites established by the Native American Heritage Commission, may also be required and, if required, shall be retained at the Applicant's expense.*
- *If human remains are discovered, all work shall be halted immediately within 200 feet of the discovery, the County Coroner must be notified, according to Section 5097.98 of the State Public Resources Code and Section 7050.5 of California's Health and Safety Code. If the remains are determined to be Native American, the coroner will notify the Native American Heritage Commission, and the procedures outlined in CEQA Section 15064.5(d) and (e) shall be followed.*

Timing/Implementation: As a condition of Project approval and implemented during all ground-disturbing activities

Enforcement/Monitoring: City of Elk Grove Planning Department

3.4 CULTURAL RESOURCES

SIGNIFICANCE AFTER MITIGATION

Implementation of Mitigation Measure 3.4-1 would ensure that the wire-wrapped redwood stave pipe on the Project site is appropriately documented and mitigated. Implementation of Mitigation Measure 3.4-2 would ensure that if an previously undiscovered cultural or paleontologic resources or human remains are encountered, appropriate steps will be taken to identify the significance of the resources and mitigate any potential impacts. With implementation of Mitigation Measures MM 3.4-1 and 3.4-2, this impact will be less than significant.

REFERENCES

City of Elk Grove 2003a. *City of Elk Grove General Plan*. Elk Grove, California. August 2003.

City of Elk Grove 2003b. *City of Elk Grove General Plan, Volume 1: Draft Environmental Impact Report, SCH #: 2002062082*. Elk Grove, California. August 2003.

Jensen 2004. *Archaeological Inventory Survey, Proposed Vintara Park Development Project*. Peter M. Jensen, PhD. Chico, California. July 14, 2004.

Peak & Associates 2013. *Cultural Resource Review for the Silverado Project Area*. Peak & Associates, Inc. El Dorado Hills, California. May 2013.

3.4 CULTURAL RESOURCES

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The purpose of this section is to disclose and analyze the potential impacts associated with the geology of the region and Project vicinity, and to analyze issues such as the potential exposure of people and property to geologic and soil hazards, landform alteration, and erosion. The Initial Study completed for the Project determined that no known mineral resources were located on the Project site and implementation of the Project would not impact the mineral resources of the area. As a result, mineral resources will not be discussed in this EIR. The reader is referred to the Initial Study for further discussion of mineral resources.

This section is based in part on the following technical studies: Earthquake Shaking Potential for California Map, Spring 2003, (California Geological Survey (CGS) 2003), 2010 Fault Activity Map of California (CGS 2101), City of Elk Grove General Plan, (City of Elk Grove 2003a), City of Elk Grove General Plan Environmental Impact Report (City of Elk Grove 2003b), Elk Grove General Plan Background Report (City of Elk Grove 2003c), Custom Soil Resource Report for Sacramento County, California (USDA 2011), and the Geotechnical Engineering Report Elk Ridge Estates (Wallace-Kuhl and Associates (WKA) 2003).

No comments were received during the public review period or scoping meeting for the Notice of Preparation regarding this topic.

3.5.1 ENVIRONMENTAL SETTING

REGIONAL GEOLOGY

The Project site is located within the Great Valley Geomorphic Province (Great Valley). The Great Valley is a relatively flat alluvial plain, about 50 miles wide and 400 miles long, bounded on the north by the Klamath and Cascade mountain ranges, on the east by the Sierra Nevada Mountains, and on the west by the California Coast Mountain Range.

The Great Valley is drained by the Sacramento and San Joaquin rivers, which join and enter San Francisco Bay. The eastern border is the west-sloping Sierran bedrock surface, which continues westward beneath alluvium and older sediments. The western border is underlain by east-dipping Cretaceous and Cenozoic strata that form a deeply buried synclinal trough, lying beneath the Great Valley along its western side.

The Great Valley has been filled over time with up to a six-mile thick sequence of interbedded clay, silt, sand, and gravel deposits. The sediments range in age from more than 144 million years old (Jurassic Period) to less than 10,000 years (Holocene Period). The most recent sediments consist of coarse-grained (sand and gravel) deposits along river courses and fine-grained (clay and silt) deposits located in low-lying areas or flood basins and are referred to as alluvial deposits. These deposits are loose and not well consolidated soils.

Older alluvial deposits underlie the edges of the valley. The older alluvial deposits are exposed in the foothill regions in the eastern portion of the county. The alluvial deposits, which slope gradually toward the center of the valley, contain most of the groundwater supplies in region. The foothills of the Coast Ranges to the west are underlain by alluvial deposits and older marine sediments deposited during the Tertiary Period when an inland sea occupied the Great Valley.

3.5 GEOLOGY AND SOILS

SITE GEOLOGY

Soil Conditions

Subsurface exploration consisted of 20 boring and six bulk samplings described in the *Geotechnical Engineering Report* (WKA 2003)¹. This report determined that surface and near-surface soils consisted of light brown silty sands with variable gravel content underlain by discontinuous lenses of partially cemented sands and silts (locally known as hardpan) to a depth of approximately three feet. Beneath the surface sands and silts are interbedded silty and sandy gravel underlain by silty sands and sandy silts to the maximum depth explored of 15 feet.

The *Custom Soil Resource Report* completed for the Project site by the United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) web-based service identifies the following soils as shown in Table 3.5-1:

TABLE 3.5-1: PROJECT SOILS

SYMBOL	MAP UNIT NAME	PERCENT OF SITE
198	Redding gravelly loam, 0 to 8 percent slopes	95.9%
214	San Joaquin silt loam, 0 to 3 percent slopes	3.6%
216	San Joaquin-Durixeralfs complex, 0 to 1 percent slopes	0.5%

SOURCE: USDA 2011, p. 10

- Redding gravelly loam – The Redding series consists of moderately well drained soils on high terraces, terrace remains and side slopes. The subsoil is claypan with a slow permeability.
- San Joaquin silt loam complex - This is a moderately deep, well-drained soil found on low terraces and valleys. The subsoil is claypan with a slow permeability.
- San Joaquin-Durixeralfs - This is a moderately well drained soil found on low terraces and valleys. The subsoil is claypan with a slow permeability.

The NRCS Soils Map is provided in Figure 3.5-1. Table 3.5-2 identifies the attributes of the soils on the Project site.

TABLE 3.5-2: SOIL ATTRIBUTES

SOIL	EROSION POTENTIAL	DRAINAGE	SUBSOIL PERMEABILITY	EFFECTIVE DEPTH	SURFACE RUNOFF
Redding gravelly loam	Moderate	Moderately Well	Very Slow	20-40"	High
San Joaquin silt loam	Slight	Moderately Well	Very Slow	23-40"	High
San Joaquin-Durixeralfs complex	Slight	Moderately Well	Very Slow	23-40"	High

SOURCE: USDA 2013

¹ In 2003, Wallace-Kuhl and Associates completed the Geotechnical Engineering Report for the Elk Ridge Estates project site which was proposed on the same site as the Project. This report was reviewed in 2006 by Wallace-Kuhl and considered to be adequate with the stipulation of a review by Wallace-Kuhl of grading and foundation plans as they become available. However, while the soils on the Project site have not changed, the Elk Ridge Estates had a different site layout and components than the Project.

Groundwater

According to the *Geotechnical Engineering Report* (WKA 2003) completed for the Project site, free groundwater was not encountered during borings taken in 2003. However, groundwater data for Sacramento County and Wallace-Kuhl's previous experience indicate that the static groundwater table is located at a depth of approximately 80 feet or more below existing grade (Wallace-Kuhl 2003, p. 3).

FAULTS AND SEISMICITY

The United States Geological Survey (USGS) has established National Seismic Zone Maps for all of the U.S. These maps are the basis for seismic design provisions of building codes, insurance rate structures, earthquake loss studies, retrofit priorities, and land use planning. Their use in design of buildings, bridges, highways, and critical infrastructure allows structures to better withstand earthquake shaking, saving lives and reducing disruption to critical activities following a damaging event. The maps also help engineers avoid costs from over-design for unlikely levels of ground motion. There are four zones in the U.S., ranging from 1 to 4: the higher the number, the higher the earthquake danger. All of California lies within Seismic Zone 3 or 4. The City of Elk Grove is within Zone 3.

Sacramento County is less affected by seismic events and other geologic hazards than other portions of the state. Nevertheless, some property damage has occurred in the past. The damage that was experienced has largely been the result of major seismic events occurring in adjacent areas, especially the San Francisco Bay area and, to a lesser extent, the foothills of the Sierra Nevada Range. The areas of Sacramento County most vulnerable to seismic and geologic hazards are those areas subject to liquefaction, to the action of expansive soils, to shaking, and to subsidence. The Central Valley, like most of California, is considered a seismically active region.

Faults

A fault is a fracture in the crust of the earth along which rocks on one side have moved relative to those on the other side. A fault trace is the line on the earth's surface defining the fault. Displacement of the earth's crust along faults releases energy in the form of earthquakes and in some cases in fault creep. Most faults are the result of repeated displacements over a long period of time.

Surface rupture occurs when movement on a fault deep within the earth breaks through to the surface. Surface ruptures have been known to extend up to 50 miles with displacements of an inch to 20 feet. Fault rupture almost always follows preexisting faults, which are zones of weakness. Rupture may occur suddenly during an earthquake or slowly in the form of fault creep. Sudden displacements are more damaging to structures because they are accompanied by shaking.

The State of California designates faults as active, potentially active, and inactive depending on how recent the movement that can be substantiated for a fault. Table 3.5-3 presents the California fault activity rating system. No known faults traverse through the Elk Grove Planning Area.

3.5 GEOLOGY AND SOILS

TABLE 3.5-3: FAULT ACTIVITY RATING

FAULT ACTIVITY RATING	GEOLOGIC PERIOD OF LAST RUPTURE	TIME INTERVAL (YEARS)
Active (A)	Holocene	Within last 11,000 years
Potentially Active (PA)	Quaternary	11,000-1.6 Million Years
Inactive (I)	Pre-Quaternary	Greater than 1.6 Million

Seismicity

Seismicity is directly related to the distribution of fault systems within a region. The amount of energy available to a fault is determined by considering the slip-rate of the fault, its area (fault length multiplied by down-dip width), maximum magnitude, and the rigidity of the displaced rocks. These factors are combined to calculate the moment (energy) release on a fault. The total seismic energy release for a fault source is sometimes partitioned between two different recurrence models, the characteristic and truncated Gutenberg-Richter (G-R) magnitude-frequency distributions. These models incorporate our knowledge of the range of magnitudes and relative frequency of different magnitudes for a particular fault. The partition of moment and the weights for multiple models are given in the following summary.

Earthquakes are generally expressed in terms of intensity and magnitude. Intensity is based on the observed effects of ground shaking on people, buildings, and natural features. By comparison, magnitude is based on the amplitude of the earthquake waves recorded on instruments, which have a common calibration. The Richter scale, a logarithmic scale ranging from 0.1 to 9.0, with 9.0 being the strongest, measures the magnitude of an earthquake relative to ground shaking. Table 3.5-4 provides a description and a comparison of intensity and magnitude.

TABLE 3.5-4: MODIFIED MERCALLI INTENSITY SCALE FOR EARTHQUAKES

RICHTER MAGNITUDE	MODIFIED MERCALLI SCALE	EFFECTS OF INTENSITY
0.1 - 0.9	I	Earthquake shaking not felt
1.0 - 2.9	II	Shaking felt by those at rest.
3.0 - 3.9	III	Felt by most people indoors, some can estimate duration of shaking.
4.0 - 4.5	IV	Felt by most people indoors. Hanging objects rattle, wooden walls and frames creak.
4.6 - 4.9	V	Felt by everyone indoors, many can estimate duration of shaking. Standing autos rock. Crockery clashes, dishes rattle and glasses clink. Doors open, close and swing.
5.0 - 5.5	VI	Felt by all who estimate duration of shaking. Sleepers awoken, liquids spill, objects are displaced, and weak materials crack.
5.6 - 6.4	VII	People frightened and walls unsteady. Pictures and books thrown, dishes and glass are broken. Weak chimneys break. Plaster, loose bricks and parapets fall.
6.5 - 6.9	VIII	Difficult to stand. Waves on ponds, cohesionless soils slump. Stucco and masonry walls fall. Chimneys, stacks, towers, and elevated tanks twist and fall.
7.0 - 7.4	IX	General fright as people are thrown down, hard to drive. Trees broken, damage to foundations and frames. Reservoirs damaged, underground pipes broken.

RICHTER MAGNITUDE	MODIFIED MERCALLI SCALE	EFFECTS OF INTENSITY
7.5 – 7.9	X	General panic. Ground cracks, masonry and frame buildings destroyed. Bridges destroyed, railroads bent slightly. Dams, dikes and embankments damaged.
8.0 – 8.4	XI	Large landslides, water thrown, general destruction of buildings. Pipelines destroyed, railroads bent.
8.5 +	XII	Total nearby damage, rock masses displaced. Lines of sight/level distorted. Objects thrown into air.

Alquist-Priolo Special Study Zone

The California legislature passed the Alquist-Priolo Special Studies Zone Act in 1972 to address seismic hazards associated with faults and to establish criteria for developments for areas with identified seismic hazard zones. The California Geologic Survey (CGS) evaluates faults with available geologic and seismologic data and determines if a fault should be zoned as active, potentially active, or inactive. If CGS determines a fault to be active, then it is typically incorporated into a Special Studies Zone in accordance with the Alquist-Priolo Earthquake Hazard Act. Alquist-Priolo Special Study Zones are usually one-quarter mile or less in width and require site-specific evaluation of fault location and require a structure setback if the fault is found traversing a project site. The Project site is not within an Alquist-Priolo Special Study Zone.

No known active faults or Alquist-Priolo earthquake hazard zones (formerly known as special study zones) occur in the Project area, although several inactive subsurface faults are identified in the Delta. According to the *2010 Fault Activity Map of California*, the nearest faults to the City with activity within the last 200 years are the Concord-Green Valley, Hayward, and Cleveland Hill faults. The closest known fault is the Midland fault, located approximately 15 miles west of the City. This fault is listed as a Quaternary fault (age undifferentiated). Most faults of this category show evidence of displacement sometime during the past 1.6 million years. The closest known active subsurface fault is the Dunnigan Hills fault, located approximately 25 miles northwest of the City (CGS 2010).

TABLE 3.5-5 FAULTS IN THE VICINITY OF ELK GROVE

NAME	APPROXIMATE DISTANCE FROM PLANNING AREA (IN MILES)	MAXIMUM MAGNITUDE (MW)
Foothills Fault System	21	6.5
Great Valley Fault (segment 5)	27	6.5
Great Valley Fault (segment 4)	29	6.6
Greenville Fault	41	6.9
Concord-Green Valley Fault	42	6.9
Hunting Creek – Berryessa Fault	45	6.9
West Napa Fault	49	6.5
Calaveras Fault	50	6.8
Rodgers Creek Fault	56	7.0
Hayward Fault	59	7.1
Bartlett Springs Fault	72	7.1
Maacama Fault (south)	73	6.9
Collayomi Fault	76	6.5
Ortogonalita Fault	76	6.9

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San Andreas Fault (1906)	76	7.9
San Gregorio Fault	78	7.3
Monte Vista – Shannon Fault	80	6.8
Mohawk Valley – Honey Lake Fault Zone	82	7.3
Point Reyes Fault	82	6.3
Genoa	87	6.9
Sargent	91	6.8
Zayante-Vergeles	94	6.8

SOURCE: CITY OF ELK GROVE 2003B, P. 4.9-3

SEISMIC HAZARDS

Seismic Ground Shaking

The potential for seismic ground shaking in California is expected. As a result of the foreseeable seismicity in California, the State requires special design considerations for all structural improvements in accordance with the seismic design provisions in the California Building Code. These seismic design provisions require enhanced structural integrity based on several risk parameters. Seismic ground shaking on the Project site is expected during the life of the Project.

Fault Rupture

A fault rupture occurs when the surface of the earth breaks as a result of an earthquake, although this does not happen with all earthquakes. These ruptures generally occur in a weak area of an existing fault. Ruptures can be sudden (i.e. earthquake) or slow (i.e. fault creep). The Alquist-Priolo Fault Zoning Act requires active earthquake fault zones to be mapped and it provides special development considerations within these zones. The Project site does not have surface expression of active faults and fault rupture is not anticipated.

Liquefaction

Liquefaction typically requires a significant sudden decrease of shearing resistance in cohesionless soils and a sudden increase in water pressure, which is typically associated with an earthquake of high magnitude. The potential for liquefaction is highest when groundwater levels are high, and loose, fine, sandy soils occur at depths of less than 50 feet.

According to the *Geotechnical Engineering Report*, soils consist of silty sands with variable gravel content and hardpan to a depth of three feet and interbedded silty and sandy gravels underlain by silty sands and sandy silts to a maximum depth explored of 15 feet (WKA 2003, p. 3).

Based upon known soil, groundwater, and ground shaking conditions within the Project area, the potential for liquefaction beneath the Project site is considered low. The potential for ground lurching, differential settlement, or lateral spreading occurring during or after seismic events in the Project area is also considered to be low (City of Elk Grove 2003b, p. 4.9-4).

Lateral Spreading

Lateral spreading typically results when ground shaking moves soil toward an area where the soil integrity is weak or unsupported, and it typically occurs on the surface of a slope, although it does not occur strictly on steep slopes. Oftentimes, lateral spreading is directly associated with areas of

liquefaction. Areas in the region that are susceptible to this hazard are located along creeks or open water bodies, or within the foothills to the west. Soils within the Project site are identified as being of moderately well drain types by the USGS.

Landslides

Landslides include rockfalls, deep slope failure, and shallow slope failure. Factors such as the geological conditions, drainage, slope, vegetation, and others directly affect the potential for landslides. One of the most common causes of landslides is construction activity that is associated with road building (i.e. cut and fill). The potential for landslides is considered remote in the valley floors due to the lack of significant slopes. For this reason, the probability of landslides occurring on the Project site is low.

NON-SEISMIC HAZARDS

Expansive Soils

According to the *Geotechnical Engineering Report*, surface and near-surface silts and sands throughout the Project site are relatively non-expansive. However, the intermittent clays encountered below the topsoil have a moderate potential for expansion (WKA 2003, p. 4). Expansive soils can undergo significant volume change with changes in moisture content. They shrink and harden when dried and expand and soften when wet.

Erosion

Erosion naturally occurs on the surface of the earth as surface materials (i.e. rock, soil, debris, etc.) is loosened, dissolved, or worn away, and transported from one place to another by gravity. Two common types of soil erosion include wind erosion and water erosion. The steepness of a slope is an important factor that affects soil erosion. Erosion potential in soils is influenced primarily by loose soil texture and steep slopes. Loose soils can be eroded by water or wind forces, whereas soils with high clay content are generally susceptible only to water erosion. The potential for erosion generally increases as a result of human activity, primarily through the development of facilities and impervious surfaces and the removal of vegetative cover.

The soils found on the Project site are considered to have a slight to moderate erosion potential. See Table 3.5-2. The surface runoff potential is considered to be high due to the very slow permeability of the soil.

Subsidence

Land subsidence is the gradual settling or sinking of an area with little or no horizontal motion due to changes taking place underground. It is a natural process, although it can also occur (and is greatly accelerated) as a result of human activities. Common causes of land subsidence from human activity include: pumping water, oil, and gas from underground reservoirs; dissolution of limestone aquifers (sinkholes); collapse of underground mines; drainage of organic soils; and initial wetting of dry soils. There is a risk for subsidence within the City. There are five causes of subsidence that affect the City – compaction by heavy structures, erosion of peat soils, peat oxidation, fluid withdrawal, and compaction of unconsolidated soils by earthquake shaking. The pumping of water from subsurface water tables for residential, commercial, and agricultural uses

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causes the greatest amount of subsidence within the Elk Grove Planning Area (City of Elk Grove 2003b, p. 4.9-4).

3.5.2 REGULATORY SETTING

STATE

The State of California has established a variety of regulations and requirements related to seismic safety and structural integrity, including the California Building Code, the Alquist-Priolo Earthquake Fault Zoning Act and the Seismic Hazards Mapping Act.

California Building Code

The California Building Code (CBC) is included in Title 24 of the California Code of Regulations (CCR) and is a portion of the California Building Standards Code. The CBC incorporates the International Building Code (IBC), which replaced the Uniform Building Code (UBC). Through the CBC, the state provides a minimum standard for building design and construction. The CBC contains specific requirements for seismic safety, excavation, foundations, retaining walls, and site demolition. It also regulates grading activities, including drainage and erosion control.

Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act of 1972 provides a mechanism for reducing losses from surface fault rupture on a statewide basis. The policies and criteria are limited to potential hazards resulting from surface faulting or fault creep within Earthquake Fault Zones, as delineated on maps officially issued by the State Geologist. Working definitions include:

- Fault – a fracture or zone of closely associated fractures along which rocks on one side have been displaced with respect to those on the other side;
- Fault Zone – a zone of related faults, which commonly are braided and sub parallel, but may be branching and divergent. A fault zone has a significant width (with respect to the scale at which the fault is being considered, portrayed, or investigated), ranging from a few feet to several miles;
- Sufficiently Active Fault – a fault that has evidence of Holocene surface displacement along one or more of its segments or branches (last 11,000 years); and
- Well-Defined Fault – a fault whose trace is clearly detectable by a trained geologist as a physical feature at or just below the ground surface. The geologist should be able to locate the fault in the field with sufficient precision and confidence to indicate that the required site-specific investigations would meet with some success.

“Sufficiently Active” and “Well Defined” are the two criteria used by the State to determine if a fault should be zoned under the Alquist-Priolo Act.

Seismic Hazards Mapping Act

The Seismic Hazards Mapping Act, passed in 1990, addresses non-surface fault rupture earthquake hazards, including liquefaction and seismically-induced landslides. Under the Act, seismic hazard

zones are to be mapped by the State Geologist to assist local governments in land use planning. The program and actions mandated by the Seismic Hazards Mapping Act closely resemble those of the Alquist-Priolo Earthquake Fault Zoning Act (which addresses only surface fault-rupture hazards) and are outlined below:

The State Geologist is required to delineate the various “seismic hazard zones.”

- Cities and Counties, or other local permitting authority, must regulate certain development “projects” within the zones. They must withhold the development permits for a site within a zone until the geologic and soil conditions of the site are investigated and appropriate mitigation measures, if any, are incorporated into development plans.
- The State Mining and Geology Board provides additional regulations, policies, and criteria, to guide cities and counties in their implementation of the law. The Board also provides guidelines for preparation of the Seismic Hazard Zone Maps and for evaluating and mitigating seismic hazards.
- Sellers (and their agents) of real property within a mapped hazard zone must disclose that the property lies within such a zone at the time of sale.

LOCAL

City of Elk Grove General Plan

The City of Elk Grove General Plan contains the following goals and policies that are relevant to geotechnical aspects of the proposed project:

Policy CAQ-6 Roads and structures shall be designed, built and landscaped so as to minimize erosion during and after construction.

Policy CAQ-23 The City shall seek to ensure that the quality of groundwater and surface water is protected to the extent possible.

CAQ-26-Action 2 Implement the City’s NPDES permit on all public and private development projects and activities.

Policy SA-23 The City supports efforts by Federal, State, and other local jurisdictions to investigate local seismic and geological hazards and support those programs that effectively mitigate these hazards.

SA-23-Action 1 Implement the Uniform Building Code to ensure that structures meet all applicable seismic standards. Note: The Uniform Building Code has been superseded by the IBC.

Policy SA-26 The City shall seek to ensure that new structures are protected from damage caused by geologic and/or soil conditions.

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City of Elk Grove Building Code

The City of Elk Grove has adopted the state codes as set forth by the State of California Building Standards Commission. The 2010 California Building Standards Code is in effect through December 31, 2013. As of January 1, 2014, the 2013 California Building Standards Code, including the following codes, will be in effect:

- 2013 California Administrative Code
- 2013 California Building Code
- 2013 California Plumbing Code
- 2013 California Electrical Code
- 2013 California Mechanical Code

The codes apply to new construction as well as modifications to existing structures. Many types of permits do not require the preparation of plans or blueprints, such as water heater and/or heating and air conditioning replacements, installation of water softeners, and roof replacements. These types of permits may be issued over the counter. When the scope of work requires the submittal of building plans, those plans are reviewed by City staff for compliance with the applicable codes.

City of Elk Grove Land Grading and Erosion Control

The City's Land Grading and Erosion Control Ordinance codified in Chapter 16.44 of the City Municipal Code establishes administrative procedures, minimum standards of review, and implementation and enforcement procedures for controlling erosion, sedimentation and other pollutant runoff, including construction debris and hazardous substances used on construction sites, and disruption of existing drainage and related environmental damage caused by land clearing, grubbing, grading, filing, and land excavation activities. Chapter 16.44 applies to projects that would disturb 350 or more cubic yards of soil or that would clear one or more acres. The intent of the ordinance is to minimize damage to surrounding properties and public rights-of-way, minimize degradation of water quality in water courses, minimize disruption of natural or City-authorized drainage flows caused by construction activities, and make projects comply with the provisions of the City's National Pollutant Discharge Elimination System (NPDES) Permit Number CA082597, issued by the California Regional Water Quality Control Board. The City of Elk Grove is co-permittee on a NPDES permit along with Sacramento County and the cities of Sacramento, Folsom, Galt, and Citrus Heights.

3.5.3 IMPACTS AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE

Consistent with Appendix G of the CEQA Guidelines, the Project will have a significant impact on geology, soils, and minerals if it will:

- Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:
 - Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning map, issued by the State Geologist for the area or based on other substantial evidence of a known fault;

- Strong seismic ground shaking;
 - Seismic-related ground failure, including liquefaction; and/or
 - Landslides;
- Result in substantial soil erosion or the loss of topsoil;
 - Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the Project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse;
 - Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property; and/or
 - Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater.

IMPACTS AND MITIGATION MEASURES

Impact 3.5-1: The Project would not expose people or structures to potential substantial adverse effects involving strong seismic ground shaking or seismic related ground failure. (less than significant)

The CGS evaluates faults and determines if a fault should be zoned as active, potentially active, or inactive. The Project site is not within an Alquist-Priolo earthquake hazard zone. There are no known faults (active, potentially active, or inactive) that traverse through the City. The City is identified as being in the lower level of earthquake hazards on the Earthquake Shaking Potential Map for California. These levels are considered to be in regions that are distant from known, active faults and will experience lower levels of shaking less frequently (CGS 2003). The Uniform Building Code places all of California in the zone 3 or 4 of the of greatest earthquake severity because recent studies indicate high potential for severe ground shaking. The City is in Seismic Activity Intensity Zone 3.

The City of Elk Grove General Plan includes policies to assist in the protection of persons and structures in the event of an earthquake. Policy SA-26 and its associated action requires that new structures be protected from damage caused by geologic and/or soil conditions. The Project would be required to adhere to seismic protection standards listed in the California Building Code.

Throughout California, including the Project site, there will always be a potential for groundshaking caused by seismic activity. However, the Project site is not in an area considered to be of high potential for earthquakes. In order to minimize potential damage to the buildings and site improvements, all construction in California is required to be designed in accordance with the latest seismic design standards of the California Building Code. Design in accordance with these standards would reduce any potential impact to a less than significant level.

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Impact 3.5-2: Implementation and construction of the Project may result in substantial soil erosion or the loss of topsoil. (less than significant with mitigation)

According to the *Custom Soil Resource Report* completed for the Project site, the soils on the Project site are considered to have a slight to moderate erosion potential. The surface runoff potential is considered to be high due to the very slow permeability of the soil.

Grading, excavation, removal of vegetation cover, and loading activities associated with construction activities could temporarily increase runoff, erosion, and sedimentation. Construction activities also could result in soil compaction and wind erosion effects that could adversely affect soils and reduce the revegetation potential at construction sites and staging areas. Mitigation Measure 3.5-1 requires an approved Storm Water Pollution Prevention Plan (SWPPP) that includes best management practices for grading, and preservation of topsoil. The SWPPP will be designed to control storm water quality degradation to the extent practicable using best management practices during and after construction. The Project applicant will submit the SWPPP with a Notice of Intent to the Regional Water Quality Control Board (RWQCB) to obtain a General Permit. The RWQCB is an agency responsible for reviewing the SWPPP with the Notice of Intent, prior to issuance of a General Permit for the discharge of storm water during construction activities.

Additionally, there is the potential for erosion associated with stormwater runoff throughout the operational phase of the Project. The potential for erosion is associated with the design of the improvements, structures, and landscaping. This includes the drainage design from all paved surfaces, including streets, parking lots, driveways, and roofs, as well as landscaping.

MITIGATION MEASURES

Mitigation Measure 3.5-1: *The Project Applicant shall submit a Notice of Intent (NOI) and Storm Water Pollution Prevention Plan (SWPPP) to the RWQCB in accordance with the NPDES General Construction Permit requirements. The SWPPP shall be designed to control pollutant discharges utilizing Best Management Practices (BMPs) and technology to reduce erosion and sediments. BMPs may consist of a wide variety of measures taken to reduce pollutants in stormwater runoff from the Project site. Measures shall include temporary erosion control measures (such as silt fences, staked straw bales/wattles, silt/sediment basins and traps, check dams, geofabric, sandbag dikes, and temporary revegetation or other ground cover) that will be employed to control erosion from disturbed areas. Final selection of BMPs will be subject to approval by the City of Elk Grove and the RWQCB. The SWPPP will be kept on site during construction activity and will be made available upon request to representatives of the RWQCB.*

Timing/Implementation: Prior to issuance of grading permits.

Enforcement/Monitoring: City of Elk Grove Public Works Department.

Mitigation Measure 3.5-2: *The Project Applicant shall prepare and submit a Post-Construction Stormwater Quality Control Plan in accordance with the most recent version of the Stormwater Quality Design Manual for the Sacramento Region. Post-construction source and treatment controls shall be designed in accordance with the City of Elk Grove Improvement Standards and the Stormwater Quality Design Manual. The design of post-construction source and treatment controls*

shall be submitted for approval with the improvement plans regardless of whether they constitute private or public improvements.

Drainage from all paved surfaces, including streets, parking lots, driveways, and roofs shall be routed either through swales, buffer strips, or sand filters or treated with a filtering system prior to discharge to the storm drain system. Landscaping shall be designed to effect some treatment, along with the use of a Stormwater Management filter to permanently sequester hydrocarbons, if necessary. Permeable pavers and pavement shall be utilized to construct the facilities, where appropriate.

A separate maintenance manual describing proper maintenance practices for the specific treatment controls to be constructed shall also be submitted. If the maintenance manual needs revisions, Applicant shall make the requested revisions in a timely manner.

Timing/Implementation: Prior to issuance of grading permits or approval of improvement plans, whichever occurs first.

Enforcement/Monitoring: City of Elk Grove Public Works Department.

SIGNIFICANCE AFTER MITIGATION

Mitigation Measure 3.5-1 requires an approved Storm Water Pollution Prevention Plan (SWPPP) that includes best management practices for grading, and preservation of topsoil. Mitigation Measure 3.5-2 requires the Project Applicant to submit an erosion control plan to the City which incorporates design measures that treat 85-90 percent of annual average stormwater runoff in accordance with the standards of the California Stormwater Best Management Practice New Development and Redevelopment Handbook. Implementation of the Mitigation Measures 3.5-1 and 3.5-2 would reduce potential impacts associated with erosion and loss of topsoil to a less than significant level.

Impact 3.5-3: The Project has the potential to be located on a geologic unit or soil that is unstable, or that could become unstable as a result of Project implementation, and potentially result in landslide, lateral spreading, subsidence, liquefaction or collapse. (less than significant with mitigation)

BEARING CAPACITY

The *Geotechnical Engineering Report* identified that the native undisturbed soils on the Project site have strength characteristics suitable for support of single family units and associated infrastructure on the Project site. The *Geotechnical Engineering Report* further identified that the existing earthen berms and stockpiles on the Project site are unsuitable for structural support and recommended that stockpiles and berms be removed and replaced with engineered fill prepared in accordance with the recommendations of the report.

LIQUEFACTION

Soil liquefaction results from loss of strength during cyclic loading, such as imposed by earthquakes. Soils most susceptible to liquefaction are clean, loose, saturated, uniformly graded, fine-grained sands. According to the *Geotechnical Engineering Report* dense, cemented soils at

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shallow depths will substantially reduce vertical percolation of water and as such, surface and near-surface soils will be in near-saturated conditions during and for a considerable period following the rainy season (WKA, p. 5). The soils are considered to be easily saturated during the winter months. For this reason, there may be a potential for liquefaction during seismic shaking.

LATERAL SPREADING

Lateral spreading typically results when ground shaking moves soil toward an area where the soil integrity is weak or unsupported, and it typically occurs on the surface of a slope, although it does not occur strictly on steep slopes. Oftentimes, lateral spreading is directly associated with areas of liquefaction. Areas in the region that are susceptible to this hazard are located along creeks or open water bodies, or within the foothills to the west. Currently, the Project site's surface runoff flows towards the south and southwest into topographic lows that include portions of Whitehouse Creek, seasonal wetlands, vernal pools, ephemeral drainages, and the onsite ponds. Whitehouse Creek traverses the Project site from the northern boundary, flowing in a southwesterly direction into a series of ponds located in the western portion of the Project site. The large ponds appear to be the result of past berming and grading activities. The Project includes a stormwater detention area of 15.7 acres. Because the area is not considered a high earthquake hazard area, the potential for lateral spreading is low.

LANDSLIDES

Landslides include rockfalls, deep slope failure, and shallow slope failure. Factors such as the geological conditions, drainage, slope, vegetation, and others directly affect the potential for landslides. One of the most common causes of landslides is construction activity that is associated with road building (i.e. cut and fill). The potential for landslides is considered remote in the valley floors due to the lack of significant slopes. For this reason, the probability of landslides occurring on the Project site is low.

COLLAPSE

If near-surface soils vary in composition both vertically and laterally, strong earthquake shaking can cause non-uniform compaction of the soil strata, resulting in movement of the near-surface soils. The Project site is located in an area considered to be of low potential for earthquake shaking according to the Earthquake Shaking Potential Map for California. Therefore, the probability of differential compaction at the Project site is low.

SUBSIDENCE

According to the Elk Grove General Plan EIR, there is a risk for subsidence, the gradual settling or sinking of the earth's surface with little or no horizontal motion, within the City. There are five causes of subsidence that affect the City – compaction by heavy structures, erosion of peat soils, peat oxidation, fluid withdrawal, and compaction of unconsolidated soils by earthquake shaking. The pumping of water from subsurface water tables for residential, commercial, and agricultural uses causes the greatest amount of subsidence the City (City of Elk Grove 2003b, p. 4. 9-4).

CONCLUSION

The Project site has a low probability for landslides, ground collapse, and lateral spreading. However, the General Plan EIR stated that there is a risk of subsidence in the Elk Grove area. The General Plan EIR included MM 4.9.2, which requires a geotechnical report or other analysis to be

conducted to determine the shrink/swell potential and stability of the soil for projects and to provide appropriate mitigation measures. In 2003, Wallace-Kuhl and Associates completed the *Geotechnical Engineering Report* for the project site under a previous development proposal. This report was reviewed in 2006 by Wallace-Kuhl and considered to be adequate with the stipulation of a review by Wallace-Kuhl of grading and foundation plans as they become available.

The *Geotechnical Engineering Report* included recommendations regarding site clearing and preparation, trench backfill, foundation design, interior floor slab support, exterior flatwork construction, site drainage, sound wall design, retaining wall design, pavement design, and constructing testing/observation to address potentially adverse geotechnical and soils. The soils on the Project site have not changed, although the previous development proposal, Elk Ridge Estates, had a different layout and components when compared to the Project. The Elk Ridge Estates project was composed of 700 single family residences. The proposed Project, includes single family residences, age restricted residences, a 125-unit lodge facility, a club house, a swim facility, and two parks. The lodge facility, club house, and swim facility may have different structural load bearings than those anticipated for single family homes in the *Geotechnical Engineering Report*. Therefore, impacts associated with unstable soils, including liquefaction and subsidence, are considered potentially significant.

MITIGATION MEASURES

Mitigation Measure 3.5-3: *A certified geotechnical engineer shall be retained to perform a geotechnical engineering evaluation of the grading and foundation plans for the Silverado Village Project. The geotechnical report shall identify measures as necessary to address bearing capacity, liquefaction, lateral spreading, expansive soils, and subsidence, and to ensure stable soil conditions. The grading and improvement plans, as well as the building plans shall be designed in accordance with the recommendations provided in the geotechnical evaluation. The Project Applicant shall adhere to the recommendations provided in the geotechnical engineering report.*

Timing/Implementation: *Prior to issuance of grading permits and/or approval of improvement plans.*

Enforcement/Monitoring: *City of Elk Grove Public Works Department.*

Mitigation Measure 3.5-3 requires a geotechnical report to be prepared for the Project and would ensure that appropriate measures are implemented to reduce potential impacts associated with unstable soils. With implementation of Mitigation Measure 3.5-3, the Project would have a less than significant impact relative to this topic.

Impact 3.5-4: The Project has the potential to be located on expansive soils, potentially creating substantial risks to life or property. (less than significant with mitigation)

Expansive soils are those that undergo volume changes as moisture content fluctuates; swelling substantially when wet or shrinking when dry. Soil expansion can damage structures by cracking foundations, causing settlement and distorting structural elements. Expansion is a typical characteristic of clay-type soils. Expansive soils shrink and swell in volume during changes in

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moisture content, such as a result of seasonal rain events, and can cause damage to foundations, concrete slabs, roadway improvements, and pavement sections.

The *Geotechnical Engineering Report* completed for the Project site determined that surface and near-surface silts and sands throughout the Project site are relatively non-expansive. However, the intermittent clays encountered below the topsoil have a moderate potential for expansion (WKA 2003, p. 4). This report stated that if and when mass grading of the Project site were to occur, the effects of expansive clay would be mitigated due to mixing with the predominate non-expansive soils of placement of clays at depth greater than 12 inches below subgrade for structures. However, without mitigation, there is no assurance that this level of mixing would occur during grading. Therefore, this impact is potentially significant.

MITIGATION MEASURES

Implementation of Mitigation Measure 3.5-3 would ensure that measures are implemented to reduce potential impacts associated with expansive soils to less than significant.

Impact 3.5-5: The Project has the potential to locate septic facilities on soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems. (less than significant with mitigation)

While specifics regarding public restroom facilities at the 5.5-acre park proposed in the north portion of the Project site have not been determined at this time, the restrooms, if developed, may be served by a septic system. Developments within the City that desire to use a septic system for wastewater disposal are referred to the Sacramento County Environmental Management Department for approval of the proposed septic system.

While the majority of the 5.5-acre park site is partially within the area designated Rural Residential by the General Plan, the southern portion of the park site is designated Low Density Residential. General Plan Policy PF-10 discourages the extension of sewer service into areas designated for Rural Residential use and prohibits the use of sewer service to accommodate lot sizes smaller than two gross acres in the Rural Residential area. Since the park site is 5.5-acres and the extension of sewer onto the park site would not result in providing public sewer service to Rural Residential lots of 2 acres or smaller, the extension of public sewer to the park site would not conflict with Policy PF-10.

The Project site was preliminarily evaluated as to its ability to absorb septic tank waste. According to the Custom Soils Survey completed for the Project site, soils within the Project site are considered to have limitations as far as the ability for the soil to absorb septic tank waste. A limitation rating indicates that the soil has features that are favorable to unfavorable for a specific use. The limitations can be overcome or minimized by special planning, design, or installation. The ratings for septic tanks are based on the soil properties that affect absorption of the effluent, construction and maintenance of the system, and public health. Saturated hydraulic conductivity (Ksat), depth to a water table, ponding, depth to bedrock or cemented pan, and flooding affect the absorption of the effluent. Stones, boulders, ice, bedrock, and a cemented pan may interfere with installation.

As the park may be served by a septic system and the design for the system is not known at this time and the potential for septic tank effluent absorption is unknown at this time, this is considered to be a potentially significant impact.

MITIGATION MEASURES

Mitigation Measure 3.5-4: *If a septic system is planned for installation at the 5.5-acre park site, the ability of the soils to accommodate a septic system shall be evaluated by a licensed engineer. If the soils do not have the capacity to adequately percolate and absorb septic tank waste, any restroom facilities on the park site shall be connected to the public sewer system or restroom facilities shall be prohibited.*

Timing/Implementation: Prior to issuance of grading permits and/or approval of improvement plans.

Enforcement/Monitoring: City of Elk Grove Public Works Department.

SIGNIFICANCE AFTER MITIGATION

Implementation of Mitigation Measure 3.5-4 would ensure that wastewater associated with the park site would be adequately disposed of and would reduce this potential impact to less than significant.

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SILVERADO VILLAGE EIR

Figure 3.8-1: Project Site Soils

Map Unit Symbol	Map Unit Name	Acres in AOI	% of AOI
198	Redding gravelly loam, 0-8% slopes	208.5	95.90%
214	San Joaquin silt loam, 0-3% slopes	7.8	3.60%
216	San Joaquin-Durixeralfs complex, 0-1% slopes	1.1	0.50%
Totals for Area of Interest		217.5	100.00%



This section discusses regional greenhouse gas (GHG) emissions and climate change impacts that could result from implementation of the Project. This section provides a background discussion of greenhouse gases and climate change linkages and effects of global climate change. This section is organized with an existing setting, regulatory setting, approach/methodology, and impact analysis.

The analysis and discussion of the GHG and climate change impacts in this section focuses on the Project's consistency with local, regional, and statewide climate change planning efforts and discusses the context of these planning efforts as they relate to the Project.

As described in greater detail below, emissions of greenhouse gases (GHGs) have the potential to adversely affect the environment in a cumulative context. The emissions from a single project will not cause global climate change, however, GHG emissions from multiple projects throughout the world could result in a cumulative impact with respect to global climate change. Therefore, the analysis of GHGs and climate change presented in this section is presented in terms of the Project's contribution to cumulative impacts and potential to result in cumulatively considerable impacts related to GHGs and climate change.

Cumulative impacts are the collective impacts of one or more past, present, and future projects that, when combined, result in adverse changes to the environment. In determining the significance of a proposed project's contribution to anticipated adverse future conditions, a lead agency should generally undertake a two-step analysis. The first question is whether the *combined* effects from *both* the proposed project *and* other projects would be cumulatively significant. If the agency answers this inquiry in the affirmative, the second question is whether "the proposed project's *incremental* effects are cumulatively considerable" and thus significant in and of themselves. The cumulative project list for this issue (climate change) comprises anthropogenic (i.e., human-made) GHG emissions sources across the globe and no project alone would reasonably be expected to contribute to a noticeable incremental change to the global climate. However, legislation and executive orders on the subject of climate change in California have established a statewide context and process for developing an enforceable statewide cap on GHG emissions. Given the nature of environmental consequences from GHGs and global climate change, CEQA requires that lead agencies consider evaluating the cumulative impacts of GHGs. Small contributions to this cumulative impact (from which significant effects are occurring and are expected to worsen over time) may be potentially considerable and, therefore, significant.

3.6.1 ENVIRONMENTAL SETTING

GREENHOUSE GASES AND CLIMATE CHANGE LINKAGES

Various gases in the Earth's atmosphere, classified as atmospheric greenhouse gases (GHGs), play a critical role in determining the Earth's surface temperature. Solar radiation enters Earth's atmosphere from space, and a portion of the radiation is absorbed by the Earth's surface. The Earth emits this radiation back toward space, but the properties of the radiation change from high-frequency solar radiation to lower-frequency infrared radiation.

3.6 GREENHOUSE GASES AND CLIMATE CHANGE

Naturally occurring greenhouse gases include water vapor (H₂O), carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), and ozone (O₃). Several classes of halogenated substances that contain fluorine, chlorine, or bromine are also greenhouse gases, but they are, for the most part, solely a product of industrial activities. Although the direct greenhouse gases CO₂, CH₄, and N₂O occur naturally in the atmosphere, human activities have changed their atmospheric concentrations. From the pre-industrial era (i.e., ending about 1750) to 2005, concentrations of these three greenhouse gases have increased globally by 36, 148, and 18 percent, respectively (IPCC 2007)¹.

Greenhouse gases, which are transparent to solar radiation, are effective in absorbing infrared radiation. As a result, this radiation that otherwise would have escaped back into space is now retained, resulting in a warming of the atmosphere. This phenomenon is known as the greenhouse effect. Among the prominent GHGs contributing to the greenhouse effect are carbon dioxide (CO₂), methane (CH₄), ozone (O₃), water vapor, nitrous oxide (N₂O), and chlorofluorocarbons (CFCs).

Emissions of GHGs contributing to global climate change are attributable in large part to human activities associated with the industrial/manufacturing, utility, transportation, residential, commercial, and agricultural sectors (California Air Resources Board, 2012)². In California, the transportation sector is the largest emitter of GHGs, followed by electricity generation (California Air Resources Board, 2012).

As the name implies, global climate change is a global problem. GHGs are global pollutants, unlike criteria air pollutants and toxic air contaminants, which are pollutants of regional and local concern, respectively. California produced 492 million gross metric tons of carbon dioxide equivalents (MMTCO₂e) in 2004 (California Energy Commission 2006a)³. By 2020, California is projected to produce 507 MMTCO₂e per year.⁴

Carbon dioxide equivalents are a measurement used to account for the fact that different GHGs have different potential to retain infrared radiation in the atmosphere and contribute to the greenhouse effect. This potential, known as the global warming potential of a GHG, is also dependent on the lifetime, or persistence, of the gas molecule in the atmosphere. Expressing GHG emissions in carbon dioxide equivalents takes the contribution of all GHG emissions to the

¹ Intergovernmental Panel on Climate Change. 2007. "Climate Change 2007: The Physical Science Basis, Summary for Policymakers."
http://www.ipcc.ch/publications_and_data/publications_ipcc_fourth_assessment_report_wg1_report_the_physical_science_basis.htm

² California Air Resources Board. 2012. "Greenhouse Gas Inventory Data, 2000-2009."
<http://www.arb.ca.gov/cc/inventory/data/data.htm>

³ California Energy Commission. 2006a. Inventory of California Greenhouse Gas Emissions and Sinks 1990 to 2004. <http://www.arb.ca.gov/cc/inventory/archive/archive.htm>

⁴ California Air Resources Board. 2010. "Functional Equivalent Document prepared for the California Cap on GHG Emissions and Market-Based Compliance Mechanisms."

greenhouse effect and converts them to a single unit equivalent to the effect that would occur if only CO₂ were being emitted.

Consumption of fossil fuels in the transportation sector was the single largest source of California's GHG emissions in 2008, accounting for 36.9% of total GHG emissions in the state (California Air Resources Board, 2012). This category was followed by the electric power sector (including both in-state and out of-state sources) (24.8%) and the industrial sector (21.1%) (California Air Resources Board, 2012).

EFFECTS OF GLOBAL CLIMATE CHANGE

The effects of increasing global temperature are far-reaching and extremely difficult to quantify. The scientific community continues to study the effects of global climate change. In general, increases in the ambient global temperature as a result of increased GHGs are anticipated to result in rising sea levels, which could threaten coastal areas through accelerated coastal erosion, threats to levees and inland water systems and disruption to coastal wetlands and habitat.

If the temperature of the ocean warms, it is anticipated that the winter snow season would be shortened. Snowpack in the Sierra Nevada provides both water supply (runoff) and storage (within the snowpack before melting), which is a major source of supply for the state. The snowpack portion of the supply could potentially decline by 70% to 90% by the end of the 21st century (Cal EPA 2006)⁵. This phenomenon could lead to significant challenges securing an adequate water supply for a growing state population. Further, the increased ocean temperature could result in increased moisture flux into the state; however, since this would likely increasingly come in the form of rain rather than snow in the high elevations, increased precipitation could lead to increased potential and severity of flood events, placing more pressure on California's levee/flood control system.

Sea level has risen approximately seven inches during the last century and it is predicted to rise an additional 22 to 35 inches by 2100, depending on the future GHG emissions levels (Cal EPA 2006). If this occurs, resultant effects could include increased coastal flooding, saltwater intrusion and disruption of wetlands (Cal EPA 2006). As the existing climate throughout California changes over time, mass migration of species, or failure of species to migrate in time to adapt to the perturbations in climate, could also result. Under the emissions scenarios of the Climate Scenarios report (Cal EPA 2006), the impacts of global warming in California are anticipated to include, but are not limited to, the following.

PUBLIC HEALTH

Higher temperatures are expected to increase the frequency, duration, and intensity of conditions conducive to air pollution formation. For example, days with weather conducive to ozone

⁵ California Environmental Protection Agency, Climate Action Team. 2006. Climate Action Team Report to Governor Schwarzenegger and the Legislature.

http://www.climatechange.ca.gov/climate_action_team/reports/

3.6 GREENHOUSE GASES AND CLIMATE CHANGE

formation are projected to increase from 25% to 35% under the lower warming range and to 75% to 85% under the medium warming range. In addition, if global background ozone levels increase as predicted in some scenarios, it may become impossible to meet local air quality standards. Air quality could be further compromised by increases in wildfires, which emit fine particulate matter that can travel long distances depending on wind conditions. The Climate Scenarios report indicates that large wildfires could become up to 55% more frequent if GHG emissions are not significantly reduced.

In addition, under the higher warming scenario, there could be up to 100 more days per year with temperatures above 90°F in Los Angeles and 95°F in Sacramento by 2100. This is a large increase over historical patterns and approximately twice the increase projected if temperatures remain within or below the lower warming range. Rising temperatures will increase the risk of death from dehydration, heat stroke/exhaustion, heart attack, stroke, and respiratory distress caused by extreme heat.

WATER RESOURCES

A vast network of man-made reservoirs and aqueducts capture and transport water throughout the state from northern California rivers and the Colorado River. The current distribution system relies on Sierra Nevada snow pack to supply water during the dry spring and summer months. Rising temperatures, potentially compounded by decreases in precipitation, could severely reduce spring snow pack, increasing the risk of summer water shortages.

The state's water supplies are also at risk from rising sea levels. An influx of saltwater would degrade California's estuaries, wetlands, and groundwater aquifers. Saltwater intrusion caused by rising sea levels is a major threat to the quality and reliability of water within the southern edge of the Sacramento/San Joaquin River Delta, a major state fresh water supply. Global warming is also projected to seriously affect agricultural areas, with California farmers projected to lose as much as 25% of the water supply they need; decrease the potential for hydropower production within the state (although the effects on hydropower are uncertain); and seriously harm winter tourism. Under the lower warming range, the snow dependent winter recreational season at lower elevations could be reduced by as much as one month. If temperatures reach the higher warming range and precipitation declines, there might be many years with insufficient snow for skiing, snowboarding, and other snow dependent recreational activities.

If GHG emissions continue unabated, more precipitation will fall as rain instead of snow, and the snow that does fall will melt earlier, reducing the Sierra Nevada spring snow pack by as much as 70% to 90%. Under the lower warming scenario, snow pack losses are expected to be only half as large as those expected if temperatures were to rise to the higher warming range. How much snow pack will be lost depends in part on future precipitation patterns, the projections for which remain uncertain. However, even under the wetter climate projections, the loss of snow pack would pose challenges to water managers, hamper hydropower generation, and nearly eliminate all skiing and other snow-related recreational activities.

AGRICULTURE

Increased GHG emissions are expected to cause widespread changes to the agriculture industry reducing the quantity and quality of agricultural products statewide. Although higher carbon dioxide levels can stimulate plant production and increase plant water-use efficiency, California's farmers will face greater water demand for crops and a less reliable water supply as temperatures rise.

Plant growth tends to be slow at low temperatures, increasing with rising temperatures up to a threshold. However, faster growth can result in less-than-optimal development for many crops, so rising temperatures are likely to worsen the quantity and quality of yield for a number of California's agricultural products. Products likely to be most affected include wine grapes, fruits and nuts, and milk.

Crop growth and development will be affected, as will the intensity and frequency of pest and disease outbreaks. Rising temperatures will likely aggravate ozone pollution, which makes plants more susceptible to disease and pests and interferes with plant growth.

In addition, continued global warming will likely shift the ranges of existing invasive plants and weeds and alter competition patterns with native plants. Range expansion is expected in many species while range contractions are less likely in rapidly evolving species with significant populations already established. Should range contractions occur, it is likely that new or different weed species will fill the emerging gaps. Continued global warming is also likely to alter the abundance and types of many pests, lengthen pests' breeding season, and increase pathogen growth rates.

FORESTS AND LANDSCAPES

Global warming is expected to alter the distribution and character of natural vegetation thereby resulting in a possible increased risk of large wildfires. If temperatures rise into the medium warming range, the risk of large wildfires in California could increase by as much as 55%, which is almost twice the increase expected if temperatures stay in the lower warming range. However, since wildfire risk is determined by a combination of factors, including precipitation, winds, temperature, and landscape and vegetation conditions, future risks will not be uniform throughout the state. For example, if precipitation increases as temperatures rise, wildfires in southern California are expected to increase by approximately 30% toward the end of the century. In contrast, precipitation decreases could increase wildfires in northern California by up to 90%.

Moreover, continued global warming will alter natural ecosystems and biological diversity within the state. For example, alpine and sub-alpine ecosystems are expected to decline by as much as 60% to 80% by the end of the century as a result of increasing temperatures. The productivity of the state's forests is also expected to decrease as a result of global warming.

3.6 GREENHOUSE GASES AND CLIMATE CHANGE

RISING SEA LEVELS

Rising sea levels, more intense coastal storms, and warmer water temperatures will increasingly threaten the state's coastal regions. Under the higher warming scenario, sea level is anticipated to rise 22 to 35 inches by 2100. Elevations of this magnitude would inundate coastal areas with saltwater, accelerate coastal erosion, threaten vital levees and inland water systems, and disrupt wetlands and natural habitats.

ENERGY CONSUMPTION

The consumption of nonrenewable energy (primarily gasoline and diesel fuel) associated with the operation of passenger, public transit, and commercial vehicles results in GHG emissions that ultimately result in global climate change. Alternative fuels such as natural gas, ethanol, and electricity (unless derived from solar, wind, nuclear, or other energy sources that do not produce carbon emissions) also result in GHG emissions and contribute to global climate change.

Electricity Consumption

California relies on a regional power system composed of a diverse mix of natural gas, renewable, hydroelectric, and nuclear generation resources. Approximately 71 percent of the electrical power needed to meet California's demand is produced in the state. Approximately 29 percent of its electricity demand is imported from the Pacific Northwest and the Southwest (California Energy Commission, 2012)⁶. In 2010, California's in-state generated electricity was derived from natural gas (53.4 percent), large hydroelectric resources (14.6 percent), coal (1.7 percent), nuclear sources (15.7 percent), and renewable resources that include geothermal, biomass, small hydroelectric resources, wind, and solar (14.6 percent) (California Energy Commission, 2012).

According to the California Energy Commission (CEC), total statewide electricity consumption increased from 166,979 gigawatt-hours (GWh) in 1980 to 228,038 GWh in 1990, which is an estimated annual growth rate of 3.66 percent. The statewide electricity consumption in 1997 was 246,225 GWh, reflecting an annual growth rate of 1.14 percent between 1990 and 1997 (California Energy Commission Energy Almanac, 2012). Statewide consumption was 274,985 GWh in 2010, an annual growth rate of 0.9 percent between 1997 and 2010. The Sacramento Area Council of Governments (SACOG) region consumed 18,398 GWh in 2010 (SACOG MTP/SCS 2035 Draft EIR, 2011), roughly 6.7 percent of the state total. The SACOG region includes the counties of El Dorado, Placer, Sacramento, Sutter, Yolo and Yuba as well as the 22 cities within these six counties.

Oil

The primary energy source for the United States is oil, which is refined to produce fuels like gasoline, diesel, and jet fuel. Oil is a finite, nonrenewable energy source. World consumption of petroleum products has grown steadily in the last several decades. As of 2009, world consumption

⁶ California Energy Commission (2012). Energy Almanac. Retrieved August 2012, from <http://energyalmanac.ca.gov/overview/index.html>

of oil had reached 96 million barrels per day. The United States, with approximately five percent of the world's population, accounts for approximately 19 percent of world oil consumption, or approximately 18.6 million barrels per day (The World Factbook 2009, Washington, DC: Central Intelligence Agency, 2009). The transportation sector relies heavily on oil. In California, petroleum based fuels currently provide approximately 96 percent of the state's transportation energy needs (California Energy Commission, 2012).

Natural Gas

In 2010, the SACOG region consumed 529.5 million therms of natural gas. Natural gas supplies are derived from underground sources and brought to the surface at gas wells. Once it is extracted, gas is purified and the odorant that allows gas leaks to be detected is added to the normally odorless gas. Natural gas suppliers, such as PG&E, then send the gas into transmission pipelines, which are usually buried underground. Compressors propel the gas through the pipeline system, which delivers it to homes and businesses.

The state produces approximately 12 percent of its natural gas, while obtaining 22 percent from Canada and 65 percent from the Rockies and the Southwest (California Energy Commission, 2012). In 2006, California produced 325.6 billion cubic feet of natural gas (California Energy Commission, 2012). PG&E is the largest publicly-owned utility in California and provides natural gas for residential, industrial, and agency consumers within the SACOG area, including the City of Elk Grove.

3.6.2 REGULATORY SETTING

FEDERAL

Clean Air Act

The Federal Clean Air Act (FCAA) was first signed into law in 1970. In 1977, and again in 1990, the law was substantially amended. The FCAA is the foundation for a national air pollution control effort, and it is composed of the following basic elements: National ambient air quality standards (NAAQS) for criteria air pollutants, hazardous air pollutant standards, state attainment plans, motor vehicle emissions standards, stationary source emissions standards and permits, acid rain control measures, stratospheric ozone protection, and enforcement provisions.

The EPA is responsible for administering the FCAA. The FCAA requires the EPA to set NAAQS for several problem air pollutants based on human health and welfare criteria. Two types of NAAQS were established: primary standards, which protect public health, and secondary standards, which protect the public welfare from non-health-related adverse effects such as visibility reduction.

Federal Climate Change Policy

According to the EPA, "the United States government has established a comprehensive policy to address climate change" that includes slowing the growth of emissions; strengthening science, technology, and institutions; and enhancing international cooperation. To implement this policy,

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“the Federal government is using voluntary and incentive-based programs to reduce emissions and has established programs to promote climate technology and science.” The federal government’s goal is to reduce the greenhouse gas (GHG) intensity (a measurement of GHG emissions per unit of economic activity) of the American economy by 18 percent over the 10-year period from 2002 to 2012. In addition, the EPA administers multiple programs that encourage voluntary GHG reductions, including “ENERGY STAR”, “Climate Leaders”, and Methane Voluntary Programs. However, as of this writing, there are no adopted federal plans, policies, regulations, or laws directly regulating GHG emissions.

STATE

Assembly Bill 1493

In response to AB 1493, CARB approved amendments to the California Code of Regulations (CCR) adding GHG emission standards to California’s existing motor vehicle emission standards. Amendments to CCR Title 13 Sections 1900 (CCR 13 1900) and 1961 (CCR 13 1961), and adoption of Section 1961.1 (CCR 13 1961.1) require automobile manufacturers to meet fleet average GHG emission limits for all passenger cars, light-duty trucks within various weight criteria, and medium-duty passenger vehicle weight classes beginning with the 2009 model year. Emission limits are further reduced each model year through 2016. For passenger cars and light-duty trucks 3,750 pounds or less loaded vehicle weight (LVW), the 2016 GHG emission limits are approximately 37 percent lower than during the first year of the regulations in 2009. For medium-duty passenger vehicles and light-duty trucks 3,751 LVW to 8,500 pounds gross vehicle weight (GVW), GHG emissions are reduced approximately 24 percent between 2009 and 2016.

CARB requested a waiver of federal preemption of California’s Greenhouse Gas Emissions Standards. The intent of the waiver is to allow California to enact emissions standards to reduce carbon dioxide and other greenhouse gas emissions from automobiles in accordance with the regulation amendments to the CCRs that fulfill the requirements of AB 1493. The EPA granted a waiver to California to implement its greenhouse gas emissions standards for cars.

Assembly Bill 1007

Assembly Bill 1007, (Pavley, Chapter 371, Statutes of 2005) directed the CEC to prepare a plan to increase the use of *alternative fuels* in California. As a result, the CEC prepared the State Alternative Fuels Plan in consultation with the state, federal, and local agencies. The plan presents strategies and actions California must take to increase the use of alternative non-petroleum fuels in a manner that minimizes costs to California and maximizes the economic benefits of in-state production. The Plan assessed various alternative fuels and developed fuel portfolios to meet California’s goals to reduce petroleum consumption, increase alternative fuels use, reduce greenhouse gas emissions, and increase in-state production of biofuels without causing a significant degradation of public health and environmental quality.

California Executive Orders S-3-05 and S-20-06, and Assembly Bill 32

On June 1, 2005, Governor Arnold Schwarzenegger signed Executive Order S-3-05. The goal of this Executive Order is to reduce California's GHG emissions to: 1) 2000 levels by 2010, 2) 1990 levels by the 2020 and 3) 80% below the 1990 levels by the year 2050.

In 2006, this goal was further reinforced with the passage of Assembly Bill 32 (AB 32), the Global Warming Solutions Act of 2006. AB 32 sets the same overall GHG emissions reduction goals while further mandating that CARB create a plan, which includes market mechanisms, and implement rules to achieve "real, quantifiable, cost-effective reductions of greenhouse gases." Executive Order S-20-06 further directs state agencies to begin implementing AB 32, including the recommendations made by the state's Climate Action Team.

Assembly Bill 32- Climate Change Scoping Plan

On December 11, 2008 ARB adopted its *Climate Change Scoping Plan* (Scoping Plan), which functions as a roadmap of ARB's plans to achieve GHG reductions in California required by AB 32 through subsequently enacted regulations. The Scoping Plan contains the main strategies California will implement to reduce CO₂e emissions by 169 million metric tons (MMT), or approximately 30 percent, from the state's projected 2020 emissions level of 596 MMT of CO₂e under a business-as-usual scenario. (This is a reduction of 42 MMT CO₂e, or almost 10 percent, from 2002–2004 average emissions, but requires the reductions in the face of population and economic growth through 2020.) The Scoping Plan also breaks down the amount of GHG emissions reductions ARB recommends for each emissions sector of the state's GHG inventory. The Scoping Plan calls for the largest reductions in GHG emissions to be achieved by implementing the following measures and standards:

- improved emissions standards for light-duty vehicles (estimated reductions of 31.7 MMT CO₂e),
- the Low-Carbon Fuel Standard (15.0 MMT CO₂e),
- energy efficiency measures in buildings and appliances and the widespread development of combined heat and power systems (26.3 MMT CO₂e), and
- a renewable portfolio standard for electricity production (21.3 MMT CO₂e).

California Strategy to Reduce Petroleum Dependence (AB 2076)

In response to the requirements of AB 2076 (Chapter 936, Statutes of 2000), the CEC and the CARB developed a strategy to reduce petroleum dependence in California. The strategy, *Reducing California's Petroleum Dependence*, was adopted by the CEC and CARB in 2003. The strategy recommends that California reduce on-road gasoline and diesel fuel demand to 15 percent below 2003 demand levels by 2020 and maintain that level for the foreseeable future; the Governor and Legislature work to establish national fuel economy standards that double the fuel efficiency of new cars, light trucks, and sport utility vehicles (SUVs); and increase the use of non-petroleum fuels to 20 percent of on-road fuel consumption by 2020 and 30 percent by 2030.

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Governor's Low Carbon Fuel Standard (Executive Order #S-01-07)

Executive Order #S-01-07 establishes a statewide goal to reduce the carbon intensity of California's transportation fuels by at least 10 percent by 2020 through establishment of a Low Carbon Fuel Standard. The Low Carbon Fuel Standard is incorporated into the State Alternative Fuels Plan and is one of the proposed discrete early action GHG reduction measures identified by CARB pursuant to AB 32.

Senate Bill 97 (SB 97)

Senate Bill 97 (Chapter 185, 2007) required the Governor's Office of Planning and Research (OPR) to develop recommended amendments to the State CEQA Guidelines for addressing greenhouse gas emissions. OPR prepared its recommended amendments to the State CEQA Guidelines to provide guidance to public agencies regarding the analysis and mitigation of greenhouse gas emissions and the effects of greenhouse gas emissions in draft CEQA documents. The Amendments became effective on March 18, 2010.

Senate Bill 375

Sen. Bill No. 375 (Stats. 2008, ch. 728) (SB 375) was built on AB 32 (California's 2006 climate change law). SB 375's core provision is a requirement for regional transportation agencies to develop a Sustainable Communities Strategy (SCS) in order to reduce GHG emissions from passenger vehicles. The SCS is one component of the existing Regional Transportation Plan (RTP).

The SCS outlines the region's plan for combining transportation resources, such as roads and mass transit, with a realistic land use pattern, in order to meet a state target for reducing GHG emissions. The strategy must take into account the region's housing needs, transportation demands, and protection of resource and farmlands.

Additionally, SB 375 modified the state's Housing Element Law to achieve consistency between the land use pattern outlined in the SCS and the Regional Housing Needs Assessment allocation. The legislation also substantially improved cities' and counties' accountability for carrying out their housing element plans.

Finally, SB 375 amended the California Environmental Quality Act (Pub. Resources Code, § 21000 et seq.) to ease the environmental review of developments that help reduce the growth of GHG emissions.

The SACOG Board, which is the local metropolitan planning organization that covers the six-county area in the Sacramento region, including the City of Elk Grove, adopted the MTP/SCS in April 2012. A program-level EIR addressing the environmental impacts of the MTP/SCS was also prepared and certified.

LOCAL

Elk Grove Climate Action Plan

On March 27, 2013, the City Council adopted the Elk Grove Climate Action Plan, or CAP. The City's Climate Action Plan is a culmination of existing and proposed initiatives to reduce greenhouse gas emissions. The CAP ensures that the City's future activities and development patterns conform to California climate change legislation. The CAP will also make future development easier by acting as a tiering document for GHG emissions under the California Environmental Quality Act.

The purpose of the CAP is to identify how the City will achieve the state-recommended GHG emission reduction target of 15 percent by the year 2020 and to create a path to obtain 2050 State targets associated with Governor's Order S-03-05. The CAP provides goals and associated measures, also referred to as GHG reduction measures, in the sectors of energy use, transportation, land use, water, and solid waste. In addition, the CAP provides goals and measures for longer-term adaptation to the potential risks associated with climate change.

More specifically, the CAP:

- Identifies sources of greenhouse gas emissions from sources within the City's jurisdictional/political boundary and estimates how these emissions may change over time.
- Discusses the various outcomes of reduction efforts and how these reduction efforts can be implemented and advertised.
- Provides energy use, transportation, land use, water use, and solid waste strategies to reduce Elk Grove's greenhouse gas emissions levels to 15 percent below 2005 levels by 2020.
- Provides methods for reducing the City's greenhouse gas emissions consistent with the direction of the State of California through the Global Warming Solutions Act (AB 32), Governor's Order S-03-05, Public Resources Code Section 21083.3(b,d), and CEQA Guidelines Section 15064.4. [The California Environmental Quality Act (CEQA) Guidelines encourage the adoption of policies or programs as a means of addressing comprehensively the cumulative impacts of projects. See State CEQA Guidelines, §15064(h)(3), §15130(d).]
- Provides substantial evidence that the emissions reductions estimated in the Climate Action Plan are feasible.

Elk Grove General Plan Sustainability Element

Concurrent with adoption of the Climate Action Plan, the City Council also adopted a new component to the General Plan – a Sustainability Element. The Sustainability Element incorporates new social, environmental, and economic goals and ideas into the General Plan that focus on the concept of sustainability.

3.6 GREENHOUSE GASES AND CLIMATE CHANGE

The Sustainability Element provides an adopted vision and strategy to guide sustainability in the City over the next 20 years. The Climate Action Plan (CAP) is a tool that is linked to the General Plan through the Sustainability Element, but focuses specifically on greenhouse gas emissions reductions.

The Sustainability Element and Climate Action Plan are part of the framework for developing a greenhouse gas emissions reduction strategy in compliance with Section 15183.5(b) of the California Environmental Quality Act (CEQA) Guidelines. Section 15183.5(b) refers to the development of a plan that can be used to streamline future development proposed as a part of the programmatic policy structure in place at the City.

The Sustainability Element is an optional element of the General Plan, and is not mandated by the State of California (State). The City worked closely with the community to define sustainability and identify the policy topics contained within the Sustainability Element.

The Sustainability Element includes the following components:

- A definition of sustainability, as defined by the community through public workshops;
- A description of relevant State laws;
- Identification and description of sustainability policy areas addressed in the General Plan;
- An explanation of the relationship of the Sustainability Element to other elements in the General Plan, including a matrix identifying the element in which policies relating to each sustainability policy area can be found;
- An explanation of the relationship of the Sustainability Element to the CAP; and
- A set of focused sustainability policies and actions not addressed in other elements of the General Plan.

The Sustainability Element identified three primary components of sustainability:

- **Environment** - Environmental sustainability is achieved by being a steward of the natural environment and reducing the impact of human activities on natural resources and systems that support the community.
- **Economy** - A sustainable economy is one that is strong, resilient, and conscientious. It is achieved by supporting education, jobs, businesses, green industries, innovation and economic development.
- **Community** - A sustainable community is one that is accessible, healthy, safe, and diverse and promotes well-being. It is achieved by supporting public participation, healthy living, access to social services, cultural diversity, historic preservation and the arts.

The following policies and actions in the Sustainability Element are relevant to the Project:

Policy S-9: Support innovation and green building best management practices for all new private development.

S-9-Action 1: Require all new private developments to meet and (as determined feasible by the City) exceed state Title 24 Energy Efficiency Building Standards. (Please see CAP reduction measures.)

S-9-Action 3: Establish a green building incentive program to encourage developers to integrate green design techniques above and beyond the requirements of Action 1. Incentives may include, but are not limited to, expedited review, plan/permit review fee reduction, density bonuses, tax credits, and/or technical assistance.

Policy S-11: Support strategies that reduce reliance on single-occupancy private vehicles and promote the viability of alternative modes of transport. (Please see CAP reduction measures.)

S-11-Action 4: Ensure new multi-family and commercial developments provide bicycle parking and other bicycle support facilities appropriate for the users of the development.

S-11-Action 5: Work with private entities to implement a citywide car-sharing program.

Policy S-12: Improve the health and sustainability of the community through improved regional air quality and reduced greenhouse gas emissions that contribute to climate change.

S-12-Action 1: Ensure that new development is consistent with the City's Climate Action Plan.

Elk Grove Sustainability Element and Climate Action Plan Subsequent Environmental Impact Report

On March 27, 2013, the Elk Grove City Council certified the Sustainability Element and Climate Action Plan Subsequent Environmental Impact Report (SEIR) (SCH#2011062031). The SEIR discloses environmental effects associated with implementation of the Elk Grove Sustainability Element and CAP. When considering approval of subsequent development projects, the City utilizes the SEIR as the basis in determining potential environmental effects and the appropriate level of environmental review, if any, of a subsequent activity. Additional environmental review under CEQA may be required for subsequent projects and would be generally based on the subsequent project's consistency with the Project and the analysis in this EIR, as required under CEQA. It may be determined that some future projects or activities under the proposed project may be exempt from environmental review. When subsequent projects or activities under the proposed project are proposed, the City will examine the projects or activities to determine whether their effects were adequately analyzed in this Program EIR (CEQA Guidelines Section 15168). If the projects or activities would have no effects beyond those disclosed in this EIR, no further CEQA compliance would be required.

SACOG Metropolitan Transportation Plan/Sustainable Communities Strategy

The Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS) is a long-range plan for transportation in the region built on the Blueprint. SACOG is required by federal law to update the MTP at least every four years. Since the last MTP, California adopted Senate Bill 375, which requires a Sustainable Communities Strategy, similar to the Sacramento region's smart land use Blueprint project, to be added to transportation plans across the state. The Blueprint is a long-range vision for growth that promotes compact, mixed-use development and more transportation choices as an alternative to low-density development.

3.6.3 IMPACTS AND MITIGATION MEASURES

GHG THRESHOLDS OF SIGNIFICANCE AND METHODOLOGY

Analysis Approach

The California Office of Planning and Research (OPR) recommends that lead agencies under CEQA make a good-faith effort, based on available information, to estimate the quantity of GHG emissions that would be generated by a proposed project, including the emissions associated with construction activities, stationary sources, vehicular traffic, and energy consumption: to determine whether the impacts have the potential to result in a significant project or cumulative environmental impact; and, where feasible mitigation is available, to mitigate any project or cumulative impact determined to be potentially significant. More recently, OPR prepared amendments to the State CEQA Guidelines, pursuant to SB 97 (Statutes of 2007) for adoption by the California Natural Resources Agency. The amendments added several provisions reinforcing the requirements to assess a project's GHG emissions as a contribution to the cumulative impact of climate change. The amendments went into effect on March 18, 2010.

Specifically, CEQA Guidelines Section 15064.4, as amended March 18, 2010, state:

(a) The determination of the significance of greenhouse gas emissions calls for a careful judgment by the lead agency consistent with the provisions in section 15064. A lead agency should make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate the amount of greenhouse gas emissions resulting from a project. A lead agency shall have discretion to determine, in the context of a particular project, whether to:

(1) Use a model or methodology to quantify greenhouse gas emissions resulting from a project, and which model or methodology to use. The lead agency has discretion to select the model or methodology it considers most appropriate provided it supports its decision with substantial evidence. The lead agency should explain the limitations of the particular model or methodology selected for use; and/or

(2) Rely on a qualitative analysis or performance based standards.

(b) A lead agency should consider the following factors, among others, when assessing the significance of impacts from greenhouse gas emissions on the environment:

(1) The extent to which the project may increase or reduce greenhouse gas emissions as compared to the existing environmental setting;

(2) Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project.

(3) The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions. Such requirements must be adopted by the relevant public agency through a public review process and must reduce or mitigate the project's incremental contribution of greenhouse gas emissions. If there is substantial evidence that the possible effects of a particular project are still cumulatively considerable notwithstanding compliance with the adopted regulations or requirements, an EIR must be prepared for the project.

The analysis of greenhouse gases in this EIR is conducted at the qualitative level, and relies on the project's consistency with the Elk Grove Climate Action Plan. This analysis approach is consistent with the guidance provided under CEQA Guidelines Section 15064.4(a)(2).

THRESHOLDS OF SIGNIFICANCE

Pursuant to Appendix G of the CEQA Guidelines, climate change-related impacts are considered significant if implementation of the proposed Project would do any of the following:

1. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.
2. Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

In order to determine whether or not the proposed Project would generate GHG emissions that may have a significant impact on the environment, this EIR relies on the Project's compliance with the City's adopted Climate Action Plan. The Elk Grove Climate Action Plan includes a range of measures, that when fully implemented, would result in a 15% reduction of GHG emissions Citywide by 2020, compared to the 2005 baseline GHG emissions. The City certified a Subsequent EIR (SCH# 2011062031) on March 27, 2013 that addressed the potential environmental impacts of implementation of the CAP, and included provisions for the subsequent review of development projects found to be consistent with the CAP. The SEIR and CAP include detailed quantifications and supporting documentation and analysis that demonstrate the feasibility of reaching the GHG reduction targets established in the CAP.

As described on page 1.0-3 of the SEIR, additional environmental review under CEQA may be required for subsequent projects and would be generally based on the subsequent project's

3.6 GREENHOUSE GASES AND CLIMATE CHANGE

consistency with the CAP and the analysis in the SEIR, as required under CEQA. It may be determined that some future projects or activities under the proposed project may be exempt from environmental review. When subsequent projects or activities are proposed, the City will examine the projects or activities to determine whether their effects were adequately analyzed in this Program EIR (CEQA Guidelines Section 15168). If the projects or activities would have no effects beyond those disclosed in this EIR, no further CEQA compliance would be required.

In order to determine whether or not the Project would conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs, the Project is analyzed for consistency with the City's CAP, which is implemented through the City's General Plan Sustainability Element. The Elk Grove CAP was developed by the City in order for future development projects and City actions to be consistent with – or better than - the statewide GHG reductions goals outlined in AB 32.

Methodology

Greenhouse gases attributable to the Project would be generated from two primary sources: 1) energy usage from the Project (both the residential and non-residential components), and 2) emissions from vehicle trips and vehicle miles travelled generated by the Project.

This EIR includes a qualitative assessment of the project's consistency with the Elk Grove CAP. If the project is shown to properly implement the applicable measures contained in the CAP, then the project would have a less than significant impact.

The analysis, conclusions, and findings contained in the Elk Grove Sustainability and Climate Action Plan Subsequent EIR (SCH# 2011062031) are incorporated into this EIR by reference. As described under CEQA Guidelines Section 15183.5(a), *lead agencies may analyze and mitigate the significant effects of greenhouse gas emissions at a programmatic level, such as in a general plan, a long range development plan, or a separate plan to reduce greenhouse gas emissions. Later project-specific environmental documents may tier from and/or incorporate by reference that existing programmatic review. Project-specific environmental documents may rely on an EIR containing a programmatic analysis of greenhouse gas emissions as provided in Section 15152 (tiering), 15167 (staged EIRs), 15168 (program EIRs), 15175-15179.5 (Master EIRs), 15182 (EIRs prepared for Specific Plans), and 15183 (EIRs Prepared for General Plans, Community Plans, or Zoning).*

As described under CEQA Guidelines Section 15183.5(b)(2), *Use with Later Activities: A plan for the reduction of greenhouse gas emissions, once adopted following certification of an EIR or adoption of an environmental document, may be used in the cumulative impacts analysis of later projects. An environmental document that relies on a greenhouse gas reduction plan for a cumulative impact analysis must identify those requirements specified in the plan that apply to the project, and, if those requirements are not otherwise binding and enforceable, incorporate those requirements as mitigation measures applicable to the project.*

GHG IMPACTS AND MITIGATION MEASURES

Impact 3.6-1: The Project may generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment, or conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases. (Less than Significant with Mitigation)

The City's Climate Action Plan is a culmination of existing and proposed initiatives to reduce greenhouse gas emissions. The CAP ensures that the City's future activities and development patterns conform to California climate change legislation. The CAP will also make future development easier by acting as a tiering document for GHG emissions under the California Environmental Quality Act.

The purpose of the CAP is to identify how the City will achieve the state-recommended GHG emission reduction target of 15 percent by the year 2020 and to create a path to obtain 2050 State targets associated with Governor's Order S-03-05. The CAP provides goals and associated measures, also referred to as GHG reduction measures, in the sectors of energy use, transportation, land use, water, and solid waste. In addition, the CAP provides goals and measures for longer-term adaptation to the potential risks associated with climate change.

More specifically, the CAP:

- Identifies sources of greenhouse gas emissions from sources within the City's jurisdictional/political boundary and estimates how these emissions may change over time.
- Discusses the various outcomes of reduction efforts and how these reduction efforts can be implemented and advertised.
- Provides energy use, transportation, land use, water use, and solid waste strategies to reduce Elk Grove's greenhouse gas emissions levels to 15 percent below 2005 levels by 2020.
- Provides methods for reducing the City's greenhouse gas emissions consistent with the direction of the State of California through the Global Warming Solutions Act (AB 32), Governor's Order S-03-05, Public Resources Code Section 21083.3(b,d), and CEQA Guidelines Section 15064.4. [The CEQA Guidelines encourage the adoption of policies or programs as a means of addressing comprehensively the cumulative impacts of projects. See State CEQA Guidelines, §15064(h)(3), §15130(d).]
- Provides substantial evidence that the emissions reductions estimated in the Climate Action Plan are feasible.

3.6 GREENHOUSE GASES AND CLIMATE CHANGE

The CAP is structured to serve as a programmatic tiering document for the purposes of CEQA. A tiering document front-loads the analysis needed for many projects in order to decrease the time and money that would be needed for individual analyses per project.

The measures presented in the Elk Grove CAP have the potential to reduce GHG emissions by 175,832 metric tons (MT) of CO₂e by 2020. These reductions are equivalent to a 15.00 percent reduction from 2005 baseline levels.

The following measures in the Elk Grove CAP are applicable to the Project, and must be implemented by the project in order for the project to be found consistent with the CAP:

BE-6. Building Stock: New Construction. Adopt CALGreen Tier 1 standards to require all new construction to achieve a 15 percent improvement over minimum Title 24 CALGreen energy requirements.

This measure requires new development in Elk Grove to meet and exceed California's Energy Efficiency Standards for Residential and Nonresidential Buildings (Title 24, Part 11, of the California Code of Regulations, or CALGreen).

The California Code of Regulations (CCR), Title 24 (California Building Standards Code, hereinafter Title 24) includes requirements for the structural, plumbing, electrical, and mechanical systems of buildings and for fire and life safety, energy conservation, green design, and accessibility in and around buildings. This reduction measure is focused on two sections of Title 24: Part 6, the California Energy Code, and Part 11, the California Green Building Standards Code, or CALGreen Code.

The CALGreen Code includes mandatory minimum energy efficiency requirements for buildings. It also establishes two tiers of voluntary measures to achieve greater energy efficiencies and other benefits. Tier 1 is a 15 percent improvement over minimum requirements, and Tier 2 is a 30 percent improvement over minimum requirements.

BE-7. Building Stock: Appliances and Equipment in New Development. Encourage the use of energy-efficient appliances and equipment in new buildings that maximize efficiency.

New development has a greater opportunity to install energy-efficient appliances that save costs and reduce energy use. Through this measure, the City will promote the voluntary incorporation of Energy Star and high-efficiency equipment and appliances in both residential and nonresidential development.

BE-9. Cool Paving Materials. Encourage the use of high-albedo material for future outdoor surfaces to the greatest extent feasible, including but not limited to parking lots, median barriers, roadway improvements, and sidewalks.

Increasing urban albedo can reduce summertime temperatures, resulting in better air quality and savings from reduced air-conditioning costs. Albedo is the measure of an object's reflectivity. Lighter-colored materials absorb less heat and therefore have a higher albedo ratio.

Increasing urban albedo reduces absorption of incoming solar radiation, countering some effects of increasing GHG concentrations. Pavements and roofs typically constitute over 60 percent of urban surfaces. Using reflective materials can increase both roof and pavement albedo by about 0.25 and 0.15, respectively, resulting in a net albedo increase of about 30 percent. To maximize the albedo of pavement, lighter-colored aggregate can be used in the pavement mix.

Alternatively, asphalt pavements can be covered with high-albedo sealcoats, small rocks set in binder, or a thin layer of concrete. For concrete applications, using lighter-colored sand and cement can increase reflectivity. Cool (lightcolored) pavements also increase nighttime visibility and pavement durability.

BE-10. On-Site Renewable Energy Installations. Promote voluntary installations of on-site solar photovoltaics in new and existing development, and revise standards to facilitate the transition to solar water heaters and solar photovoltaics in new development.

The goal of this measure is to reduce GHG emissions related to residential and commercial energy use by facilitating the development of small-scale distributed renewable energy production. Renewable energy installations are expected to increase dramatically throughout the next few decades due to innovative financing strategies, lower costs of renewable energy equipment, and new regulations that require the provision of solar photovoltaic options and solar offsets for new subdivisions.

RC-1. Waste Reduction. The City shall facilitate recycling, reduction in the amount of waste, and reuse of materials to reduce the amount of solid waste sent to the landfill from Elk Grove and achieve an 80 percent diversion by 2020.

Measure RC-1 is intended to increase the proportion of waste diverted from landfills. This measure will be implemented through a range of actions that will be implemented by the City. Actions applicable to residential projects include encouraging the use of recycled concrete in all base material used in private road construction and requiring 65% construction waste diversion.

RC-2. Water Conservation. Reduce the amount of water used by residential and non-residential uses.

This measure relies primarily on local actions by residents and water rationing by the local water districts. Actions associated with this measure applicable to the Project include promoting the use of drought-tolerant vegetation to minimize water consumption and encouraging the use of drought-tolerant planting and site design to maximize runoff into designated planter areas.

TACM-5. Pedestrian and Bicycle Travel. Provide for safe and convenient pedestrian and bicycle travel through implementation of the Bicycle and Pedestrian Master Plan and increased bicycle parking standards.

The City's Bicycle and Pedestrian Master Plan was completed in 2004 and details the City's anticipated future bikeways and bike and pedestrian facility improvements. This measure includes actions to revise commercial parking standards, require provision of bicycle support facilities for

3.6 GREENHOUSE GASES AND CLIMATE CHANGE

appropriate development, and review office and mixed-use development to address connection and orientation to pedestrian paths, bicycle paths, and existing transit stops within ½ mile of the new development. The Project provides extensive pedestrian and bicycle facilities, including bike lanes, multi-use paths, and paseos, and provides for connections to existing facilities, as described in Chapter 2.0, consistent with the Bicycle and Pedestrian Master Plan.

TACM-12. Traffic Calming and Anti-Idling. Improve traffic flow and reduce unnecessary idling through use of traffic calming devices and enforcement of idling restrictions.

The goal of this measure is to reduce GHG emissions from transportation sources by reducing idling times and improving traffic flow. Actions associated with this measure include encouraging traffic circles over 4- or 2-way stop signs at residential intersections, where feasible, and working with the Police Department to enforce vehicle idling limitations. The Project includes a traffic circle at each of the 4-way intersections along Silverado Drive. Mitigation Measure 3.10-3 limits idling of internal combustion engines to no more than 5 minutes during construction activities.

SUMMARY

The implementation of Mitigation Measure 3.6-1 would ensure that the Project incorporates all of the relevant and applicable measures contained in the Elk Grove CAP. The Project is consistent with the Rural Residential, Low Density Residential, and Commercial/Office/Multifamily land use designation assigned to the site by the General Plan Land Use Map, as described in Section 3.9. The General Plan land use designations would accommodate approximately 1,022 residential units on the Project site; the Project proposes 660 single family units and up to 125 independent/assisted living units, which is less than the development allowed under the adopted land use designations. As such, the cumulative greenhouse gas impacts associated with the Project are consistent with the greenhouse gas emissions projections and analysis in the Elk Grove Sustainability Element and Climate Action Plan Subsequent EIR. Implementation of the Project would not result in greenhouse gas emissions beyond the levels assumed in the CAP and analyzed in the SEIR.

As described above, implementation of the CAP would result in a 15% reduction of GHGs within the City by 2020, compared to the baseline 2005 GHG levels. Implementation of Mitigation Measure 3.6-1 would ensure that the Project implements the applicable CAP measures described above and reduce potential greenhouse gas emissions. With implementation of Mitigation Measure 3.6-1, the Project would be consistent with the CAP and this impact would be **less than significant**.

MITIGATION MEASURES

Mitigation Measure 3.6-1: *Prior to the issuance of building permits, the Project shall demonstrate compliance with the following:*

- *Achieve Tier 1 of Title 24, Part 11, green building standards to exceed minimum Title 24 energy efficiency standards by 15%.*
- *Incorporate the use of energy-efficient appliances and equipment that maximize efficiency in new buildings and facilities.*
- *Incorporate the use of high-albedo material for outdoor surfaces to the greatest extent feasible, including but not limited to parking lots, median barriers, roadway improvements, and sidewalks.*
- *Prewiring or conduit for solar photovoltaics shall be provided in all non-residential structures.*
- *Utilize drought-tolerant vegetation in landscape areas, and design grading improvements to maximize runoff into designated landscape and planter areas.*
- *Achieve a minimum waste diversion rate of 65%, which shall be demonstrated through the Project's Waste Management Plan, for all construction and demolition activities.*
- *Utilize recycled concrete in base material for new road construction to the greatest extent feasible.*
- *Provide prewiring for plug-in electric vehicles.*
- *Provide a solar option for homebuyers.*

Timing/Implementation: Prior to issuance of building permits

Enforcement/Monitoring: City of Elk Grove Planning Department

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The purpose of this section is to disclose and analyze the potential impacts associated with hazards and hazardous materials related to the Project site and general vicinity, and to analyze the potential for exposure of people to hazards and hazardous materials as the Project is built and operated. This section is based in part on the following technical studies: *EnviroStor Website* (DTSC 2013), *GeoTracker* (SWRCB 2013), *City of Elk Grove General Plan* (City of Elk Grove 2003a), *Sacramento County Multi-Hazard Mitigation Plan* (Sacramento County 2004), *Phase I Environmental Site Assessment Bond Waterman Property* (Wallace-Kuhl & Associates (WKA) 2011a), *Report of Findings Soil Sampling and Analysis* (WKA 2011b), and *Custom Soil Resource Report* (USDA 2011).

Comments regarding this topic received in response to the Notice of Preparation identified concerns associated with the following issues (see Appendix A for complete comments):

- Potential for hazardous materials to occur on the Project site, and
- Soil contamination related to previous dumping on site.

3.7.1 ENVIRONMENTAL SETTING

HAZARDOUS MATERIALS

Hazardous Materials Defined

For the purposes of this EIR, “hazardous material” is defined as provided in California Health & Safety Code, Section 25501:

- Any material that, because of its quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace or the environment.

“Hazardous materials” include, but are not limited to, hazardous substances, hazardous waste, and any material that a handler or the administering agency has a reasonable basis for believing that it would be injurious to the health and safety of persons or harmful to the environment if released into the workplace or the environment.

“Hazardous waste” is a subset of hazardous materials. For the purposes of this EIR, the definition of hazardous waste is essentially the same as that in the California Health & Safety Code, Section 25517, and in the California Code of Regulations (CCR), Title 22, Section 66261.2:

- Hazardous wastes are wastes that, because of their quantity, concentration, physical, chemical, or infectious characteristics, may either cause, or significantly contribute to, an increase in mortality or an increase in serious illness, or pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, disposed of, or otherwise managed.

CCR Title 22 categorizes hazardous waste into hazard classes according to specific characteristics of ignitability, corrosivity, reactivity, or toxicity. Hazardous waste with any of these characteristics is also known as a Resource Conservation and Recovery Act (RCRA) waste.

3.7 HAZARDS AND HAZARDOUS MATERIALS

Hazardous materials can be categorized as hazardous non-radioactive chemical materials, radioactive materials, toxic materials, and biohazardous materials. The previous definitions are adequate for non-radioactive hazardous chemicals. Radioactive and biohazardous materials are further defined as follows:

- Radioactive materials contain atoms with unstable nuclei that spontaneously emit ionizing radiation to increase their stability.
- Radioactive wastes are radioactive materials that are discarded (including wastes in storage) or abandoned.
- Toxic wastes are harmful or fatal when ingested or absorbed (e.g., containing mercury, lead). When toxic wastes are land disposed, contaminated liquid may leach from the waste and pollute groundwater.
- Biohazardous materials include materials containing certain infectious agents (microorganisms, bacteria, molds, parasites, and viruses) that cause or significantly contribute to increased human mortality or organisms capable of being communicated by invading and multiplying in body tissues.
- Medical wastes include both biohazardous wastes (byproducts of biohazardous materials) and sharps (devices capable of cutting or piercing, such as hypodermic needles, razor blades, and broken glass) resulting from the diagnosis, treatment, or immunization of human beings, or research pertaining to these activities.

PROJECT VICINITY

Hazardous Material Sites

The State of California Hazardous Waste and Substances Site List (also known as the "Cortese List") is a planning document used by the state, local agencies, and developers to comply with the CEQA requirements for providing information about the location of hazardous materials sites. Government Code Section 65962.5 requires the California Environmental Protection Agency (Cal EPA) to annually update the Cortese List. The Department of Toxic Substances Control (DTSC) is responsible for preparing a portion of the information that comprises the Cortese List. Other state and local government agencies are required to provide additional hazardous material release information that is part of the complete list. The CAL-SITES Abandoned Site Program Information System (ASPIS) Database is compiled by Cal-EPA to identify and track potential hazardous waste sites. In addition to the Cortese List and CAL-SITES, the County of Sacramento's Department of Environmental Health also maintains lists of hazardous material sites, releases, and accident occurrences. GeoTracker is a geographic information system (GIS) that provides online access to environmental data and is the interface to the Geographic Environmental Information Management System (GEIMS), a data warehouse which tracks regulatory data about underground fuel tanks, fuel pipelines, and public drinking water supplies.

Searches of the above resources and records identified 48 hazardous material sites in the vicinity of Elk Grove known to handle and store hazardous materials and are associated with a hazardous material related release or occurrence. The terms "release" or "occurrence" include any means by

which a substance could harm the environment: by spilling, leaking, discharging, dumping, injecting, or escaping.

Table 3.7-1 displays the known hazardous material sites in the City with a description of the hazards provided. No known hazardous sites are associated with the Project site. The Franklin Meadows Elementary School No. 37 site is within one-half mile from the Project site and has been determined to require no action by SWRCB. Of those sites within one mile of the Project; Arco #5696 and FAA Remote Repeater are considered closed cases, and the Mather Auxiliary Field site is identified as open and inactive, with no potential contaminants of concern identified, according to the SWRCB (SWRCB 2013). The California State Military Museum (CSMM) website indicates that the Mather Auxiliary Field site in the City was acquired in December 1942. A 2,200' x 2,500' landing area had been prepared and was awaiting paving, but the site was not used and no structures were built. The site was not placed into use and was then returned to the original owners, remaining in agricultural land for several decades until it was developed as a residential subdivision (CSMM 2013).

TABLE 3.7-1: GEOTRACKER KNOWN HAZARDOUS MATERIAL RELEASE SITES

SITE NAME	SITE TYPE	CLEANUP STATUS	ADDRESS
Arco #5696**	LUST	Completed - Case Closed	9215 Elk Grove-Florin Road
Mather Field Auxiliary (J09ca0797)**	DTSC	Inactive - Needs Evaluation	Bond Road/Waterman Road, south of Bond Road
FAA Remote Repeater**	LUST	Completed - Case Closed	Rodgers Rd
Franklin Meadows Elem School No. 37*	DTSC	No Action Required	Fire Poppy Drive/Blossom Ranch Drive

SOURCE: SWRCB, GEOTRACKER, 2013

Note: LUST = Leaking Underground Storage Tank, DTSC = California Department of Toxic Substances Control. * site within ½ mile of project, ** site within 1 mile of project.

DTSC's Brownfields and Environmental Restoration Program (Cleanup Program) EnviroStor database provides DTSC's component of Cortese List data by identifying Annual Workplan (now referred to State Response and/or Federal Superfund), and Backlog sites listed under Health and Safety Code section 25356. In addition, DTSC's Cortese List includes Certified with Operation and Maintenance sites. There are no DTSC Cleanup Program sites within one mile of the Project site (DTSC EnviroStor 2013).

Transportation of Hazardous Materials

The transportation of hazardous materials within the City is subject to various federal, state, and local regulations. The only roadway and transportation route approved for the transportation of explosives, poisonous inhalation hazards, and radioactive materials in the City is Interstate 5.

In addition to area roadways, hazardous materials are routinely transported on existing railroad facilities that pass through the City. The Union Pacific Railroad (UPRR) is within the existing city limits, aligns diagonally north to south, and is located east of SR 99. The Western Pacific Railroad (WPRR) is located in the western portion of the Planning Area, near Interstate 5. The Central California Traction Railroad (CCTRR) aligns north to south near the eastern portion of the City (City of Elk Grove, 2003). The UPRR tracks are located approximately 3/4 miles west of the Project site,

3.7 HAZARDS AND HAZARDOUS MATERIALS

the WPRR tracts are about 5.5 miles to the west, and the CCTRR tracks are approximately three miles east of the Project site.

Major Hazardous Material Handling Facilities in the City of Elk Grove

The Suburban Propane facility, which is located at 10450 Grant Line Road, and the Georgia Pacific Resins facility, which is located at 10399 East Stockton Boulevard, are the only major industrial facilities within the City of Elk Grove that have the potential to pose off-site hazards. Existing land uses within a one-half mile radius of these facilities consist of *light and heavy industrial, office, commercial, residential, and agricultural*. Several studies have been conducted to determine the site-specific risks of these two facilities and evaluate the consequences that could be attributed to these facilities (City of Elk Grove 2003, p. 4.4-6). These studies analyzed the hazard types, incidence scenarios, worst-case effects and the extent of those effects, specific conditions associated with worst-case effects, and approximate probabilities associated with each scenario. Off-site hazards to human health and property associated with potential incidents at the Suburban Propane and Georgia Pacific facilities include vapor cloud explosion, radiant heat, flash fire, shrapnel and formaldehyde exposure. The extent of the potential impact for these hazards has been identified in the Elk Grove General Plan EIR and are as follows:

- Vapor Cloud Explosion – out to $\frac{3}{4}$ mile,
- Radiant Heat (fireball) – out to $\frac{1}{2}$ mile,
- Flash Fire – out to 1 $\frac{1}{2}$ mile,
- Formaldehyde exposure – out to 1 mile, and
- Shrapnel - out to $\frac{1}{2}$ mile (City of Elk Grove 2003, pg. 4.4-26).

The Project site is approximately three miles from both the Suburban Propane facility and the Georgia Pacific Resins facility, which is well outside of the hazard zone for these facilities.

SITE CHARACTERISTICS

The Project site consists of approximately 230 acres located at the northwest corner of Bond Road and Waterman Road, as shown on Figure 2-2. The Project site is generally bounded by Waterman Road, vacant land, rural residential uses, and Laguna Creek to the east; Waterman Square Apartments adjacent the southeast corner; Bond Road and single family residential uses to the south; and single family residential development to the west, with a vacant area adjacent to the northwest.

Site Topography

The Project site is vacant and characterized by relatively level topography, with the exception of areas with earthen berms which generally rise in height from three to five feet, several man-made ponds, and a large depression. Historically, the Project site has been utilized for agricultural and industrial uses. However, the Project site has been vacant since the acquisition of the property by the Sacramento Area Sewer District (SASD), formerly the Sacramento County Sanitation District. The elevation ranges from 39 to 71 feet above mean sea level. Surface runoff flows towards the south and southwest into topographic lows that include portions of Whitehouse Creek, seasonal

wetlands, vernal pools, ephemeral drainages, and the onsite ponds. Whitehouse Creek traverses the property from the northern boundary, flowing in a southwesterly direction into a series of ponds located in the western portion of the Project site. The large ponds appear to be the result of past berming and grading activities. In addition, many of the linear depressions on the Project site appear to be a result of historic excavation activities and may be related to past agricultural practices on the property. The discharge of water from the Project site occurs when the ponds are significantly inundated and exits the Project site via a weir, overland swales, and roadside ditches, eventually discharging into Laguna Creek to the west.

Soils

The *Custom Soil Resource Report* completed for the Project site by the United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) web-based service identifies the near-surface soils on the Project site consist of Redding gravelly loam, 0 to 8 percent slopes, San Joaquin silt loam, 0 to 3 percent slopes, and San Joaquin-Durixeralfs complex, 0 to 1 percent slopes (USDA 2011, p. 10).

Regional and Local Groundwater

The Project site is located within the California Department of Water Resources (DWR) defined Sacramento Valley Groundwater Basin of the Sacramento River Hydrologic Region. According to WKA, no DWR monitored groundwater wells are located within one-half mile of the Project site (WKA 2011, p. 9).

WKA reviewed information regarding the former Elk Grove Disposal facility, which was located approximately 400 feet south of the Project site. According to a 2008 Annual Monitoring Report, the direction of groundwater at the facility was reported to be to the west. The depth to groundwater ranged from 29.71 to 33.25 feet below ground surface (WKA 2011, p. 9).

Phase I Environmental Site Assessment

A Phase I Environmental Site Assessment (ESA) consistent with ASTM Standard E1527-05 and general industry standards was conducted on the Project site by WKA. The purpose of this Phase I Environmental Site Assessment (ESA) was to evaluate the Project site for evidence of potential Recognized Environmental Conditions (RECs) resulting from current and/or former site activities. The following information was provided in the ESA for the Project site.

SITE RECONNAISSANCE

WKA (2011) visually assessed the Project site on August 17, 2011. On the day of field reconnaissance the Project site was undeveloped land. The majority of the Project site was covered with dense, low-lying vegetation. Several berms were noted on the western and northern portions of the Project site. The berms ranged in height from approximately three feet to five feet. The purpose of the berms was not immediately discernible. Several piles of dirt overgrown with vegetation were observed on the southern portion of the Project site. Concrete pads with two drainage basins on the western end were observed on the southern portion of the Project site. A well casing was observed to the south of the concrete pads adjacent to a tree. High-voltage, tower-mounted electrical transmission lines were observed along the northeastern boundary of the Project site.

3.7 HAZARDS AND HAZARDOUS MATERIALS

HISTORICAL REVIEW

Historical information was reviewed to develop a history of the previous uses of the Project site and surrounding area, in order to evaluate the Project site and adjoining properties for evidence of RECs. Standard historical sources reviewed during the preparation of this report included the following:

- Sanborn Maps;
- Topographic Maps;
- Oil and Gas Well Maps;
- Aerial Photographs;
- Ownership Records;
- Building Department Records;
- Local Street Directories;
- Zoning and Land Use Records;
- Other Historical Sources; and,
- Prior Assessments.

The literature review included a previous Phase I ESA dated November 2, 2001 that had been prepared for the Project site by Kleinfelder, Inc., a Phase I ESA Update prepared by WKA in January 2006, and a history of the Project site dated October 7, 2008 prepared by the Sacramento Area Sanitation District.

SOIL SAMPLING

In 1988, Sacramento County collected surface soil samples from four areas on the Project site, which included two composite background samples from the northwestern portion, two composite samples from the area of the former winery drainage ponds, two composite samples from the former drainage basin, and two composite samples from the IDS area. The soil samples were analyzed for metals, pesticides, polychlorinated biphenyls, and total organic content. The analytical results of the soil samples collected in the background area, area of the former wine wastewater evaporation ponds, and drainage basin areas did not reveal high levels of tested parameters. The composite samples from the IDS area revealed elevated levels of lead, zinc, and copper, but the groundwater and surface water sample did not indicate that any of the tested parameters were above screening levels. Sacramento County concluded that the elevated levels of metals in the surface soils in the IDS area are likely from several layers of gravel and asphalt and not the result of IDS activities at the Project site. WKA conducted further analysis of the IDS area soils, described below under the Report of Findings Soil Sampling and Analysis.

PHASE I ESA CONCLUSIONS

The historical land use research dating back to the late 1800s revealed that the Project site was primarily used for agricultural purposes prior to the early 1930s. The north-central portion of the Project site was used for winery wastewater evaporation ponds from the early 1930s to the mid-1970s. The southwestern portion of the Project site was developed with a residential structure from the early 1900s to the early 1970s. Independent Disposal Services used the southwestern portion for offices and a truck maintenance area from 1963 to the late 1980s. The Project site is currently vacant land.

The analytical results of the soil samples collected by Sacramento County in the area of the former wine wastewater evaporation ponds indicated that the tested parameters were below screening levels.

The central portion of the Project site is located within a 500-year regulatory floodplain, as designated by the Federal Emergency Management Agency (FEMA).

It is unlikely that a potential vapor intrusion condition (pVIC) exists.

The Phase I ESA did not identify any recognized environmental conditions in connection with the Project site (WKA 2011a, p. 21).

PHASE 1 ESA RECOMMENDATIONS

Based on the information provided in the ESA, the ESA made the following recommendations:

- Abandon well on the southern portion of the Project site in accordance with local regulations.
- If a septic system is encountered during construction activities, it shall be properly abandoned in accordance with local regulations.
- If the northern portion of the Project site will be developed for a sensitive use, such as a daycare, school, or hospital, further investigation of the winery wastewater evaporation ponds may be required.
- If any soil disturbing activity uncovers evidence of soil staining, soil odors, buried objects, or any other non-soil artifact, modify the findings, conclusions, and recommendations in the ESA as required by the discovery of new information.

Report of Findings Soil Sampling and Analysis

A Report of Findings Soil Sampling and Analysis (ROF) was prepared for the Project site by WKA on August 31, 2011 (Appendix C). The ROF indicated that the Project site had formerly been used as a corporate yard and staging area for a waste disposal company which operated from 1963 until 1981. The ROF was prepared to address whether lead-impacted soil is present beneath areas of the Project site because of previous site activities.

Soil samples were collected from eight hand-augered borings in the southwest area of the Project site, as shown on Figure 3 of the ROF in Appendix C. The soils were analyzed for lead content using EPA Method 6010B and soluble lead content using California Waste Extraction Test and EPA Method 6010B. Lead concentrations ranged from 8.8 milligrams per kilogram (mg/kg) to 15 mg/kg. This range of detected lead is well below the environmental screening level of 200 mg/kg. Soluble lead was not detected in any of the soil samples above 0.50 milligrams per liter. WKA did not recommend any additional investigative sampling or analysis (WKA 2011b).

3.7.2 REGULATORY SETTING

FEDERAL

The primary federal agencies that are responsible for overseeing regulations and policies regarding hazardous materials are the Environmental Protection Agency (EPA), Department of Labor Occupational Safety and Health Administration (OSHA), and the Department of Transportation (DOT). Several laws governing the transport, storage, and use of hazardous materials are governed

3.7 HAZARDS AND HAZARDOUS MATERIALS

by these agencies as well as oversight for contaminated sites cleanup. Federal laws and regulations that are applicable to hazards and hazardous materials are presented below.

Resource Conservation and Recovery Act

The 1976 Federal Resource Conservation and Recovery Act (RCRA) and the 1984 RCRA Amendments regulate the treatment, storage, and disposal of hazardous and non-hazardous wastes. The legislation mandated that hazardous wastes be tracked from the point of generation to their ultimate fate in the environment. This includes detailed tracking of hazardous materials during transport and permitting of hazardous material handling facilities.

The 1984 RCRA amendments provided the framework for a regulatory program designed to prevent releases from USTs. The program establishes tank and leak detection standards, including spill and overflow protection devices for new tanks. The tanks must also meet performance standards to ensure that the stored material will not corrode the tanks. Owners and operators of USTs had until December 1998 to meet the new tank standards. As of 2001, an estimated 85 percent of USTs were in compliance with the required standards.

Hazardous Materials Transportation Act

The Hazardous Materials Transportation Act, as amended, is the basic statute regulating hazardous materials transportation in the United States. The purpose of the law is to provide adequate protection against the risks to life and property inherent in transporting hazardous materials in interstate commerce. This law gives the U.S. Department of Transportation (USDOT) and other agencies the authority to issue and enforce rules and regulations governing the safe transportation of hazardous materials (DOE 2002).

Comprehensive Environmental Response, Compensation, and Liability Act

The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (the Act) introduced active federal involvement to emergency response, site remediation, and spill prevention, most notably the Superfund program. The Act was intended to be comprehensive in encompassing both the prevention of, and response to, uncontrolled hazardous substances releases. The Act deals with environmental response, providing mechanisms for reacting to emergencies and to chronic hazardous material releases. In addition to establishing procedures to prevent and remedy problems, it establishes a system for compensating appropriate individuals and assigning appropriate liability. It is designed to plan for and respond to failure in other regulatory programs and to remedy problems resulting from action taken before the era of comprehensive regulatory protection.

Natural Gas Pipeline Safety Act

The Natural Gas Pipeline Safety Act authorizes the U.S. Department of Transportation Office of Pipeline Safety to regulate pipeline transportation of natural (flammable, toxic, or corrosive) gas and other gases as well as the transportation and storage of liquefied natural gas. The Office of Pipeline Safety regulates the design, construction, inspection, testing, operation, and maintenance of pipeline facilities. While the federal government is primarily responsible for developing, issuing, and enforcing pipeline safety regulations, the pipeline safety statutes provide for State assumption of the intrastate regulatory, inspection, and enforcement responsibilities under an annual

certification. To qualify for certification, a state must adopt the minimum federal regulations and may adopt additional or more stringent regulations as long as they are not incompatible.

STATE

The primary state agencies that are responsible for overseeing regulations and policies regarding hazardous materials are the California Office of Emergency Services (OES), California Environmental Protection Agency (Cal-EPA), Department of Toxic Substances Control (DTSC), California Department of Transportation (Caltrans), California Highway Patrol (CHP), California Water Quality Control Board, and the California Air Resources Board. Several laws governing the generation, transport, and disposal of hazardous materials are administered by these agencies. State laws and regulations that are applicable to hazards and hazardous materials are presented below.

California Health and Safety Code

Cal-EPA has established rules governing the use of hazardous materials and the management of hazardous wastes. Many of these regulations are embodied in the California Health and Safety Code. The code includes regulations that govern safe drinking water, substances control, land reuse and revitalization, remediation, restoration, and methamphetamine contaminated cleanups.

California Code of Regulations Title 22 and Title 26

The California Code of Regulations (CCR) Title 22 provides state regulations for hazardous materials, and CCR Title 26 provides regulation of hazardous materials management. In 1996, Cal/EPA established the “Unified Hazardous Waste and Hazardous Materials Management Regulatory Program” (Unified Program) which consolidated the six administrative components of hazardous waste and materials into one program.

Medical Waste Management Act

The Medical Waste Management Act (MWMA), Sections 117600-118360 of the California Health and Safety Code (HSC), considers any person whose act or process produces medical waste to be a medical waste generator in California (e.g., a facility or business that generates and/or stores medical waste on-site). Medical wastes are categorized by the MWMA as either biohazardous waste or sharps waste. The MWMA requires that a medical waste generator: maintain a current “Unified Program Facility Permit,” issued by the County Department of Environmental Management, train employees in appropriate hazardous waste management, maintain a Medical Waste Management Plan, and keep documentation that demonstrates the proper disposal of medical wastes. Small or large quantity generators who are required to register with an enforcement agency pursuant to HSC Section 117930 or 117955, respectively, shall file a Medical Waste Management Plan with the City.

3.7 HAZARDS AND HAZARDOUS MATERIALS

LOCAL

City of Elk Grove General Plan

The City General Plan contains the following goals and policies that are relevant to hazards and hazardous materials aspects of the Project:

Policy SA-2 In considering the potential impact of hazardous facilities on the public and/or adjacent or nearby properties, the City shall consider the hazards posed by reasonably foreseeable events. Evaluation of such hazards shall address the potential for events at facilities to create hazardous physical effects at offsite locations that could result in death, significant injury, or significant property damage. The potential hazardous physical effects of an event need not be considered if the occurrence of an event is not reasonably foreseeable as defined in Policy SA-3. Absent substantial evidence to the contrary, a “hazardous physical effect” from an event shall be a level of exposure to a hazardous physical effect in excess of the levels identified in Policy SA-4.

Policy SA-4 The Maximum Acceptable Exposure standards shown in Table SA-A shall be used in determining the appropriateness of either:

- (1) Placing a use near an existing hazardous facility which could expose the new use to hazardous physical effects, or
- (2) Siting a hazardous facility that could expose other nearby uses to hazardous physical effects.

Absent substantial evidence to the contrary, the placement of land uses that do not meet the Maximum Acceptable Exposure standards shall be considered to result in a significant, adverse impact for the purposes of CEQA analysis.

Policy SA-8 Storage of hazardous materials and waste shall be strictly regulated, consistent with state and federal law.

Policy SA-10 Industries which store and process hazardous or toxic materials shall provide a buffer zone between the installation and the property boundaries sufficient to protect public safety. The adequacy of the buffer zone shall be determined by the City of Elk Grove.

Sacramento County Multi-Hazard Mitigation Plan

The City is part of the Sacramento County Multi-Hazard Mitigation Plan (SCMHMP). This plan is a multi-jurisdictional plan that covers the following incorporated communities that participated in the planning process: City of Citrus Heights, City of Elk Grove, City of Folsom, City of Galt, City of Isleton, City of Ranch Cordova, City of Sacramento, and Sacramento County. This plan also covers 69 additional special districts and organizations within Sacramento County that meet the DMA definition of “local government” and participated in the planning process (Sacramento County MHMP 2004, p. 1-2). This plan addresses natural hazards only.

Cosumnes Community Services District - Fire Department

The Cosumnes Community Services District (CCSD) Fire Department Master Plan includes a management and response plan in addition to identification of service level goals. The plan examines future growth in the service area boundaries and identifies manpower, facilities, and equipment needed to meet established goals. The CCSD Fire Department relies on a Fire Development Fee program to fund departmental needs.

3.7.3 IMPACTS AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE

Consistent with Appendix G of the CEQA Guidelines, the proposed Project will have a significant impact from hazards and hazardous materials if it will:

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.
- Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

The Initial Study (Appendix A) completed for this Project analyzed impacts regarding hazards and hazardous materials which are listed in Appendix G of the CEQA Guidelines. This analysis determined that while the Project may have a significant impact regarding certain thresholds of significance, others would result in no impact. The topics for which there is no impact are listed below and are not discussed further in this EIR:

- Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment.
- For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area.
- For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area.
- Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.

The reader is referred to the Initial Study (Appendix A) for further discussion of these impact areas.

3.7 HAZARDS AND HAZARDOUS MATERIALS

IMPACTS AND MITIGATION MEASURES

Impact 3.7-1: The Project has the potential to create a significant hazard through the routine transport, use, or disposal of hazardous materials or through the reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. (less than significant with mitigation)

CONSTRUCTION PHASE

Construction activities associated with development of the Project site may include refueling and minor maintenance of construction equipment on-site which could lead to minor fuel and oil spills. The use and handling of hazardous materials during construction activities would occur in accordance with applicable Federal, State, and local laws including California Occupational Health and Safety Administration (CalOSHA) requirements. Construction activities would be subject to the NPDES permit process which requires the preparation of a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP would be reviewed and approved by the Regional Water Quality Control Board. The proposed construction staging areas and fuel and oil changing locations would be identified in the SWPPP. Small amounts of hazardous materials may be used during operation and maintenance activities associated with future development (i.e. equipment maintenance, fuel, solvents, roadway resurfacing, re-stripping materials, etc.). The use of these materials in the quantities necessary would not result in any significant adverse health or environmental impacts to people in the vicinity of the Project site.

Additionally, construction activities may uncover wells, areas of soil staining, soil odors, buried objects or any other non-soil artifact. Further, the existing well on the southern portion of the Project site must be abandoned pursuant to local regulations.

The hazardous materials used during the construction phase of the Project must comply with federal, state, and local regulations regarding the handling and transportation of such materials, thereby reducing the potential for accidental release of those materials to the environment. Construction activities may uncover an abandoned wells site and areas of soil staining, soil odors, buried objects or any other non-soil artifact.

OPERATIONAL PHASE

The operational phase of the Project will occur after construction is completed and tenants and residents move in to occupy the structures and facilities on a day-to-day basis. Below is discussion of the environmental impacts associated with the various components of the Project throughout the operational phase.

The Project includes a mix of land uses, the majority of which are considered compatible with the surrounding uses. These land uses include: single family residential uses, senior patio homes, open space including drainage facilities, parks and a trail. None of these land uses routinely transport, use, or dispose of hazardous materials, or present a reasonably foreseeable release of hazardous materials, with the exception of common residential grade hazardous materials such as household cleaners, paint, etc.

The senior lodge facility would include facilities for persons in need of assisted living and memory care. This type of facility would dispense medication which would create medical hazardous waste. Any facility or business that generates or stores medical waste onsite is considered to be a medical waste generator in California and must comply with the regulations set forth in the MWMA, including registering with the Sacramento County Department of Environmental Management. In addition, medical waste generators that treat medical waste on the Project site would be required to obtain a completed on-site treatment permit, obtained by submission of an application and the appropriate fees to the California Department of Public Health, Medical Waste Management Program. On-site treatment of medical waste reduces the potential for public exposure during transportation of the waste. Compliance with the regulations established in the MWMA program would ensure that the medical waste and other hazardous materials that would be generated from the Project would not create a significant hazard through the routine transport, use, or disposal of hazardous materials, nor would a significant hazard to the public or to the environment through the reasonably foreseeable upset and accidental conditions involving the likely release of hazardous materials into the environment occur.

CONCLUSION

The City General Plan includes several policies to protect those living in the City from the potential of hazardous waste exposure. Policy SA-2 requires that in considering the potential impact of hazardous facilities on the public and/or adjacent or nearby properties, the City shall consider the hazards posed by reasonably foreseeable events and Policy SA-4 states that the Maximum Acceptable Exposure standards shown in Table SA-A shall be used in determining the appropriateness of siting a facility. This EIR includes analysis of the potential of exposure to hazardous wastes during construction and operation of the Project. Additionally, the Phase I ESA completed for the Project identified that the Project site was free of hazardous waste. Policy SA-8 states that storage of hazardous materials and waste shall be strictly regulated, consistent with state and federal law. The Project is required to conform to local, state and federal law with regards to hazardous material and waste. Policy SA-10 requires that Industries which store and process hazardous or toxic materials shall provide a buffer zone between the installation and the property boundaries sufficient to protect public safety. The Project is not for the development of an industry or business that stores significant amounts of hazardous or toxic materials.

Construction activities associated with development of the Project site may include refueling and minor maintenance of construction equipment on-site which could lead to minor fuel and oil spills. The operational phase of the Project does not pose a significant hazard to the public or the environment. Implementation of the Project would have a less than significant impact relative to this issue.

MITIGATION MEASURES

Mitigation Measure 3.7-1: *All abandoned wells on the Project site shall be destroyed in accordance with the requirements of the Sacramento County Environmental Health Division.*

Timing/Implementation: *Prior to issuance of grading permits and/or approval of improvement plans.*

Enforcement/Monitoring: *City of Elk Grove Public Works Department.*

3.7 HAZARDS AND HAZARDOUS MATERIALS

Mitigation Measure 3.7-2: *If at any time during construction an existing septic system is encountered, the system shall be removed and destroyed in accordance with the requirements of the Sacramento County Environmental Health Division.*

Timing/Implementation: As a condition of Project approval and implemented during all ground-disturbing activities

Enforcement/Monitoring: City of Elk Grove Public Works Department.

Mitigation Measure 3.7-3: *If at any time during construction, soil staining, soil odors, or potentially hazardous non-soil artifacts are encountered, the Applicant shall cease construction in the vicinity of the discovery. The Applicant shall have a licensed geotechnical engineer evaluate the soil conditions and, if potentially hazardous conditions exist, submit recommendations to the City of Elk Grove Public Works Department to address potentially hazardous conditions. Upon acceptance of recommendations by the City, the Applicant shall implement recommendations.*

Timing/Implementation: As a condition of Project approval and implemented during all ground-disturbing activities

Enforcement/Monitoring: City of Elk Grove Public Works Department.

SIGNIFICANCE AFTER MITIGATION

Much of the potential hazard impacts related to construction are controlled by applicable Federal, State, and local laws including California Occupational Health and Safety Administration (CalOSHA) requirements. In addition, construction activities would be subject to the NPDES permit process which requires the preparation of a Storm Water Pollution Prevention Plan (SWPPP). For those undiscovered potential hazards, Mitigation Measures 3.7-1 through 3.7-3 require the removal of these hazards according to the Sacramento County Environmental Health Division or the City of Elk Grove regulations. Implementation of Mitigation Measures 3.7-1 through 3.7-3 will reduce potential hazard impacts to less than significant.

Impact 3.7-2: The Project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. (no impact)

Potential impacts associated with handling hazardous materials, substances, and waste are discussed under Impact 3.7-1. There are no schools within a ¼ mile of the Project site. The nearest school is the Elk Grove Elementary School located at 9373 Crowell Dr., approximately ½ of a mile from the southwestern border of the Project site. No schools are proposed within ¼ of a mile of the Project site. Therefore, there would be no impact to schools within ¼ of a mile of the Project site.

Impact 3.7-3: The Project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. (no impact)

The City of Elk Grove is part of the Sacramento County Multi-Hazard Mitigation Plan (SCMHMP), which addresses natural hazards. The SCMHMP also determined that other than flooding, there are no other mapped, identified natural hazard areas for the City of Elk Grove. Earthquake shaking from distant sources could cause damage in Elk Grove, though damage would probably be minor

due to the relative newness of the building stock and the absence of tall buildings (Sacramento County MHMP 2004, p. 6.4-5).

The City adopted the Sacramento County Area Plan (SCAP), which is used as a guideline for hazardous material related accidents or occurrences. The purpose of the SCAP is "To delineate responsibilities and actions by various agencies in Sacramento County required to meet the obligation to protect the health and welfare of the populace, natural resource (environment), and the public and private properties involving hazardous materials."

The City and the Cosumnes Community Services District Fire Department would implement emergency response measures to address emergency management, including notifications, evacuations, and other necessary measures in the event of an emergency.

The Project provides multiple points of access, as well as emergency access points, that would accommodate evacuation in the event of an emergency. The Project is consistent with the General Plan and would not impede implementation of adopted emergency response plans.

The Project would not impede or conflict with the objectives or policies contained in the SCMDP or the SCAP and there would be no impact.

3.7 HAZARDS AND HAZARDOUS MATERIALS

REFERENCES

California Department of Toxic Substance Control 2013. *EnviroStor Website 2013*. Accessed 2/20/2013.

California State Water Resources Control Board 2013. *GeoTracker, 2013*. Accessed 2/20/2013.

California State Military Museum 2013. <http://www.militarymuseum.org/ElkGroveAuxField.html>. Accessed 6/3/2013.

City of Elk Grove 2003. *City of Elk Grove General Plan*. Elk Grove, California. August 2003.

Sacramento County 2004. Multi-Hazard Mitigation Plan. December 2004. Sacramento, CA.

Wallace-Kuhl & Associates 2011a. *Phase I Environmental Site Assessment (includes supporting EDR reports)*. August 31, 2011.

Wallace-Kuhl & Associates 2011b. *Report of Findings Soil Sampling and Analysis*. August 31, 2011.

This section describes the regulatory setting, regional hydrology and water quality, impacts that are likely to result from Project implementation, and measures to reduce potential significant impacts to hydrology and water quality. The Initial Study completed for the proposed Project determined that the Project would not expose persons or structures to inundation by seiche, tsunami, or mudflow; therefore this subject will not be discussed in this Draft EIR. The reader is referred to the Initial Study for further analysis on this subject.

This section is based in part on the following documents, reports and studies: *Which Lakes, Streams, or Ocean Locations Are Listed By The State As Impaired?* (California Water Quality Control Monitoring Council 2012), *City of Elk Grove General Plan* (City of Elk Grove 2003a), *City of Elk Grove General Plan Environmental Impact Report* (City of Elk Grove 2003b), *Elk Grove General Plan Background Report* (City of Elk Grove 2003c), *Storm Drainage Master Plan, Volume II* (City of Elk Grove 2011a), *Storm Drainage Master Plan Draft Environmental Impact Report* (City of Elk Grove 2011b), *Custom Soil Resource Report for Sacramento County, California* (USDA 2013), *California's Groundwater Update [Sacramento Valley Groundwater Basin, South American Sub-Basin]* (DWR 2006), *About Elk Grove* (Elk Grove Chamber of Commerce 2013), *2010 Urban Water Management Plan* (Elk Grove Water District 2011), *California Lakes and Reservoirs Impaired by Mercury* (State Water Resources Control Board 2012), *Drainage Study for Silverado Village Site Development* (Wood Rodgers 2013), *Ground-Water Quality Data in the Southern Sacramento Valley, California, 2005—Results from the California GAMA Program* (United States Geological Survey (USGS) 2005), *Web Soil Survey* (United States Department of Agriculture (USDA) 2013), and *Geotechnical Engineering Report Elk Ridge Estates*, (Wallace-Kuhl and Associates (WKA) 2003).

Comments related to hydrology, water quality and drainage were received during the NOP/Initial Study comment period. These comments consisted of the following:

- Flooding to the Quail Ranch subdivision, Campbell Road area, and Sheldon Estates subdivision as a result of site development.
- Hydraulic impacts to Laguna Creek.
- Quality of stormwater and runoff.

3.8.1 EXISTING SETTING

REGIONAL HYDROLOGY

Surface Water

The City is located in the Sacramento River Hydrological Region, which covers approximately 17 million acres (27,000 square miles) and extends from the Modoc Plateau and Cascade Range at the Oregon border south to the Sacramento- San Joaquin Delta. The Sacramento River Basin includes the entire area drained by the Sacramento River. For planning purposes, the Sacramento River Basin includes all of the watersheds tributary to the Sacramento area that are north of the Cosumnes River watershed. The City is located in the Morrison Creek Stream Group Drainage Basin. This 192-square-mile drainage basin drains much of the area designated for urban development in the county. Stormwater in most of the basin flows west through Morrison, Laguna,

3.8 HYDROLOGY, WATER QUALITY AND DRAINAGE

Elder, and Elk Grove creeks and other associated creeks to the Beach Stone Lakes basin west of I-5 (Elk Grove 2011b, pg. 3.6-1).

The region includes the Sacramento River, the longest river system in California, and its tributaries. The Sacramento River Hydrological Region is the main water supply for many of California's urban and agricultural areas. The hydrological region normally receives 90 percent of its annual precipitation during the wet season (approximately October to April) with rain in the lower elevations and snow in the higher elevations. Snowmelt occurring in the late spring and early summer months contributes to large stream flows in the spring.

LOCAL DRAINAGE

The City's drainage area encompasses both urbanized and rural areas within the City, which covers over 26,000 acres in the southern portion of Sacramento County. The terrain throughout the City is relatively flat, with natural creeks and channels traversing the area. The eastern portion of the City is predominantly rural, with residences built on large lots where animal raising is common.

The City drains within thirteen major watersheds as shown on Figure 3.8-1. Within the watersheds there are ten major natural creeks or open channels that convey stormwater runoff within the City including: Deer Creek, Whitehouse Creek, Elk Grove Creek, Grant Line Channel, Laguna Creek, Laguna West Channel, Shed A Channel, Shed B Channel, Shed C Channel, and Strawberry Creek. Four of the creeks convey runoff that originates outside of the City limits: Deer Creek, Elk Grove Creek, Laguna Creek, and Strawberry Creek. All of the City watersheds ultimately drain into the Beach Stone Lakes area of the county, with the exception of the Deer Creek and Grant Line Channel watersheds, which drain to Deer Creek and ultimately to the Cosumnes River (City of Elk Grove 2011b, pg. 3.6-1). The Project site drains into Whitehouse Creek which is a tributary of Laguna Creek. These watersheds are described in detail below.

Laguna Creek Watershed - Laguna Creek is the largest stream in the City. Runoff in the watershed flows generally to the southwest until the creek reaches Waterman Road where it bends, flowing to the northwest, toward its confluence with Morrison Creek. The total watershed area, at the confluence of Morrison Creek, is approximately 48 square miles. The headwaters of Laguna Creek begin in the City of Rancho Cordova to the northeast. Laguna Creek flows into the City at Calvine Road, picking up Whitehouse Creek and Elk Grove Creek before leaving the City boundaries near Sheldon Road. The creek then picks up flows from Jacinto Creek within the City of Sacramento City limits and joins Morrison Creek just east of I-5. In Elk Grove, Laguna Creek has been altered by development (City of Elk Grove 2011a, pg. 4-1).

Whitehouse Creek Watershed - Whitehouse Creek drains a watershed with an area of approximately 1,030 acres and is a major tributary to Laguna Creek. The watershed is approximately bounded by SR 99 to the west, Sheldon Road to the north, Waterman Road to the east, and Bond Road to the south. The Creek begins northeast of the intersection of Bond and Waterman roads and flows to the west for approximately 1.5 miles, then turns south and continues for approximately 0.5 miles before joining Laguna Creek 1,200 feet upstream of SR 99 (City of Elk Grove 2011a, pg. 7-1).

SURFACE WATER QUALITY

Potential hazards to surface water quality include the following nonpoint pollution problems: high turbidity from sediment resulting from erosion of improperly graded construction projects, concentration of nitrates and dissolved solids from agriculture or surfacing septic tank failures, contaminated street and lawn run-off from urban areas, and warm water drainage discharges into cold water streams.

The most critical period for surface water quality is following a rainstorm which produces significant amounts of drainage runoff into streams at low flow, resulting in poor dilution of contaminants in the low flowing stream. Such conditions are most frequent during the fall at the beginning of the rainy season when stream flows are near their lowest annual levels. Besides the greases, oils, pesticides, litter, and organic matter associated with such runoff, heavy metals such as copper, zinc, and cadmium can cause considerable harm to aquatic organisms when introduced to streams in low flow conditions.

Urban stormwater runoff was managed as a non-point discharge (a source not readily identifiable) under the Federal Water Pollution Control Amendments of 1972 (PL 92-500, Section 208) until the mid-1980's. However, since then, the Federal Environmental Protection Agency has continued to develop implementing rules which categorize urban runoff as a point source (an identifiable source) subject to National Pollution Discharge Elimination System (NPDES) permits. Rules now affect medium and large urban areas, and further rulemaking is expected as programs are developed to meet requirements of Federal water pollution control laws.

Surface water pollution is also caused by erosion. Excessive and improperly managed grading, vegetation removal, quarrying, logging, and agricultural practices all lead to increased erosion of exposed earth and sedimentation of watercourses during rainy periods. In slower moving water bodies these same factors often cause a buildup of siltation, which ultimately reduces the capacity of the water system to percolate and recharge groundwater basins, as well as adversely affecting both aquatic resources and flood control efforts.

303(d) Impaired Water Bodies: Section 303(d) of the federal Clean Water Act requires States to identify waters that do not meet water quality standards or objectives and thus, are considered "impaired." Once listed, Section 303(d) mandates prioritization and development of a Total Maximum Daily Load (TMDL). The TMDL is a tool that establishes the allowable loadings or other quantifiable parameters for a waterbody and thereby the basis for the States to establish water quality-based controls. The purpose of TMDLs is to ensure that beneficial uses are restored and that water quality objectives are achieved.

According to the California Water Quality Control Monitoring Council, which is part of California Environmental Protection Agency, Natural Resources, there are no impaired water bodies within the vicinity of the Project site. However, within Sacramento County there are ten 303(d) impaired waterbodies. California waters are listed as impaired for uses related to fish or shellfish consumption by humans and which pollutants are involved. Table 3.8-1 identifies waterbodies in Sacramento County which are listed as impaired, including the pollutant of concern and TMDL status.

3.8 HYDROLOGY, WATER QUALITY AND DRAINAGE

TABLE 3.8-1: 303(D) LISTED IMPAIRED WATERBODIES IN SACRAMENTO COUNTY

<i>WATERBODY</i>	<i>AFFECTED AREA</i>	<i>POLLUTANT OF CONCERN</i>	<i>TMDL STATUS</i>
American River, Lower (Nimbus Dam to confluence with Sacramento River)	27 miles	Mercury	Not Started
Delta waterways: Central portion	11,425 acres	Mercury	Completed project report with data and analysis
		DDT, Group A Pesticides	Completed compilation of existing information, identified data needs, developed study plans and engaged stakeholders
Delta waterways: Eastern portion	2,972 acres	Mercury	Completed project report with data and analysis
		DDT, Group A Pesticides	Completed compilation of existing information, identified data needs, developed study plans and engaged stakeholders
Delta waterways: Northern portion	6,795 acres	Mercury	Completed project report with data and analysis
		Polychlorinated Biphenyls (PCBs)	Not Started
		DDT, Group A Pesticides	Completed compilation of existing information, identified data needs, developed study plans and engaged stakeholders
Delta waterways: Western portion	14,524 acres	Mercury	Completed project report with data and analysis
		DDT, Group A Pesticides	Completed compilation of existing information, identified data needs, developed study plans and engaged stakeholders
Lake Natomas	485 acres	Mercury	Not started
Natomas East Main Drainage Canal (aka Steelhead Creek, downstream of Arcade Creek)	3 miles	Polychlorinated Biphenyls (PCBs)	Not started
Natomas East Main Drainage Canal (aka Steelhead Creek, upstream of Arcade Creek)	12 miles	Polychlorinated Biphenyls (PCBs)	Not started
Sacramento River (Knights Landing to the Delta)	16 miles	Mercury	Not started
Sacramento-San Joaquin Delta-	41,736 acres,	Mercury,	USEPA Approved
		Polychlorinated Biphenyls (PCBs)	RWQCB Adopted TMDL
		Chordane, DDT, Dieldrin	Completed data collection and analysis
		Dioxin Compounds (including 2,3,7,8-TCDD), Furan Compounds, PCBs (Polychlorinated biphenyls) (dioxin-like)	Completed definition of project and justification

Source: California Water Quality Control Monitoring Council, CalEPA. 2012

According to the State Water Resources Control Board, there are three lakes in Sacramento County that are impaired. These are:

- Beach Lake, mercury.
- Folsom Lake, mercury.
- Lake Natomas, mercury.

Groundwater

The City is located within the Sacramento Valley Groundwater Basin and South American Sub-basin. This aquifer system underlying the Project site is part of a regional aquifer system that extends beyond Sacramento County into the Central Valley. The South American sub-basin is comprised of continental deposits of Late Tertiary to Quaternary age that are bounded on the east by the Sierra Nevada mountain range, on the west by the Sacramento River, on the north by the American River, and on the south by the Cosumnes and Mokelumne Rivers (DWR 2006, Pg. 1). These perennial rivers generally create a groundwater divide in the shallow subsurface. It is clear that there is interaction between groundwater of adjacent sub-basins at greater depths (DWR 2006, pg. 1). Furthermore, this aquifer system recharges from a combination of sources including stream recharge primarily from the American, Cosumnes, Mokelumne, and Sacramento Rivers, subsurface inflows from adjacent counties, and percolation of rainfall and applied water.

The South American sub-basin aquifer system is comprised of continental deposits of Late Tertiary to Quaternary age. These deposits include Younger Alluvium (consisting of flood basin deposits, dredge tailings, and Holocene stream channel deposits), Older Alluvium, and Miocene/Pliocene Volcanics. The cumulative thickness of these deposits increases from a few hundred feet near the Sierra Nevada foothills on the east to over 2,500 feet along the western margin of the subbasin.

Geologically, the Sacramento Valley is a large trough filled with sediments having variable permeability rates; as a result, wells developed in areas with coarser aquifer materials will produce larger amounts of water than wells developed in fine aquifer materials. In general, well yields in the Sacramento Valley are good and range from one-hundred to several thousand gallons per minute (City of Elk Grove 2008, pg. 4.7-2). As surface water supplies have been so abundant in the Sacramento Valley, groundwater supply primarily supplements the surface water supply. Yet with changing environmental laws and requirements, this balance is shifting to a greater reliance on groundwater, and conjunctive use of both supplies is occurring to a greater extent throughout the Sacramento Valley, particularly in drought years (City of Elk Grove 2008, pg. 4.7-2).

Two aquifer formations underlie the City. The first and shallower aquifer (Laguna Formation) extends 200 to 300 feet below ground level. The second and deeper aquifer (Mehrten Formation) separated from the shallower aquifer by a discontinuous clay layer, averages 1,600 feet thick. Extraction from the South Sacramento groundwater basin has formed a cone-of-depression in the groundwater table centered south of Elk Grove Boulevard between Interstate 5 and SR 99 (City of Elk Grove 2003b, pg. 4.8-9).

3.8 HYDROLOGY, WATER QUALITY AND DRAINAGE

GROUNDWATER QUALITY

Generally, groundwater in the Sacramento Valley has lower dissolved-solids concentrations than other sub regions in the Central Valley, with dissolved-solids concentrations increasing as the depth increases in the aquifer system. Groundwater in predominantly agricultural areas (i.e., southern and eastern portions of the county) can become excessively saline and damaging to crops because evaporation of sprayed irrigation water and evapotranspiration of soil moisture and shallow groundwater leaves behind dissolved salts. As a result, the concentration of salts in the soil and shallow groundwater increases and may reach levels detrimental to plant growth.

Maximum recommended nitrate concentrations for drinking water by the USEPA is 10 milligrams per liter. Some crops may be affected by nitrate concentrations as low as 5 milligrams per liter. Occurrences of nitrate in concentrations of greater than 5 milligrams per liter are sporadic in the City and seem to be confined mainly to the shallow parts of the aquifer. The contamination is usually attributable to local sources, such as septic tanks, feedlots, and dairies (City of Elk Grove 2003b, pg. 4.8-15).

The Ground-Water Ambient Monitoring and Assessment (GAMA) Statewide Basin Assessment project was developed in response to the Ground-Water Quality Monitoring Act of 2001 and is being conducted by the California State Water Resources Control Board (SWRCB) in collaboration with the U.S. Geological Survey (USGS) and the Lawrence Livermore National Laboratory (USGS 2005, pg. 1). The purpose of this report is to present the analytical results and quality-control (QC) analyses for organic, inorganic, and microbial constituents, and general water-quality parameters for ground-water samples collected from 83 wells in the Southern Sacramento Valley GAMA study unit (USGS 2005, pg. 1).

The City is located in the Southern Sacramento Valley study unit (SSACV) for the purposes of the GAMA. The GAMA defined boundaries of the South American (SAM) study area closely match those defined by the Department of Water Resources (DWR) for the "South American Subbasin". Ground-water quality in the approximately 2,100 square-mile Southern Sacramento Valley study unit (SSACV) was investigated from March to June 2005 as part of the Statewide Basin Assessment Project of Ground-Water Ambient Monitoring and Assessment (GAMA) Program. This study was designed to provide a spatially unbiased assessment of raw ground-water quality within SSACV, as well as a statistically consistent basis for comparing water quality throughout California. Samples were collected from 83 wells in Placer, Sacramento, Solano, Sutter, and Yolo Counties. Sixty-seven of the wells were selected using a randomized grid-based method to provide statistical representation of the study area. Sixteen of the wells were sampled to evaluate changes in water chemistry along ground-water flow paths. Four additional samples were collected at one of the wells to evaluate water-quality changes with depth. This study did not evaluate the quality of water delivered to consumers; after withdrawal from the ground, water typically is treated, disinfected, and (or) blended with other waters to maintain acceptable water quality (USGS 2005, pg. 6).

Relative-concentrations (sample concentration divided by the benchmark concentration) were used for evaluating groundwater quality for those constituents that have Federal and (or) California benchmarks for drinking-water quality. Aquifer-scale proportion was used as a metric for evaluating regional-scale groundwater quality. High aquifer-scale proportion is defined as the percentage of the primary aquifers with relative-concentration greater than 1.0 for a particular

constituent or class of constituents; proportion is based on an areal rather than a volumetric basis. Moderate and low aquifer-scale proportions were defined as the percentage of the aquifer with moderate and low relative-concentrations, respectively. Two statistical approaches, grid-based and spatially-weighted, were used to evaluate aquifer-scale proportion for individual constituents and classes of constituents (USGS 2008, pg 60).

Inorganic constituents with health-based benchmarks occurred at high relative-concentrations, in 30 percent of the primary aquifers in the SSACV. The constituent contributing most frequently to these high aquifer-scale proportions was arsenic. Inorganic constituents with non-regulatory, aesthetic/technical-based benchmarks were high in 32 percent of the primary aquifers in the SSACV. The primary constituent contributing to these high aquifer-scale proportions was manganese (USGS 2008, pg 60).

Organic constituents were present at high relative-concentrations in less than 1 percent of the primary aquifers in the SSACV. Moderate relative-concentrations occurred in 2.6 percent in the study area. The detection frequencies for seven organic and special-interest constituents were greater than or equal to 10 percent, atrazine and chloroform, in the SSACV; perchloroethene, and trichloroethene (USGS 2008, pg. 60).

GROUNDWATER RECHARGE

Groundwater in the City occurs in both the upper shallow aquifer zone and in the underlying deeper aquifer zone. The deeper aquifer is composed primarily of the Mehrten Formation and is separated from the shallow aquifer by a discontinuous clay layer. The thickness of the deep aquifer ranges from approximately 200 feet thick in the eastern portion of Sacramento County to over 2,000 feet thick in some of the western portions of the County (City of Elk Grove 2003b, pg. 4.8-9).

As mentioned above, a discontinuous clay layer that is not completely impermeable in some areas separates the shallow and deep aquifers. Therefore, there is a potential for vertical movement of groundwater between the two aquifers. Generally, the movement of groundwater between the aquifers occurs when a head differential exists between the aquifer systems. For instance, if heavy pumping in the deep aquifer reduces the pressure head in this system, then groundwater from the shallow aquifer will be induced to recharge the deeper aquifer. Conversely, if groundwater levels are decreased (by increased pumping) in the shallow aquifer, then the potential exists for the upward movement of groundwater to recharge the shallow aquifer (City of Elk Grove 2003b, pg. 4.8-9).

Recharge to the aquifer system in the Elk Grove area occurs from a combination of three main sources: stream recharge (primarily from the Cosumnes and Sacramento rivers), subsurface inflows from adjacent areas, and percolation of rainfall and applied water. A large area on both sides of the Cosumnes River, as well as, a small portion around the Sacramento River have areas with high to moderate recharge capabilities (see Figure 3.8-2). The majority of the City has poor groundwater recharge capabilities. Groundwater contours in the City are generally ten feet or more below sea level and range from approximately fifty feet below sea level to 30 feet above sea level. The lowest point in the City is located under Bruceville Road, south of Elk Grove Boulevard. The highest point in the City is located generally west of Grant Line Road (City of Elk Grove 2003b, pg. 4.8-9).

3.8 HYDROLOGY, WATER QUALITY AND DRAINAGE

Stormwater

The Sacramento Coordinated Water Quality Monitoring Program (CMP) conducts water quality monitoring on the Sacramento and American rivers to comply with National Pollution Discharge Elimination System (NPDES) permit requirements. The CMP characterizes ambient water quality conditions in the Valley, including the Project area. Most recently, the CMP conducted six sampling events from July 2009 through June 2010. The vast majority of the constituents measured in 2009–2010 indicated compliance with existing water quality objectives from the California Toxics Rule, the Water Quality Control Plan for the Sacramento River Watershed (Basin Plan), and U.S. Environmental Protection Agency (USEPA) criteria for ammonia and *E. coli* bacteria (City of Elk Grove 2011b, pg. 3.6-11).

Exceedances of water quality objectives were observed for a few constituents, including the indicator bacteria *E. coli* and fecal coliform, and the metals total aluminum and total iron. However, occasional exceedances are typical for these constituents, and two of the three events with bacteria exceedances were storm events, when higher bacteria levels are typical. While the total iron and total aluminum exceedances in the Sacramento River are typical, they are not officially considered exceedances because the objectives are based on Title 22 drinking water maximum contaminant levels. Dissolved concentrations were below those objectives. Finally, four polynuclear aromatic hydrocarbons, which are byproducts of fuel burning, were detected at concentrations exceeding their lowest applicable water quality objective (0.0044 µg/L) during one event at one site. Exceedances of such low thresholds are not uncommon in urban waterway. In addition, the City performs regular maintenance on its storm drain system in order to remove waste and associated potential pollutants before they drain to waterways (City of Elk Grove 2011b, pg. 3.6-11).

LOCAL SETTING

The Project site is approximately 230 acres and is located north of Bond Road and west of Waterman Road, as shown on Figure 2-2. The Project site is generally bounded by Waterman Road, vacant land, rural residential uses, and Laguna Creek to the east; Bond Road and single family residential uses to the south; and single family residential development to the west, with a vacant area adjacent to the northwest.

The topography of the Project site slopes from east to west, with a small portion draining towards the southwest corner of the Project site. Whitehouse Creek enters the Project site along the central northern boundary, flowing southwest eventually discharging into the series of bermed ponds along the western side of the Project site. Currently, the bermed ponds receive urban and natural runoff and rainfall from the north, filling to capacity, and discharging via a concrete weir and grassy swale off site to the west. This swale is connected to roadside ditches along Campbell Road and flows through a pond, residential areas, and industrial/commercial areas, eventually connecting with Laguna Creek to the west near State Route 99.

Climate

Precipitation is the principal source of runoff from the Project site. According to the General Plan EIR, the mean annual precipitation for Elk Grove ranges from approximately 15 to 20 inches per year. Most annual rainfall arrives during the winter storm season from November through April.

Snowfall rarely occurs in the Sacramento Valley. More characteristic of the region is the dense fog occurring in mid-winter. Fog usually occurs in the morning hours and may continue for several days in a row if atmospheric conditions are stagnant. The Elk Grove area generally has warm, dry summers and mild winters (City of Elk Grove 2003b, pg 4.8-1). Temperatures of more than 100 degrees Fahrenheit occur nearly every year and temperatures can drop to near freezing during winter months.

Flooding

Flooding events can result in damage to structures, injury or loss of human and animal life, exposure of waterborne diseases, and damage to infrastructure. In addition, standing floodwater can destroy agricultural crops, undermine infrastructure and structural foundations, and contaminate groundwater. Flood zones are geographic areas that the Federal Emergency Management Agency (FEMA) has defined according to varying levels of flood risk. These zones are depicted on a community's Flood Insurance Rate Map (FIRM) or Flood Hazard Boundary Map. Each zone reflects the severity or type of flooding in the area.

The current FEMA flood map for the Project site (FIRM Panel 060767 0336 H, August 16, 2012) shows the bulk of the site in the unshaded Zone X – which are those areas outside the 500-year (0.2% annual chance) floodplain. The large on-site pond is noted as being in Shaded Zone X, which includes the 500-year floodplain and areas in the 100-year floodplain (0.1% annual chance) with average depths less than 1 foot, drainage areas less than 1 square mile, or protected by levees from the 100-year flood. In August 2012, a Letter of Map Revision (LOMR) was issued for properties to the west of the Project site. This revision included those areas in the southwest and western portions of the Project site that were in the AE Zone and changed them to unshaded X Zone. See Figures 3.8-3a and 3.8-3b for the flood zones and resulting changes due to the LOMR.

TABLE 3.8-2: DEFINITIONS OF FEMA FLOOD ZONE DESIGNATIONS

ZONE	DESCRIPTION
MODERATE TO LOW RISK AREAS	
X (shaded)	Area of moderate flood hazard, usually the area between the limits of the 100-year and 500-year floods. Are also used to designate base floodplains of lesser hazards, such as areas protected by levees from 100-year flood, or shallow flooding areas with average depths of less than one foot or drainage areas less than 1 square mile.
X (unshaded)	Area of minimal flood hazard, usually depicted on FIRMs as above the 500-year flood level.

Source: FEMA Available at: <https://msc.fema.gov>

Drainage

The majority of the existing onsite runoff areas contribute to flows within the Whitehouse Creek watershed and natural stream system downstream, with a small portion draining to existing Bond Road drainage infrastructure (Wood Rogers 2013, pg. 1).

The Project site is located near the upstream end of the Whitehouse Creek watershed, with only a small tributary area located further upstream, to the north of the Project site. Waterman Road to the east of the Project site serves as a shed divide, directing runoff east of Waterman Road into the Laguna Creek watershed. The northwest corner of the intersection of Bond Road and Waterman Road is not part of the proposed development and is shown to be draining directly into Laguna Creek; however, the existing development just north of this property does drain westward

3.8 HYDROLOGY, WATER QUALITY AND DRAINAGE

away from Waterman Road and through the Project site. The southwest portion of the Project site drains to Bond Road and is tributary to Laguna Creek. This low area does not have a piped inlet and, during peak events, storm water will spill over onto Bond Road at the southwest corner of the Project site and enter the existing Bond Road drainage system. This low area was essentially land-locked by development to the west and improvements to Bond Road to the south (Wood Rodgers 2013, pg. 2).

The main portion of the Project site discharges to Whitehouse Creek approximately 1,000 feet upstream of the Campbell Road culvert crossing. A portion of the Project site to the north naturally flows through a series of man-made ponds, which have been filling and overflowing freely over the past several years with no known operation or maintenance. These ponds historically acted as evaporation ponds and are relatively shallow features with small non-engineered containment berms on the low side of the features. Central to the Project site is a larger pond that appears to be originally designed to provide some level of detention for run-off, with the run-off leaving the Project site to the west. The berms on the low side of the basin are small and appeared to be non-engineered structures. All of the ponds onsite fill up at the beginning of the wet season and remain full during the majority of the season. For this reason, they provide little to no reduction for down stream flows (Wood Rodgers 2013, pg. 2).

3.8.2 REGULATORY SETTING

There are a number of regulatory agencies whose responsibility includes the oversight of the water resources of the State and nation, including the Federal Emergency Management Agency, the US Environmental Protection Agency, the State Water Resources Control Board, and the Regional Water Quality Control Board. The following is an overview of the federal, State, and local regulations that are applicable to the Project.

FEDERAL AND STATE

Clean Water Act (CWA)

The Clean Water Act (CWA), initially passed in 1972, regulates the discharge of pollutants into watersheds throughout the nation. Section 402(p) of the act establishes a framework for regulating municipal and industrial stormwater discharges under the National Pollutant Discharge Elimination System (NPDES) Program. Section 402(p) requires that stormwater associated with industrial activity that discharges either directly to surface waters or indirectly through municipal separate storm sewers must be regulated by an NPDES permit.

The State Water Resources Control Board (SWRCB) is responsible for implementing the Clean Water Act and does so through issuing NPDES permits to cities and counties through regional water quality control boards. Federal regulations allow two permitting options for stormwater discharges (individual permits and general permits). The SWRCB elected to adopt a statewide general permit (Water Quality Order No. 2003-0005-DWQ) for small MS4s covered under the CWA to efficiently regulate numerous stormwater discharges under a single permit. Permittees must meet the requirements in Provision D of the General Permit, which require the development and implementation of a Stormwater Management Plan (SWMP) with the goal of reducing the

discharge of pollutants to the maximum extent practicable. The SWMP must include the following six minimum control measures:

- 1) Public Education and Outreach on Stormwater Impacts
- 2) Public Involvement/Participation
- 3) Illicit Discharge Detection and Elimination
- 4) Construction Site Stormwater Runoff Control
- 5) Post-Construction Stormwater Management in New Development
- 6) Redevelopment and Pollution Prevention/Good Housekeeping for Municipal Operations

Federal Emergency Management Agency (FEMA)

Sacramento County is a participant in the National Flood Insurance Program (NFIP), a Federal program administered by FEMA. Participants in the NFIP must satisfy certain mandated floodplain management criteria. The National Flood Insurance Act of 1968 has adopted as a desired level of protection, an expectation that developments should be protected from floodwater damage of the Intermediate Regional Flood (IRF). The IRF is defined as a flood that has an average frequency of occurrence on the order of once in 100 years, although such a flood may occur in any given year. Communities are occasionally audited by the Department of Water Resources to insure the proper implementation of FEMA floodplain management regulations.

California Water Code

The Federal Clean Water Act places the primary responsibility for the control of surface water pollution and for planning the development and use of water resources with the states, although this does establish certain guidelines for the States to follow in developing their programs and allows the Environmental Protection Agency to withdraw control from states with inadequate implementation mechanisms.

California's primary statute governing water quality and water pollution issues with respect to both surface waters and groundwater is the Porter-Cologne Water Quality Control Act of 1970 (Division 7 of the California Water Code) (Porter-Cologne Act). The Porter-Cologne Act grants the SWRCB and each of the RWQCBs power to protect water quality, and is the primary vehicle for implementation of California's responsibilities under the Federal Clean Water Act. The Porter-Cologne Act grants the SWRCB and the RWQCBs authority and responsibility to adopt plans and policies, to regulate discharges to surface and groundwater, to regulate waste disposal sites and to require cleanup of discharges of hazardous materials and other pollutants. The Porter-Cologne Act also establishes reporting requirements for unintended discharges of any hazardous substance, sewage, or oil or petroleum product.

Each RWQCB must formulate and adopt a water quality control plan (Basin Plan) for its region the regional plans are to conform to the policies set forth in the Porter-Cologne Act and established by the SWRCB in its State water policy. The Porter-Cologne Act also provides that a RWQCB may include within its regional plan water discharge prohibitions applicable to particular conditions, areas, or types of waste.

3.8 HYDROLOGY, WATER QUALITY AND DRAINAGE

The Water Code Section 13260 requires all dischargers of waste that may affect water quality in waters of the state to prepare a water quality discharge report to the RWQCB. Section 13260a-c is as follows:

“(a) Each of the following persons shall file with the appropriate regional board a report of the discharge, containing the information that may be required by the regional board:

(1) A person discharging waste, or proposing to discharge waste, within any region that could affect the quality of the waters of the state, other than into a community sewer system.

(2) A person who is a citizen, domiciliary, or political agency or entity of this state discharging waste, or proposing to discharge waste, outside the boundaries of the state in a manner that could affect the quality of the waters of the state within any region.

(3) A person operating, or proposing to construct, an injection well.

(b) No report of waste discharge need be filed pursuant to subdivision (a) if the requirement is waived pursuant to Section 13269.

(c) Each person subject to subdivision (a) shall file with the appropriate regional board a report of waste discharge relative to any material change or proposed change in the character, location, or volume of the discharge.”

National Pollutant Discharge Elimination System (NPDES)

NPDES permits are required for discharges of pollutants to navigable waters of the United States, which includes any discharge to surface waters, including lakes, rivers, streams, bays, the ocean, dry stream beds, wetlands, and storm sewers that are tributary to any surface water body. NPDES permits are issued under the Federal Clean Water Act, Title IV, Permits and Licenses, Section 402 (33 USC 466 et seq.)

The RWQCB issues these permits in lieu of direct issuance by the Environmental Protection Agency, subject to review and approval by the Environmental Protection Agency Regional Administrator. The terms of these NPDES permits implement pertinent provisions of the Federal Clean Water Act and the Act’s implementing regulations, including pre-treatment, sludge management, effluent limitations for specific industries, and anti- degradation. In general, the discharge of pollutants is to be eliminated or reduced as much as *practicable* so as to achieve the Clean Water Act’s goal of “fishable and swimmable” navigable (surface) waters. Technically, all NPDES permits issued by the RWQCB are also Waste Discharge Requirements issued under the authority of the CWC.

These NPDES permits regulate discharges from publicly owned treatment works, industrial discharges, stormwater runoff, dewatering operations, and groundwater cleanup discharges. NPDES permits are issued for five years or less, and are therefore to be updated regularly. The rapid and dramatic population and urban growth in the Central Valley Region has caused a significant increase in NPDES permit applications for new waste discharges. To expedite the permit issuance process, the RWQCB has adopted several general NPDES permits, each of which regulates

numerous discharges of similar types of wastes. The SWRCB has issues general permits for stormwater runoff from construction sites statewide. Stormwater discharges from industrial and construction activities in the Central Valley Region can be covered under these general permits, which are administered jointly by the SWRCB and RWQCB.

Water Quality Control Plan for the Sacramento River and San Joaquin River Basins

The Water Quality Control Plan for the Sacramento River and San Joaquin River Basins (Basin Plan) includes a summary of beneficial water uses, water quality objectives needed to protect the identified beneficial uses, and implementation measures. The Basin Plan establishes water quality standards for all the ground and surface waters of the region. The term “water quality standards,” as used in the Federal Clean Water Act, includes both the beneficial uses of specific water bodies and the levels of quality that must be met and maintained to protect those uses. The Basin Plan includes an implementation plan describing the actions by the RWQCB and others that are necessary to achieve and maintain the water quality standards.

The RWQCB regulates waste discharges to minimize and control their effects on the quality of the region’s ground and surface water. Permits are issued under a number of programs and authorities. The terms and conditions of these discharge permits are enforced through a variety of technical, administrative, and legal means. Water quality problems in the region are listed in the Basin Plan, along with the causes, where they are known. For water bodies with quality below the levels necessary to allow all the beneficial uses of the water to be met, plans for improving water quality are included. The Basin Plan reflects, incorporates, and implements applicable portions of a number of national and statewide water quality plans and policies, including the California Water Code and the Clean Water Act.

LOCAL

City of Elk Grove General Plan

The City of Elk Grove General Plan contains the following goals and policies that are relevant to hydrology and water quality aspects of the Project:

Policy CAQ-1 Reduce the amount of water used by residential and non-residential uses by encouraging water conservation.

Policy CAQ-5 Roads and structures shall be designed, built and landscaped so as to minimize erosion during and after construction.

Policy CAQ-12 The City shall seek to ensure that the quality of groundwater and surface water is protected to the extent possible.

Policy CAQ-13 Implement the City’s NPDES permit through the review and approval of development projects and other activities regulated by the permit.

Policy CAQ-18 Post–development peak storm water runoff discharge rates and velocities shall be designed to prevent or reduce downstream erosion, and to protect stream habitat.

3.8 HYDROLOGY, WATER QUALITY AND DRAINAGE

Policy CAQ-19 Encourage the retention of natural stream corridors and the creation of natural stream channels where improvements to drainage capacity are required.

Policy CAQ-20 Fill may not be placed in any 100-year floodplain as delineated by currently effective FEMA Flood Insurance Rate Maps or subsequent comprehensive drainage plans unless specifically approved by the City. No fill shall be permitted in wetland areas unless approved by the City and appropriate state and federal agencies.

City of Elk Grove Municipal Code

STORMWATER MANAGEMENT AND DISCHARGE CONTROL, CHAPTER 15.12

The intent of the Stormwater Management and Discharge Control Chapter (City Municipal Code, Chapter 15.12) is to protect and enhance the water quality of watercourses, water bodies and wetlands within the City in a manner consistent with the federal CWA, the Porter-Cologne Water Quality Control Act, and the NPDES permit by controlling the contribution of urban pollutants to stormwater runoff which enters the City's drainage conveyance system.

Chapter 15.12 of the City Municipal Code provides the City with the legal authority to accomplish the following goals:

- To reduce the discharge of pollutants in stormwater to the maximum extent practicable; To effectively prohibit non-stormwater discharges into the City drainage conveyance system;
- To comply with the requirements of the federal CWA, the Porter-Cologne Water Quality Control Act, and the NPDES permit as they apply to the discharge of pollutants into and from the City drainage conveyance system;
- To fully implement a comprehensive Stormwater Quality Management Program as approved by the RWQCB; To protect the physical integrity and function of the City drainage conveyance system from the effects of pollutants and materials other than stormwater;
- To prevent the contamination of groundwater as a result of pollution migration from the City drainage conveyance system;
- To promote cost-effective management and beneficial use of sediments in the City drainage conveyance system;
- To protect the health and safety of maintenance personnel and the public who may be exposed to pollutants in the City drainage conveyance system;
- To provide for the recovery of regulatory costs incurred by the City in the implementation of its Stormwater Quality Management Program, including, but not limited to, enforcement activities, inspections, investigations, sampling, and monitoring; and
- To establish appropriate enforcement procedures and penalties for violations.

LAND GRADING AND CONTROL, CHAPTER, 16.44

The City regulates land grading and erosion in order to minimize damage to surrounding properties and public right-of-way, the degradation of the water quality of watercourses, and the disruption

of natural drainage flows. The Land Grading and Erosion Control Chapter (City Municipal Code, Chapter 16.44) establishes administration procedures, minimum standards of review, and implementation and enforcement procedures for controlling erosion, sedimentation, and other pollutant runoff associated with construction activities.

ZONING, TITLE 23

Whereas the City's General Plan describes land use in a broad sense, its Zoning (Title 23 of the Municipal Code) more specifically describes the zone classification and associated allowable uses for each piece of property in the City. For each zone classification, standards such as minimum lot size, maximum building height, building setbacks, and maximum lot coverage are specified. Prior to building permit issuance, the project proponent must demonstrate that the proposal complies with the applicable zoning requirements. Zoning Title 23 also promotes water quality protection. Zoning Title 23 can indirectly affect water quality; for example, limits on lot coverage result in more vegetated areas to infiltrate and filter runoff and less impervious surface. Zoning Title 23 also specifies water quality treatment requirements for parking lots such as vegetated swales in landscape areas between parked cars or might require the use of pervious pavement.

CITY OF ELK GROVE WATER USE AND CONSERVATION

The Water Use and Conservation Ordinance codified in the City Municipal Code, Chapter 14.10 defines the standards and procedures for the design, installation, and management of landscapes in order to utilize available plant, water, land, and human resources to the greatest benefit of the people of Elk Grove. The ordinance applies to new and rehabilitated landscaping for industrial, commercial, and institutional developments; to parks and other public recreational areas; to multi-family residential, common areas and model homes; and City road medians and corridors, recognizing that skillful planting and irrigation design, appropriate use of plants, and intelligent landscape management can assure landscape development that avoids excessive water demands and that is less vulnerable to periods of severe drought.

City of Elk Grove Floodplain Management Policy

The City's Floodplain Management Policy (Resolution No. 2001-48) (City of Elk Grove 2001) regulates floodplain management activities such as setting construction standards in flood prone areas and establishing permitting and floodplain mapping criteria as required for participation in the National Flood Insurance Program (NFIP). The purpose of this policy is to:

- Protect the life, health, and safety of the residents of the community;
- Protect buildings and property from damage due to flooding;
- Moderate the impact of new development on others;
- Minimize expenditure of public money for costly flood control projects;
- Minimize the need for rescue and relief efforts associated with flooding which are generally undertaken at the expense of the general public;
- Minimize prolonged business interruptions;
- Minimize damage to public facilities located in special flood and local flood hazard areas;

3.8 HYDROLOGY, WATER QUALITY AND DRAINAGE

- Ensure that current flood hazard data is available for property owners, prospective buyers, insurance agents, real estate agents, and other interested parties;
- Ensure that those who develop in special flood or local flood hazard areas do so pursuant to the Floodplain Management Policy;
- Ensure that those who develop in special flood or local flood hazard areas assume responsibility for their actions;
- Preserve the natural characteristics and functions of watercourses and floodplains to moderate flood and drainage impacts, improve water quality, and preserve aquatic/riparian habitat; and
- Make federally subsidized flood insurance available to residents in the City by fulfilling the requirements of the National Flood Insurance Program (NFIP).

In addition to help reduce flood losses, the City implements the following:

- Restricts or prohibits development which is dangerous to health, safety, and property due to flood hazards;
- Controls the alteration of natural floodplains, stream channels, and natural protective barriers;
- Controls filling, grading, dredging, and other development which may increase flood damage; and
- Prevents or regulate the construction of flood barriers which will unnaturally divert floodwater or which may increase flood hazards in other areas.

3.8.3 IMPACTS AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE

The potential for exposure of persons or structures to inundation by seiche, tsunami, or mudflow was determined to be of no impact in the Initial Study prepared for this Project. Therefore these topics will not be discussed in this EIR. The reader is referred to the Initial Study for a discussion of these topics.

Consistent with Appendix G of the CEQA Guidelines, the Project will have a significant impact on the environment associated with hydrology and water quality if it will:

- Violate any water quality standards or waste discharge requirements;
- Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of preexisting nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted;

- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion, siltation, run-off or flooding on- or off-site;
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site;
- Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff;
- Otherwise substantially degrade water quality;
- Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map;
- Place within a 100-year flood hazard area structures that would impede or redirect flood flows.

IMPACTS AND MITIGATION

Impact 3.8-1: The Project could result in water quality impacts associated with erosion, siltation, or pollution, including the potential to violate water quality standards or waste discharge requirements during construction. (less than significant with mitigation)

Construction activities would consist of substantial grading and vegetation removal activities, which would increase soil erosion rates on the areas proposed for development. Although the Project site is relatively flat and the potential for soil erosion is considered low, peak storm water runoff could result in short-term sheet erosion in areas of exposed, raw soil. In addition, the compaction of soils by heavy equipment could reduce the infiltration capacity of the soils thereby increasing the runoff and erosion potential. If uncontrolled, the soil materials could result in engineering problems, blockage of drainage channels, and downstream sedimentation.

Vegetation removal and earth-moving activities associated with Project construction may have the greatest potential for detrimental impacts to surface water quality associated with Whitehouse Creek and the removal of vegetation during Project construction could expose site soils to rainsplash, sheetflow and gully erosion prior to successful revegetation. The cleared, exposed surfaces and soil stockpiles created during construction could create sedimentation in downstream waters. Fuels, lubricants, and other toxic materials used during construction could also potentially enter surface waters. As required by the Clean Water Act, each phase of construction will require an approved Stormwater Pollution Prevention Plan (SWPPP) that includes best management practices for grading, and preservation of topsoil. The project proponent or contractor is required to submit the SWPPP with a Notice of Intent to the Regional Water Quality Control Board (RWQCB) to obtain a General Permit. The RWQCB is an agency responsible for reviewing the SWPPP with the Notice of Intent, prior to issuance of a General Permit for the discharge of stormwater during construction activities.

3.8 HYDROLOGY, WATER QUALITY AND DRAINAGE

The City General Plan has a number of policies which assist in the protection of water quality during the construction phase of the Project. Policy CAQ-5 requires roads and structures be designed, built and landscaped to minimize erosion during and after construction. Policy CAQ-13 requires that the City's NPDES permit be implemented through the review and approval of development projects and other activities regulated by the permit. Policy CAQ-18 requires that post-development peak storm water runoff discharge rates and velocities shall be designed to prevent or reduce downstream erosion, and to protect stream habitat. The City's Municipal Code Chapters 15.12, and 16.44, as well as Title 23 have been established to enforce the water quality regulations of the City. The Drainage Study prepared for the Project does not describe the specific measures that will be taken to ensure compliance with the General Plan policies and adopted City regulations. Implementation of the Project could result water quality impacts associated with erosion or pollution, including the potential to violate water quality standards or waste discharge requirements during construction and, as such, result in a potentially significant impact.

MITIGATION MEASURES

Implement Mitigation Measure 3.5.1.

SIGNIFICANCE AFTER MITIGATION

Mitigation Measure 3.5.1 presented in the Geology and Soils section of this DEIR requires the Project applicant to submit a Notice of Intent (NOI) and Storm Water Pollution Prevention Plan (SWPPP) to the RWQCB in accordance with the NPDES General Construction Permit requirements. Mitigation Measures 3.5.1 and 3.5.2 would result in the Project being designed, built, and landscaped to minimize erosion. Implementation of Mitigation Measure 3.5.1 would ensure that post-development peak storm water runoff discharge rates and velocities are designed to prevent or reduce downstream erosion and protect stream habitat. Implementation of the Mitigation Measure 3.5.1 would ensure consistency with the regulatory requirements and ensure that the Project would have a **less than significant** impact on construction-related water quality.

Impact 3.8-2: The Project could result in water quality impacts associated with erosion, siltation, or pollution, including the potential to violate water quality standards or waste discharge requirements during operation. (less than significant with mitigation)

The long-term operations of the Project could result in long-term impacts to surface water quality from urban stormwater runoff. The Project would result in new impervious areas associated with roadways, driveways, parking lots, buildings, and landscape areas. Normal activities in these developed areas include the use of various automotive petroleum products (i.e. oil, grease, fuel), household hazardous materials, heavy metals, pesticides, herbicides, fertilizers, and sediment. Within urban areas, these pollutants are generally called nonpoint source pollutants. The pollutant levels vary based on factors such as time between storm events, volume of storm event, type of uses, and density of people.

The City General Plan has a number of policies which assist in the protection of water quality. Policy CAQ-1 requires the reduction of the amount of water used by residential and non-residential uses by encouraging water conservation. The Project is required to comply with Water Use and Conservation, Chapter 14.10 of the City Municipal Code. Policy CAQ-5 requires roads and

structures be designed, built and landscaped to minimize erosion during and after construction. The Project would be subject to the City's Grading and Erosion Control Ordinance Policy CAQ-12 requires the City to ensure that the quality of groundwater and surface water is protected to the extent possible. Policy CAQ-13 requires that the City's NPDES permit be implemented through the review and approval of development projects and other activities regulated by the permit.

The Project has an approved and valid United States Army Corp of Engineers (USACE) 404 permit (No. SPK-2001-00584) and 401 certification, dated April 2008. This permit outlines the allowable modifications jurisdictional wetlands that will be the primary water quality treatment areas and flood control structure for the Project. The existing earthen berms that currently contain this jurisdictional wetlands will be reconstructed to modern construction standards to provide the necessary water quality (WQ) and Flood Control storage volumes need by the Project. These proposed modifications are consistent with the approved 404 permit (Wood Rodgers 2013, pg. 3).

There is also an approved designation by the State Water Resources Control Board that requires treatment of the southwest portion of the Project site that is planned to drain into the Bond Road storm drainage system. In accordance with this ruling, the Project applicant's engineer, Wood Rodgers, proposes the use of a filter before discharging to the Bond Road drainage system, as described on page 10 of the October 23, 2007 letter from the California Regional Water Quality Control Board Central Valley Region (Wood Rodgers 2013, pg. 3).

The undeveloped areas designated as wetlands in the northern portion of the Project site will be set aside as open space and will remain undeveloped. The Drainage Study prepared for the Project describes the proposed drainage and water quality features (Appendix D). The main central detention basin will be improved to operate as a WQ treatment area under low-flow conditions, and reconfigured to drain operationally as a stormwater detention facility under higher-flow events. The water quality treatment will be achieved utilizing a variety of low-impact development measures outlined in the City's adopted Stormwater Quality Design Manual for the Sacramento and South Placer Regions. Those measures include the incorporation of water quality basins. These areas will meet all current standards for stormwater quality upon final design and be designed to either infiltrate, evaporate, or outlet overland after passing through appropriately sized pond/swale configurations. There is more than sufficient area available in the central detention basin footprint to achieve the required treatment volume retention and contact time (Wood Rodgers 2013, pg. 5).

The areas to the west of the central detention basin and north of the flood outlet works will have a dedicated wet water quality treatment pond. The developed acreage tributary to this dedicated pond is 9.4 acres. The remaining acreage to the east and south of the proposed detention basin will drain into a second, larger water quality treatment pond in the southeast portion of the overall detention basin (Wood Rodgers 2013, pg. 5).

The undeveloped areas to the north of the proposed development will be directed through a dedicated swale to keep this runoff separate from the storm water quality treatment areas with a sinuous path to the detention basin outlet works. The remaining majority of the Project site is approximately 100.6 acres, and will have a permanent pool and overflow configured in the southeast portion of the overall detention area. Low flows and drawdown discharges will be directed to the main outlet and steered using very small berms, approximate 0.1 to 0.2 feet high.

3.8 HYDROLOGY, WATER QUALITY AND DRAINAGE

The southwest corner of the Project site is tributary to Laguna Creek and will utilize conventional sand oil interceptor to treat flows prior to entering the existing Bond Road drainage system. This treatment approach is consistent with the 404 permit and 401 water quality certification that have been issued for the Project (Wood Rodgers 2013, pg. 6).

While the Drainage Study prepared for the Project identifies several components of the approach to addressing potential pollutants, it does not identify the full range of measures that will be implemented by the Project to ensure that water quality requirements are met. Therefore, the Project has the potential to result in water quality impacts associated with erosion, siltation, or pollution and this impact is potentially significant.

MITIGATION MEASURES

Implement Mitigation Measure 3.5.2.

SIGNIFICANCE AFTER MITIGATION

Mitigation measure 3.5.2 requires the Project applicant to prepare and submit a Post-Construction Stormwater Quality Control Plan in accordance with the most recent version of the Stormwater Quality Design Manual for the Sacramento Region. Post-construction source and treatment controls shall be designed in accordance with the City of Elk Grove Improvement Standards and the Stormwater Quality Design Manual.

As described above, there are water quality treatment facilities incorporated into the design of the Project (water quality treatment ponds and a conventional sand oil interceptor). These facilities are consistent with the 404 permit and 401 water quality certification that have been issued for the Project. Additionally implementation of Mitigation Measure 3.5.2 requires the Project Applicant to prepare and submit a Post-Construction Stormwater Quality Control Plan. Therefore, the Project would have a **less than significant** impact on long-term water quality.

Impact 3.8.3: The Project would not significantly deplete groundwater supplies nor interfere substantially with groundwater recharge. (less than significant)

(Note: The following discussion is associated with potential impacts of the Project on groundwater as it relates to stormwater infiltration and groundwater recharge. Depletion of groundwater supplies as it relates to water usage is addressed in Section 3.13.)

The Project would result in new impervious surfaces and could reduce rainwater infiltration and groundwater recharge. Infiltration rates vary depending on the overlying soil types. In general, sandy soils have higher infiltration rates and can contribute to significant amounts of ground water recharge; clay soils tend to have lower percolation potentials; and impervious surfaces such as pavement significantly reduce infiltration capacity and increase surface water runoff.

Recharge to the aquifer system in the Elk Grove area occurs from a combination of three main sources: stream recharge (primarily from the Cosumnes and Sacramento rivers), subsurface inflows from adjacent areas, and percolation of rainfall and applied water. A large area on both sides of the Cosumnes River, as well as, a small portion around the Sacramento River have areas with high to moderate recharge capabilities. The majority of the Elk Grove area, including the

Project site, has poor groundwater recharge capabilities as shown on Figure 3.8-2. The static groundwater table in the vicinity of the Project site is approximately 80 feet or more below grade (Wallace-Kuhl 2003, p. 3).

The Elk Grove Water District (EGWD) and the Sacramento County Water Agency (SCWA) pump groundwater from the South American Subbasin. The groundwater basins underlying the Sacramento County have been divided into three geographic subareas: (1) North Basin, (2) Central Basin, and (3) South Basin. EGWD overlies and extracts groundwater from the Central Basin from seven wells that range in total depth from 450 to 1,075 feet below ground surface. According to the EGWD Urban Water Management Plan, the Central Basin is not adjudicated or considered to be in a state of being over drafted. Due to the active planning by water agencies, the basin is not foreseen to be over drafted in the future (EGWD, pg. 22).

Groundwater use is regularly monitored within the Sacramento County region. The Sacramento Groundwater Authority (SGA) Basin Management Report that was prepared in 2007-2008, found that groundwater use in the Central Basin, where EGWD is located, has remained relatively constant at approximately 262,500 AFY during the preceding four years and had a high of 264,860 in 2008. In communication with the other groundwater users from the basin (SCWA, the Golden State Water Company, and the California American Water Company), it is not anticipated that groundwater extraction would have increased in the years of 2009 or 2010, given the dramatic decline in home construction and the depressed local economy. This would indicate a remaining groundwater capacity of approximately 8,140 AFY in regards to the agreed upon sustainable yield of 273,000 AFY for the Central Basin stakeholders (EGWD, pg. 22).

As is shown in Figure 3.8-2, the Project site is located in an area that is considered to have poor groundwater recharge capabilities due infiltration rates. As such, groundwater recharge is less than optimal. The water supplier, EGWD, has determined that the groundwater basin will not be over drafted in the foreseeable future. For these reasons, the Project would not cause the depletion of groundwater supplies or interfere substantially with groundwater recharge. As such, implementation of the Project would have a **less than significant** impact regarding this issue.

Impact 3.8-4: The Project would alter the existing drainage pattern in a manner which would not result in flooding, but could create or contribute runoff in excess of the capacity of stormwater drainage systems. (less than significant with mitigation)

As described previously, the topography of the Project site slopes from east to west, with a small portion draining towards the southwest corner of the Project site.

The Project proposes drainage features to ensure that runoff would not result in downstream flooding. Water quality, including potential impacts associated with erosion, siltation, and pollution, are discussed under Impacts 3.8-1 and 3.8-2.

On-Site Detention – Project Areas Tributary to Whitehouse Creek

Drainage from areas within the Project site that are tributary to Whitehouse Creek would be directed to the existing main central detention basin area. Under existing conditions, the basin area sits full during large storm events, overtopping and spilling into the downstream channel

3.8 HYDROLOGY, WATER QUALITY AND DRAINAGE

system. The *Preliminary Drainage Study* prepared for the Project by Wood Rodgers calculated the increase in storm water elevations that would occur with development of the Project. The Preliminary Drainage Study found that the 100-year flood condition would produce a maximum water surface elevation in the central detention basin of 45.3 feet. In order to accommodate the increased water surface elevation, the central drainage basin and associated berms would need to be improved. While essentially maintaining a similar footprint, the berms would be engineered and reconstructed vertically to reserve flood storage above 43 feet elevation up to 45.3 feet.

The proposed outlet will be configured to attenuate storm events by constructing four 12-inch outlet pipes with an invert elevation of 43 feet embedded in a 40-foot weir with a crest elevation of 44 feet. Downstream of this tiered outlet control would be a large box culvert crossing with a 20-foot bottom under the proposed roadway to the west of the detention basin, having an invert elevation just below 43 feet, as shown on Figure 3.5-4.

Under pre-development conditions, the Project site would result in a peak discharge of 217 cubic feet per second during a 100-year flood event. Implementation of the Project, including the proposed drainage improvements, would result in a peak discharge of 192.5 cubic feet per second during a 100-year flood event (Spokely 2013). The Project would result in a decrease in peak discharge during storm events. Impacts associated with project areas that are tributary to Whitehouse Creek are **less than significant**.

Bond Road Drainage – Project Areas Tributary to Laguna Creek

Drainage from the portion of the southwest corner of the Project site that is tributary to Laguna Creek, including the proposed residential lots adjacent to the Quail Ranch subdivision, would be directed to the Bond Road Trunk pipe and would be conveyed to Laguna Creek. The analysis of the Bond Road Trunk drainage improvements and resulting impacts to Laguna Creek performed by the West Yost Associates is summarized in the *Preliminary Drainage Study* prepared for the Project by Wood Rodgers.

West Yost Associates determined that the increased flows in the Bond Road trunk pipe would not have a significant effect on Laguna Creek. While the Project would result in a 4% increase in the Laguna Creek flow while the Bond Road trunk pipe is at peak flows, the Bond Road trunk pipe is located in the lower part of the Laguna Creek watershed. Therefore, the Bond Road trunk pipe will peak well before Laguna Creek reaches peak flows. At the time Laguna Creek is at peak flow, the flows in the Bond Road trunk pipe, including flows from the Project site, will have receded. Thus, any changes in Laguna Creek flows associated to the Bond Road trunk pipe are negligible.

While the effects on Laguna Creek would be negligible, there are existing deficiencies in the Bond Road drainage system identified in the City's Drainage Master Plan. The City wide Drainage Master Plan dated June 2011 identified existing deficiencies in the trunk drainage system in Bond Road. In this study there was a portion of the Project Site that was tributary to the Bond Road Trunk Drainage System that was excluded from the approved plan. The City has confirmed that this area should be added to the Bond Road Trunk Drainage System.

As described above, the Project would not result in significant increases in flow to Whitehouse Creek and Laguna Creek. By conveying Project drainage to the on-site central detention basin and to the Bond Road trunk pipe, the Project would not result in increases in run-off to adjacent

properties. However, the existing Bond Road drainage system has deficiencies that require mitigation. Impacts to the Bond Road trunk pipe are **potentially significant**.

MITIGATION MEASURES

Mitigation Measure 3.8-1: *Prior to approval of grading and improvement plans for the lots in Village 1-A that are served by the Bond Road Trunk Drainage System, the Project Applicant shall enter into an agreement with the City to fund the fair-share cost for the incremental increase in the Bond Road Trunk Drainage system that needed to accommodate the Project. The incremental increase shall be calculated based on any additional amount above the previously identified upsizing required for the Bond Road Trunk Drainage System in the City's Master Drainage Plan. The agreement shall identify the timing for the drainage system improvements and shall require that no building permits be issued for the Lots in Village 1-A that are served by the Bond Road Trunk Drainage System Improvements until such improvements have been completed.*

Timing/Implementation: *Prior to issuance of grading permits and/or approval of improvement plans for the lots in Village 1-A that are served by the Bond Road Trunk Drainage System.*

Enforcement/Monitoring: *City of Elk Grove Public Works Department.*

Implementation of Mitigation Measure 3.8-1 would ensure that the Project contributed its fair-share to the cost of the necessary Bond Road Trunk Drainage improvements that are needed to accommodate the Project. Implementation of Mitigation Measure 3.8-1 would reduce potential impacts to the existing drainage pattern to less than significant.

Impact 3.8.5 The Project would not otherwise substantially degrade water quality. (less than significant)

Water Quality Impacts from Discharges to 303(d) Listed Water Bodies: Section 303(d) of the federal Clean Water Act (CWA) requires States to identify waters that do not meet water quality standards or objectives and thus, are considered "impaired." Once listed, Section 303(d) mandates prioritization and development of a Total Maximum Daily Load (TMDL). The TMDL is a tool that establishes the allowable loadings or other quantifiable parameters for a waterbody and thereby the basis for the States to establish water quality-based controls. The purpose of TMDLs is to ensure that beneficial uses are restored and that water quality objectives are achieved.

There are ten 303(d) impaired waterbodies in Sacramento County. Under the CWA listing, these impaired water bodies have no remaining assimilative capacity or ability to accommodate additional quantities of these contaminants, irrespective of concentration. Projects are required to comply with requirements of approved TMDLs, as regulated in the region by the RWQCB through issuance of Waste Discharge Requirements and NPDES permit amendments.

Previously listed mitigation measures (3.5.1 and 3.5.2) require the Project applicant to submit a Notice of Intent and SWPPP to the RWQCB in accordance with the NPDES General Construction Permit requirements. The SWPPP will utilize BMPs and technology to reduce erosion and sediments to meet water quality standards during construction.

3.8 HYDROLOGY, WATER QUALITY AND DRAINAGE

The Project design includes the use of stormwater quality features that will minimize nonpoint source pollution and long-term urban runoff impacts. The undeveloped areas to the north of the proposed development will be directed through a dedicated swale to keep this runoff separate from the storm water quality treatment areas with a sinuous path to the detention basin outlet works. The remaining majority of the developing site is approximately 100.6 acres, and will have a permanent pool and overflow configured in the southeast portion of the overall detention area. Low flows and drawdown discharges will be directed to the main outlet and steered using very small berms, approximate 0.1 to 0.2 feet high. The South west corner of the Site that is tributary to Laguna Creek will utilize conventional sand oil interceptor to treat flows prior to entering the existing Bond Road drainage system.

The Project stormwater quality features are intended to treat runoff close to the source. Through the implementation of mitigation measures 3.5-1 and 3.5-2, the Project's water quality control measures will be refined so that they will functionally minimize stormwater quality impacts, which would reduce the impacts on downstream 303(d) impaired water bodies. The Project would not have impacts to water quality beyond those identified under impacts 3.8-1 and 3.8-2. The potential to otherwise substantially degrade water quality is a **less than significant** impact and no additional mitigation is necessary.

Impact 3.8.6: The Project would not place housing or structures within a 100-year flood hazard area nor would the Project impede/redirect flows within a 100-year flood hazard area as mapped on a flood hazard delineation map. (less than significant)

The current FEMA flood map for the Project site (FIRM Panel 060767 0336 H, August 16, 2012) shows the bulk of the Project site in the unshaded Zone X – which are those areas outside the 500-year (0.2% annual chance) floodplain. The large on-site pond is noted as being in Shaded Zone X, which includes the 500-year floodplain and areas in the 100-year floodplain (0.1% annual chance) with average depths less than 1 foot, drainage areas less than 1 square mile, or protected by levees from the 100-year flood. In August 2012, a Letter of Map Revision (LOMR) was issued for properties to the west of the Project site. This revision included those areas in the southwest and western portions of the Project site that were in the AE Zone and changed them to unshaded X Zone. See Figures 3.8-3a and 3.8-3b for the flood zones and resulting changes due to the LOMR.

The USDA Web Soil Survey, in addition to identifying soil type, also identifies the potential for flooding of a user defined area. The Project site is considered to be in the "none" USDA flooding identification class. None is described by the USDA as: "None" means that flooding is not probable. The chance of flooding is nearly 0 percent in any year. Flooding occurs less than once in 500 years" (USDA 2013).

As discussed previously, the existing main central detention basin area will be where the development runoff will be directed for areas tributary to Whitehouse Creek. The basin will be engineered and sized to accommodate 100-year flood events. Project flows to Laguna Creek would not result in a significant increase in flows during peak flow events.

As discussed above, the majority of the Project site is within the unshaded Zone X flood zone and therefore the potential for flooding to this area is minimal. For those areas in the AE Flood Zone,

improvements to the detention pond are designed to alleviate the potential for flood from the 100-year event. As a result, development of the Project would not place housing or structures in a flood hazard area. As a result, the Project would have a **less than significant** impact on these environmental issues.

3.8 HYDROLOGY, WATER QUALITY AND DRAINAGE

REFERENCES

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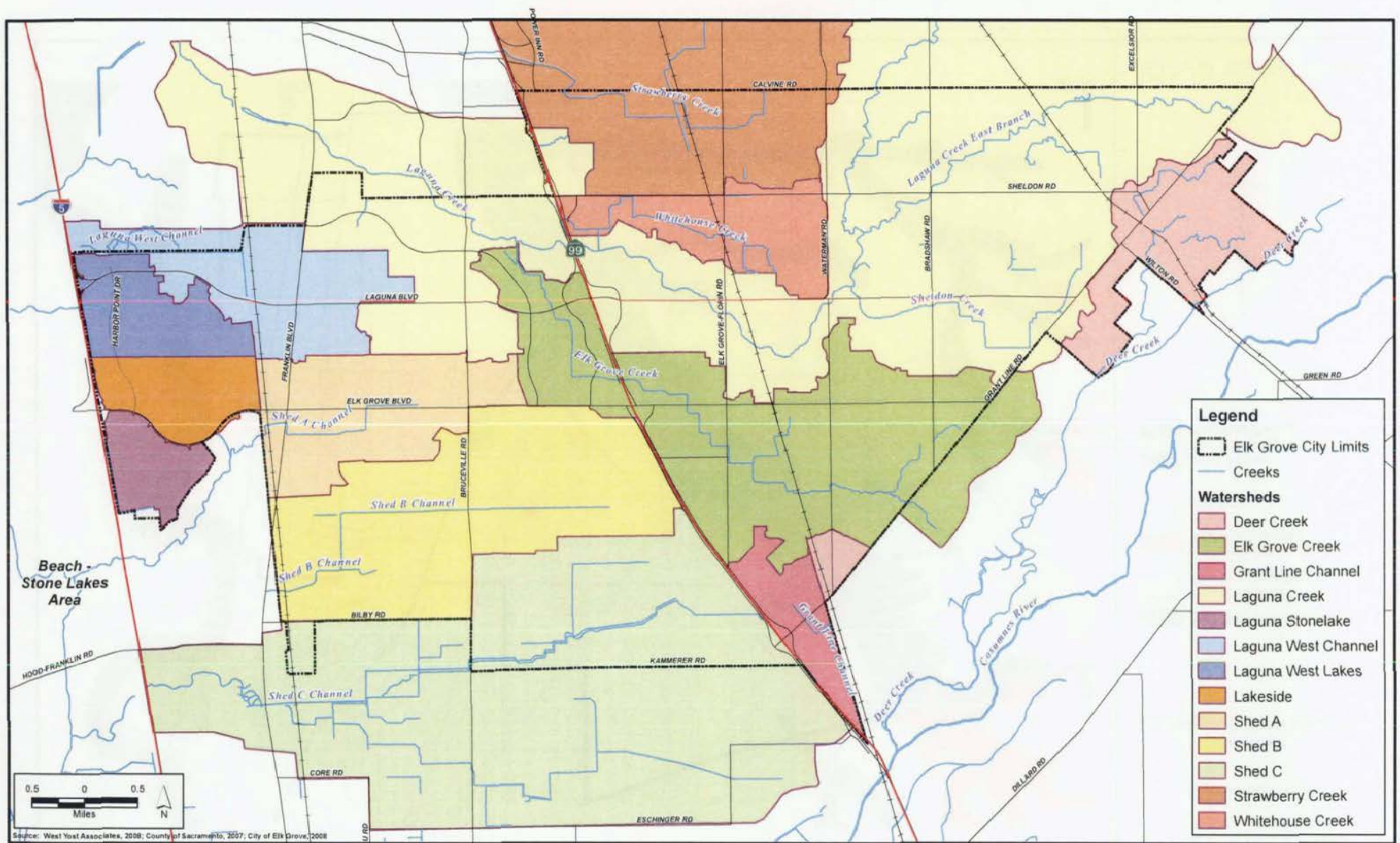
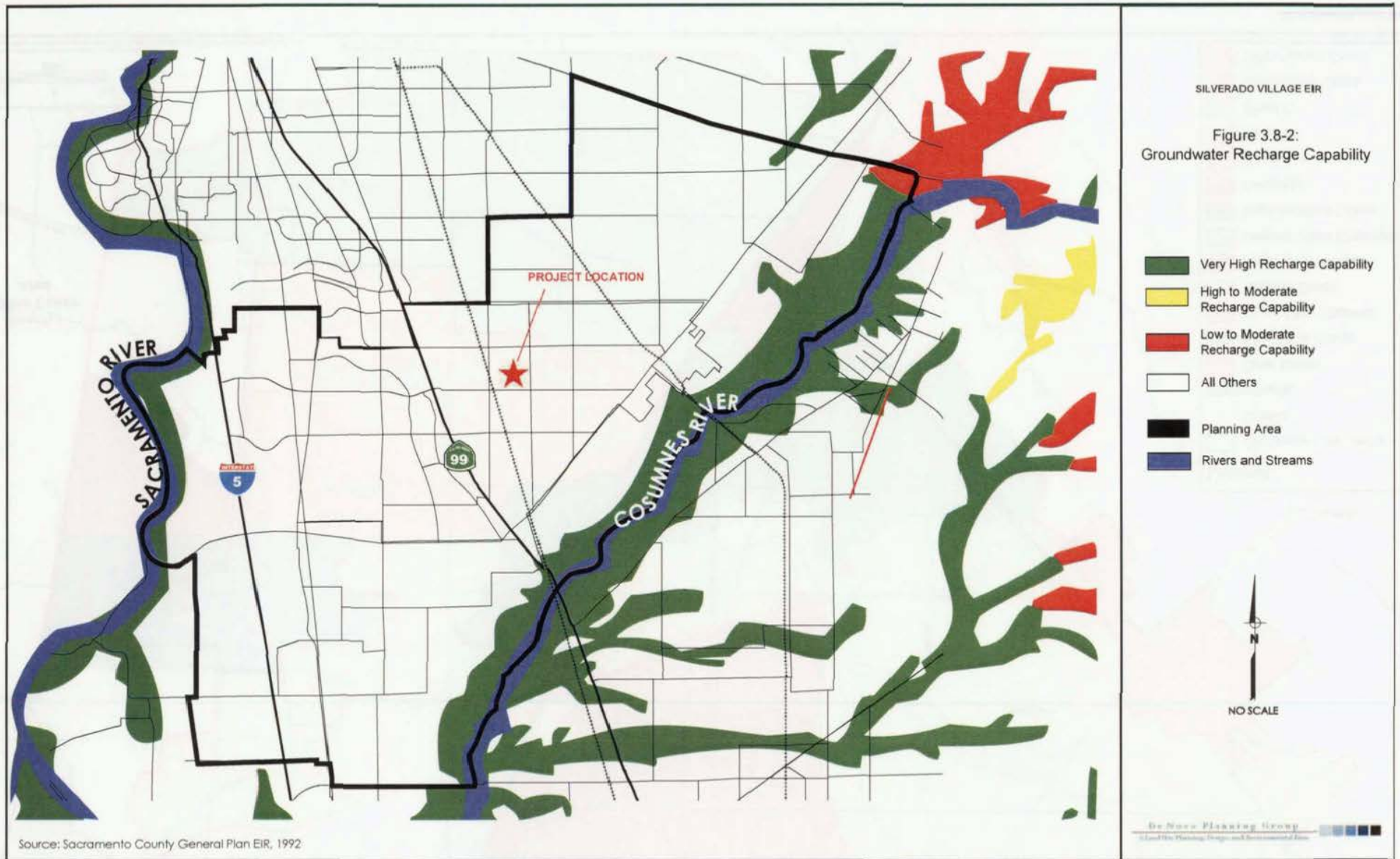


Figure 3.8-1: Water Features and Watersheds

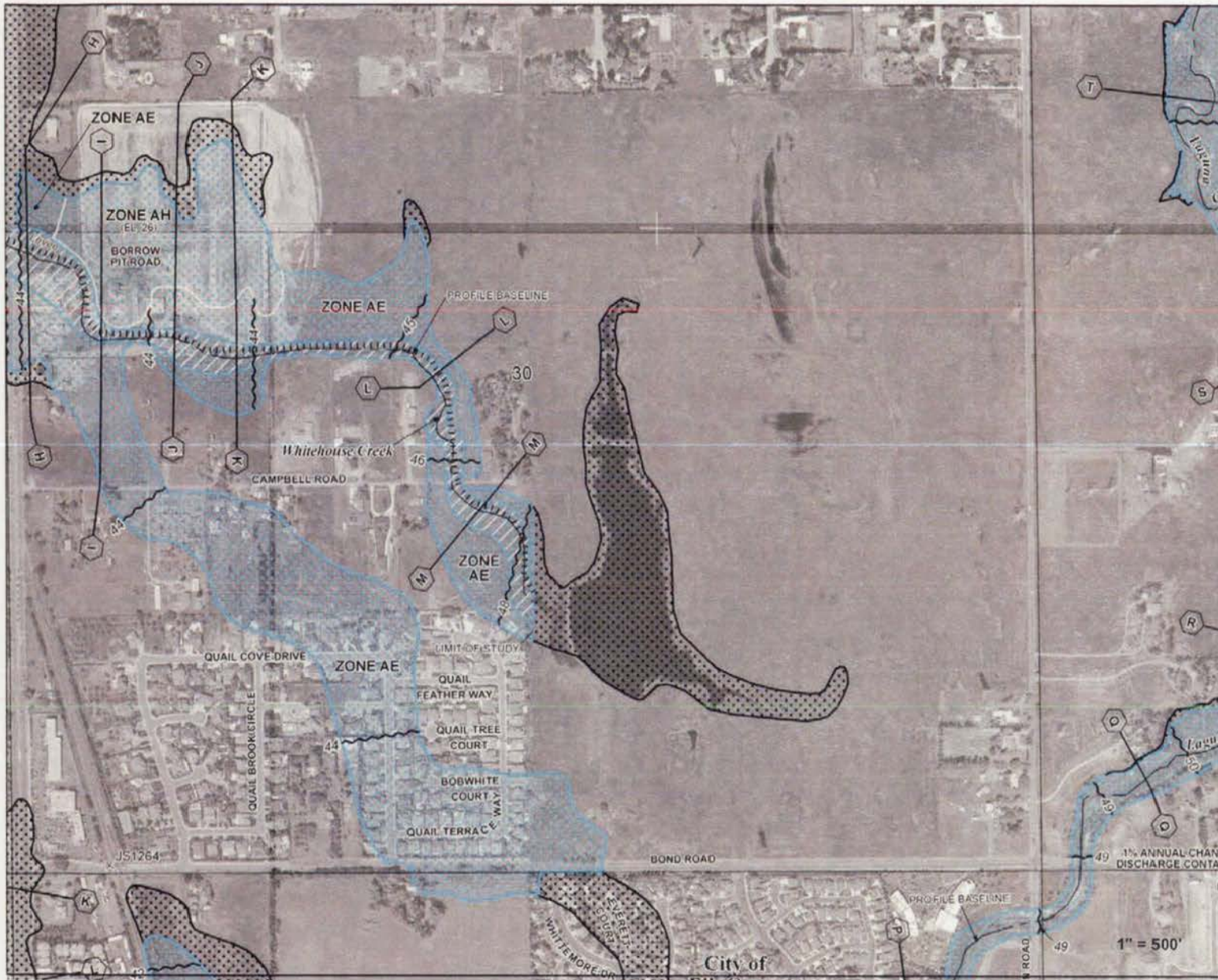
Figure 3.8-2:
Groundwater Recharge Capability



Source: Sacramento County General Plan EIR, 1992

SILVERADO VILLAGE EIR

Figure 3.8-3a: FEMA Flood Map



NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0336H

FIRM
FLOOD INSURANCE RATE MAP

SACRAMENTO COUNTY, CALIFORNIA
AND INCORPORATED AREAS

PANEL 336 OF 705
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

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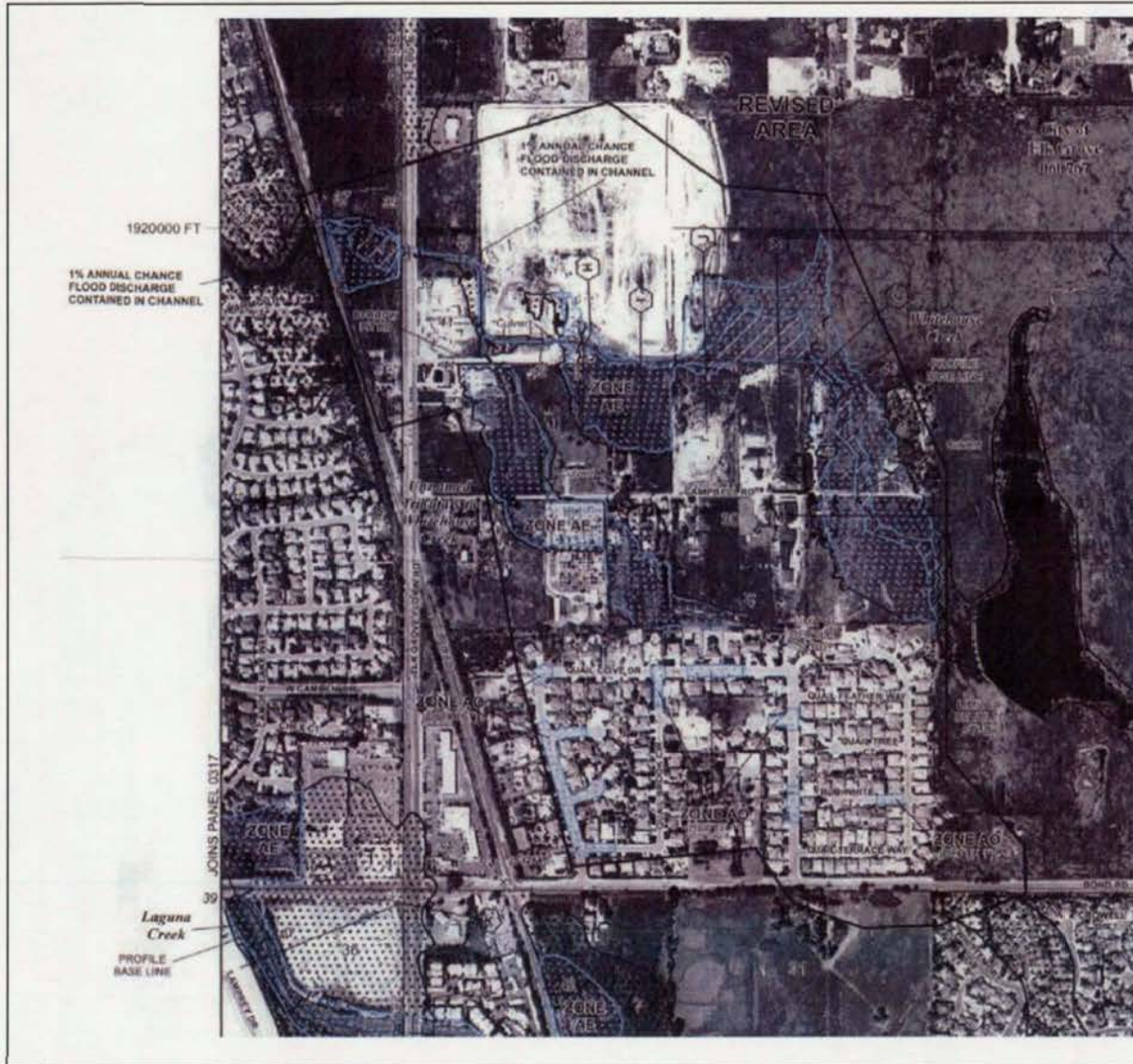
MAP NUMBER
96067C0336H

EFFECTIVE DATE
AUGUST 16, 2012

Federal Emergency Management Agency

- SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD**
- The 1% annual chance flood (FIRM Panel 336) also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The special flood hazard areas in the map subject to flooding by the 1% annual chance flood, include the Special Flood Hazard zones AE-1, AE-2, AE-3, AE-4, AE-5, AE-6, AE-7, AE-8, AE-9, AE-10, AE-11, AE-12, AE-13, AE-14, AE-15, AE-16, AE-17, AE-18, AE-19, AE-20, AE-21, AE-22, AE-23, AE-24, AE-25, AE-26, AE-27, AE-28, AE-29, AE-30, AE-31, AE-32, AE-33, AE-34, AE-35, AE-36, AE-37, AE-38, AE-39, AE-40, AE-41, AE-42, AE-43, AE-44, AE-45, AE-46, AE-47, AE-48, AE-49, AE-50.
- ZONE A** (See Flood Insurance Information)
- ZONE AE** (See Flood Insurance Information)
- ZONE AH** (See Flood Insurance Information)
- ZONE AHX** (See Flood Insurance Information)
- ZONE AE1** (See Flood Insurance Information)
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- ZONE AE48** (See Flood Insurance Information)
- ZONE AE49** (See Flood Insurance Information)
- ZONE AE50** (See Flood Insurance Information)
- TRUCKWAY AREAS IN ZONE AE**
- The Truckway Areas in Zone AE are those areas that are subject to flooding by the 1% annual chance flood (FIRM Panel 336) and are shown on the map with a wavy line pattern.
- OTHER FLOOD AREAS**
- ZONE X** (See Flood Insurance Information)
- ZONE D** (See Flood Insurance Information)
- CONSTANT HAZARD RESOURCES SYSTEM (CHRS) AREAS**
- OTHER SPECIAL FLOOD HAZARD AREAS (SFHAs)**
- 1% ANNUAL CHANCE FLOOD**
- 2% ANNUAL CHANCE FLOOD**
- 5% ANNUAL CHANCE FLOOD**
- 10% ANNUAL CHANCE FLOOD**
- Zone D boundary**

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov



SILVERADO VILLAGE EIR
 Figure 3.8-3b: FEMA LOMR Map

NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0336H

FIRM
 FLOOD INSURANCE RATE MAP

SACRAMENTO COUNTY,
 CALIFORNIA
 AND INCORPORATED AREAS

PANEL 336 OF 705
 (SEE MAP NUMBER FOUR THOUSAND THREE HUNDRED THIRTY SIX FOR PANEL LOCATION)

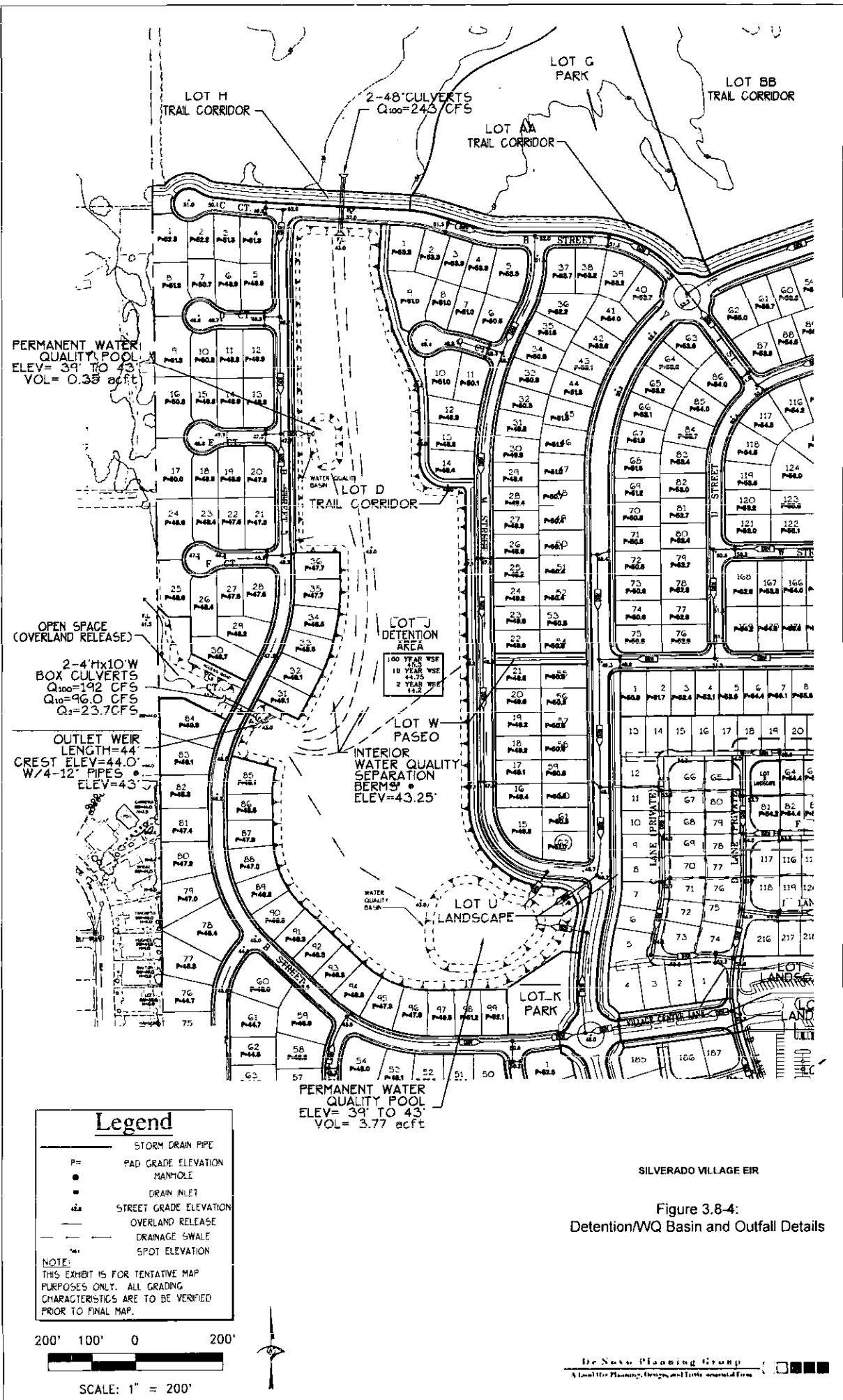
COMMUNITY NUMBER: 060001
 FIRM PANEL SURVEY: 1987

REVISED TO REFLECT LOMR
 EFFECTIVE: June 21, 2013

MAP NUMBER: 98007C0336H
 EFFECTIVE DATE: AUGUST 16, 2012

Federal Emergency Management Agency

- Legend**
- 1% annual chance (100-Year) Floodplain
 - 1% annual chance (100-Year) Floodway
 - 0.2% annual chance (500-Year) Floodplain



PERMANENT WATER QUALITY POOL
ELEV= 39' TO 43'
VOL= 0.38 acft

OPEN SPACE (OVERLAND RELEASE)
2-4'Hx10'W BOX CULVERTS
 $Q_{100}=192$ CFS
 $Q_{10}=96.0$ CFS
 $Q_2=23.7$ CFS

OUTLET WEIR LENGTH=44'
CREST ELEV=44.0'
W/4-12" PIPES
ELEV=43'

LOT J DETENTION AREA
100 YEAR VSE 14.2
10 YEAR VSE 44.25
2 YEAR VSE 14.2

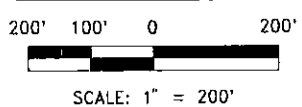
LOT W PASEO
INTERIOR WATER QUALITY SEPARATION BERM
ELEV=43.25'

PERMANENT WATER QUALITY POOL
ELEV= 39' TO 43'
VOL= 3.77 acft

Legend

- STORM DRAIN PIPE
- P= PAD GRADE ELEVATION
- MANHOLE
- DRAIN INLET
- STREET GRADE ELEVATION
- OVERLAND RELEASE
- - - DRAINAGE SWALE
- SPOT ELEVATION

NOTE:
THIS EXHIBIT IS FOR TENTATIVE MAP PURPOSES ONLY. ALL GRADING CHARACTERISTICS ARE TO BE VERIFIED PRIOR TO FINAL MAP.



SILVERADO VILLAGE EIR

Figure 3.8-4:
Detention/WQ Basin and Outfall Details

The purpose of this EIR section is to identify the existing land use conditions on the Project site and surrounding areas, to analyze the Project's consistency with relevant planning documents and policies adopted for the purpose of avoiding or mitigating an environmental effect, and, if necessary, to identify mitigation measures to avoid or minimize the significance of potential impacts.

Information in this section is based on information provided by the Project Applicant in the Project application package submitted to the City of Elk Grove, including the October 2012 Project Description, the Silverado Village Special Planning Area (SPA) document, site surveys conducted by De Novo Planning Group in 2012, ground and aerial photographs, and the following reference documents: *City of Elk Grove General Plan* (City of Elk Grove 2003a), the *City of Elk Grove General Plan Environmental Impact Report* (General Plan EIR) (City of Elk Grove 2003b), and the *City of Elk Grove Municipal Code, Title 23 Zoning Code* (City of Elk Grove 2013).

3.9.1 ENVIRONMENTAL SETTING

PROJECT SITE

The Project site consists of approximately 230 acres located northwest of the intersection of Bond Road and Waterman Road (see Figure 2-2). Historically, the Project site has been utilized for agricultural and industrial uses. However, the Project site has been vacant since the acquisition of the property by the Sacramento Area Sewer District (SASD), formerly the Sacramento County Sanitation District. Whitehouse Creek traverses the property from the northern boundary, flowing in a southwesterly direction into a series of ponds eventually discharging into Laguna Creek. The ponds appear to be the result of past berming and grading activities, potentially associated with the Project site's prior detention and treatment use. In addition, many of the linear depressions on the Project site appear to be a result of historic excavation activities and may be related to past agricultural practices on the property. Power lines are located along the eastern boundary of the Project site and in the Bond Road street and sidewalk improvements. General Plan and Zoning designations for the Project site and surrounding land uses are summarized in Table 3.9-1.

SURROUNDING LAND USES

Uses adjacent to and in the vicinity of the Project site include roadways, residential subdivisions, multifamily apartments, agricultural/rural residential uses, and vacant land. The Project site is generally bounded by Waterman Road, vacant land, rural residential uses, and Laguna Creek to the east; Bond Road and single family residential uses to the south; and single family residential development to the west, with a vacant area adjacent to the northwest. General Plan and Zoning designations and land uses adjacent the Project site are summarized in Table 3.9-1.

The Project and surrounding land uses are shown in Figure 2-2.

3.9 LAND USE

TABLE 3.9-1: PROJECT AND SURROUNDING AREA LAND USE DESIGNATIONS

<i>LOCATION</i>	<i>GENERAL PLAN LAND USE</i>	<i>ZONING</i>	<i>ACTUAL USE OF PROPERTY</i>
On-Site	Rural Residential, Low Density Residential, Commercial/Office/Multi-Family	RD-2, RD-4, RD-5, RD-5(F), and O	Vacant
North	Rural Residential	AR-2	Sheldon Road Ranch Estates
South	Low Density Residential	RD-5	Fallbrook Subdivision and Summer Place Subdivision
East	Estate Residential,	AG-80, AR-5, AR-5(F), AR-10, SC	Apartment complex; single-family residences
West	Rural Residential; Low Density Residential	RD-2, RD-4, RD-5, AR-5, RD-5(F), AR-5(F)	Quail Ranch Estates, rural residential uses, and vacant land

3.9.2 REGULATORY SETTING

LOCAL

City of Elk Grove General Plan

The City of Elk Grove General Plan represents the community's goals and aspirations for its long-term physical form and development. The General Plan is a broad framework for planning the future of the City of Elk Grove. It is the official policy statement of the City Council to guide the private and public development of the City in a manner to gain the maximum social and economic benefit to the citizens (General Plan, p. 5-6).

General plans are prepared under a mandate from the State of California, which requires each city and county to prepare and adopt a comprehensive, long-term general plan for its jurisdiction and any adjacent related lands. Under State law, City ordinances regulating land use must be consistent with the General Plan. The Zoning Code, Specific Plans, and individual project proposals must be consistent with the goals, policies, and standards contained in the General Plan. In addition, all capital improvements and public works projects must be consistent with the General Plan (General Plan, p. 6).

General Plan Land Use Map

The Land Use Policy Map describes what type of new land uses are desired—or whether existing open lands will be retained for agriculture, habitat, or other uses. In some areas, the Land Use Policy Map shows future uses, which differ from the existing land uses; in these areas, the General Plan foresees change and a transition to new land uses (General Plan, p. 129). The Land Use Map portrays the ultimate uses of land in and around Elk Grove through land use designations. The Land Use Map designates the Project site as Rural Residential, Low Density Residential, and Commercial/Office/Multi-Family. Surrounding land uses include Rural Residential, Low Density Residential, and Estate Residential as shown in Figure 3.9-1. Each of these land use designations are described below.

Rural Residential: Minimum lot size: 2 to 10 acres gross (0.1 - 0.5 du/gross acre)

Estate Residential: Lot sizes range from ¼ acre to 2 acres. (0.51 – 4.0 du/gross acre)

Low Density Residential: Lot sizes vary, generally from approximately 6,000 to 10,000 SF. (4.1+ - 7.0 du/gross acre)

Commercial/Office/Multi-Family: Generally characterized by office, professional, and retail uses in any mix. Also includes high density residential development. Multifamily allowed at a maximum density of 20 units per gross acre.

General Plan Policies

The City General Plan policies and standards applicable to environmental issues associated with land use are summarized below. General Plan policies associated with specific environmental topics (aesthetics, air quality, agriculture, biological resources, cultural resources, geology/soils, greenhouse gas, hazards, hydrology/water quality, noise, public services, recreation, transportation, and utilities) are discussed in the relevant chapters of this EIR. General Plan policies associated with agricultural resources, mineral resources, population and housing were analyzed in the Initial Study prepared for the Project and were found to have a less than significant or no environmental impact and are not further addressed in this EIR.

- Policy LU-5** Subsequent plans which implement the Land Use Policy Map may blend uses or residential densities as part of a master planned project, provided that the overall development intensity shown on the Land Use Policy Map is not exceeded.
- Policy LU-6** Multi-family housing development in excess of 15 dwelling units per gross acre should be located according to the following general criteria. Flexibility may be applied on a case-by-case basis for sites, which vary from these guidelines.
- Multi-family housing sites should generally be no smaller than eight (8) acres and no larger than fifteen (15) acres. *The minimum size is intended to ensure on-site management; the maximum size is intended to reduce the potential for public safety problems.*
 - Individual sites should be located at least one-third (1/3) mile apart. *This is intended to reduce the potential for over-concentration of multi-family uses in any part of Elk Grove.*
 - Multi-family housing sites should be located close to commercial areas, major roadways, and public transit to encourage pedestrian rather than vehicle traffic.
 - Senior/assisted living housing projects may be appropriate at sizes and spacing below typical thresholds, due to the reduced traffic and other impacts generally associated with these uses.
- Policy LU-11** The City shall support the development of neighborhood-serving commercial uses adjacent to residential areas, which provide quality, convenient and community-serving retail choices in a manner that does not impact neighborhood character.

3.9 LAND USE

Policy CAQ-7 Encourage development clustering where clustering would facilitate on-site protection of woodlands, grasslands, wetlands, stream corridors, scenic areas, or other appropriate natural features as open space, provided that:

1. Urban infrastructure capacity is available for urban use.
2. On-site resource protection is appropriate and consistent with other General Plan Policies.
3. The architecture and scale of development is appropriate for the area.
4. Development rights for the open space area are permanently dedicated and appropriate long-term management is provided for by either a public agency, homeowners association, or other appropriate entity.

Policy CAQ-17 The City recognizes the value of naturally vegetated stream corridors, commensurate with flood control and public acceptance, to assist in removal of pollutants, provide native and endangered species habitat and provide community amenities.

Policy CAQ-19 Encourage the retention of natural stream corridors, and the creation of natural stream channels where improvements to drainage capacity are required.

Policy PTO-7 The trails system in Elk Grove should provide for connectivity, so that all trails are linked to the extent possible for greater use as recreational and travel routes. The following features should be included in the trails system in Elk Grove:

- Trails should link residential areas with parks, commercial and office areas, and other destinations.
- Trails along major roadways should avoid meanders or other design features which make bicycle use less convenient or safe.
- Trails should be located off-street to the extent possible.

Policy PTO-16 Stream corridors, floodways, electrical transmission corridors, and similar features shall be considered for inclusion in the citywide trails and open space system.

Policy PTO-18 To the extent possible, retain natural drainage courses in all cases where preservation of natural drainage is physically feasible and consistent with the need to provide flood protection.

Policy PF-10 The City shall strongly discourage the extension of sewer service into any area designated for Rural Residential land uses. Sewers shall not be used to accommodate lot sizes smaller than 2 (two) gross acres in the Rural Residential area, and lot sizes shall be large enough to accommodate septic systems. This policy shall not be construed to limit the ability of any sewer agency to construct "interceptor" lines through or adjacent to the Rural Residential area, provided that no "trunk" or service lines are provided within the Rural Residential area.

City of Elk Grove Zoning Code

Title 23, Zoning, of the City Municipal Code carries out the policies of the City General Plan by classifying and regulating the uses and development of land and structures within the City, consistent with the General Plan. The Zoning Code is adopted to protect and to promote the public health, safety, comfort, convenience, prosperity, and general welfare of residents and businesses in the City [Ord. 8-2011 §3(B), eff. 6-24-2011].

ZONING DISTRICTS

Table 3.9-1 above (page 3.9-2) identifies the zoning districts which correspond to and implement the land use categories for the project site and surrounding areas. Following is a general description of each of the zoning district categories, along with unique characteristics of each corresponding zone district (Title 23, Zoning).

Very Low Density Residential (RD-1 through RD-3). The very low density residential zoning district designations are applied to areas of the city intended to accommodate very low density single-family residential uses in a semi-rural setting.

- **RD-2.** The RD-1 through RD-3 districts are applied to areas of the City intended to accommodate very low density single-family estate type uses. Property with these RD designations should serve as a transitional residential district between agricultural residential and traditional lower density single-family neighborhoods. The RD-2 district allows a density of two dwelling units per acre.

Low Density Residential (RD-4 through RD-7). The low density residential zoning district designations are applied to areas of the city intended to accommodate low density single-family residential neighborhoods. Permitted uses in the RD districts include single-family and two-family homes, second units, and compatible neighborhood support facilities. Property with this designation should be located near other residential properties, schools, parks/open space, and neighborhood commercial services with low-impact office and light industrial uses nearby. This residential designation includes the following specific zoning districts:

- **RD-4.** The RD-4 district allows detached single-family and two-family homes up to a maximum density of four dwelling units per acre. Development is typically one and two stories in height with larger yard areas.
- **RD-5.** The RD-5 district allows single-family and two-family homes up to a maximum density of five dwelling units per acre. This district may include detached and attached housing types, with typical development one and two stories in height with private yard areas.

Agricultural Residential (AR). The AR districts implement the estate residential and rural residential General Plan land use designation.

- **AR-2.** The AR-2 district allows for one residential unit on lots with a minimum size of two gross acres and is intended to accommodate low density single-family residential uses in a rural setting with agricultural and accessory uses. Implements the estate residential General Plan designation.

3.9 LAND USE

- **AR-5.** The AR-5 zoning district allows for one residential unit on lots with a minimum size of five gross acres to accommodate low density single-family development along with agricultural and accessory uses. The AR-5 zoning districts implement the rural residential General Plan designation.

Shopping Center (SC). The shopping center district is intended for medium to high intensity shopping centers with a local or regional market area on medium to large sites at major intersections. The SC zone should be adjacent to higher density residential development. Development in this district typically involves integrated structures with multiple uses and tenants providing a broad range of goods and services. Development should incorporate pedestrian-friendly designs that include walkways interior to the project as well as connections to adjacent uses and neighborhoods, but should also be auto-accommodating.

Open Space Land Use (O). The open space zoning district is applied to lands that have been reserved for open space uses such as landscape corridors, habitat mitigation, wetlands, wildlife habitat and corridors, lakes, trails, and similar uses. Resource protection and restoration, resource-related recreation, parks and public plazas, and utility infrastructure are permitted uses in this zone.

Special Planning Area (SPA). The purpose of the special planning area (SPA) district is to designate areas for unique and imaginative planning standards and regulations not provided through the application of standard zoning districts. Allowed uses and development standards within the special planning area are those uses and standards listed uses in the adopted special planning area. The enabling legislation granting authority to prepare, process, adopt and implement a Special Planning Area (SPA) is defined by Title 23, Chapter 16,(23.16.100) of the City Municipal Code.

3.9.3 IMPACTS AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE

Consistent with Appendix G of the CEQA Guidelines, the Project will have a significant impact on land use and planning if it will:

- Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect.

The potential for the Project to physically divide an established community or conflict with any applicable habitat conservation plan was analyzed in the Initial Study prepared for the Project and found to have no impact. Please refer to the Initial Study for further information on these topics.

IMPACTS AND MITIGATION MEASURES

Impact 3.9-1: Implementation of the Project may conflict with an applicable land use plan, policy, or regulation of an agency with jurisdiction over the project adopted to avoid or mitigate an environmental effect. (less than significant)

CONSISTENCY WITH THE CITY OF ELK GROVE GENERAL PLAN

In evaluating the Project for potential environmental impacts related to consistency with adopted land use plans, policies, and regulations, the General Plan land use designations and policies must be examined for consistency.

The City of Elk Grove General Plan Land Use Map designates the northern third of the Project site as Rural Residential (78± acres), the central and southern portions of the Project site as Low Density Residential (152± acres), and a 4-acre parcel at the southeast corner as Commercial/Office/Multi-Family. As described above, the Rural Residential designation accommodates residential development at a density of 0.1 to 0.5 dwellings per gross acre with a permitted lot size of 2 to 10 acres. The Low Density Residential designation permits residential development at densities ranging from 4.1 to 7.0 dwellings per gross acre. The Commercial/Office/Multi-Family designation permits office, professional, and retail uses in any mix and permits multi-family residential development at a maximum density of 30 dwelling units per gross acre.

The Project proposes extensive open space uses, including a 68.1-acre wetland habitat preservation area, 10.3 acres of open space lots, a 14.7-acre stormwater detention area, and a 0.6-acre overland stormwater release area. The Project also proposes 8.3 acres of parks and trails. The open space/habitat preserve and parks uses in the northern portion of the Project site are allowed in the Rural Residential designation. The Project site would accommodate up to 1,022 residential units under the adopted General Plan land use designations, and this is the amount of development that was anticipated for the Project site in the General Plan EIR. The Project proposes 660 single family units and up to 125 independent/assisted living units, which is less than the development allowed under the adopted land use designations. The Village Core uses (the clubhouse, swimming atrium, and up to 125 independent/assisted living units) are consistent with the uses allowed by the Commercial/Office/Multi-Family designation. The Project does not propose growth beyond the areas envisioned for urbanization on the Land Use Map. The Project would shift the Commercial/Office/Multi-Family uses from the southeast corner of the Project site to an area within Village 3, as allowed by Policy LU-5 and described below.

The Project Applicant has submitted an entitlement request to rezone the Project site to SPA. The Silverado Village SPA proposes the General Plan land uses be shifted to accomplish the environmental goals of providing a compact and integrated layout for residents, preservation of open space to protect habitat, protection from flooding, and buffering and integrating the Project with adjacent development. General Plan Policy LU-5 provides that subsequent master-planned projects, such as a SPA, may blend uses or residential densities provided that the overall development intensity shown on the Land Use Policy Map is not exceeded. As discussed in the

3.9 LAND USE

above land use map consistency analysis, the Project is consistent with the intended use and development intensity intended for the Project site in the General Plan.

The General Plan includes a number of broad guiding and focused goals that provided the direction for the planned land use types and location. The General Plan seeks to attain a high quality of life for all residents by providing a safe community, free from manmade and natural hazards (Focused Goal 1-1). Development should recognize environmental constraints and be designed and operated to minimize impacts on the environment and protect natural resources (Focused Goals 3-1, 3-3).

The extensive open space and park uses on the Project site recognize the existing environmental constraints and would help to retain the rural, open character on a portion of the Project site, provide protection from flooding, and protect sensitive habitat, consistent with Focused Goals 1-1, 3-1, and 3-3.

Policy CAQ-7 encourages development clustering where clustering would facilitate on-site protection of woodlands, grasslands, wetlands, stream corridors, scenic areas, or other appropriate natural features as open space. The Project would cluster development in Villages 1 through 3 to preserve unique habitat within the wetland habitat preserve area in the northern portion of the property consistent with Policy CAQ-7. The clustering of uses in the central and southern portions of the property also minimizes impervious surfaces, consistent with Policy CAQ-14. Policy CAQ-7 notes that clustering is appropriate provided that urban infrastructure is available and the development rights for the open space area are permanently dedicated and appropriate long-term management is provided for by a public agency. All urban infrastructure is available to the Project site. The Project would transfer ownership of the wetland habitat preserve area to the City of Elk Grove, another public agency, or a non-profit entity. The Wetland Mitigation Plan describes the long-term management requirements for the Project site, which would occur through the Habitat Management Foundation.

Consistent with Policies CAQ-17, CAQ-19, and PTO-18, the Project would retain the naturally vegetated pond and overland flow connection to Whitehouse Creek, providing a naturalized drainage channel to ensure adequate stormwater capacity.

The Project would provide two parks connected with a multi-use trail system. The multi-use trail system would include a trail located in the powerline corridor, consistent with Policy PTO-16, which encourages consideration of electrical transmission corridors in the City's trails and open space system. Consistent with Policies PTO-16 and PTO-17, the Project's multi-trail system would provide on-site trails and connections to existing bike and pedestrian facilities in accordance with Figure 4 of the City of Elk Grove Trails Master Plan.

General Plan Policy PF-10 discourages the extension of sewer service into areas designated for Rural Residential use and prohibits the use of sewer service to accommodate lot sizes smaller than two gross acres in the Rural Residential area. Since the park site is 5.5-acres and the extension of sewer onto the park site would not result in providing public sewer service to Rural Residential lots of 2 acres or smaller, the extension of public sewer to the park site would not conflict with Policy PF-10.

Policy LU-6 provides guidelines for the size (8-15 acres) and location (near commercial and transit) of multifamily housing to reduce the potential for land use public safety issues. The policy notes that senior/assisted living housing projects may be appropriate at sizes and spacing below typical thresholds, because senior developments have reduced traffic and other impacts generally associated with Multi-Family uses. The Silverado Village 3 senior lodge is smaller than the minimum for non-age restricted multifamily; this smaller size consistent with the Policy LU-6 exception for senior/assisted living projects. The senior lodge would have on-site management, the lack of which is the primary concern identified in Policy LU-6 for smaller sites, and would be within walking distance of the neighborhood-serving commercial and retail services that would be located in the Village Core.

Policy LU-11 supports the development of neighborhood-serving commercial uses adjacent to residential areas, which provide convenient and neighborhood-serving retail choices in a manner that does not impact neighborhood character. Consistent with Policy LU-11, the Village Core uses would include neighborhood-serving commercial and recreational amenities, convenient to senior residents that are expected to drive less. The Village Core commercial uses would be located in the interior of Village 3 and would therefore not impact the character of the surrounding community.

The Project is consistent with General Plan policies related to land use including those related to amount and location of growth, allowed uses, development densities and intensities, parks and trails, and retention of on-site drainage features.

CONSISTENCY WITH THE ZONING CODE

The Project proposes to zone the Project site as Silverado Village SPA. Consistent with the Zoning Code requirements established at Section 23.16.100, the Silverado Village SPA document would be regulatory in nature and would serve as zoning and development standards for the Project site as described in Chapter 2.0. The Project is appropriate for consideration as a SPA because the Project includes objectives to protect sensitive wetland and habitat areas on the Project site, provide housing for senior households (identified as a special needs group in the City's Housing Element), and include a mix of land uses that require conditions and development standards that could not be provided through the application of standard zoning regulations. The Project has significant environmental features and land use mixtures that justify the placement of the Project site within the SPA land use zone.

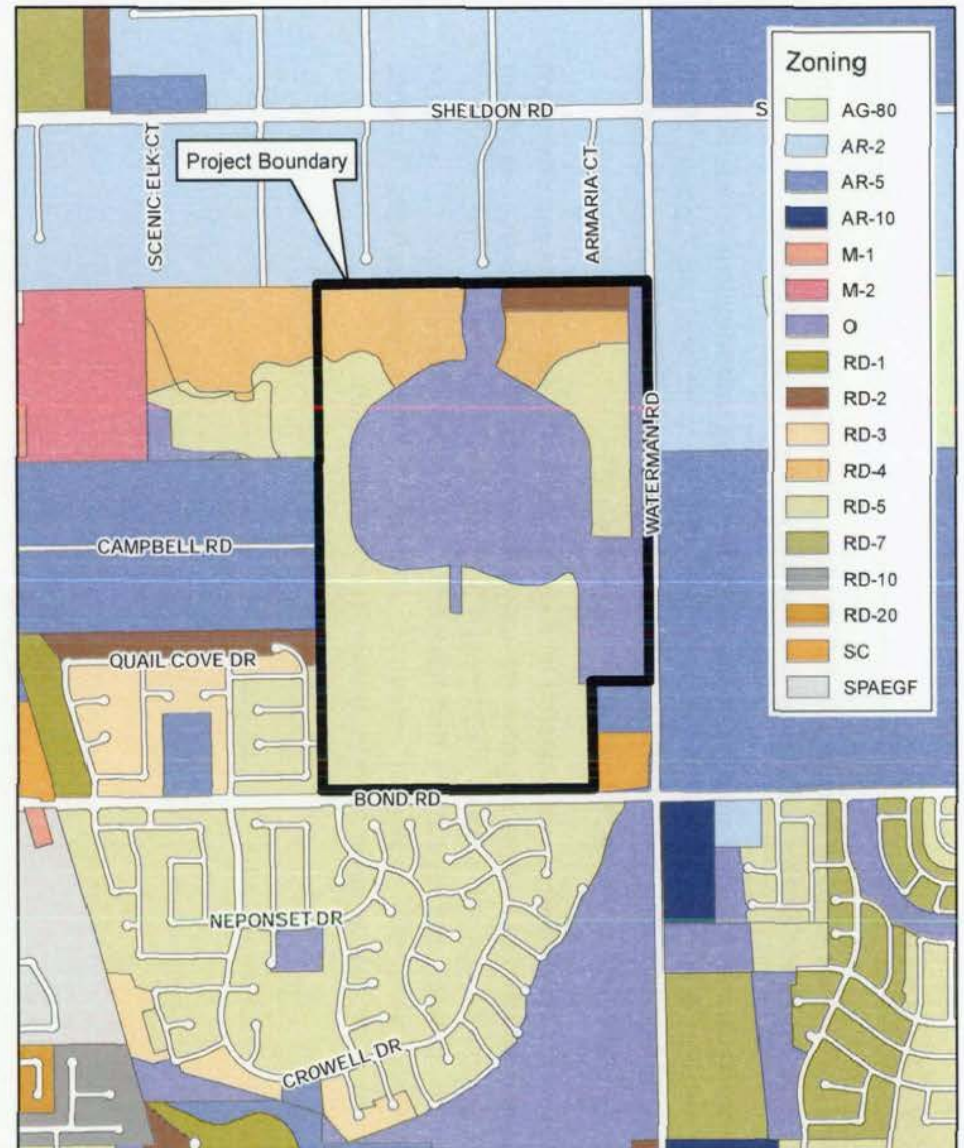
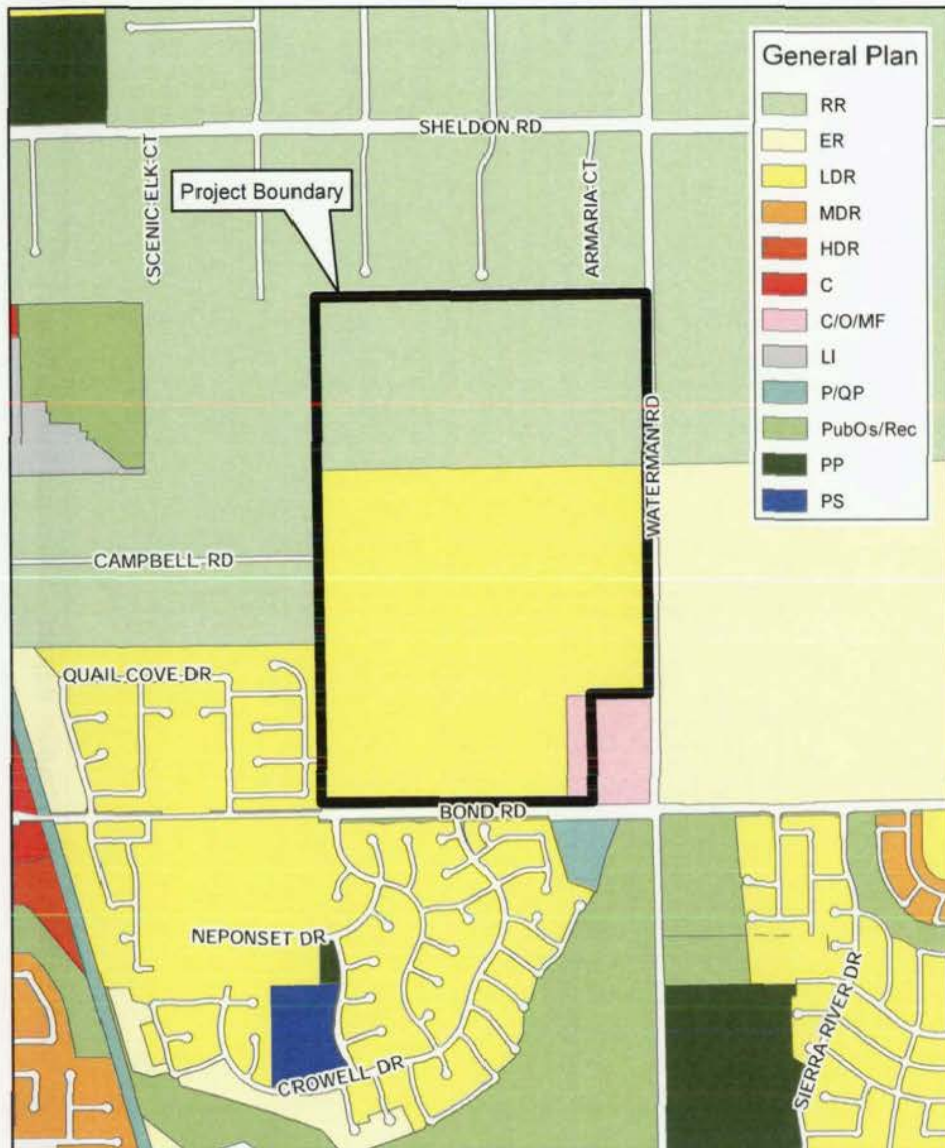
The Silverado Village SPA along with the City of Elk Grove General Plan and Municipal Code would regulate zoning for the Project. All existing City land use policies, development standards, and roadway improvement standards would remain in effect except as specifically addressed in the SPA. The SPA requires Village 1 and Village 2 to be consistent with the RD-5 Zoning designation and permitted land uses as defined in Title 23 of the City of Elk Grove Municipal Code. However, Village 3 is envisioned as an age-restricted gated community with private streets and contains two unique housing product types that do not fit within the City of Elk Grove's existing zoning categories, and are therefore defined in the SPA. The first housing type is the higher intensity Village Core area, which will provide a lodge facility for seniors of one or more buildings, plus recreational and neighborhood commercial service amenities. The second housing type is the

3.9 LAND USE

Patio Homes which are located around the Village Core allowing convenient access for the residents to the recreation and service commercial amenities in the Village Core area.

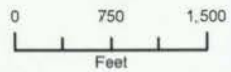
Development plans, the Development Agreement, subdivision maps, and site plans for the Project must be consistent with the adopted SPA and must be submitted for review and approval of the City Council through a public hearing process. Compliance with the SPA regulatory document would ensure the Project's consistency with the City's Zoning Code.

The Project would be consistent with adopted land use and planning documents and other land use regulations adopted to address potential environmental effects. This is a less than significant impact. Chapters 3.1 through 3.8 and 3.10 through 3.13 address the Project's consistency with adopted plans, policies, and regulations that have been adopted to address impacts associated with aesthetics, air quality, biological resources, cultural resources, geology/soils, hazards, hydrology and water quality, public services, transportation, and utilities.



SILVERADO VILLAGE EIR

Figure 3.9-1: General Plan Land Use and Zoning Designations



Data source: City of Elk Grove GIS. Map date: June 3, 2013.

De Novo Planning Group

A Land Use Planning, Design, and Environmental Firm



This section provides a general description of the existing noise sources, a discussion of the regulatory setting, and identifies potential noise impacts associated with the Project. Project impacts are evaluated relative to applicable noise level criteria and to the existing ambient noise environment. Mitigation measures have been identified for significant noise-related impacts. The information in this section is based on the *Environmental Noise Analysis* prepared for the Project by Bollard Acoustical Consultants in 2013 (see Appendix E).

3.10.1 ENVIRONMENTAL SETTING

KEY TERMS

Acoustics	The science of sound.
Ambient Noise	The distinctive acoustical characteristics of a given area consisting of all noise sources audible at that location. In many cases, the term ambient is used to describe an existing or pre-project condition such as the setting in an environmental noise study.
Attenuation	The reduction of noise.
A-Weighting	A frequency-response adjustment of a sound level meter that conditions the output signal to approximate human response.
Decibel or dB	Fundamental unit of sound, defined as ten times the logarithm of the ratio of the sound pressure squared over the reference pressure squared.
CNEL	Community noise equivalent level. Defined as the 24-hour average noise level with noise occurring during evening hours (7 - 10 p.m.) weighted by a factor of three and nighttime hours weighted by a factor of 10 prior to averaging.
Frequency	The measure of the rapidity of alterations of a periodic acoustic signal, expressed in cycles per second (Hertz).
Impulsive	Sound of short duration, usually less than one second, with an abrupt onset and rapid decay.
Ldn	Day/Night Average Sound Level. Similar to CNEL but with no evening weighting.
Leq	Equivalent or energy-averaged sound level.
Lmax	The highest root-mean-square (RMS) sound level measured over a given period of time.
L(n)	The sound level exceeded a described percentile over a measurement period. For instance, an hourly L50 is the sound level exceeded 50 percent of the time during the one hour period.
Loudness	A subjective term for the sensation of the magnitude of sound.
Noise	Unwanted sound.
SEL	Sound exposure levels. A rating, in decibels, of a discrete event, such as an aircraft flyover or train passby, that compresses the total sound energy into a one-second event.

FUNDAMENTALS OF ACOUSTICS

Acoustics is the science of sound. Sound may be thought of as mechanical energy of a vibrating object transmitted by pressure waves through a medium to human (or animal) ears. If the pressure variations occur frequently enough (at least 20 times per second), then they can be heard and are called sound. The number of pressure variations per second is called the frequency of sound, and is expressed as cycles per second or Hertz (Hz).

Noise is a subjective reaction to different types of sounds. Noise is typically defined as (airborne) sound that is loud, unpleasant, unexpected or undesired, and may therefore be classified as a more specific group of sounds. Perceptions of sound and noise are highly subjective from person to person.

Measuring sound directly in terms of pressure would require a very large and awkward range of numbers. To avoid this, the decibel scale was devised. The decibel scale uses the hearing threshold (20 micropascals), as a point of reference, defined as 0 dB. Other sound pressures are then compared to this reference pressure, and the logarithm is taken to keep the numbers in a practical range. The decibel scale allows a million-fold increase in pressure to be expressed as 120 dB, and changes in levels (dB) correspond closely to human perception of relative loudness.

The perceived loudness of sounds is dependent upon many factors, including sound pressure level and frequency content. However, within the usual range of environmental noise levels, perception of loudness is relatively predictable, and can be approximated by A-weighted sound levels. There is a strong correlation between A-weighted sound levels (expressed as dBA) and the way the human ear perceives sound. For this reason, the A-weighted sound level has become the standard tool of environmental noise assessment. All noise levels reported in this section are in terms of A-weighted levels, but are expressed as dB, unless otherwise noted.

The decibel scale is logarithmic, not linear. In other words, two sound levels 10 dB apart differ in acoustic energy by a factor of 10. When the standard logarithmic decibel is A-weighted, an increase of 10 dBA is generally perceived as a doubling in loudness. For example, a 70 dBA sound is half as loud as an 80 dBA sound, and twice as loud as a 60 dBA sound.

Community noise is commonly described in terms of the ambient noise level, which is defined as the all-encompassing noise level associated with a given environment. A common statistical tool to measure the ambient noise level is the average, or equivalent, sound level (Leq), which corresponds to a steady-state A weighted sound level containing the same total energy as a time varying signal over a given time period (usually one hour). The Leq is the foundation of the composite noise descriptor, Ldn, and shows very good correlation with community response to noise.

The day/night average level (Ldn) is based upon the average noise level over a 24-hour day, with a +10 decibel weighing applied to noise occurring during nighttime (10:00 p.m. to 7:00 a.m.) hours. The nighttime penalty is based upon the assumption that people react to nighttime noise exposures as though they were twice as loud as daytime exposures. Because Ldn represents a 24-hour average, it tends to disguise short-term variations in the noise environment. CNEL is similar to Ldn, but includes a +5 dB penalty for evening noise. Table 3.10-1 lists several examples of the noise levels associated with common situations.

TABLE 3.10-1: TYPICAL NOISE LEVELS

<i>COMMON OUTDOOR ACTIVITIES</i>	<i>NOISE LEVEL (DBA)</i>	<i>COMMON INDOOR ACTIVITIES</i>
	--110--	Rock Band
Jet Fly-over at 300 m (1,000 ft)	--100--	
Gas Lawn Mower at 1 m (3 ft)	--90--	
Diesel Truck at 15 m (50 ft), at 80 km/hr (50 mph)	--80--	Food Blender at 1 m (3 ft) Garbage Disposal at 1 m (3 ft)
Noisy Urban Area, Daytime Gas Lawn Mower, 30 m (100 ft)	--70--	Vacuum Cleaner at 3 m (10 ft)
Commercial Area Heavy Traffic at 90 m (300 ft)	--60--	Normal Speech at 1 m (3 ft)
Quiet Urban Daytime	--50--	Large Business Office Dishwasher in Next Room
Quiet Urban Nighttime	--40--	Theater, Large Conference Room (Background)
Quiet Suburban Nighttime	--30--	Library
Quiet Rural Nighttime	--20--	Bedroom at Night, Concert Hall (Background)
	--10--	Broadcast/Recording Studio
Lowest Threshold of Human Hearing	--0--	Lowest Threshold of Human Hearing

SOURCE: CALTRANS, TECHNICAL NOISE SUPPLEMENT, TRAFFIC NOISE ANALYSIS PROTOCOL. NOVEMBER 2009.

EFFECTS OF NOISE ON PEOPLE

The effects of noise on people can be placed in three categories:

- Subjective effects of annoyance, nuisance, and dissatisfaction;
- Interference with activities such as speech, sleep, and learning; and
- Physiological effects such as hearing loss or sudden startling.

Environmental noise typically produces effects in the first two categories. Workers in industrial plants can experience noise in the last category. There is no completely satisfactory way to measure the subjective effects of noise or the corresponding reactions of annoyance and dissatisfaction. A wide variation in individual thresholds of annoyance exists and different tolerances to noise tend to develop based on an individual's past experiences with noise.

Thus, an important way of predicting a human reaction to a new noise environment is the way it compares to the existing environment to which one has adapted: the so-called ambient noise level. In general, the more a new noise exceeds the previously existing ambient noise level, the less acceptable the new noise will be judged by those hearing it.

With regard to increases in A-weighted noise level, the following relationships occur:

- Except in carefully controlled laboratory experiments, a change of 1 dBA cannot be perceived;
- Outside of the laboratory, a 3 dBA change is considered a just-perceivable difference;

3.10 NOISE AND VIBRATION

- A change in level of at least 5 dBA is required before any noticeable change in human response would be expected; and
- A 10 dBA change is subjectively heard as approximately a doubling in loudness, and can cause an adverse response.

Stationary point sources of noise – including stationary mobile sources such as idling vehicles – attenuate (lessen) at a rate of approximately 6 dB per doubling of distance from the source, depending on environmental conditions (i.e. atmospheric conditions and either vegetative or manufactured noise barriers, etc.). Widely distributed noises, such as a large industrial facility spread over many acres, or a street with moving vehicles, would typically attenuate at a lower rate.

EXISTING NOISE LEVELS

Traffic Noise Levels

The FHWA Model was used to identify existing traffic noise levels for the major local roadways which would be used by Project traffic. The model is based upon the CALVENO noise emission factors for automobiles, medium trucks, and heavy trucks, with consideration given to vehicle volume, speed, roadway configuration, distance to the receiver, and the acoustical characteristics of the site. The FHWA Model predicts hourly Leq values for free-flowing traffic conditions, and is generally considered to be accurate within 1.5 dB.

Existing traffic volumes were obtained from the *Traffic Impact Study* prepared for the Project by Fehr & Peers. Table 3.10-2 shows the predicted existing traffic noise levels at a normalized distance of 100 feet from the roadway centerlines. Sensitive receptors may be located at distances which vary from the centerline and may experience shielding from intervening barriers or sound walls. The noise level contours may vary from the distances predicted by the FHWA model due to roadway curvature, grade, shielding from local topography or structures, elevated roadways, or elevated receivers. The distances reported in Table 3.10-2 are generally considered to be conservative estimates of noise exposure along the project-area roadways.

TABLE 3.10-2: PREDICTED EXISTING TRAFFIC NOISE LEVELS

<i>ROADWAY SEGMENT</i>	<i>NOISE LEVEL AT 100 FEET FROM ROADWAY CENTERLINE (DB)</i>
1. Bond Road West of Elk Grove Florin Rd.	66
2. Bond Road Elk Grove Florin Rd. to Quail Cove Dr.	66
3. Bond Road Quail Cove Dr. to Crowell Dr.	65
4. Bond Road Crowell Dr. to Waterman Rd.	66
5. Bond Road East of Waterman Rd.	65
6. Elk Grove Florin Road North of Bond Rd.	66
7. Elk Grove Florin Road South of Bond Rd.	65
8. Quail Cove Dr. North of Bond Rd.	50
9. Quail Cove Dr. South of Bond Rd.	57
10. Crowell Dr. South of Bond Rd.	55

TABLE 3.10-2: PREDICTED EXISTING TRAFFIC NOISE LEVELS

ROADWAY SEGMENT	NOISE LEVEL AT 100 FEET FROM ROADWAY CENTERLINE (DB)
11. Waterman Rd. North of Sheldon Rd.	62
12. Waterman Rd. from Sheldon Rd. to Bond Rd.	61
13. Waterman Rd. South of Bond Rd.	63
14. Sheldon Rd. West of Waterman Rd.	62
15. Sheldon Rd. East of Waterman Rd.	60

NOTES: DISTANCES TO TRAFFIC NOISE CONTOURS ARE MEASURED IN FEET FROM THE CENTERLINES OF THE ROADWAYS.

SOURCE: BOLLARD ACOUSTICAL CONSULTANTS, INC., 2013.

3.10.2 REGULATORY FRAMEWORK

STATE

California Building Standards Code

The California Building Standards Code includes the California Residential Code, Title 24, Part 2.5 of the State of California Code of Regulations, which establishes uniform minimum noise insulation performance standards to protect persons within new buildings other than single-family dwellings which house people, including hotels, motels, dormitories, and apartments.

Title 24 mandates that interior noise levels attributable to exterior sources shall not exceed 45 dB Ldn or CNEL in any habitable room. Title 24 also mandates that for structures containing noise-sensitive uses to be located where the Ldn or CNEL exceeds 60 dB, an acoustical analysis must be prepared to identify mechanisms for limiting exterior noise to the prescribed allowable interior levels. If the interior allowable noise levels are met by requiring that windows be kept closed, the design for the structure must also specify a ventilation or air conditioning system to provide a habitable interior environment.

LOCAL

City of Elk Grove General Plan

The Noise Element of the General Plan establishes acceptable noise level limits for transportation (such as traffic), and non-transportation noise sources. Relevant policies from the General Plan are identified below.

Policy NO-1 New development of the uses listed in Table NO-C (Table 3.10-3) shall conform with the noise levels contained in that Table. All indoor and outdoor areas shall be located, constructed, and/or shielded from noise sources in order to achieve compliance with the City's noise standards.

Policy NO-2 Where noise-sensitive land uses are proposed in areas exposed to existing or projected exterior noise levels exceeding the levels specified in Table NO-C or the performance standards of Table NO-A (Table 3.10-4), an acoustical analysis shall be required as part

3.10 NOISE AND VIBRATION

of the environmental review process so that noise mitigation may be included in the project design.

Policy NO-3 Noise created by new proposed nontransportation noise sources shall be mitigated so as not to exceed the noise level standards of Table NO-A (Table 3.10-4) as measured immediately within the property line of lands designated for noise-sensitive uses.

NO-3-Action 1 Limit construction activity to the hours of 7 a.m. to 7 p.m. whenever such activity is adjacent to residential uses.

NO-3-Action 3 The City shall require that stationary construction equipment and construction staging areas be set back from existing noise-sensitive land uses.

Policy NO-7 The City shall not require the installation of soundwalls in front yard areas to reduce noise to acceptable levels in residential areas which were originally constructed without soundwalls. The City shall emphasize other methods to reduce noise levels in these situations.

Policy NO-8 Where noise mitigation measures are required to achieve the standards of Tables NO-A (Table 3.10-4) and NO-C (Table 3.10-3), the emphasis of such measures shall be placed upon site planning and project design. The use of noise barriers shall be considered a means of achieving the noise standards only after all other practical design-related noise mitigation measures—including the use of distance from noise sources—have been integrated into the project.

Policy NO-9 Where soundwalls or noise barriers are constructed, the City shall strongly encourage and may require the use of a combination of berms and walls to reduce the apparent height of the wall and produce a more aesthetically appealing streetscape.

TABLE 3.10-3: GENERAL PLAN TABLE NO-C - MAXIMUM ALLOWABLE NOISE EXPOSURE, TRANSPORTATION NOISE SOURCES

LAND USE	OUTDOOR ACTIVITY AREAS ¹ LDN/CNEL, DB	INTERIOR SPACES	
		LDN/CNEL, DB	LEQ, DB ²
Residential	60 ³	45	-
Residential subject to noise from railroad tracks, aircraft overflights, or similar noise sources which produce clearly identifiable, discrete noise events (the passing of a single train, as opposed to relatively steady noise sources such as roadways)	60 ³	40 ⁵	-
Transient Lodging	60 ⁴	45	-
Hospitals, Nursing Homes	60 ³	45	-
Theaters, Auditoriums, Music Halls	-	-	35
Churches, Meeting Halls	60 ³	-	40
Office Buildings	-	-	45
Schools, Libraries, Museums	-	-	45
Playgrounds, Neighborhood Parks	70	-	-

¹ WHERE THE LOCATION OF OUTDOOR ACTIVITY AREAS IS UNKNOWN, THE EXTERIOR NOISE LEVEL STANDARD SHALL BE APPLIED TO THE PROPERTY LINE OF THE RECEIVING LAND USE. WHERE IT IS NOT PRACTICAL TO MITIGATE EXTERIOR NOISE LEVELS AT PATIO OR BALCONIES OF APARTMENT COMPLEXES, A COMMON AREA SUCH AS A POOL OR RECREATION AREA MAY BE DESIGNATED AS THE OUTDOOR ACTIVITY AREA.

² AS DETERMINED FOR A TYPICAL WORST-CASE HOUR DURING PERIODS OF USE.

³ WHERE IT IS NOT POSSIBLE TO REDUCE NOISE IN OUTDOOR ACTIVITY AREAS TO 60 DB LDN/CNEL OR LESS USING A PRACTICAL APPLICATION OF THE BEST-AVAILABLE NOISE REDUCTION MEASURES, AN EXTERIOR NOISE LEVEL OF UP TO 65 DB LDN/CNEL MAY BE ALLOWED PROVIDED THAT AVAILABLE EXTERIOR NOISE LEVEL REDUCTION MEASURES HAVE BEEN IMPLEMENTED AND INTERIOR NOISE LEVELS ARE IN COMPLIANCE WITH THIS TABLE.

⁴ IN THE CASE OF HOTEL/MOTEL FACILITIES OR OTHER TRANSIENT LODGING, OUTDOOR ACTIVITY AREAS SUCH AS POOL AREAS MAY NOT BE INCLUDED IN THE PROJECT DESIGN. IN THESE CASES, ONLY THE INTERIOR NOISE LEVEL CRITERION WILL APPLY.

⁵ THE INTENT OF THIS NOISE STANDARD IS TO PROVIDE INCREASED PROTECTION AGAINST SLEEP DISTURBANCE FOR RESIDENCES LOCATED NEAR RAILROAD TRACKS.

TABLE 3.10-4: GENERAL PLAN TABLE NO-A - NOISE LEVEL PERFORMANCE STANDARDS FOR NEW PROJECTS AFFECTED BY OR INCLUDING NON-TRANSPORTATION NOISE SOURCES

The types of uses which may typically produce the noise sources addressed below include, but are not limited to: industrial facilities including pump stations, trucking operations, tire shops, auto maintenance shops, metal fabricating shops, shopping centers, drive-up windows, car washes, loading docks, public works projects, batch plants, bottling and canning plants, recycling centers, electric generating stations, race tracks, landfills, sand and gravel operations, and athletic fields.

PART 1: PERFORMANCE STANDARDS FOR TYPICAL STATIONARY NOISE SOURCES		
<i>NOISE LEVEL DESCRIPTOR</i>	<i>DAYTIME (7 A.M. TO 10 P.M.)</i>	<i>NIGHTTIME (10 P.M. TO 7 A.M.)</i>
Hourly Leq, dB	55	45
THE STANDARDS ABOVE WILL APPLY GENERALLY TO NOISE SOURCES THAT ARE NOT TONAL, IMPULSIVE, OR REPETITIVE IN NATURE. TYPICAL NOISE SOURCES IN THIS CATEGORY WOULD INCLUDE HVAC SYSTEMS, COOLING TOWERS, FANS, BLOWERS, ETC.		
PART 2: PERFORMANCE STANDARDS FOR STATIONARY NOISE SOURCES WHICH ARE TONAL, IMPULSIVE, REPETITIVE, OR CONSIST PRIMARILY OF SPEECH OR MUSIC		
<i>NOISE LEVEL DESCRIPTOR</i>	<i>DAYTIME (7 A.M. TO 10 P.M.)</i>	<i>NIGHTTIME (10 P.M. TO 7 A.M.)</i>
Hourly Leq, dB	50	40
THE STANDARDS IN PART 2 APPLY TO NOISES WHICH ARE TONAL IN NATURE, IMPULSIVE OR REPETITIVE, OR WHICH CONSIST PRIMARILY OF SPEECH OR MUSIC (E.G., HUMMING SOUNDS, OUTDOOR SPEAKER SYSTEMS, ETC.). TYPICAL NOISE SOURCES IN THIS CATEGORY INCLUDE: PILE DRIVERS, DRIVE-THROUGH SPEAKER BOXES, PUNCH PRESSES, STEAM VALVES, AND TRANSFORMER STATIONS.		
THESE NOISE LEVEL STANDARDS IN PARTS 1 AND 2 ABOVE DO NOT APPLY TO RESIDENTIAL UNITS ESTABLISHED IN CONJUNCTION WITH INDUSTRIAL OR COMMERCIAL USES (E.G., CARETAKER DWELLINGS).		
THE CITY MAY IMPOSE NOISE LEVEL STANDARDS WHICH ARE MORE OR LESS RESTRICTIVE THAN THOSE SPECIFIED ABOVE BASED UPON DETERMINATION OF EXISTING LOW OR HIGH AMBIENT NOISE LEVELS.		

City of Elk Grove Municipal Code

Section 6.32.140 of the City Municipal Code prohibits the operation of construction tools and equipment on private property used in alteration, construction, demolition, drilling, or repair work daily between 7:00 p.m. and 7:00 a.m.

3.10 NOISE AND VIBRATION

3.10.3 IMPACTS AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE

Consistent with Appendix G of the CEQA Guidelines, the proposed Project will have a significant impact related to noise if it will result in:

- Exposure of persons to, or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies;
- Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels;
- A substantial permanent increase in ambient noise levels in the Project vicinity above levels existing without the project; or
- A substantial temporary or periodic increase in ambient noise levels in the Project vicinity above levels existing without project.

The Notice of Preparation and Initial Study prepared for the Project identified that the Project would not have an impact associated with exposure to noise associated with an airport or airstrip. Therefore, this issue will not be addressed in this EIR.

NOISE STANDARDS

The noise standards applicable to the Project include the relevant portions of the City General Plan and the following standards.

Project-Related Traffic Noise Increases

The following guidelines were developed by the Federal Interagency Committee on Noise (FICON) as a means of developing thresholds for identifying project-related noise level increases. The rationale for the graduated scales is that test subject's reactions to increases in noise levels varied depending on the starting level of noise. Specifically, with lower ambient noise environments, such as those below 60 dB Ldn, a larger increase in noise levels was required to achieve a negative reaction than was necessary in environments where noise levels were already elevated. Therefore, because the City does not have defined thresholds for what would be considered a substantial increase in noise levels associated with traffic, the following thresholds are used:

- Ambient Noise Level Without Project of less than 60 dB: a +5.0 dB or more Ldn increase
- Ambient Noise Level Without Project of 60 to 65 dB: a +3.0 dB or more Ldn increase
- Ambient Noise Level Without Project of 65 dB or more: a +1.5 d increase

GROUNDBORNE NOISE AND CONSTRUCTION VIBRATION

The general threshold at which human annoyance could begin to occur is noted as 0.1 in/sec p.p.v and the threshold where human annoyance becomes significant is noted at 0.20 in/sec p.p.v. The threshold for building damage to normal buildings occurs at 0.20 in/sec p.p.v. (Caltrans 2002).

METHODOLOGY

TRAFFIC NOISE PREDICTION METHODOLOGY

To describe projected noise levels due to traffic, Bollard Acoustical Consultants, Inc. employed the Federal Highway Administration (FHWA) Highway Traffic Noise Prediction Model (FHWA RD-77-108). The model is based upon the Calveno reference noise factors for automobiles, medium trucks and heavy trucks, with consideration given to vehicle volume, speed, roadway configuration, distance to the receiver, and the acoustical characteristics of the Project site.

TRAFFIC NOISE PREDICTION MODEL CALIBRATION FOR BOND AND WATERMAN ROADS

On August 18, 2011, Bollard Acoustical Consultants, Inc. conducted noise level measurements and concurrent counts of both Waterman Road and Bond Road traffic at the Project site. The purpose of the short-term traffic noise level measurements is to determine the accuracy of the FHWA model in describing the existing traffic noise at the project site, accounting for shielding from local topography, actual travel speeds, and roadway grade. Noise measurement results were compared to the FHWA model results by entering the observed traffic volume, speed and distance as inputs to the FHWA model. Based upon the calibration results shown in Appendix B of the *Environmental Noise Analysis*, an offset of -3 dB was applied to FHWA model for the prediction of future Waterman Road traffic noise levels.

PREDICTED FUTURE (CUMULATIVE) TRAFFIC NOISE LEVELS AT THE PROJECT SITE

Average daily traffic volumes for future conditions (2025) were obtained from traffic data, used for the Elk Grove General Plan Noise Element. The day/night distribution and truck percentages were derived from Bollard Acoustical Consultants, Inc. file data for similar roadways. Estimated future traffic speed assumptions were based on posted speed limits and field observations. The FHWA Model inputs are contained in Appendix C of the *Environmental Noise Analysis*. The FHWA model was used with the Appendix C data to predict future traffic noise levels at the Project site.

IMPACTS AND MITIGATION MEASURES

Impact 3.10-1: Potential to expose persons to, or generate noise levels in excess of applicable standards or to result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without project – Off-site traffic noise. (Less than Significant)

The FHWA Model was used to predict existing and existing plus Project traffic noise levels for the major local roadways which would be used by Project traffic. Table 3.10-5 identifies the predicted existing and traffic noise levels, respectively, both with and without the Project at a normalized distance of 100 feet from the roadway centerlines. As shown in Table 3.10-5, the Project would result in increased off-site traffic noise levels of up to 1 dB. This is below the threshold of significance for traffic noise. Therefore, this impact is **less than significant**.

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TABLE 3.10-5: PREDICTED EXISTING TRAFFIC NOISE LEVELS

<i>ROADWAY SEGMENT</i>	<i>EXISTING NOISE LEVEL AT 100 FEET FROM ROADWAY CENTERLINE (DB)</i>	<i>EXISTING PLUS PROJECT NOISE LEVEL AT 100 FEET FROM ROADWAY CENTERLINE (DB)</i>
1. Bond Road West of Elk Grove Florin Rd.	66	67
2. Bond Road Elk Grove Florin Rd. to Quail Cove Dr.	66	66
3. Bond Road Quail Cove Dr. to Crowell Dr.	65	66
4. Bond Road Crowell Dr. to Waterman Rd.	66	66
5. Bond Road East of Waterman Rd.	65	65
6. Elk Grove Florin Road North of Bond Rd.	66	66
7. Elk Grove Florin Road South of Bond Rd.	65	65
8. Quail Cove Dr. North of Bond Rd.	50	50
9. Quail Cove Dr. South of Bond Rd.	57	57
10. Crowell Dr. South of Bond Rd.	55	55
11. Waterman Rd. North of Sheldon Rd.	62	62
12. Waterman Rd. from Sheldon Rd. to Bond Rd.	61	62
13. Waterman Rd. South of Bond Rd.	63	63
14. Sheldon Rd. West of Waterman Rd.	62	62
15. Sheldon Rd. East of Waterman Rd.	60	60

*NOTES: DISTANCES TO TRAFFIC NOISE CONTOURS ARE MEASURED IN FEET FROM THE CENTERLINES OF THE ROADWAYS.
SOURCE: BOLLARD ACOUSTICAL CONSULTANTS, INC., 2013.*

Impact 3.10-2: Exposure of persons to, or generation of noise levels in excess of applicable standards - Exposure of Project residents to Exterior Traffic Noise. (Less than Significant with Mitigation)

Average daily traffic volumes for future conditions were obtained from traffic data used for the Elk Grove General Plan Noise Element. The day/night distribution and truck percentages were derived from Bollard Acoustical Consultants, Inc. file data for similar roadways. Estimated future traffic speed assumptions were based on posted speed limits and field observations. The results of that analysis are shown in Table 3.10-6. As shown in Table 3.10-6, the residences proposed nearest to Bond Road and Waterman Road would be exposed to future traffic noise levels which exceed the City of Elk Grove 60 dB Ldn exterior noise level standard for residential uses.

Due to reduced ground attenuation at elevated positions, second floor noise levels are generally 2 dB higher than unshielded first floor locations, which would result in noise levels of 72 dB Ldn or less at the Project lots along Bond Road and noise levels of 63 to 66 dB Ldn or less at the Project lots along Waterman Road. These noise levels could exceed the City of Elk Grove 45 dB Ldn/CNEL interior noise standard for residential uses. To achieve compliance with the City’s interior noise level standard at exposed second-floor rooms adjacent to Bond Road, building facade noise level reductions of 27 dB or less would be required. At first-floor facades, a building facade noise reduction of 15 dB would be required. Standard residential construction, such as stucco, sound transmission class (STC)-28 windows, door weather-stripping, exterior wall insulation, and composition plywood roof, results in an exterior to

interior noise reduction of at least 25 dB with windows closed and approximately 15 dB with windows open. Therefore, standard construction would reduce interior noise levels consistent with the City's interior noise level standard for residences along Waterman Road and shielded first-floor facades along Bond Road, but would fail to provide the required noise reduction at elevated (unshielded) second-floor facades along Bond Road.

The potential for the Project to expose residential uses to exterior and interior noise levels in excess of adopted standards is a **potentially significant impact**.

TABLE 3.10-6: EXPOSURE OF PROJECT RESIDENTS TO FUTURE TRAFFIC NOISE LEVELS

LOCATION	NOISE LEVEL, LDN	DISTANCE TO NOISE CONTOURS (FEET) ¹	
		60 dB LDN	65 dB LDN
Bond Road			
Lots 9-11	70 dB	348	162
Lots 12-21, 66, 160-175	70 dB		
Waterman Road			
Lots 29-44	61 dB	263	122
Lots 26-27	62 dB		
Lots 39-46, 137	64 dB		

MITIGATION MEASURES

Mitigation Measure 3.10-1: Development plans for the Project shall include the following noise attenuation features:

- A uniform 9-foot tall noise barrier should be constructed along the south property lines of all proposed residential uses adjacent to Bond Road to reduce future traffic noise levels to 60 dB Ldn or less within proposed backyards. The barrier shall be constructed of solid materials, such as a masonry wall, earthen berm, or combination of the two, and shall wrap at the ends as indicated in Figure 3.10-1.
- A uniform 6-foot tall noise barrier shall be constructed along the eastern property lines of Waterman Road to reduce future traffic noise levels to 60 dB Ldn or less at proposed backyard areas located adjacent to that roadway. The barrier shall be constructed of solid materials, such as a masonry wall, earthen berm, or combination of the two, and shall wrap at the ends as indicated in Figure 3.10-1.

Timing/Implementation: Prior to issuance of building permits.

Enforcement/Monitoring: City of Elk Grove Planning Department.

Mitigation Measure 3.10-2: Development plans for the Project shall include the following noise attenuation features:

- Air conditioning shall be included in all residences constructed in the Silverado Village development to allow occupants to close doors and windows as desired to achieve additional acoustic isolation from traffic noise in the project vicinity.

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- All second floor windows within 162 feet of Bond Road shall have a minimum STC rating of 30.

Timing/Implementation: Prior to issuance of building permits.

Enforcement/Monitoring: City of Elk Grove Planning Department.

SIGNIFICANCE AFTER MITIGATION

To determine the effectiveness of Mitigation Measure 3.10-1, Bollard Acoustical Consultants, Inc. evaluated the sound reduction that would occur with implementation of solid noise barriers adjacent to Bond Road and Waterman Road. The FHWA Model traffic noise barrier insertion loss methodology was used to determine the noise reduction which would be provided by noise barriers of various heights. The summarized results of the FHWA barrier analysis for the proposed residences located nearest to Bond Road and Waterman Road are contained in Table 3.10-7. As shown in Table 3.10-7 data, a noise barrier 9 feet in height would reduce exterior noise levels along Bond Road to 60 dB Ldn. A noise barrier of 6 feet along Waterman Road will reduce exterior traffic noise levels to 55 to 58 dB Ldn. Implementation of Mitigation Measure 3.10-1 would reduce potential impacts to Project residents associated with exterior noise levels associated with traffic noise to **less than significant**.

TABLE 3.10-7: EXPOSURE TO FUTURE TRAFFIC NOISE LEVELS

LOCATION	NOISE LEVEL, LDN	DISTANCE TO NOISE CONTOURS (FEET) ¹		BARRIER HEIGHT (FEET)	PREDICTED EXTERIOR NOISE LEVEL (LDN)
		60 DB LDN	65 DB LDN		
Bond Road					
Lots 9-11	70 dB	348	162	6	63
				7	62
				8	61
				9	60
				10	59
Lots 12-21, 66, 160-175	70 dB	348	162	6	64
				7	63
				8	61
				9	60
				10	59
Waterman Road					
Lots 29-44	61 dB	263	122	6	55
				7	54
				8	53
Lots 26-27	62 dB	263	122	6	56
				7	55
				8	54
Lots 39-46, 137	64 dB	263	122	6	58
				7	57
				8	55

NOTE: ALL BARRIERS ARE ASSUMED TO BE LOCATED AT THE PROPERTY LINES OF THE RESIDENTIAL USES ADJACENT TO BOND ROAD AND WATERMAN ROAD. BARRIER HEIGHTS ARE RELATIVE TO THE PROPOSED BUILDING PAD ELEVATIONS. DISTANCES ARE MEASURED FROM THE ROADWAY CENTERLINE.

Mitigation Measure 3.10-2 would provide for interior noise attenuation through upgraded sound rating of windows facing Bond Road and through air conditioning, which would allow residents to close doors and windows as desired for acoustical isolation. Implementation of Mitigation Measure 3.10-2 would reduce interior noise levels of residences along Bond Road to levels within the City's interior noise standard. This impact is **less than significant**.

Impact 3.10-3: Potential to expose persons to, or generate noise levels in excess of applicable standards or to result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without project – Park Noise. (Less than Significant)

Children playing at neighborhood parks are often considered potentially significant noise sources which could adversely affect adjacent noise-sensitive land uses. Typical noise levels associated with groups of approximately 50 children playing at a distance of 50 feet generally range from 55 to 60 dB Leq. It is expected that the playground areas would be utilized during daytime hours.

As indicated in Figure 3.10-1, the Project proposes two park areas. Specifically, an approximately 5-acre park is proposed at the northern portion of the Project site on Lot F and a 0.6-acre park is proposed in the south-central portion of the Project site on Lot J. No designs have been developed for these parks at this time, but it is anticipated that the Lot J park would be provided for passive recreation only due to its small size, and that active recreation would occur at the northern park site (Lot F). Given the passive recreation usage of Lot J, no adverse noise impacts are anticipated from this park usage.

Although no design has been developed for the Lot F park, it would likely include active recreation areas such as children's play structures, baseball diamonds, and/or soccer fields. The most significant noise sources associated with the future park usage would likely be crowd cheering during baseball and soccer games. Reference noise level data collected by Bollard Acoustical Staff staff at soccer and baseball facilities indicates that average noise levels during games can be expected to be approximately 55 dB Leq at a distance of 100 feet from the center of the soccer field or pitcher's mound. Because of the intervening "A" Street, the nearest proposed residential outdoor activity areas (backyards) would be located at least 200 feet from the center of the soccer fields or baseball pitcher's mounds. At that distance, noise generated during intensive use of those facilities would be reduced to less than 50 dB Leq. In addition, because the nearest residences will front on A-Street, the rear yard areas, which are the primary outdoor activity areas, of those nearest residences would be shielded from view of park activities by the intervening residential structures. This shielding is expected to further reduce park-generated noise by at least 5 dB in those backyards. The resulting exterior noise exposure would be approximately 45 dB Leq or less during intensive park usage, which is well within compliance with the City's 55 dB Leq daytime noise level standard shown in Table 2. As a result, noise impacts associated with normal park usage are anticipated to be **less than significant** at nearby residences.

Impact 3.10-4: Potential to expose persons to, or generate noise levels in excess of applicable standards, result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without project, or result in vibration and groundborne noise - Construction Noise. (Less than Significant with Mitigation)

During the construction phases of the Project, noise and vibration, including groundborne noise, from construction activities would add to the noise environment in the immediate Project vicinity. Typical activities involved in construction would generate maximum noise levels ranging from 85 to 90 dB at a distance of 50 feet, as shown in Table 3.10-8.

TABLE 3.10-8: CONSTRUCTION EQUIPMENT NOISE

TYPE OF EQUIPMENT	PREDICTED NOISE LEVELS, LMAX DB AT 50'
Bulldozers	87
Heavy Trucks	88
Backhoe	85
Pneumatic Tools	85
Portable Crushing Plant	90

SOURCE: BOLLARD ACOUSTICAL CONSULTANTS 2013.

Minimum rear yard setbacks in Village 1, which would be the lots closest to the existing residences in the vicinity of the Project site, are 20 feet. Therefore, the nearest residential receptors would be located as close as approximately 20 to 75 feet from construction activities. At these distances, construction related activities are predicted to generate maximum noise levels ranging between 70-90 dB Lmax.

The City of Elk Grove Municipal Code prohibits the operation of tools or equipment associated with construction between 7:00 p.m. and 7:00 a.m., which reduces construction noise impacts during the evening hours and provides a regular respite from construction noise. However, Project construction may result in noise that exceeds the City's standards.

While construction activities would occur between the hours exempted by the City, construction activities could result in a substantial temporary increase in ambient noise levels in the project vicinity above levels existing without the project. This is a **potentially significant** impact.

MITIGATION MEASURES

Mitigation Measure 3.10-3: *The following measures shall be followed throughout all phases of construction that are within 250 feet of existing residences:*

- *Construction equipment shall be well maintained and used judiciously to be as quiet as practical. Equip all internal combustion engine-driven equipment with mufflers, which are in good condition and appropriate for the equipment.*
- *Use "quiet" models of air compressors and other stationary noise sources where technology exists.*

- *Locate stationary noise-generating equipment and construction staging areas a minimum of 100 feet from sensitive receptors, including neighboring residential uses, when sensitive receptors adjoin or are near a construction area.*
- *Construction activity within 150 feet of residential uses shall be limited to the hours of 7 a.m. to 7 p.m. whenever such activity is adjacent to residential uses.*
- *Limit idling of internal combustion engines to no more than 5 minutes.*

Timing/Implementation: Throughout all construction and earthmoving activities

Enforcement/Monitoring: City of Elk Grove Planning Department.

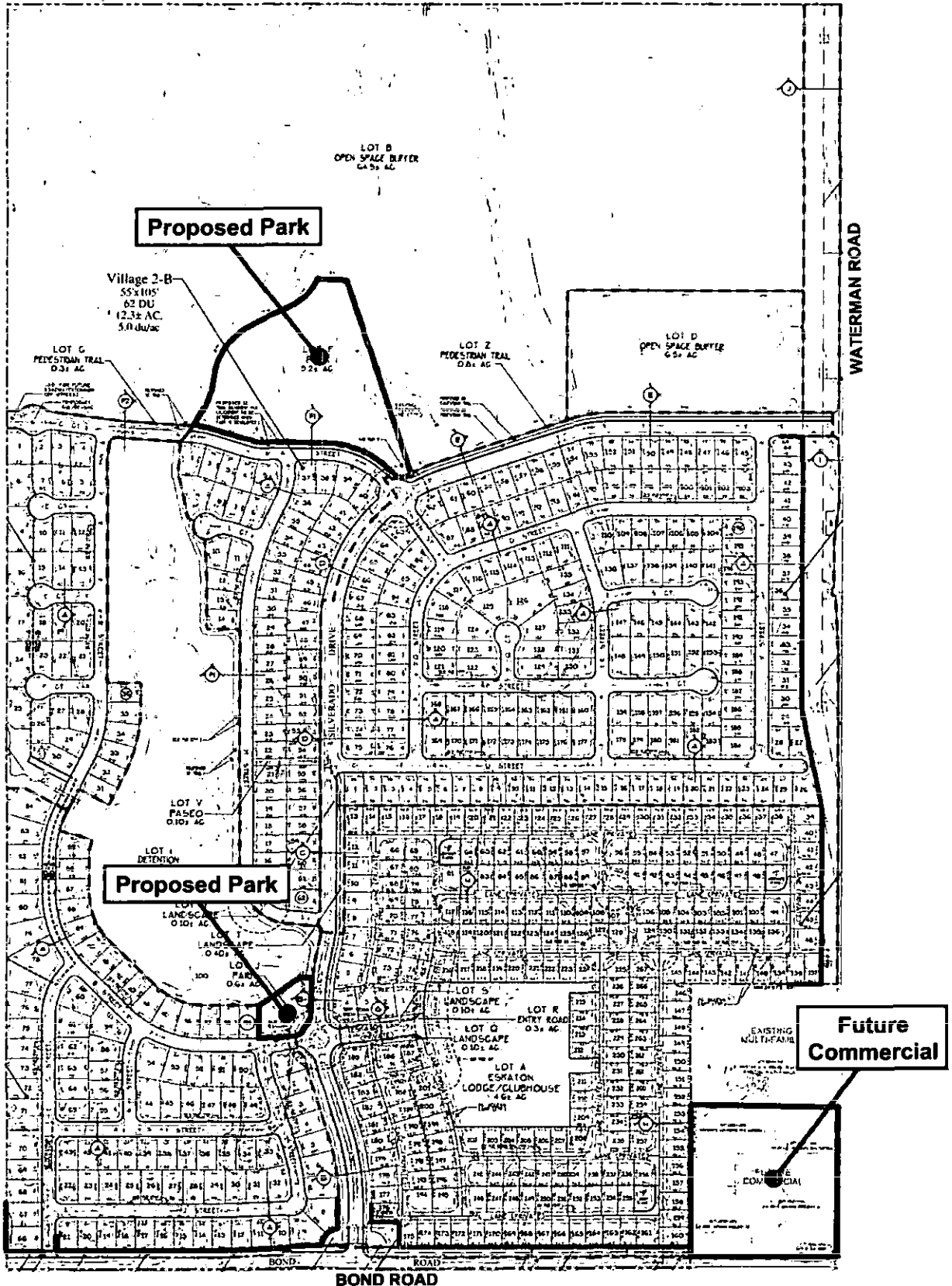
SIGNIFICANCE AFTER MITIGATION

Mitigation Measure 3.10-3 would reduce noise generated by the construction accommodated by the Project, in the form of best available construction noise controls implemented during all construction phases. Construction noise impacts due to construction activities would be **less than significant** with implementation of Mitigation Measure 3.10-1.

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SILVERADO VILLAGE EIR

Figure 3.10-1:
Noise Barrier Locations



Legend
 Recommended Barrier Location

De Novo Planning Group
 A Land Use Planning, Design, and Environmental Firm

Source: Bollard Acoustical Consultants

This section describes and evaluates potential impacts associated with the Project on police protection, fire protection and emergency response services, and parks and recreation. The Initial Study completed for the Project determined that impacts to other public facilities, schools, and existing parks and recreation facilities would be less than significant (see Appendix A). Therefore, impacts to these services will not be discussed in this EIR.

The information in this section is derived from the *Comprehensive Annual Fiscal Report* (City of Elk Grove 2012), *Cosumnes Community Services District Strategic Plan 2008-2013* (CCSD 2008), Cosumnes Community Services District Fire website, Cosumnes Community Services District Park website, *Cosumnes Community Services District 2012 – 2013 Final Budget* (CCSD 2013a), *Cosumnes Community Services District Monthly Fire Report December 2012* (CCSD 2013b), *City of Elk Grove General Plan* (City of Elk Grove 2003a), *City of Elk Grove General Plan, Volume 1: Draft Environmental Impact Report, SCH #: 2002062082* (City of Elk Grove 2003b), *City of Elk Grove Annual Budget 2012-2013* (City of Elk Grove 2012), *City of Elk Grove 2013 Development Related Fees* (City of Elk Grove 2013), and the Elk Grove Police Department website.

Comments received in response to the NOP identified concerns regarding overcrowding of schools and public safety. The comment regarding school overcrowding is addressed in Chapter 1.0, Introduction. The comments are located in Appendix A.

3.11.1 EXISTING CONDITIONS

POLICE PROTECTION

The City of Elk Grove operates its own police force (the Elk Grove Police Department or EGPD), whose service boundaries are contiguous with the City limits. The EGPD provides law enforcement services including responding to crime-related events, handling traffic-related issues, and providing community services to the citizens of Elk Grove. Traffic accidents occurring on freeways that pass through Elk Grove (SR 99 and I-5) are handled by the California Highway Patrol (CHP).

The EGPD provides the full range of public safety services for the City. The Police Department operates out of three facilities. The Police Department's main building is a 12,500-square-foot facility located in the City Hall complex at 8380 Laguna Palms Way, approximately two miles from the Project site. This facility accommodates the administrative functions of the Department, including administration, detectives, and K-9 divisions. A 31,000-square-foot facility located at 8400 Laguna Palms Way houses records, property and evidence, communications, professional standards, traffic, information technology, and fleet services. An approximately 8,069-square-foot facility located at 10190 Iron Rock Way serves as a staging area for the Police Department's fleet and provides shower facilities and equipment storage for sworn personnel.

EGPD has 207 staff positions including 130 sworn police officers, including the police chief, captains, lieutenants, sergeants, and detectives, and 77 non-sworn management, administrative and technical positions (EGPD, 2013). The City's ratio of sworn officers per 1,000 population was 0.82 (130 sworn personnel:159,074 persons) in 2013. EGPD has four divisions: Administrative Services, Field Services, Investigative Services, and Support Services. Field Services is the largest division; Patrol is the largest component of the Field Services Division with 3 lieutenants, 9 sergeants, 53 patrol officers, 6 K-9 officers, and 10 community services officers.

3.11 PUBLIC SERVICES AND RECREATION

The Elk Grove Communications Center answers an average of 186,000 emergency and non-emergency calls annually. In 2012, 96,242 calls for service were received. Patrol personnel handle calls for service from residents, businesses and visitors. The current average response time for priority calls is 5.8 minutes (City of Elk Grove, 2012). The Elk Grove Police Department's response time to non-emergency call depends on the seriousness (or priority) of the situation, the likelihood of making an arrest at the scene and the availability of an officer. Response times are the longest for so-called "cold crimes" like home burglaries where the suspect has fled, no suspect information exists, and the victim is in no further danger (Elk Grove Police Department, 2011).

Table 3.11-1 summarizes the number and type of crimes that have occurred from 2006 through 2010 in Elk Grove.

TABLE 3.11-1: ELK GROVE POLICE DEPARTMENT CRIME STATS (2006-2010)

CATEGORY/CRIME	2006	2007	2008	2009	2010
Violent Crimes	197	505	660	608	529
Willful Homicide	1	2		4	2
Forcible Rape	16	23	22	15	14
Robbery	65	154	149	152	108
Aggravated Assault	115	326	489	437	405
Property Crimes	1,188	2,274	1,966	2,010	1,790
Burglary	398	951	882	859	653
Motor Vehicle Theft	286	546	349	432	343
Larceny-Theft Over \$400	504	777	735	719	794
Larceny-Theft	1,142	2,186	2,359	2,152	2,208
Over \$400	504	777	735	719	794
\$400 and Under	638	1,409	1,624	1,433	1,414
Arson	8	6	12	11	15

SOURCE: CALIFORNIA DEPARTMENT OF JUSTICE. 2013. [HTTP://OAG.CA.GOV/CRIME/IT_CISC/2010](http://oag.ca.gov/crime/it_cisc/2010)

FIRE PROTECTION AND EMERGENCY RESPONSE

Fire protection and emergency response services are provided by the Cosumnes Community Services District (CCSD) Fire Department. The CCSD Fire Department services include fire suppression, emergency medical services, technical rescue, arson, and explosion investigations. In November of 2006, a merger between the Elk Grove Community Services District and the Galt Fire Protection District resulted in the creation of the CCSD. This change expanded the delivery of CCSD fire protection and emergency medical services to the cities of Elk Grove and Galt, and unincorporated south County areas—approximately 157 square miles.

Through the merger of the two fire districts and the creation of the CCSD, the total number of fire stations increased from six to eight, plus an administrative building. Six of the fire stations are located in the City of Elk Grove. A description of the operational characteristics of the stations is provided below.

Fire Station 71 is located at 8760 Elk Grove Boulevard in Elk Grove. This station maintains one four-person engine, one two-person medic, and one battalion chief.

Fire Station 72 is located at 10035 Atkins Drive in the East Franklin Specific Plan area in Elk Grove. Primary equipment at this station includes one three-person engine and one two-person medic. This station is approximately 1 ½ miles from the Project site.

Fire Station 73 is located at 9607 Bond Road in Elk Grove. This station provides fire, emergency medical, and ambulance transport services. Primary equipment at this station includes one three-person engine and one two-person medic. This station is approximately one mile from the Project site.

Fire Station 74 is located at 6501 Laguna Park Drive in Elk Grove. This station provides fire, rescue, emergency medical, and ambulance transport services. Primary equipment at this station includes one four-person truck, one three-person engine, and one two-person medic.

Fire Station 75 is located at 2300 Maritime Drive in Elk Grove, approximately 9.5 miles northwest of the Project site. This station provides fire and emergency medical services. Minimum staff at this station includes one three-person engine.

Fire Station 76 is located at 8545 Sheldon Road in Elk Grove. This station provides fire and emergency medical service. Primary equipment located at this station includes one three-person engine. This station is approximately 1 ¾ mile from the Project site.

The CCSD Fire Department is divided into two divisions, the Operations division and the Administration and Support Services division. These two divisions work in concert to provide emergency mitigation and fire prevention services in the region.

The Operations Division provides leadership and evaluation of assigned emergency personnel; responds to various emergencies dispatched throughout the community, including fires, vehicle collisions, hazardous materials spills, medical, and public assistance calls; and manages operation-based programs, including emergency vehicle and equipment acquisition and management.

In 2011, CCSD responded to more than 14,000 calls. The CCSD is staffed with more than 150 sworn personnel and eight engine companies, one ladder truck company, six ambulances, and a command vehicle each day on a 24-hour basis. There are also eight grass engines and other specialty apparatus, including one heavy foam unit, a heavy rescue engine, a technical rescue trailer, a mass decontamination trailer, a mass casualty incident trailer, and a swift water rescue boat, also staffed using these personnel as seasons and emergency circumstances dictate (CCSD, 2013a, p. 4).

The CCSD Fire Department operates three full-time medic units from Fire Stations 73, 74, and 75 in central Elk Grove, Laguna, and east Elk Grove, respectively. The CCSD provides Basic Life Support (BLS) and Advanced Life Support (ALS) and ambulance transport services in the CCSD service boundaries, as well as the nearby communities of Wilton, Herald, and Courtland. All medic units are staffed with one paramedic and an emergency medical technician (EMT). In addition to ambulance units, the EMS Division has a medic bike team that is deployed at large-scale community events to provide rapid medical responses in heavily congested areas (CCSD, 2012a, CCSD, 2012b).

3.11 PUBLIC SERVICES AND RECREATION

Table 3.11-2 provides statistics on fire calls/service in 2011 and 2012 for the City of Elk Grove. The most frequent types of calls for fire services in 2011 are related to medical (74%). Fires represented 4% of all calls in 2012, an increase of 19% from 2011.

TABLE 3.11-2: CCSD ELK GROVE CALL/SERVICE STATISTICS

CALL TYPE	NUMBER OF INCIDENTS				2011-2012 CHANGE
	2011	% OF TOTAL	2012	% OF TOTAL	
Fire	387	3%	459	4%	19%
Medical	8,739	74%	8,865	74%	1%
Special	214	2%	201	2%	-6%
Other	2,494	21%	2,380	20%	-5%
Total	11,825	100%	11,905	100%	1%

SOURCE: CSDD 2013B, P. 2.

Insurance Services Office (ISO) Rating

The ISO rating is the recognized classification for a fire department or district's ability to defend against major fires. According to the ISO, newly developing urban areas should have a fire station opened within 1½ miles of all commercial development and 2½ miles from all residential development when "build-out" exceeds 20% of the planned area. A rating of 10 generally indicates no protection, whereas an ISO rating of 1 indicates high firefighting capability. The City has been given an ISO rating of 3 in areas where a water distribution system and hydrants are in place and an ISO rating of 8 in unwatered areas (City of Elk Grove 2003b, pg 4.12-3).

PARKS AND RECREATION SYSTEM

The CCSD Parks and Recreation Department provides parks and recreation services to the Cities of Elk Grove and Galt. The CCSD plans and designs new parks; owns, operates, and maintains parks and community centers; manages rentals of community centers, picnic sites, and sports fields; and offers recreation programs. Currently, the CCSD manages 92 parks, 18 miles of off-street trails, two community centers, four recreation centers, and two aquatics complexes. The CCSD provides recreation programs for all ages including special events, preschools, summer camps, teen programs, special interest classes, before- and after-school recreation, non-traditional sports, therapeutic recreation, youth and adult sports, and aquatic programming (CCSD, 2012).

Park Inventory

The CCSD's 92 parks are divided into thirteen zones. The Project is in the CCSD Zone 11. The park facilities in Zone 11 are summarized in Table 3.11-3 below.

TABLE 3.11-3: CCSD PARK FACILITIES INVENTORY

PARK NAME	ACRES	ZONE
Berens Park	2.65	11
Derr-Okamoto Park	21	11
Fleming Park	2	11
Gates Park	2.4	11
Lewis Park	2.5	11

PARK NAME	ACRES	ZONE
Miles Park	2	11
Simpson Park	7.8	11
Strong Park	7.9	11
Wright Park	1.5	11

SOURCE: CCSD ON-LINE PARKS LIST [HTTP://WWW.YOURCSD.COM/PARKS/PARKS_LIST.ASP](http://www.yourcsd.com/parks/parks_list.asp)

CCSD Community Facilities

Barbara Morse Wackford Community and Aquatic Complex is located next to Laguna Community Park, on the corner of Bruceville Road and Big Horn Blvd. The facility features an aquatics complex, reception and meeting rooms, full court gymnasium, preschool room, teen center, skate park, and lobby.

The Grove is Elk Grove's largest teen recreational facility, offering recreational amenities and programs for students enrolled in grades 7-12. This 2,100-square-foot facility has three large flat screen TVs, gaming consoles, pool tables, foosball tables, a ping pong table, computers to help with homework research, a snack bar, and an outdoor patio.

The Laguna Town Hall is a CCSD facility located near I-5 and the Laguna Blvd exit. The facility offers community classes, a preschool, and special events.

The Jerry Fox Swim Center is an aquatic center with a 140 foot water slide, a 25 yard pool, and a large, shaded picnic area with barbeques and a dry jungle gym. The facility is open from Memorial Day to Labor Day and hosts a variety of aquatic activities including open recreational swim, swim lessons, pool parties, and special water-based events for families and teens.

The Castello Recreation Center is in Castello Park and is used by the Tiny Tot Zone program.

The Pavilion accommodates 200 guests in a dining capacity, and 300 guests theater style. Rental includes set-up and break-down of all the tables and chairs, full access to kitchen facility, outdoor patios, and ample parking.

Strauss Island, home of the popular Strauss Festival, is a beautiful outdoor facility that is available for ceremonies that can accommodate a maximum of 200 guests. Strauss Island includes indoor dressing rooms, chairs, electrical outlets, and nearby parking. Restrooms are approximately 200 yards away.

The Johnson Recreation Center, located at 3570 Marsh Point Drive, offers the preschool program "Tiny Tot Station" and the elementary-age before- and after-school Recreation Enrichment Kid Central Station.

The Elk Grove Recreation Center, located at 8828 Elk Grove Blvd., hosts several preschool programs including Tiny Tot Friendship Corner, Tiny Tot Kids at Play, Buddy Bunch, and Toddler Time. The California Montessori project is located on site and several Leisure Enrichment Classes are offered at this location.

The Stephenson Recreation Center is situated in Stephenson Park and hosts the Tiny Tot Pals preschool program.

3.11 PUBLIC SERVICES AND RECREATION

3.11.2 REGULATORY SETTING

STATE

Fire Code

The California Fire Code, based on the International Fire Code with State of California amendments, contains regulations relating to construction, maintenance, and use of buildings. Topics addressed in the California Fire Code include fire department access, fire hydrants, automatic sprinkler systems, fire alarm systems, fire and explosion hazards safety, hazardous materials storage and use, provisions intended to protect and assist fire responders, industrial processes, and many other general and specialized fire-safety requirements for new and existing buildings and the surrounding premises. The California Fire Code contains specialized technical regulations related to fire and life safety.

California Health and Safety Code

State fire regulations are set forth in Division 12 of the California Health and Safety Code. This includes regulations for building standards (as also set forth in the California Building Code), fire protection and notification systems, fire protection devices such as extinguishers and smoke alarms, high-rise building and childcare facility standards, and fire suppression training.

LOCAL

City of Elk Grove General Plan

The City of Elk Grove General Plan contains the following goals and policies that are relevant to public services:

PUBLIC FACILITIES AND FINANCE ELEMENT

Policy PF-21 New development shall fund its fair share portion of its impacts to all public facilities and infrastructure as provided for in state law.

Police Protection

Policy PF-1 Except when prohibited by state law, the City shall require that sufficient capacity in all public services and facilities will be available on time to maintain desired service levels and avoid capacity shortages, traffic congestion, or other negative effects on safety and quality of life.

Policy SA-30 Design neighborhoods and buildings in a manner that prevents crime and provides security and safety for people and property when feasible.

Policy SA-31: Encourage the use of Crime Prevention Through Environmental Design (CPTED) principles in the design of development projects and buildings. These basic principles include:

- **Natural Surveillance:** A design concept directed primarily at keeping intruders easily observable. Promoted by features that maximize visibility of people, parking areas and building entrances: doors and windows that look out on to streets and parking

areas; pedestrian friendly sidewalks and streets; front porches; adequate nighttime lighting.

- **Territorial Reinforcement:** Physical design can create or extend a sphere of influence. Users then develop a sense of territorial control while potential offenders, perceiving this control, are discouraged. Promoted by features that define property lines and distinguish private spaces from public spaces using landscape plantings, pavement designs, gateway treatments, and "CPTED" fences.
- **Natural Access Control:** A design concept directed primarily at decreasing crime opportunity by denying access to crime targets and creating in offenders a perception of risk. Gained by designing streets, sidewalks, building entrances and neighborhood gateways to clearly indicate public routes and discouraging access to private areas with structural elements.
- **Target Hardening:** Accomplished by features that prohibit entry or access: window locks, dead bolts for doors, interior door hinges.

Fire Protection

Policy PF-1 Except when prohibited by state law, the City shall require that sufficient capacity in all public services and facilities will be available on time to maintain desired service levels and avoid capacity shortages, traffic congestion, or other negative effects on safety and quality of life.

Policy PF-2 The City shall coordinate with outside service agencies—including water and sewer providers, the Elk Grove Community Services District, and the Elk Grove Unified School District --during the review of plans and development projects.

Policy PF-7 The City shall require that water flow and pressure be provided at sufficient levels to meet domestic, commercial, industrial, and firefighting needs.

Policy PF-19 Public facilities should be phased in a logical manner which avoids "leapfrog" development and encourages the orderly development of roadways, water and sewer, and other public facilities. The City shall not provide public financing or assistance for projects that do not comply with the planned phasing of public facilities. Interim facilities may be used only if specifically approved by the City Council.

Policy PF-21 New development shall fund its fair share portion of its impacts to all public facilities and infrastructure as provided for in state law.

Policy SA-28 Cooperate with the Elk Grove Community Services District (EGCSD) Fire Department to reduce fire hazards, assist in fire suppression, and promote fire safety in Elk Grove.

SA-28-Action 1 Review new development for adequate water supply and pressure, fire hydrants, and access to structures by fire fighting equipment and personnel.

SA-28-Action 2 Review projects for compliance with the Fire Code as part of the building permit process.

3.11 PUBLIC SERVICES AND RECREATION

SA-28-Action 4 Require, where appropriate, on-site fire suppression systems for all new commercial and industrial development to reduce the dependence on fire department equipment and personnel.

Policy SA-32 Cooperate with the Elk Grove Community Services District (EGCSD) Fire Department to reduce fire hazards, assist in fire suppression, and promote fire safety in Elk Grove.

PARKS, TRAILS, AND OPEN SPACE ELEMENT

Policy PTO-1 The City of Elk Grove supports the development, maintenance, and enhancement of parks and trails serving a variety of needs at the neighborhood, area, and citywide level. The City may seek to accomplish the provision of parks and trails in cooperation with the Elk Grove Community Services District.

Policy PTO-3 Funding for maintenance of parks and/or trails shall be assured to the City's satisfaction prior to the approval of any Final Subdivision Map which contains or contributes to the need for a public parks and facilities.

Policy PTO-4 New residential developments may be required to, at a minimum, provide parks consistent with the Quimby Act (CA Govt. Code Section 66477), through land dedication, fees in lieu, or on-site improvements at a standard of five (5) acres of land for parks per 1,000 residents. Land dedication and/or payment of in-lieu fees shall be required consistent with state law. Land dedication and/or fees may be required pursuant to other policies in this Element with or without the use of the authority provided in the Quimby Act, or in combination with the Quimby Act and other legal authority.

Policy PTO-7 The trails system in Elk Grove should provide for connectivity, so that all trails are linked to the extent possible for greater use as recreational and travel routes. The following features should be included in the trails system in Elk Grove:

- Trails should link residential areas with parks, commercial and office areas, and other destinations.
- Trails along major roadways should avoid meanders or other design features which make bicycle use less convenient or safe.
- Trails should be located off-street to the extent possible.
- Easements such as access roads should be placed in joint use as trails.

Policy PTO-8 The City's desired trails system is shown in Figure PTO-2. Flexibility shall be considered when making decisions on specific trail locations within projects, so long as the trails shown in figure PTO-2 are implemented and other policies (such as connectivity) are incorporated in the trails system.

Policy PTO-9 Funding for maintenance of City trails shall be assured prior to the approval of any project which contains a City owned trail.

Policy PTO-11 Trails which parallel streams should be primarily located beyond the riparian corridor and wetlands to minimize wildlife impacts and shall be restricted to non-motorized traffic.

Policy PTO-12 Trails should be designed with the safety of users and adjacent property owners in mind. To the extent possible, the bicycle trails system should provide safe, off-street options suitable for use by children and less-experienced riders.

Policy PTO-13 Recreational trails should not be placed adjacent to or on farmland if feasible alternative routes exist elsewhere in the vicinity. However, if no other feasible routes exist, trail facilities should be designed in cooperation with adjacent property owners to minimize adverse impacts on farming practices.

City of Elk Grove Municipal Code

CHAPTER 22.40. PARK AND RECREATION DEDICATION AND FEES

Chapter 22.40 establishes parks and recreation dedication and fee requirements for development projects. This chapter does not apply to the Project site. Section 22.40.000, Application states that this chapter and the Quimby Act do not apply to Vintara Park on the northeast corner of Bond Road and Waterman Road consisting of Assessor Parcel Numbers 127-0010-002, 127-0010017, 127-0010-018, 127-0010-019, 127-0010-020 and 127-0010-040.

3.11.3 IMPACTS AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE

Consistent with Appendix G of the CEQA Guidelines, the Project will have a significant impact on public services if it would:

- Result in substantial adverse physical impacts associated with the provisions of new or physically altered government facilities, and/or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts in order to maintain acceptable service ratios, response times, or other performance objectives for any of the following public services:
 - Fire Protection,
 - Police Protection, or
 - Parks; and/or
- Include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment.

IMPACTS AND MITIGATION MEASURES

Impact 3.11-1: The Project would not have a significant effect on fire protection services or facilities. (less than significant)

The CCSD Fire Department currently operates six fire stations in the City of Elk Grove. The closest fire station to the Project site is currently Station 73 located at 9607 Bond Road, approximately one mile from the Project site.

3.11 PUBLIC SERVICES AND RECREATION

The CCSD Fire Department has established a goal for emergency response units from the Fire Department to arrive on-scene in urban areas of the CCSD within five minutes of initial dispatch, 70% of the time, and up to six minutes of initial dispatch, 90% of the time. In rural areas, the goal is for the Fire Department to arrive on-scene within twelve minutes of initial dispatch, 90% of the time." (CCSD 2008, p. 19).

The General Plan Draft EIR anticipated urbanization of the City and identified that implementation of the General Plan would result in a less than significant impact associated with provision of fire protection and emergency medical services with implementation of the EGSCD (now CCSD) Master Plan and mitigating General Plan policies and actions including Policies PF-1, PF-2, PF-7, PF-19, PF-20, PF-21, and SA-28 and associated implementing actions (Impact 4.12.1. City of Elk Grove, 2003b, pp. 4.12-7 through 4.12-9). The Project is consistent with the General Plan policies and implementing actions, to the extent that these policies apply to the Project.

The Project would provide adequate water flow and pressure, as required by Policy PF-7 and SA-28 Action 1. General Plan Policy SA-32 requires the cooperation with the Elk Grove Community Services District (EGSCD) Fire Department (now CCSD Fire Department) to reduce fire hazards, assist in fire suppression, and promote fire safety in Elk Grove and Policy PF-2 requires coordination with outside agencies. The Project is required to undergo the City's development review process. The Project application has been provided to the CCSD Fire Department for its review and comment. In a July 10, 2012 letter, the CCSD identified its standard comments that must be addressed by the Project as part of the plan checking process. These standard comments include fire sprinkler specifications, emergency vehicle turnaround requirements, minimum fire flow requirements, requirement for installation of various infrastructure, and requirements for the wetlands/open space areas. The CCSD also identified project-specific requirements regarding the street names/addressing, street layout, and requirement for funding a portion of the CCSD's ongoing fire and emergency services. The Project would be required to comply with the CCSD's requirements prior to issuance of a Fire Permit by the CCSD. Policy PF-21 requires that new development shall fund its fair share portion of its impacts to all public facilities and infrastructure as provided for in state law. As a part of the City's Fire Fee, the City collects impact fees from new development at a rate of \$1,767 per single family dwelling, \$936 for age restricted dwelling for Zone 1 area of which the Project site is located (City of Elk Grove 2013, pg. 18). Payment of the applicable impact fees by the Project applicant would assist in offsetting any fiscal impacts to fire services.

As the Project is developing within an urban area, it meets the goal of having a fire station (Station 73) within one mile, resulting in an ISO rating of 3. Additionally, this Project is infill development in an existing built out urban area and would not result in a decrease of the response time goal of 5 minutes or less (80 percent of the time) in the urbanized portions of the City. The Project would not require expansion of existing facilities or development of a new fire station in order for the CCSD to maintain its service levels. Therefore, potential physical impacts related to the provision of fire and emergency medical services in the Project areas are considered **less than significant**.

Impact 3.11-2: The Project would not have a significant effect on police services or facilities. (less than significant)

The service standard for the Police Department is one officer per 1,000 people. The Project includes 393 single-family residential units, 267 adult (55 and older) single-family residential units, and 125 independent living, assisted living, and/or memory care units for seniors. This is projected to increase the population by an estimated 2,100 (based on 3.22 persons per household¹ for single family residents, 2.30 persons per household² per senior single-family unit, and 1.76 persons per household² per senior independent living/assisted living/memory care units). The Project would require approximately 1.7 sworn officers according to the City's existing service level of 0.82 officers per 1,000 people. The addition of 1.7 officers would not require the Police Department to expand the existing facilities or construct new facilities.

The General Plan Draft EIR anticipated urbanization of the City and identified that implementation of the General Plan would result in a less than significant impact to police services with implementation of mitigating General Plan policies and actions, SA-30, and SA-31 related to provision of police and public safety services (Impact 4.12.1.2; City of Elk Grove, 2003b, pp. 4.12-14 through 4.12-16). The Project is consistent with General Plan policies related to public safety services.

Elk Grove General Plan Policy SA-30 requires development to design neighborhoods and buildings in a manner that prevents crime and provides security and safety for people and property when feasible. Policy SA-31 encourages the use of Crime Prevention Through Environmental Design (CPTED) principles in the design of development projects and buildings. The Project is required to undergo the City's development review process. The Project application was reviewed by the Elk Grove Police Department, which identified four "flag-style" lots that may pose an issue for regular patrol. The lots identified by the Police Department are in Village 3, which will be gated and have private security patrols. Policy PF-21 requires that new development shall fund its fair share portion of its impacts to all public facilities and infrastructure as provided for in state law.

As a part of the City's Capital Facilities Fee Program, the City collects police facility impact fees from new development at a rate of \$429 per single family dwelling, \$279 for age restricted dwelling and \$201 for multifamily age restricted units (City of Elk Grove 2013, pg. 12). Payment of the applicable impact fees by the Project applicant would assist in offsetting any fiscal impacts to police services. The potential need for approximately 1.7 additional sworn police officers as a result of Project implementation would not require a new or expanded police facility. Therefore, the Project would have a **less than significant** impact to police services.

¹ Based on DOF Report E-5: City/County Population and Housing Estimates, 1/1/2013

² Based on U.S. Census Bureau, 2007-2011 American Community Survey, Tables S0102 and S0103

Impact 3.11-3: The Project may result in significant environmental impacts associated with the construction and operation of parks and recreation facilities. (less than significant with mitigation)

General Plan Policy PTO-4 states that new residential developments may be required to, at a minimum, provide parks consistent with the Quimby Act (CA Govt. Code Section 66477), through land dedication, fees in lieu, or on-site improvements at a standard of five (5) acres of land for parks per 1,000 residents. Additionally, Policy PTO-15 exemplifies the City's desire to preserve open space lands in the region, and supports the establishment of multipurpose open space areas. While the City's parks and recreation requirements established in Chapter 22.40 of the Municipal Code do not apply to the Project, the Project would provide neighborhood parks and recreational trails consistent with General Plan Policy PTO-4. The Project would also provide recreational amenities, including a clubhouse and swimming atrium, for Village 3 residents.

Development of the Project's proposed parks and recreation facilities, including the approximately 6.1 acres of parks, 2.2 acres of trail corridors, a 3.9-acre open space/trail corridor, and a 2.1-acre parcel in Village 3 to accommodate the clubhouse and swimming atrium, may result in environmental impacts. Potential environmental impacts that would result from development of the Project, including the Project's parks and recreation components, are discussed in Chapters 3.1 through 3.13 of this document.

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The purpose of this EIR section is to identify environmental impacts related to circulation and transportation that would result from Project implementation. This section recommends mitigation measures to avoid or minimize the significance of potential impacts. Information in this section is based on the *Transportation Impact Study – Silverado Village SPA* (Fehr & Peers 2013) (see Appendix F).

3.12.1 ENVIRONMENTAL SETTING

PROJECT LOCATION

The Project site is located northwest of the Bond Road and Waterman Road intersection in the City of Elk Grove (see Figures 2-1 and 2-2).

STUDY AREA ROADWAYS

Regional access to the Project is provided by State Route (SR) 99 and, to a lesser extent, Interstate 5 (I-5) while local access to the Project site is provided via Bond Road and Waterman Road.

Freeways

Freeways serving the Project vicinity include I-5, SR 99, and SR 16.

- I-5 is a major federal interstate freeway, extending from the Canadian border to Mexico. I-5 runs from north to south through the western portion of the City and, in the Sacramento region, is a 4- to 8-lane freeway.
- SR 99 is an important north-south corridor serving the major urbanized areas in the Central Valley. SR 99 runs from north to south through the City and, in the Sacramento region, is a 2- to 8-lane highway.
- SR 16 runs from Highway 50 near Power Inn Road to State Route 49 at the town of Drytown. SR 16 makes up the northern boundary of the City's General Plan Planning Area.

Roadways

Several key local roadway facilities near the Project site are described below:

- **Sheldon Road** is an east-west arterial roadway located roughly one half mile north of the Project's northern boundary. Sheldon Road begins approximately 5.5 miles east of SR 99, and extends just less than one mile west of the freeway before transiting into Center Parkway. East and west of its intersection with Waterman Road, Sheldon Road is two lanes. Wide shoulders are available on both sides of Sheldon Road between Waterman Road and Elk Grove Florin Road.
- **Bond Road** is an east-west arterial roadway that serves as the southern boundary of the Project. Bond Road extends from SR 99 to Grant Line Road. Between SR-99 and Bradshaw Road, Bond Road is four lanes and narrows to two lanes east of Bradshaw Road. It will serve as the Project's primary connection to SR 99.

3.12 TRANSPORTATION AND CIRCULATION

There is an at-grade crossing of the Union Pacific Railroad (Crossing Number 752749S) located about 400 feet east of Elk Grove Florin Road. The crossing traverses one set of tracks that serves about 16 trains per day (i.e., a combination of passenger and freight trains). The crossing is a 24-hour quiet zone. The typical speed range over the tracks is 40 to 55 miles per hour. Traffic control at the crossing includes the following passive and active devices:

- Advanced Warning Signs
- Pavement Markings – stop lines and railroad crossing symbols
- Gates – full-barrier gates
- Flashing Lights – 10 pairs
- Bells – 4 bells

In addition, the railroad crossing and the Elk Grove Florin Road/Bond Road intersection are coordinated so that the traffic signal clears the westbound approach to the intersection prior to a train crossing Bond Road. The traffic signal also minimizes delay for other movements at the intersection not affected by the train crossing (e.g., northbound and southbound Elk Grove Florin Road).

A query of the Federal Railroad Administration accident history database revealed no collisions at this crossing.

- **Waterman Road** is a north-south arterial roadway extending from north of Vintage Park Drive in Sacramento County to Grant Line Road. Waterman Road is two lanes near the Project.
- **Elk Grove Florin Road** is a major north-south arterial roadway extending from SR-99 north to Florin Road, at which point it transitions into Watt Avenue and continues north to Baseline Road in North Antelope. The entire distance covered by Watt Avenue and Elk Grove Florin Road is nearly 25 miles. At its intersection with Bond Road, it carries traffic in four lanes and features separate left- and right-turn lanes.

Study Intersections

The traffic study area for the Project was selected based on the expected travel characteristics (i.e., Project location and amount of Project trips) of the Project, as well as the susceptibility of nearby transportation facilities to Project impacts. Five existing and two future intersections were selected for analysis:

1. Elk Grove Florin Road/Bond Road
2. Quail Cove Drive/Bond Road
3. Project Access/Bond Road Driveway (Opposite Whittemore Drive)
4. Crowell Drive (East)/Bond Road (Project Access)

5. Waterman Road/Bond Road
6. Waterman Road/Project Access
7. Sheldon Road/Waterman Road

DATA COLLECTION AND ANALYSIS

To provide a baseline for the transportation analysis, traffic counts were collected at the five existing study intersections on Thursday, December 6th, 2012. The intersection turning movement counts were conducted during the AM (7:00 to 9:00) and PM (4:00 to 6:00) peak periods. During the counts, weather conditions were dry, no unusual traffic patterns were observed, and the Elk Grove Unified School District was in full session. Pedestrians and bicyclists were also counted at each of the study intersections.

Each intersection's peak hour within the peak period was used for the analysis. For the majority of study intersections, the counts indicate that the AM peak hour is between 7:30 AM and 8:30 AM and the PM peak hour is between 5:00 PM and 6:00 PM.

Analysis Methodology

INTERSECTIONS

All intersections were analyzed using procedures and methodologies contained in the Highway Capacity Manual (HCM), Transportation Research Board, 2010. These methodologies were applied using SimTraffic 7 (a micro-simulation modeling software).

The HCM methodologies determine a level of service (LOS) for each study intersection. Level of service is a qualitative measure of traffic operating conditions whereby a letter grade, from A to F, is assigned. These grades represent the perspective of drivers and are an indication of the comfort and convenience associated with driving. In general, LOS A represents free-flow conditions with no congestion, and LOS F represents severe congestion and delay under stop-and-go conditions. Tables 3.12-1 and 3.12-2 present intersection LOS thresholds for traffic signal controlled and stop controlled intersections, respectively.

- Since the analysis was conducted using micro-simulation, a weighted average peak-hour factor was applied to the study intersections based on the December 2012 peak period intersection turning movement counts.
- Intersection analysis results are based on the average of 12 micro-simulation model runs.
- A heavy vehicle percentage of two percent was applied.

3.12 TRANSPORTATION AND CIRCULATION

TABLE 3.12-1: INTERSECTION LEVEL OF SERVICE THRESHOLDS – SIGNALIZED INTERSECTIONS

LEVEL OF SERVICE	AVERAGE CONTROL DELAY (SECONDS/VEHICLE) 1
A	≤ 10.0
B	10.1 – 20.0
C	20.1 – 35.0
D	35.1 – 55.0
E	55.1 – 80.0
F	> 80.0

Notes:

1. Control delay includes initial deceleration delay, queue move-up time, stopped delay, and acceleration delay.

Source: Fehr & Peers, 2013

TABLE 3.12-2: INTERSECTION LEVEL OF SERVICE THRESHOLDS – UNSIGNALIZED INTERSECTIONS

LEVEL OF SERVICE	AVERAGE CONTROL DELAY (SECONDS/VEHICLE) 1
A	≤ 10.0
B	10.1 – 15.0
C	15.1 – 25.0
D	25.1 – 35.0
E	35.0 – 50.0
F	> 50.0

Notes:

1. Control delay includes initial deceleration delay, queue move-up time, stopped delay, and acceleration delay.

Source: Fehr & Peers, 2013

FREEWAY FACILITIES

Congested freeway travel speed is used to evaluate freeway facilities as documented by Caltrans in the 2008 State Highway Congestion Monitoring Program (HICOMP) Annual Data Compilation, September 2009.

EXISTING INTERSECTION OPERATIONS

Figure 3.12-2 shows existing AM and PM weekday peak hour traffic volumes, lane configurations, and traffic controls at each study intersection. Table 3.12-3 summarizes the existing peak hour intersection level of service (see Appendix B for detailed calculations). As shown, most of the study intersections operate acceptably, LOS D or better, except for the Waterman Road/Sheldon Road intersection, which operates at LOS E during both the AM and PM peak hours.

The Sheldon Road / Waterman Road intersection is the only study intersection in the City's Rural Residential Area and is subject to the Elk Grove Rural Road Improvement Policy (November 14, 2007). The policy outlines the process for implementing roadway and intersection improvements in response to traffic impact and not a result of forecasted travel demand. Existing AM and PM peak hour traffic volumes satisfy the peak hour volume warrant (Warrant 3) for traffic signal control according to methodology of the California Manual on Uniform Traffic Control Devices, Caltrans, 2010.

TABLE 3.12-3: INTERSECTION LEVEL OF SERVICE – EXISTING CONDITIONS

INTERSECTION	TRAFFIC CONTROL	AM PEAK HOUR		PM PEAK HOUR	
		DELAY	LOS	DELAY	LOS
1. Elk Grove Florin Road / Bond Road	Signal	51	D	52	D
2. Quail Cove Drive / Bond Road	Signal	19	B	8	A
3. Bond Road / Bond Road Project Driveway			Project Access		
4. Crowell Drive (East) / Bond Road	Signal	11	B	6	A
5. Waterman Road / Bond Road	Signal	29	C	29	C
6. Waterman Road Project Driveway / Waterman Road			Project Access		
7. Sheldon Road / Waterman Road	All-Way Stop	36	E	36	E

Note: Intersection delay is based on the average intersection control delay for signalized and all-way stop controlled intersections. **Bold** identifies intersections operating worse than the City's LOS D threshold.

Source: Fehr & Peers, 2013

FREEWAY OPERATIONS

As documented in the California Department of Transportation *Mobility Performance Report*, 2009, bottleneck locations exist on SR 99 and I-5 that cause congested (LOS F) conditions (i.e., vehicle speed of 35 miles per hour or less) on these facilities northbound in the morning and southbound in the evening. Bottlenecks are caused by merging vehicles, lane drops, and vehicle weaving. I-5 and SR 99 are the primary commute corridors linking Elk Grove and downtown Sacramento.

As presented in the 2008 HICOMP Annual Data Compilation, congested conditions persist for multiple hours in the morning (northbound) on SR 99 and I-5. On SR 99 congested conditions extend from south of Laguna Boulevard to U.S. 50. Similarly, drivers experience congested conditions in the evening (southbound) from U.S 50 to south of Sheldon Road. These conditions are consistent with the findings presented in the *State Route SR 99 & Interstate 5 Corridor System Management Plan (CSMP)*, May 2009. As documented in the CSMP, SR 99 serves about 149,000 vehicles per day between Elk Grove Boulevard and Mack Road and operates over capacity at LOS F. Similarly, I-5 serves about 100,000 vehicles per day between Laguna Boulevard and Pocket Road and about 156,000 vehicles per day between Pocket Road and US 50. These segments of I-5 operate at LOS E and F, respectively.

PEDESTRIAN AND BICYCLE FACILITIES

Class II bicycle lanes (on-street with signage and striping) are provided in both directions Bond Road within the Project study area. Bike lanes are provided on Waterman Road along improved frontage near the Bond Road/Waterman Road intersection. Marked crosswalks are provided at all signalized intersections within the study area. Pedestrian activity was relatively low with no more than six pedestrians using any crosswalk during the two peak hours.

TRANSIT SERVICE

Transit service within the study area is provided by e-Tran, which operates ten local routes within Elk Grove and ten commuter routes with service to Downtown Sacramento. One local route and two commuter routes provide service within the study area, with bus stops near Elk Grove Florin Road, Crowell Drive (west), Crowell Drive (east), and Waterman Road. These routes are described briefly below:

3.12 TRANSPORTATION AND CIRCULATION

- **Neighborhood Route 160 (Bond)** is a local route that provides service between Consumnes River College and the southeastern portion of the city. This route runs Monday through Friday from approximately 6:30 AM to 7:00 PM on one hour headways except during midday service when two hour headways are provided.
- **Commuter Route 58 (East Elk Grove Express)** is a commuter route that travels between the intersection of Waterman Road/Grant Line Road and Downtown Sacramento. Within the study area, the route travels on Bond Road and Elk Grove Florin Road. This route provides three inbound buses in the morning, and three outbound buses in the evening Monday through Friday.
- **Weekend Shuttle** is a local route circulating between Consumnes River College, Harbour Point Drive, and Waterman Road. Vehicles travel on Bruceville Road, Laguna Boulevard, Harbour Point Drive, Elk Grove Boulevard, Waterman Road, and Bond Road. Weekend service is provided roughly once per hour between 10:00 AM and 3:15 PM and a connection is available to Sacramento RT light rail service at Consumnes River College.

3.12.2 REGULATORY SETTING

FEDERAL AND STATE

The California Department of Transportation (Caltrans) is responsible for planning, designing, constructing, operating, and maintaining all state-owned roadways in Sacramento County, including the City. Federal highway standards are implemented in California by Caltrans. Any improvements or modifications to the State highway system within the City need to be approved by Caltrans, and the City has no ability to unilaterally make improvements to the State highway system.

Caltrans approved the *State Route 99 & Interstate 5 Corridor System Management Plan (CSMP)* in May 2009 to provide integrated management of all travel modes (transit, cars, trucks, bicycles) and infrastructure (rail tracks, roads, highways, information systems, bike routes) in the I-5/SR 99 corridor. The CSMP replaces the Transportation Concept Corridor Reports that previously served as the long-range planning documents for SR 99 and I-5.

"Concept LOS" and "Concept Facility" have traditionally been used in Caltrans TCCRs to reflect the minimum level or quality of operations acceptable for each route segment within the 20-year planning period and the highway facility needed in the next 20 years to maintain the Concept LOS. The Concept LOS for SR 99 in Sacramento County is F from the San Joaquin-Sacramento County Line to Junction SR 51 and is E from Junction I-5 to the Sutter County Line. The Concept LOS for I-5 in Sacramento County is F from Hood-Franklin Boulevard to the I-5/SR 99 Interchange and is D from the I-5/SR 99 Interchange to the Sacramento/Yolo County line.

LOCAL

Sacramento Area Council of Governments (SACOG)

SACOG is designated as the Metropolitan Planning Organization (MPO) responsible for developing a regional transportation plan every four years in coordination with Sacramento, Yolo, Yuba,

Sutter, El Dorado and Placer counties and the 22 cities within those counties (excluding the Tahoe Basin). The Metropolitan Transportation Plan/ Sustainable Communities Strategy for 2035 (MTP/SCS) covers the period from 2008 to 2035. The MTP/SCS takes an integrated approach to transportation and land use, and their impacts on air quality and climate change. The MTP/SCS represents transportation improvements and investments that will serve the projected land use pattern and population growth forecasts in the Sacramento region in the near- and long-term.

City of Elk Grove General Plan

The Elk Grove General Plan guides development within the City limits as well as the annexation and any subsequent development of areas outside the City limits. The General Plan has a Circulation Element that is prepared consistent with the requirements of the California Government Code. The Circulation Element addresses all forms of transportation within the circulation system. This specifically includes: motor vehicles, including cars and trucks; trains, for both freight and passenger traffic (on "heavy" and "light" rail lines); public transit; bicycles; pedestrian travel; and air travel. Relevant circulation policies include:

- Policy CI-4** Specific Plans, Special Planning Areas, and development projects shall be designed to promote pedestrian movement through direct, safe, and pleasant routes that connect destinations inside and outside the plan or project area.
- Policy CI-6** The City shall require that transit service is provided in all areas of Elk Grove, including rural areas, so that transit dependent residents of those areas are not cut off from community services, events, and activities.
- Policy CI-10** The City shall implement the roadway master plan shown in Figure CI-2. The following policies apply to selected roadways:
- The City shall use the latest version of Caltrans' "Transportation Concept Report" for I-5 and Hwy 99 to determine the planned width of these freeways.
 - "Expanded right-of-way" indicates roadways on which sufficient width is provided for a middle two-way turn lane and/or expanded turn pockets at roadway intersections.
 - The City will widen Grant Line Road north of Bradshaw Road only as needed to accommodate traffic, and strongly supports efforts to locate a future regional connector to provide traffic relief for this roadway. Grant Line Road north of Bradshaw Road should be widened in phases as needed, and should be widened to six lanes only if no alternative route for a future regional connector (see Policy CI-12) has been located and traffic conditions warrant the widening.
- 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.
- Policy CI-14** The City recognizes that Level of Service D may not be achieved on some roadway segments, and may also not be achieved at some intersections. Roadways on which LOS D is projected to be exceeded are shown in the General Plan

3.12 TRANSPORTATION AND CIRCULATION

Background Report, based on the latest traffic modeling conducted by the City. On these roadways, the City shall ensure that improvements to construct the ultimate roadway system as shown in this Circulation Element are completed, with the recognition that maintenance of the desired level of service may not be achievable.

- Policy CI-15** Development projects shall be required to provide funding or to construct roadway/intersection improvements to implement the City's Circulation Master Plan. The payment of established traffic impact or similar fees shall be considered to provide compliance with the requirements of this policy with regard to those facilities included in the fee program, provided that the City finds that the fee adequately funds all required roadway and intersection improvements. If payment of established fees is used to provide compliance with this policy, the City may also require the payment of additional fees if necessary to cover the fair share cost of facilities not included in the fee program.
- Policy CI-16** Where a development project is required to perform new roadway construction or road widening, the entire roadway shall be completed to its planned width from curb-to-curb prior to the operation of the project for which the improvements were constructed, unless otherwise approved by the City Engineer. Such roadway construction shall also provide facilities adequate to ensure pedestrian safety as determined by the City Engineer.
- Policy CI-21** The City shall require the installation of traffic pre-emption devices for emergency vehicles (police and fire) at all newly constructed intersections, and shall seek to retrofit all existing intersections to incorporate these features.
- Policy CI-22** Where traffic calming devices or techniques are employed, the City shall coordinate design and implementation with the Elk Grove Police Department and the Elk Grove CSD to ensure adequate access for police and fire vehicles.
- Policy CI-23** All public streets should have sufficient width to provide for parking on both sides of the street and enough remaining pavement width to provide for fire emergency vehicle access.

City of Elk Grove Transportation Improvement Plan

The City's Transportation Improvement Plan (TIP) represents a five-year transportation capital improvement plan for the City. The TIP provides program summary information for the City's various capital improvement funding programs, as well as project summary information (i.e., revenues, expenditures, and schedules) for the specific projects selected for implementation during the current TIP period. The TIP identifies projects within the City limits that need various improvements during the planning horizon. The improvements include but are not limited to street extensions, traffic signals, bikeway improvements, ramp widenings, and bridge replacements.

3.12.5 THRESHOLDS OF SIGNIFICANCE

The following thresholds of significance are based on the CEQA Guidelines as well as criteria established by the City of Elk Grove General Plan. The Project would result in a significant impact on transportation if it would:

- Conflict with an applicable plan, code, or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit.
 - Intersections: A significant traffic-related impact would occur at an intersection if: the traffic generated by the Project degrades the LOS from an acceptable LOS D or better (without the Project) to an unacceptable LOS E or F (with the Project), or the level of service (without Project) is unacceptable and Project generated traffic increases the control delay by more than five seconds.
 - Freeway Segments: According to the *Guide for the Preparation of Traffic Impact Studies* (Caltrans, December 2002), Caltrans strives to maintain a target LOS at the transition between LOS C and LOS D on State highway facilities; therefore, LOS D was selected as the *minimum standard for all study freeway facilities*. Unlike the City of Elk Grove traffic impact study guidelines, Caltrans does not provide a threshold for determining if the addition of Project traffic to a freeway facility that operates unacceptably without the Project is considered significant. Therefore, under these circumstances, the addition of any Project traffic is considered significant.
- Substantially increase hazards due to a design feature.
- Result in inadequate emergency access.
- Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.
 - An impact is considered significant if implementation of the Project will disrupt or interfere with existing or planned bicycle or pedestrian facilities.
 - An impact is considered significant if implementation of the Project will disrupt or interfere with existing or planned transit operations or transit facilities.

3.12.6 IMPACTS AND MITIGATION MEASURES

PROJECT CHARACTERISTICS

Trip Generation

As discussed in Chapter 2.0, the Project consists of three residential villages:

- **Village 1:** 135 single-family detached homes,
- **Village 2:** 258 single-family detached homes,

3.12 TRANSPORTATION AND CIRCULATION

- **Village 3:** 267 active adult single-family patio homes, and
- **Village 3 Core:** lodge and clubhouse consisting of 125 independent living, assisted living, and/or memory care units for seniors.

Table 3.12-4 shows the expected daily AM peak hour, and PM peak hour trip generation for the Project. The Project is expected to generate 379 new weekday AM peak hour trips, 496 new weekday PM peak hour trips, and 5,154 new daily trips.

TABLE 3.12-4: WEEKDAY TRIP GENERATION

LAND USE	QUANTITY	TRIP RATE ¹			TRIPS						
		DAILY	AM PEAK HOUR	PM PEAK HOUR	DAILY	AM PEAK HOUR			PM PEAK HOUR		
						IN	OUT	TOT	IN	OUT	TOT
Single Family Detached Residential (Villages 1 and 2)	393 Dwelling Units	9.52	0.75	1.00	3,741	74	221	295	248	145	393
Senior Adult Detached Residential (Village 3)	267 Dwelling Units	3.68	0.22	0.27	983	21	38	59	44	28	72
Senior Adult Attached Residential (Core of Village 3)	125 Dwelling Units	3.44	0.20	0.25	430	8	17	25	17	14	31
New Project Trips					5,154	103	276	379	309	187	496

Notes:

1 Trip rates from Trip Generation, 9th ed. (Institute of Transportation Engineers, 2012).

2 ksf = thousand square feet

Source: Fehr & Peers, 2013

Trip Distribution and Assignment

Figure 3.12-3 shows the expected distribution of Project trips, which was developed based on existing travel patterns within the study area using traffic counts collected in December 2012. The distribution of Project traffic is about equal to eastbound and westbound Bond Road, with slightly more traffic to/from the west. The areas immediately north and south of Bond Road between Elk Grove Florin Road and Waterman Road are primarily residential, so a nominal amount of Project traffic (i.e., three percent) is assigned to these areas. In addition, about 10 percent of outbound trips in the morning are assumed to travel south on Crowell Drive for student drop off at Elk Grove Elementary School before continuing to their primary destination.

The Project traffic volumes summarized in Table 3.12-4 were added to the existing traffic counts based on the expected distribution of Project trips show in Figure 3.12-3 to generate the traffic volume forecasts for the Existing Plus Project scenario. Figure 3.12-4 displays the resulting study area AM and PM peak hour turning movement volume forecasts for Existing Plus Project conditions.

GENERAL PLAN CONSISTENCY REVIEW

Section 15168 of the State CEQA Guidelines provides the following guidance regarding the use of a Program EIR with subsequent environmental documents:

“(d) Use with Subsequent EIRs and Negative Declarations. A program EIR can be used to simplify the task of preparing environmental documents on later parts of the program. The program EIR can:

(1) Provide the basis in an Initial Study for determining whether the later activity may have any significant effects.

(2) Be incorporated by reference to deal with regional influences, secondary effects, cumulative impacts, broad alternatives, and other factors that apply to the program as a whole.

(3) Focus an EIR on a subsequent project to permit discussion solely of new effects which had not been considered before.”

The General Plan land use designations on the Project site, as described in Chapter 2.0, Project Description, allow for up to 1,022 units. The Draft EIR for the City of Elk Grove General Plan assumed full buildout of the Project site. The Project proposes 659 single family units and 125 independent, assisted, or memory care multi-family units in the Village 3 Core Lodge for a total of 784 units. The Project would result in 238 fewer units than allowed by the General Plan land use designations and analyzed in the General Plan EIR.

The Draft EIR for the City of Elk Grove General Plan analyzed area roadways and freeway segments. As documented in Table 3.12-4, the Project would generate 5,154 trips per day, compared to 9,729 trips based on the General Plan LDR designation, which was assumed for the Project site during preparation of the General Plan Draft EIR. Therefore, the Project site was anticipated for urbanization, and the corresponding increase in vehicle trips that would result from urbanization, in the General Plan EIR and the Project would result in fewer trips than analyzed in the General Plan EIR. The General Plan EIR provided a program-level analysis of impacts to local and regional roadways that would result with implementation of the General Plan, which included trips associated with the Project. Given that the Project is consistent with the land use designation for the site, which was analyzed in the General Plan EIR, there would be no new Project-specific traffic impacts to the local and regional roadway facilities addressed in the General Plan EIR.

It is further noted that CEQA Guidelines Section 15183 allows a streamlined environmental review process for projects that are consistent with the densities established by existing zoning, community plan, or general plan policies for which an Environmental Impact Report (EIR) was certified. As noted above, the Project is consistent with the land use designation and densities established by the Elk Grove General Plan, for which an EIR was certified.

As stated in Section 15183 of the CEQA Guidelines:

“(a) CEQA mandates that projects which are consistent with the development density established by existing zoning, community plan, or general plan policies for which an EIR was certified shall not

3.12 TRANSPORTATION AND CIRCULATION

require additional environmental review, except as might be necessary to examine whether there are project-specific significant effects which are peculiar to the project or its site. This streamlines the review of such projects and reduces the need to prepare repetitive environmental studies.

(b) In approving a project meeting the requirements of this section, a public agency shall limit its examination of environmental effects to those which the agency determines, in an initial study or other analysis:

- (1) Are peculiar to the project or the parcel on which the project would be located,*
- (2) Were not analyzed as significant effects in a prior EIR on the zoning action, general plan, or community plan, with which the project is consistent,*
- (3) Are potentially significant off-site impacts and cumulative impacts which were not discussed in the prior EIR prepared for the general plan, community plan or zoning action, or*
- (4) Are previously identified significant effects which, as a result of substantial new information which was not known at the time the EIR was certified, are determined to have a more severe adverse impact than discussed in the prior EIR.*

Transportation and circulation impacts addressed in the General Plan EIR are summarized below:

- **Local Roadway System - Impact 4.5.1:** Implementation of the General Plan would result in increased traffic volumes, volume-to-capacity ratios, and a decrease in LOS on area roadways during the A.M. and P.M. peak hours. Impacts in the Project vicinity include:
 - Bond Road 4 Lanes (East Stockton Boulevard to Elk Grove Florin Road) – LOS F (eastbound) and LOS E (westbound)
 - Bond Road 4 Lanes (Elk Grove Florin Road to Bradshaw Road) – LOS C (eastbound) and LOS B (westbound)
 - Waterman Road 4 Lanes (Calvine Road to Bond Road) – LOS C (northbound) and LOS B (southbound)
 - Waterman Road 4 Lanes (Bond Road to Grant Line Road) – LOS B (northbound) and LOS A (southbound)

MM 4.5.1 requires the City to coordinate and participate with the City of Sacramento, Sacramento County, and Caltrans on roadway improvements that are shared by the jurisdictions in order to improve operations. MM 4.5.1 revised the General Plan to Policy CI-2; implementation of General Plan Policies CI-2, CI-3, CI-4, CI-5, CI-6, CI-7, CI-8, CI-9, CI-10, CI-13, CI-14, CI-15, CI-16, CI-17, and CI-18 and associated action items would reduce impacts to local roadways. However, since there are some roadways that would not reach a LOS D even with improvements, impacts to these roadways were determined to be significant and unavoidable (City of Elk Grove 2003b, pp. 4.5-52 through 4.5-80). Impact 3.12-1 below addresses potential roadway impacts in the study area that are specific to the Project site.

- **State Highways - Impact 4.5.2:** Implementation of the proposed General Plan would result in increased traffic volumes, V/C ratios, and a decrease in LOS on state highways during the A.M. and P.M. peak hours. This is considered a significant impact.

Mitigation Measure MM 4.5.1 was identified to mitigate this impact and was implemented through revising the General Plan to include Policy CI-2. While improvements to State highway facilities were considered a viable mitigation measure, the proposal and timing of needed improvements was not known and depended on if and when Caltrans (acting as the lead agency) submits the projects for inclusion into the MTP. It is outside the City's jurisdiction to implement improvement to state highways. As such, the General Plan's impact to state highways is considered to be significant and unavoidable.

- **Transit System - Impact 4.5.3:** Implementation of the proposed General Plan would result in an increase in the demand for transit service. Implementation of General Plan Policies CI-3, CI-4, CI-5, CI-6, CI-7, CI-8, and CI-9 and associated action items reduced the potential impact to less than significant.
- **Bicycle and Pedestrian Facilities - Impact 4.5.4:** Implementation of the proposed General Plan would result in an increased demand for bicycle and pedestrian facilities. Implementation of General Plan Policies CI-3, CI-4, and CI-5 and associated action items reduced the potential impact to less than significant.
- **Roadway Safety - Impact 4.5.5:** Implementation of the proposed General Plan would result in an increase in traffic volumes, which would increase the potential opportunities for safety conflicts. While implementation of the proposed General Plan would increase the amount of vehicle traffic and the number of potential safety conflicts, implementation of the General Plan (specific Policies CI-3, CI-4, CI-17, CI-18, CI-19, CI-20, CI-21, CI-22, and CI-23 and associated action items) and modern construction design standards would also result in the provision of facilities without unacceptable safety conflicts. This impact is considered less than significant.
- **Cumulative Traffic Impacts on Local Roadways and State Highways - Impact 4.5.6:** Implementation of the proposed General Plan as well as potential development of the Urban Study Areas would contribute to significant impacts on local roadways and state highways under cumulative conditions. This is considered a cumulative significant impact. Implement Mitigation Measure MM 4.5.1 was identified to mitigate this impact and was implemented through revising the General Plan to include Policy CI-2. Implementation of General Plan Policies CI-2, CI-3, CI-4, CI-5, CI-6, CI-7, CI-8, CI-9, CI-10, CI-13, CI-14, CI-15, CI-16, CI-17, and CI-18 and associated action items would assist in reducing cumulative impacts to local roadways and SR 99. However, the General Plan DEIR identified that since there are some local roadways that would not reach a LOS D even with improvements, impacts to these roadways are significant and unavoidable (see General Plan DEIR Tables 4.5-7 and 4.5-8). Further improvement of these impacted roadways is considered infeasible given that the necessary right-of-way is not available as a result of extensive residential and commercial development immediately adjacent to these roadways. In addition, the City does not have jurisdiction to improve SR 99, which is a state highway. Thus, impacts to SR 99 are also considered significant and unavoidable .

3.12 TRANSPORTATION AND CIRCULATION

- **Cumulative Transit System, Bicycle, and Pedestrian Impacts - Impact 4.5.7:** Implementation of the proposed General Plan along with potential development of the Urban Study Areas would contribute to a cumulative increase in the demand for transit service as well as bicycle and pedestrian usage. Implementation of General Plan Policies CI-3, CI-4, CI-5, CI-6, CI-7, CI-8, and CI-9 and associated action items reduced the potential impact to less than significant.

The General Plan EIR impacts described above demonstrate that the regional and cumulative impacts of the Project were adequately addressed in the General Plan EIR. Pursuant to the guidance provided in CEQA Guidelines Sections 15168 and 15183, this EIR need not re-address the regional and cumulative traffic impacts of the Project, given that the Project’s density is consistent with the density assumed for the site in the General Plan EIR.

As stated above, CEQA Guidelines Section 15183(b) states that a public agency shall limit its analysis to impacts that are peculiar to the Project site or were not previously addressed in a prior environmental document. As such, the analysis provided below focuses on the intersections and transportation facilities that would be directly affected by the Project, which were not fully addressed in the General Plan EIR.

IMPACTS AND MITIGATION MEASURES

Impact 3.12-1: Potential to conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system: Study Area Intersections. (Less than Significant)

Table 3.12-5 summarizes the Existing Plus Project analysis (refer to Appendix B for detailed calculations) that was performed to address Project-specific impacts to roadways in the study area. As shown in Table 3.12-5, most of the study intersections would continue to operate acceptably, LOS D or better, except for the Waterman Road/Sheldon Road intersection, which would operate at LOS E during both the AM and PM peak hours. While the Project would add traffic to the Waterman Road / Sheldon Road intersection, it would not increase delay by more than five seconds. It is noted that with Project traffic, the Elk Grove Florin Road / Bond Road will operate near the LOS D/E threshold, but will continue to operate acceptably at the LOS D threshold. Therefore, the Project would have a **less than significant** impact on intersection operations.

TABLE 3.12-5: INTERSECTION LEVEL OF SERVICE – EXISTING PLUS PROJECT CONDITIONS

INTERSECTION	TRAFFIC CONTROL	EXISTING CONDITIONS				EXISTING PLUS PROJECT			
		AM PEAK HOUR		PM PEAK HOUR		AM PEAK HOUR		PM PEAK HOUR	
		DELAY	LOS	DELAY	LOS	DELAY	LOS	DELAY	LOS
1. Elk Grove Florin Road / Bond Road	Signal	51	D	52	D	54	D	54	D
2. Quail Cove Drive / Bond Road	Signal	19	B	8	A	22	C	10	A
3. Bond Road / Bond Road Driveway	Right-in / Right-out Only Intersection								
4. Crowell Drive (East) / Bond Road	Signal	11	B	6	A	21	C	19	B

5. Waterman Road / Bond Road	Signal	29	C	29	C	30	C	32	C
6. Waterman Road / Project Driveway	Side-Street Stop	-	-	-	-	4	A	6	A
7. Sheldon Road / Waterman Road	All-Way Stop	36	E	36	E	36	E	36	E

Note: Intersection delay is based on the average intersection control delay for signalized and all-way stop controlled intersections.

Bold identifies intersections operating worse than the City's LOS D threshold.

Source: Fehr & Peers, 2013.

Impact 3.12-2: Potential to conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system: Freeways. (Significant and Unavoidable)

As previously discussed, bottleneck locations exist on SR 99 and I-5 that cause congested conditions (i.e., vehicle speed of 35 miles per hour or less) on these facilities northbound in the morning and southbound in the evening. The Project would add traffic to these commute corridors, which would exacerbate already congested conditions.

This is considered a significant impact based on the Caltrans evaluation criteria. However, this would not be an impact based on the City of Elk Grove evaluation criteria, since the Project would add less than 500 vehicle trips per day to SR 99, which would not increase the volume to capacity ratio by 0.05 or more or increase the volume on SR 99 by more than 5 percent.

MITIGATION MEASURES

To mitigate impacts based on the Caltrans evaluation criteria, the Project Applicant should pay its fair-share of the cost for mobility enhancements consistent with those identified in the most current version of the State Route 99 & Interstate 5 CSMP. Table 13 of the CSMP identifies that the construction of bus/carpool lanes on I-5 from US 50 to Elk Grove Boulevard is fully funded. Another improvement that would improve SR 99, and potentially I-5, operations is construction of carpool lanes on I-5 from Elk Grove to the San Joaquin County line; this is identified as a visionary project in Table 14 of the CSMP with no estimate of cost or identified method of funding. The CSMP does not identify capital projects in either Table 13 or 14 to add additional lanes or other improvements on SR 99 in the vicinity of the City that would improve the existing and planned congested conditions. Construction and implementation of necessary improvements is uncertain because the implementation of such improvements is outside of the City's jurisdiction. While implementation of capital and operational mobility enhancements would lessen the significant impact associated with I-5 and SR 99, there is not an enforceable fee program that has been adopted by Caltrans and there is no mechanism in place to collect adequate funds for the improvements and ensure that the funds are used to construct the necessary improvements. Consequently, the mitigation is not feasible.

In addition, even with implementation of capital and operational mobility enhancements, some impacts would still remain significant because acceptable levels of service will not be achieved as indicated by the Concept LOS on SR 99 and I-5, which is LOS F in the study area. Successful implementation of some of the proposed improvements will require the cooperation of third party

3.12 TRANSPORTATION AND CIRCULATION

agencies (Caltrans, Sacramento, County, or City of Sacramento) over which Elk Grove has no control. For this latter reason, Elk Grove is conservatively acknowledging the possibility that, despite its own commitment to work with Caltrans, mutually acceptable accommodation may not be reached. As such, this impact is considered **significant and unavoidable**, and as described above, there is no feasible mitigation available to the City to reduce this impact to a less than significant level.

Impact 3.12-3: Potential to substantially increase hazards due to a design feature. (Less than Significant)

The Project does not include any design features that would substantially increase potential hazards associated with the transportation and circulation network. As discussed under Impact 3.12-4, the Project will be required to comply with the Cosumnes Community Services District (CCSD) standard and project-specific requirements for emergency access. The Project is required to substantially comply with the City's roadway standards for intersection sight distance and driveway sight distance (Standard Drawing 26) to ensure that there are no sight distance or visibility hazards. This is considered a **less than significant** impact, and no mitigation is required.

Impact 3.12-4: Potential to result in inadequate emergency access. (Less than Significant)

Factors such as number of access points and roadway widths determine whether a Project provides sufficient emergency access. Primary access to the Project site would be from Bond and Waterman Roads. There would also be a secondary point of access from Bond Road which would allow only right-turn-in and right-turn-out movements. Silverado Drive would be the primary residential collector through the Project site from Bond Road to Waterman Road, with local residential streets providing access to Villages 1 and 2. Access to Village 3 would be from the Village Center Lane connection to Silverado Drive. The Project includes two emergency vehicle access points. A 42' wide Emergency Vehicle Access (EVA) would be located at terminus of Bob White Court located in the Quail Ranch community to the interior street within Village 1 and a 26' EVA and pedestrian connection will be provided from Village 3 to Bond Road.

General Plan Policy SA-32 requires the cooperation with the Elk Grove Community Services District (EGCSD) Fire Department (now CCSD Fire Department) to reduce fire hazards, assist in fire suppression, and promote fire safety in Elk Grove and Policy PF-2 requires coordination with outside agencies. The Project is required to undergo the City's development review process. The Project application has been provided to the CCSD Fire Department for its review and comment. In a July 10, 2012 letter, the CCSD identified its standard comments that must be addressed by the Project as part of the plan checking process. These standard comments include fire sprinkler specifications, emergency vehicle turnaround requirements, minimum fire flow requirements, requirement for installation of various infrastructure, and requirements for the wetlands/open space areas. The CCSD also identified Project-specific requirements regarding the street names/addressing, street layout, and requirement for funding a portion of the CCSD's on-going fire and emergency services. The Project would be required to comply with the CCSD's requirements prior to issuance of a Fire Permit by the CCSD.

The Project site includes adequate access points for emergency services. Prior to issuance of a Fire Permit by the CCSD, the Project will be required to comply with the CCSD's standard requirements as well as the project-specific requirements to ensure adequate emergency access. This is a **less than significant** impact, and no mitigation is required.

Impact 3.12-5: Potential to disrupt or interfere with existing or planned bicycle or pedestrian facilities. (Less than Significant)

The Project includes pedestrian and bicycle features to provide both internal connectivity as well as connections to adjacent bicycle and pedestrian facilities, as described in Chapter 2.0. As part of the Project, a continuous sidewalk and Class II bike lanes would be constructed on the western side of Waterman Road along the frontage of the Project site, continuing the frontage improvement that extend north from Bond Road. Implementation of the Project would not disrupt or interfere with existing bicycle or pedestrian facilities, and would not disrupt or interfere with the implementation of any planned bicycle or pedestrian facilities. This is a **less than significant** impact, and no mitigation is required.

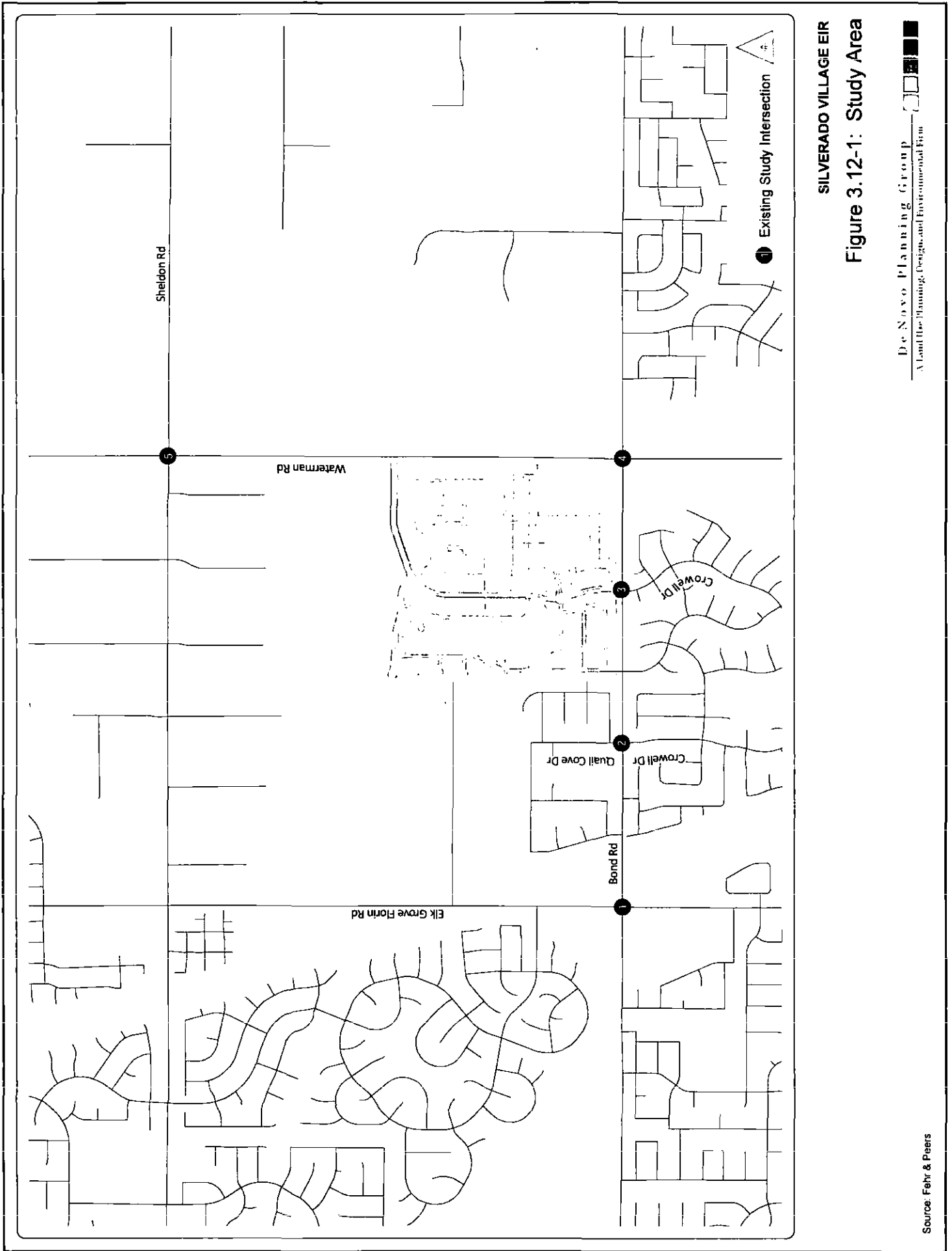
Impact 3.12-6: Potential to disrupt or interfere with existing or planned transit facilities. (Less than Significant)

Residents and employees of the Project would have access to e-Trans service routes that currently operate along the Project frontage as previously described. Implementation of the Project would not disrupt or interfere with existing or planned transit operations or facilities. This is a **less than significant** impact, and no mitigation is required.

3.12 TRANSPORTATION AND CIRCULATION

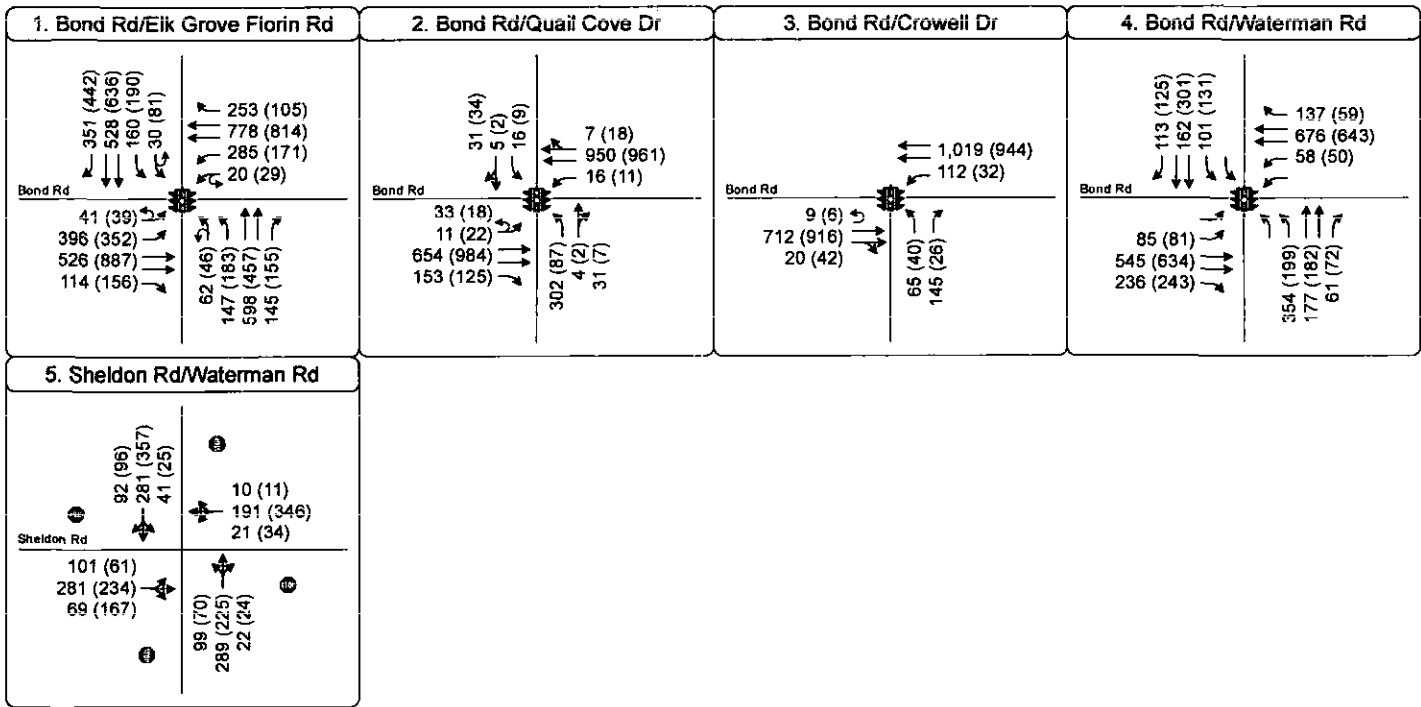
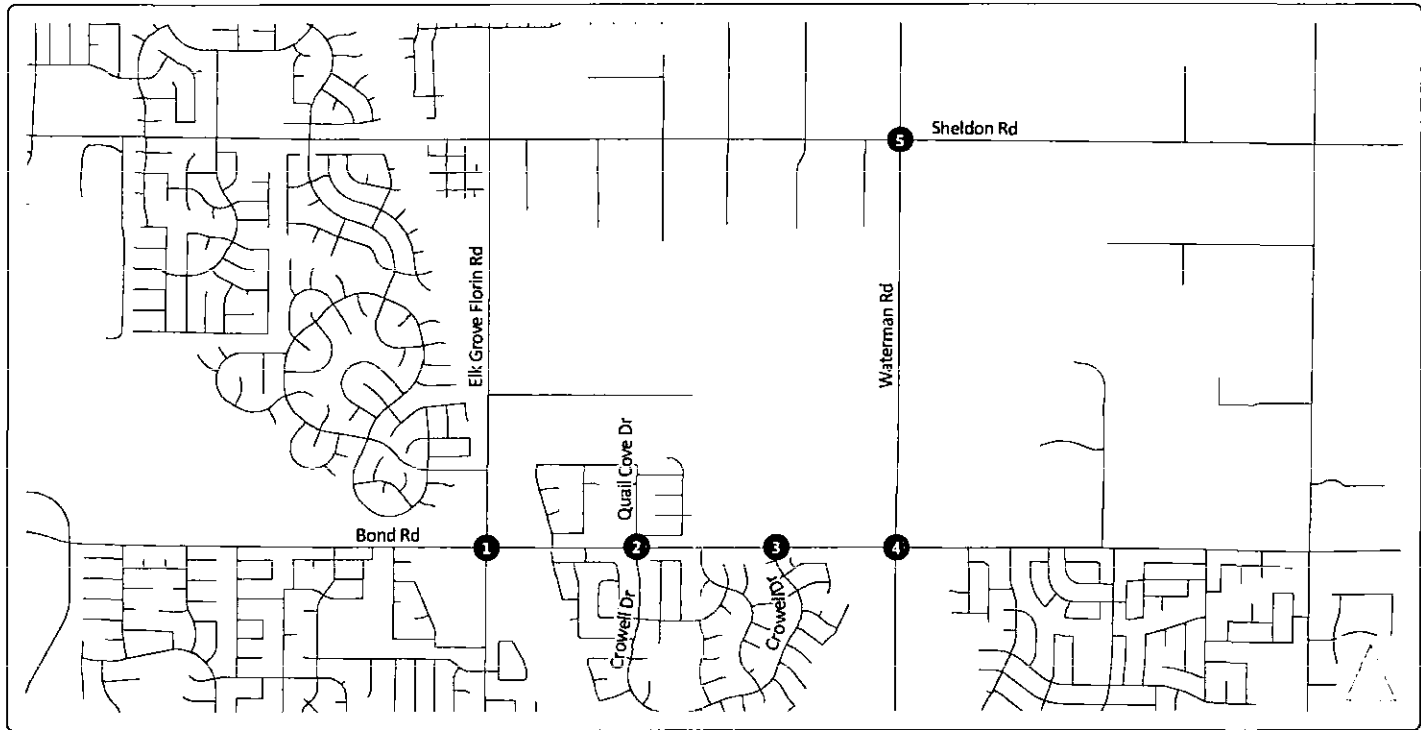
REFERENCES

- City of Elk Grove 2003a. *City of Elk Grove General Plan*. Elk Grove, California. August 2003.
- City of Elk Grove 2003b. *City of Elk Grove General Plan, Volume 1: Draft Environmental Impact Report, SCH #: 2002062082*. Elk Grove, California. August 2003.
- Caltrans 2009. *State Route 99 & Interstate 5 Corridor System Management Plan*. May 2009.
- Fehr & Peers 2013. *Draft Transportation Impact Study, Silverado Village SPA*. Roseville, CA. August 2013.



SILVERADO VILLAGE EIR

Figure 3.12-1: Study Area



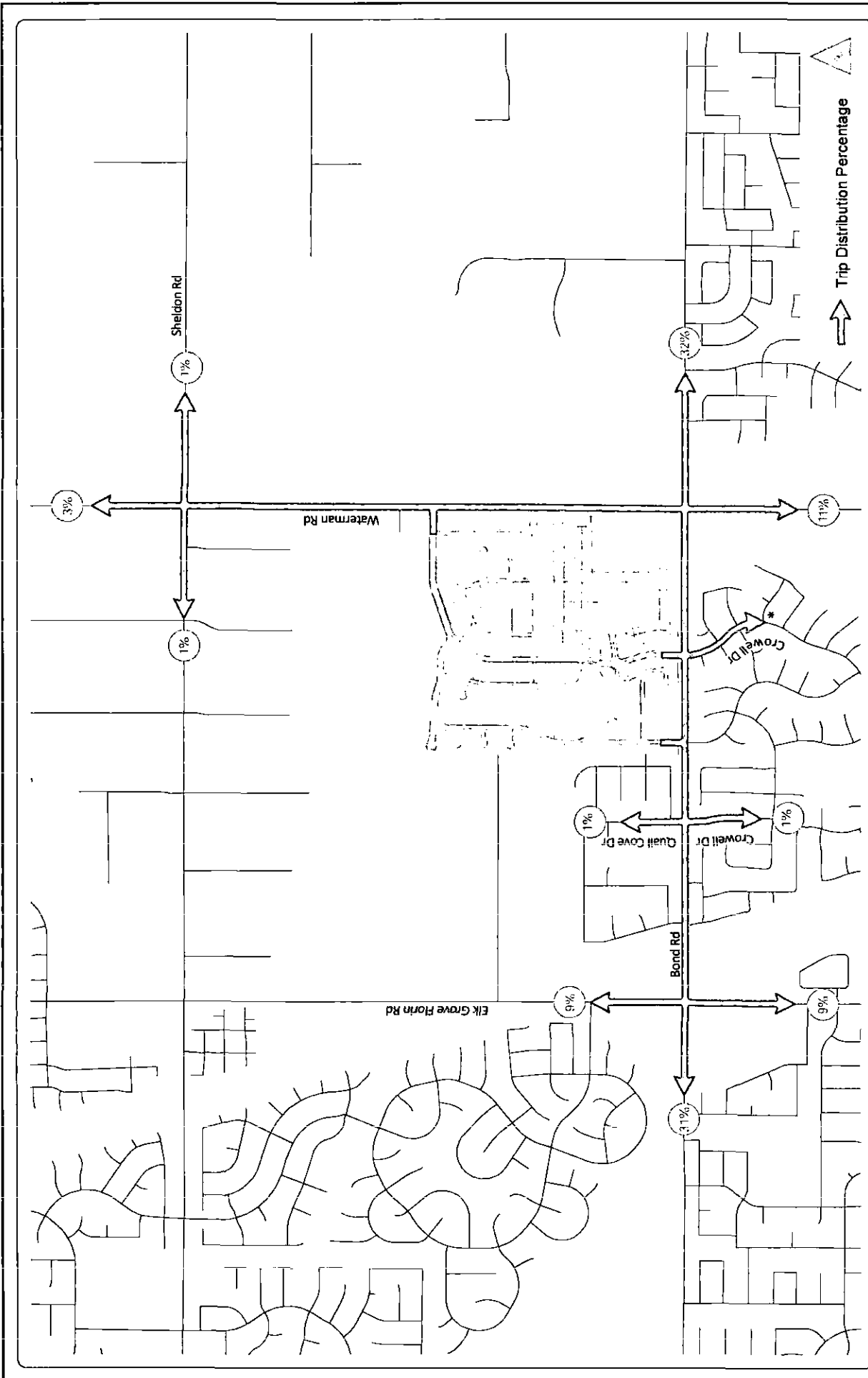
LEGEND

- Turn Lane
- AM (PM) Peak Hour Traffic Volume
- Study Intersection
- Traffic Signal
- Stop Sign

SILVERADO VILLAGE EIR

Figure 3.12-2:
Peak Hour Traffic Volume and Land Configurations
- Existing Conditions

Source: Fehr & Peers

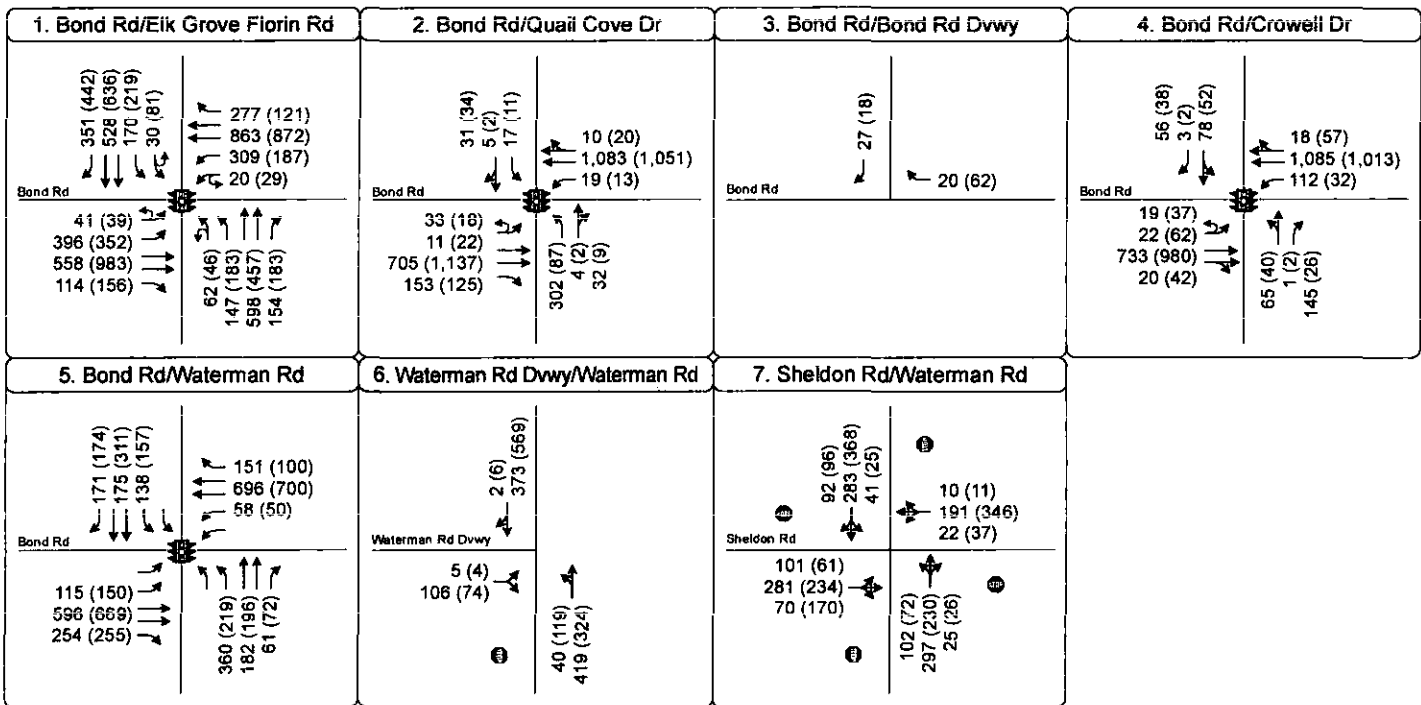
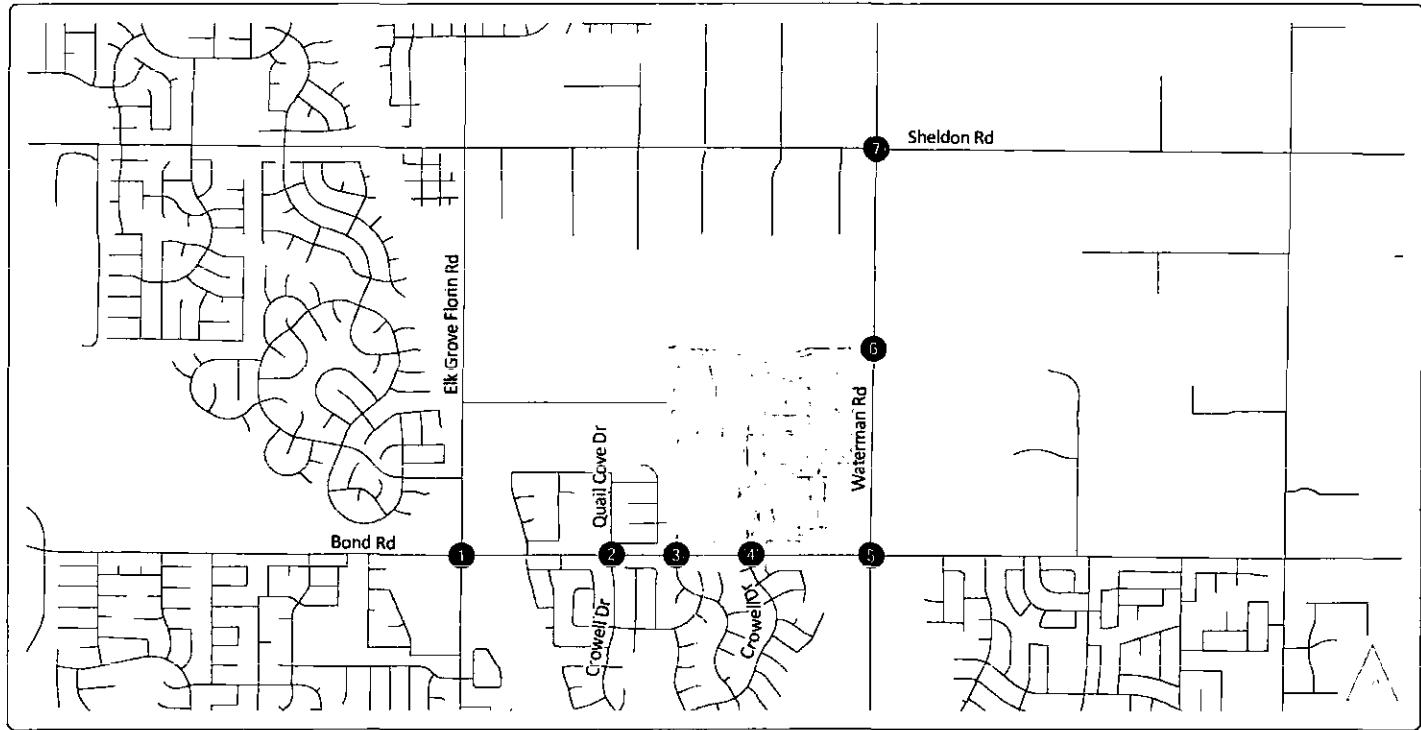


* Note: 10% of AM outbound trips are assumed to stop at Elk Grove Elementary School.

SILVERADO VILLAGE EIR

Figure 3.12-3: Trip Distribution

De Novo Planning Group
 A Land Use Planning, Design, and Environmental Firm



LEGEND

- Turn Lane
- AM (PM) Peak Hour Traffic Volume
- Study Intersection
- ⊠ Traffic Signal
- Stop Sign

SILVERADO VILLAGE EIR

**Figure 3.12-4:
Peak Hour Traffic Volume and Lane Configurations
- Existing Plus Project Conditions**

De Novo Planning Group

A Land Use Planning, Design, and Environmental Firm



This section describes the existing setting, regulatory framework, impacts associated with wastewater services, water services, and solid waste disposal that are likely to result from Project implementation, and measures to reduce potentially significant impacts to wastewater, water supplies, and solid waste. Storm water drainage and infrastructure is addressed in Section 3.8, Hydrology and Water Quality.

This section is based in part on the following documents, reports and studies: Solid Waste Information System (CalRecycle 2013), Jurisdiction Diversion/Disposal Rate Summary 2007 – Current (CalRecycle 2011), 2010 Urban Water Management Plan (Elk Grove Water District (EGWD) 2011), Water Supply Assessment for the Silverado Village Project (Florin Resource Conservation District/EGWD (FRCD/EGWD) 2013) (Appendix G), Sewer System Capacity Plan 2010 Update Executive Summary (Sacramento Area Sewer District (SASD) 2011a), Sewer System Capacity Plan 2010 Update (SASD 2011b), Zone 40 Water Supply Master Plan (Sacramento County Water Agency (SCWA) 2005), Draft 2010 Urban Water Management Plan (SCWA 2011), 2020 Master Plan, Final Executive Summary (Sacramento Regional County Sanitation District (SRCSD) 2008), 2012 State of the District Report (SRCSD, 2012), and the Sewer System Management Plan (SRCSD, 2013). Finally, solid waste diversion information was provided from the following website: <http://www.calrecycle.ca.gov/LGCentral/reports/diversionprogram/JurisdictionDiversionPost2006.aspx>.

Comments received in response to the NOP identified concerns regarding water supply. The comments are located in Appendix A.

3.13.1 WASTEWATER SERVICES

EXISTING SETTING

Wastewater Conveyance

The City lies within the sanitary sewer collection service area of the Sacramento Area Sewer District (SASD), and the sanitary sewer treatment boundaries of the Sacramento Regional County Sanitation District (SRCSD). SASD provides wastewater collection services in the urbanized unincorporated area of the County, in the cities of Citrus Heights, Elk Grove, and Rancho Cordova, and in a portion of the cities of Sacramento and Folsom. SASD owns, operates and maintains a network of 4,200 miles of main line and lower lateral pipes within a 268 square-mile area (SASD, 2013). The Project site is located in the BR Bond Sheldon Trunk Shed. The Project site is served by a 10-inch or larger pipe located in Bond Road (SASD 2011b, Figure 1-2).

Once collected in the SASD system, sewage flows into the Sacramento Regional County Sanitation District (SRCSD) interceptor system, where it is conveyed to the Sacramento Regional Wastewater Treatment Plant near Elk Grove. The existing Elk Grove trunk line extends southeast from the Sacramento Regional Wastewater Treatment Plant (SRWTP) influent diversion structure to Laguna Boulevard, then parallel to SR 99 along E. Stockton Boulevard extending close to the southern City boundary.

The SASD *Sewer System Capacity Plan (SCP)* estimates the future capital needs of the SASD trunk sewer system, both for capacity relief projects for the existing system and expansion projects to

3.13 UTILITIES

serve newly developed areas. Table 3.13-1 identifies the existing and anticipated capacity need calculated in equivalent single family dwelling units (ESDs) for SASD services.

TABLE 3.13-1: 2010 SCP PLANNING SCENARIOS AND PROJECTED ESDS

<i>SASD HYDRAULIC MODEL</i>	<i>SCP PLANNING SCENARIO</i>	<i>ESDs¹</i>
2010 Model	Year 2010 Condition (Existing)	400,260
2020 Model	Year 2020 Condition (Mid-Range Planning)	423,130
Buildout Model	Buildout Condition (Long Range Planning)	1,101,680

Source: SASD SCP 2011a, pg. 2

Wastewater Treatment

Wastewater treatment for the City is provided by the Sacramento Regional County Sanitation District (SRCSD). SRCSD provides wastewater services for the residential, commercial, and industrial communities in metropolitan Sacramento County, and to the City of West Sacramento in Yolo County. SRCSD owns and operates the regional wastewater conveyance system and the SRWTP. SRCSD's system includes:

- Miles of Pipeline: 177 miles
- Pump Stations: 9
- 3,500-acre wastewater treatment facility
- Population Served: Approximately 1.4 million in the greater Sacramento area
- Number of Customer Accounts: 577,458 (SRCSD 2012, pg 4).

SRCSD's contributing agencies each collect wastewater, while SRCSD is responsible for major conveyance, wastewater treatment, and wastewater disposal. SRCSD collects wastewater from its contributing agencies at various influent diversion locations and conveys the wastewater via its pipeline system to the existing SRWTP. The SRWTP is on a 3,500-acre site located between Franklin Boulevard and I-5, north of Elk Grove and south of Sacramento. The SRWTP has a permitted capacity of 181 million gallons per day (mgd) of dry weather flow and 391 mgd for peak wet weather flow. The SRWTP has an annual effluent flow of 139,941 acre-feet, with an average dry weather flow of 115 mgd and a peak wet weather flow of 259 mgd.

The *Sacramento Regional Wastewater Treatment Plant 2020 Master Plan (2020 MP)* for the SRWTP provides a phased program of recommended wastewater treatment facilities and management programs to accommodate planned growth and to meet existing and anticipated regulatory requirements in the SRCSD service area through the year 2020. The SRWTP 2020 MP uses SACOG population projections multiplied by per capita flow and load values to determine future facilities needs (SRCSD, 2008, p. 14). According to the 2020 MP, the reliable capacity of the existing facilities is limited, based on hydraulic considerations, to an equivalent 207-mgd ADWF. This capacity is insufficient to accommodate the projected 218-mgd ADWF in the year 2020. In addition, the permitted capacity to treat wet peak 24-hour weather flows of 392 mgd is insufficient to accommodate the projected 434 mgd PWWF in the year 2020. (SRCSD 2008, pg.15). Table 3.13-2 shows the anticipated capacity need projected through 2020 and also identifies the capacity of flows the SRWTP is designed to treat at buildout of the SRWTP facilities.

The SRWTP has been designed with multiple storage basins so that peak flows can be diverted and stored prior to treatment. This allows the SRWTP to store peak wet weather flow, then treat the wastewater later when the storm flows subside. This reduces the level of idle capacity and also allows the SRWTP to effectively accommodate a larger amount of flows than its peak treatment levels, by storing the flows and then treating the flows when the daily flows have returned to below peak levels.

TABLE 3.13-2: POPULATION BASED FLOW PROJECTIONS (ALL FLOWS IN MILLION OF GALLONS PER DAY)

YEAR	AVERAGE DRY WEATHER (ADWF) ¹	AVERAGE DAY MAXIMUM MONTH (ADMMF)	PEAK HOURLY 2-YEAR STORM (PHWWF) ²
2000	154 ³	220 ³	312 ³
2005	174	247	334
2010	196	279	362
2015	210	299	392
2020	218	311	408
<i>Buildout Capacity⁴</i>	<i>350</i>	<i>450</i>	<i>833⁵</i>

(1) ADWF defined as the average flow occurring over the three consecutive lowest flow months of the year.
 (2) Wet weather flows are from Regional Interceptor 2000 Master Plan.
 (3) Actual data.
 (4) Capacity based on "buildout" of the SRWTP facilities. Not a projection of service area wastewater flows/loads at buildout.
 (5) Collection system build-out flows based from Regional Interceptor 2000 Master Plan.

SOURCE: SRCSD 2008, PG 14.

REGULATORY SETTING

FEDERAL AND STATE

Clean Water Act (CWA) / National Pollutant Discharge Elimination System (NPDES) Permits

The CWA is the cornerstone of water quality protection in the United States. The statute employs a variety of regulatory and non-regulatory tools to sharply reduce direct pollutant discharges into waterways, finance municipal wastewater treatment facilities, and manage polluted runoff. These tools are employed to achieve the broader goal of restoring and maintaining the chemical, physical, and biological integrity of the nation’s waters so that they can support “the protection and propagation of fish, shellfish, and wildlife and recreation in and on the water.”

The CWA regulates discharges from “non-point source” and traditional “point source” facilities, such as municipal sewage plants and industrial facilities. Section 402 of the Act creates the NPDES regulatory program which makes it illegal to discharge pollutants from a point source to the waters of the United States without a permit. Point sources must obtain a discharge permit from the proper authority (usually a state, sometimes EPA, a tribe, or a territory). NPDES permits cover industrial and municipal discharges, discharges from storm sewer systems in larger cities, storm water associated with numerous kinds of industrial activity, runoff from construction sites disturbing more than one acre, mining operations, and animal feedlots and aquaculture facilities above certain thresholds.

Permit requirements for treatment are expressed as end-of-pipe conditions. This set of numbers reflects levels of three key parameters: (1) biochemical oxygen demand (BOD), (2) total suspended solids (TSS), and (3) pH acid/base balance. These levels can be achieved by well-operated sewage

3.13 UTILITIES

plants employing "secondary" treatment. Primary treatment involves screening and settling, while secondary treatment uses biological treatment in the form of "activated sludge."

All so-called "indirect" dischargers are not required to obtain NPDES permits. An indirect discharger is one that sends its wastewater into a city sewer system, so it eventually goes to a sewage treatment plant. Although not regulated under NPDES, "indirect" discharges are covered by another CWA program called pretreatment. "Indirect" dischargers send their wastewater into a city sewer system, which carries it to the municipal sewage treatment plant, through which it passes before entering surface water.

SRCSO's current permit was issued by the Central Valley Regional Water Quality Control Board (Regional Board), Order No. R5-2010-0114-01. The NPDES Permit, No. Ca0077682, regulates the wastewater effluent quantity and quality upon discharge.

LOCAL

Sacramento Area Sewer District

Sacramento Area Sewer District (SASD) is the largest of the three contributing agencies of the SRCSD. Wastewater from SASD is discharged into the SRCSD interceptor system and treated at SRCSD's SRWTP. SASD also provides wastewater conveyance for the Rio Cosumnes Correctional Center (RCCC) and serves the Delta communities of Courtland and Walnut Grove with separate collection and treatment systems.

Sewer System Capacity Plan 2010 Update - The primary objective of the Sacramento Area Sewer District (SASD) 2010 Sewer System Capacity Plan (2010 SCP) update was to develop a high-level planning and dynamic sewer capacity plan that addresses existing, midrange, and buildout sewer capacity needs. Existing capacity needs are based on SASD's current sewer system conditions. The mid-range capacity needs are based on plans to provide sewer service to SASD's service area within the next 10 years. The buildout capacity needs are based on providing sewer service to the entire SASD service area.

The SCP uses the information shown in Table 3.13-3 to determine the ESD density for future capacity need. The land use categories for the Project site identified in the SCP are consistent with the adopted General Plan land uses. The 2010 System Capacity Map in the SCP identifies the northern portion of the Project site as having a design density of 0 to 0.2 ESDs per acre, the central and southern portions of the Project site as having a design density of 5.51 to 6.50 ESDs per acre, and the southeastern corner of the Project site as having a design density of 15.01 to 20.00 ESDs per acre (SASD SCP 2011b, Figure 2-3).

TABLE 3.13-3: 2010 SCP LAND USE CATEGORIES AND DESIGN ESD DENSITIES

DESCRIPTION	ESDS PER ACRE
Medium Low Density Residential	10
Medium density Residential	15
Medium High Density Residential	22
High Density Residential	30
Corridors and Town Centers	20
Open Space (non-sewered areas) <ul style="list-style-type: none">• Elk Grove Rural Residential	0

<ul style="list-style-type: none"> • Parks, greenbelts, public open spaces, resource conservation area • Manmade lakes, storm water detention ponds, storm water canals, drainage parkway, detention basins • Flood plains, waterways, levees, drainage ditches, irrigation canals • American River Parkway, nature preserve, urban reserves (non-sewered), wetland buffers, wastelands • Bike path corridors, landscape corridors • Cemeteries • Roadway, streets 	
<p>All Other Land Uses:</p> <ul style="list-style-type: none"> • Residential • Commercial/Office • Industrial • Public/Quasi-public/Schools • Mixed/Special Planning Area/Urban Reserve 	6

SOURCE: SASD SCP 2011A, PG. 3

Figure 2-4 of the SCP identifies the Project site as a potential development area by 2020 and has an identified density of 5.51 to 6.50 ESD per acre. Figure 2-5 of the SCP shows this area to be approximately 10 percent builtout by 2020. This information is used by the SCP when considering planning scenarios for SASD expansion projects.

Figure 6-2 of the SCP identifies potential future expansion facilities needed by 2020; this figure identifies the Project site as new development, but shows that no future expansion pipe will be needed to serve the Project site. Under full buildout conditions of the SASD service area (2030 or beyond), the BR Bond Sheldon trunk shed would require expanded facilities. A future pumping station is anticipated in the vicinity of the Bond Road/Waterman Road intersection.

Sacramento Regional County Sanitation District

As previously discussed, SRCSD provides public wastewater treatment and disposal in the unincorporated and urbanized portions of Sacramento County under the direction of the County of Sacramento’s Water Quality Division. SRCSD has prepared the following documents to guide the development of wastewater facilities in Sacramento County:

Regional Interceptor Master Plan 2000 - The SRCSD has prepared a long-range master plan for the large diameter interceptors that transports wastewater to the SRWTP and includes interceptor upgrades/expansions to accommodate anticipated growth through 2035.

Regional 2020 Master Plan - The 2020 MP for the SRWTP provides a phased program of recommended wastewater treatment facilities and management programs to accommodate planned growth and to meet existing and anticipated regulatory requirements through the year 2020. The key goals of the 2020 Master Plan are to provide sufficient capacity to meet growth projections and an orderly expansion of SRWTP facilities to comply with applicable water quality standards and to provide for the most cost-effective facilities and programs from a watershed perspective.

The 2020 MP states that the master planning capacity is based on conservative criteria to initiate the timing of new facilities in sufficient time to allow for permitting and environmental documentation, preliminary design, final design, and construction. The master planning capacity can be exceeded, as necessary, while the SRWTP continues to meet all applicable NPDES permit

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requirements. For example, the master planning design criteria (and capacity) may be exceeded for individual treatment processes for certain periods of time during the planning horizon, and at times when new projects are just coming on line.

The 2020 MP indicates that wastewater facilities should be sufficiently flexible to accommodate additional growth beyond the planning period. The 3,500-acre SRWTP site has been master planned to accommodate a mirror image buildout of the existing facilities of 350-mgd ADFW of conventional and advanced treatment capacity. The 2020 MP includes cost estimates for future 2020 MP projects and projects the timing of the projects based on anticipated population growth in its service area. Not all facilities necessary to treat the master planned capacity or the projected 2020 flow-rates need to be constructed at the same time. Generally, facility expansion is phased in five to ten year increments over the planning period. These increments are large enough to provide a reasonable economy of scale and yet small enough to minimize the size of potentially idle facilities (SRCSD 2008, pg 15).

NPDES Permit - In 2010, the Regional Board issued a new discharge permit to SRCSD for the SRWTP. The discharge permit requires treatment facility upgrades for ammonia removal, nitrate removal, filtration, and additional disinfection.

SRCSD filed an appeal to the State Water Resources Control Board (State Board) requesting it review the Regional Board's decision on the discharge permit. In December 2012, the State Board conducted a hearing and upheld the discharge permit, thereby concluding SRCSD's regulatory appeals process. SRCSD also filed a lawsuit in Sacramento Superior Court in December 2011. The interested parties agreed to a "stay" on some of the requirements pending the State Board's review of SRCSD's appeal. After the State Board issued its final order in December 2012, the litigation process was reinitiated. A hearing on SRCSD's lawsuit has been set for fall 2013.

The discharge permit requires implementation of a significant number of special studies and pollution prevention plans. During 2012, SRCSD began implementing the 12 approved studies and plans. Three other special studies and pollution prevention plans are still under review by the Regional Board.

SRCSD built the Advanced Treatment Technology Pilot Project (Pilot Project) to evaluate and determine which treatment technologies would meet the new discharge permit requirements most effectively. SRCSD is operating the Pilot Project and evaluating the performance of each of the piloted technologies (SRCSD 2013).

City of Elk Grove General Plan

The City General Plan contains the following goals and policies that are relevant to wastewater aspects of the Project:

Policy PF-1 Except when prohibited by state law, the City shall require that sufficient capacity in all public services and facilities will be available on time to maintain desired service levels and avoid capacity shortages, traffic congestion, or other negative effects on safety and quality of life.

Policy PF-2: The City shall coordinate with outside service agencies including water and sewer providers, the Elk Grove Community Services District, and the Elk Grove Unified School District – during the review of plans and development projects.

Policy PF-8 Sewage conveyance and treatment capacity shall be available in time to meet the demand created by new development, or shall be assured through the use of bonds or other sureties to the City's satisfaction.

PF-8-Action 2 The following shall be required for all subdivisions to the extent permitted by state law:

- Sewage/wastewater treatment capacity shall be available at the time of tentative map approval.
- The agency providing sewer service to the subdivision shall demonstrate prior to the approval of the Final Map by the City that sufficient capacity shall be available to accommodate the subdivision plus existing development, and other approved projects using the same conveyance lines, and projects which have received sewage treatment capacity commitment.
- Onsite and offsite sewage conveyance systems required to serve the subdivision shall be in place prior to the approval of the Final Map, or their financing shall be assured to the satisfaction of the City, consistent with the requirements of the Subdivision Map Act.
- Sewage conveyance systems within the subdivision shall be in place and connected to the sewage disposal system prior to the issuance of any building permits. Model homes may be exempted from this policy as determined appropriate by the City, and subject to approval by the City.

Policy PF-9 Development along corridors identified by sewer providers in their Master Plan as locations of future sewage conveyance facilities shall incorporate appropriate easements as a condition of approval.

Policy PF-13 Residential development on lots smaller than two (2) gross acres shall be required to connect to public sewer service. This policy shall not apply to lots smaller than 2 gross acres in the Rural Residential land use category which existed as legal lots as of the date of adoption of this General Plan; these lots shall not be required to connect to public sewer service as a condition of development.

THRESHOLDS OF SIGNIFICANCE

Consistent with Appendix G of the CEQA Guidelines, the Project will have a significant impact on the environment associated with utilities if it will:

1. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board;

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2. Require or result in the construction of new wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects; and/or
3. Result in a determination by the wastewater treatment provider which serves or may serve the Project that it has inadequate capacity to serve the Project's projected demand in addition to the provider's existing commitments.

IMPACTS AND MITIGATION MEASURES

Impact 3.13-1: The Project would generate wastewater that would be treated at an existing wastewater treatment plant. (less than significant)

Wastewater generated by the Project would be conveyed to the SRWTP near Elk Grove for treatment and disposal. Wastewater from the Project will be connected to existing 15 inch sewer lines located on Bond Road, adjacent to the Project site. In general, the newly proposed sewer lines are shown to be located within public ROW and typically under the paved road section.

The Project includes 393 single family units, 267 adult (55 and older) single family units and 125 units for independent living, assisted living, and/or memory care for seniors. The potential estimated population for the Project is 2,100 persons¹. Table 3.13-4 illustrates the potential wastewater flows coming from the Project at full buildout. The calculated wastewater flows of 135 gallons per capita per day were based on rates provided in the Urban Water Management Plan (EGWD, pg. 28). The Project would generate an estimated 0.28 million gallons per day (mgd) average wastewater flow.

TABLE 3.13-4: PROJECT SEWER FLOWS

<i>LAND USE</i>	<i>UNITS</i>	<i>PERSONS PER HOUSEHOLD</i>	<i>PERSONS¹</i>	<i>FLOW PER CAPITA² (GPD)</i>	<i>ADDF³ (GPD)</i>
Single family Residential	393	3.22	1,265	135	170,755
Senior Residential	267	2.30	614	135	82,890
Independent Living Units	125	1.76	220	135	29,700
Total	785	-	2,100		283,345 0.28 mgd

Notes: 1) Persons per household based on 2013 Department of Finance data for single family units and 2007-2011 US Census data for senior units

2) Per Capita Flow Rates were established in the EGWD Urban Water Management Plan, page 28.

3) ADDF = Average Daily Dry Weather Flow

The Project is within the SRCSD CSD-1 service area. Project-generated wastewater would be conveyed by existing collectors and interceptors for treatment at the SRWTP. According to the 2012 SRCSD State of the District Report, the current average dry weather wastewater flow into the WWTP is 115 mgd and the peak weather flow is 259 mgd. The Project would add an additional 0.28 mgd average daily dry weather flow to the WWTP. The Project's additional flows to the

¹ Based on 3.23 persons per household (based on DOF Report E-5: City/County Population and Housing Estimates, 1/1/2012) for single family residents and 2 persons per household for senior units).

WWTP would not cause an exceedance of the plant's permitted design capacity of 181 mgd of dry weather flow and 391 mgd of peak wet weather flow.

The Elk Grove General Plan includes policies to assist in the provision of wastewater conveyance and treatment facilities. Policies PF-1 and PF-8 require that treatment facilities be available. The SRWTP has capacity to treat wastewater flows coming from the Project. The Project will connect to public sewer service consistent with the requirement of Policy PF-13.

Consequently, no additional treatment capacity or infrastructure is needed to treat wastewater generated by the Project. The Project would not cause the SRCSD to exceed its wastewater treatment requirements. Impacts associated with wastewater treatment are considered less than significant.

Impact 3.13-2: The Project would connect to existing wastewater infrastructure. (less than significant)

Implementation of the Project would require an adequate wastewater conveyance system to serve the Project site. Only on-site sewer infrastructure will be necessary as the Project site is anticipated to be linked to the adjacent to existing sewer pipelines on Bond Road.

Figure 1.2 of the SCP shows that Bond Road, adjacent to the Project site, has an existing 10 inch or larger sewer pipe². Figure 2-4 of the SCP identifies the Project site as a potential development area by 2020 and anticipates development of the Project site at densities consistent with the City's adopted General Plan. Figure 6-2 of the SCP identifies the potential future expansion facilities needed by 2020 for the wastewater conveyance system. The Project site is identified on Figure 6-2 showing no new facilities are needed in the area. Thus, the Project site can be served by the existing facilities.

The Elk Grove General Plan includes policies to assist in the provision of wastewater conveyance and treatment facilities. Policies PF-1 and PF-8 require that conveyance facilities be available. The SCP identifies that existing wastewater pipes are located along Bond Road. SASD has confirmed that the Bond Road trunk line has adequate capacity and no new off-site facilities will be needed to serve the Project (Singh 2013). Policy PF-9 requires the incorporation of easements as a condition of approval for development located along corridors where sewer providers have planned for future sewage conveyance facilities. The SCP identifies a future force main along Waterman Road and the northern boundary of the Project site and a future pump station at the Bond Road/Waterman Road intersection to serve buildout (beyond 2020) conditions. The Interceptor Sequencing Study prepared by SRCSD in 2013 evaluated proposed interceptor facilities and also reevaluated growth projections for its service area, future demand projections, and potential interceptor alternatives. The ISS concluded that the Laguna Interceptor, which would have traversed the northern boundary of the Project, would not be needed. Prior to approval of the Final Map or improvement plans, the Project applicant is required to submit a sewer study for approval by SASD. If provisions for public sewer easement are required by SASD, the sewer easement would be dedicated to SASD and would be required to meet SASD standards.

² The Silverado Village Preliminary Sewer and Water Exhibit show this sewer pipe to be 15 inches.

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The Project would be required to comply with the most recent Sewer Use Ordinance, SASD Connection Fee Ordinance, and the Sacramento Regional Sanitation District (SRCSD) Connection Fee Ordinance, as well as the conditions for specific infrastructure design discussed above. In addition, the Project would connect to conveyance infrastructure located in the existing Bond Road right-of-way. The SCP shows that the Project would be served by existing facilities. As such, impacts to wastewater conveyance are considered less than significant.

3.13.2 WATER SUPPLIES

EXISTING SETTING

Water Service Area

ELK GROVE WATER DISTRICT

The Project site is served by the Elk Grove Water District (EGWD), which is owned and operated by Florin Resource Conservation District (FRCD). EGWD has two service areas that are supplied with pumped groundwater and treated conjunctive use (groundwater and surface water) water supplies that are purchased from the Sacramento County Water Agency (SCWA). The EGWD service areas cover approximately 13 square miles and are bounded by Sheldon Road to the north, State Route 99 to the west, Grant Line Road to the east, and the Union Industrial Park to the south. The differentiation between the service areas is based on the separate water suppliers: Service Areas No. 1 is supplied water from EGWD's groundwater wells and Service Area No. 2 is supplied with water purchased wholesale from SCWA.

The Project site is within Service Area No. 2. Service Area No. 2 has a service area of approximately 4,875 acres and a customer base of approximately 4,115 connections (FRCD 2013, p. 1-6).

SACRAMENTO COUNTY WATER AGENCY

SCWA is the wholesale water supplier for the Project and provides the water supplies and water system infrastructure. The Project site is within Zone 40 of the SCWA. Zone 40 implements SCWA's conjunctive use program in the Central Sacramento Region as part of an effort which began in 1986. The creation of Zone 40 empowered SCWA to establish fees, charges, credits, and regulations for the wholesale supply of water to zones within the SCWA.

Zone 41 of the SCWA was created in June 2000 to provide retail and wholesale water services within its existing water retail service areas. Zone 40 is the primary source of financing to staff the conjunctive use program and construct the needed capital facilities to implement surface water, groundwater and recycled water use. The Project will be required to pay the necessary Zone 40 Development Fees to further the conjunctive use program in the region. Zone 41 operates the water treatment and large water distribution system which will deliver water to the Project site via a metered turnout from an existing Zone 41 transmission main to the Project site's southern property line in Bond Road. Zone 41's cost of treatment and conveyance is passed on to EGWD, which owns and operates the local water distribution system and retails the water to its customers. EGWD's retail water rates pay for the Zone 41 wholesale supply as well as EGWD's maintenance and operations costs.

Water Demand

Table 3.13-5 provides a summary of EGWD water demands through the year 2035 for Tariff Area No. 2. Column 1 reflects past water demands based on individual customer metered data. Column 2 represents projected water demands to 2035 assuming full implementation of SBX7-7³ by 2020. Column 3 represents water demands assuming no implementation of SBX7-7. Column 4 water demands reflect existing (2010) water demands if no new growth were to occur in Service Area No. 2. As can be seen by the projected decrease in the baseline water demands, any increase from limited residual growth is more than off-set from implementing SBX7-7 over the same area and period of time. The result is a net decrease over time, with demand going from 2,935 acre-feet per year (AFY) in 2010 to 2,428 AFY in 2035.

TABLE 3.13-5: EGWD TARIFF AREA NO. 2 - EXISTING AND PROJECTED WATER DEMAND

YEAR	HISTORICAL DEMAND (AFY)	PROJECTED DEMAND WITH SBX7-7 (AFY)	PROJECTED DEMAND WITHOUT SBX7-7 (AFY)	BASELINE OF EXISTING WATER DEMAND (AFY)
2005	2,516	-	-	2,516
2010	2,935	2,935	2,935	2,935
2014	-	3,443	3,773	2,671
2015	-	3,570	3,983	2,624
2016	-	3,584	4,099	2,568
2017	-	3,598	4,215	2,508
2018	-	3,612	4,331	2,451
2019	-	3,626	4,448	2,397
2020	-	3,640	4,564	2,346
2025	-	4,100	5,139	2,389
2030	-	4,560	5,715	2,415
2035	-	4,560	5,715	2,428

Notes: 1. Baseline water use average 253 gpcd pre-SBX7-7 (EGWD 2011, p. 11). Population based on census data for Service Area No. 2 in Table 3 of UWMP.

SOURCE: FRCD/EGWD 2013, TABLE 2-1.

Water Supplies

EGWD relies primarily on groundwater as the source of supply for both service areas, Service Area No. 1 and Service Area No. 2⁴. Groundwater is supplied to Service Area No. 1 by a series of three shallow and four deep wells, which are owned and operated by EGWD. There are normally closed intertie connections with the SCWA. Service Area No. 2 is supplied water from the SCWA through a wholesale master water agreement with SCWA. Service Area No. 2, which is located within SCWA’s Zone 40, uses both groundwater and surface water as sources of water supply. EGWD has an agreement with SCWA to provide the water necessary to serve the Service Area No. 2 franchise area. Although SCWA has recently acquired surface water supplies and recycled water, Service Area No. 2 is not currently supplied with recycled water and currently does not receive any

³ Senate Bill SBX7-7 was enacted in November 2009 and requires urban water agencies throughout California to increase conservation to achieve a statewide goal of a 20 percent reduction in urban per capita use by December 31, 2020.

⁴ The UWMP’s uses the “Tariff” area as a naming convention. This term has been replaced with term “Service” area. The former term is no longer relevant since water rates are the same for the entire retail service area.

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significant amount of surface water. SCWA is developing substantial surface water supplies as part of the Freeport Regional Water Authority (FRWA), which may become available to Service Area No. 2.

The quality of the groundwater supplied by EGWD meets the California Department of Public Health (CDPH) drinking water standards. EGWD provides centralized water quality treatment to remove manganese and provide blending to reduce arsenic concentrations at the Railroad Street Water Treatment Plant for EGWD's four deep wells. EGWD does not provide recycled water to its service areas.

The data in the Table 3.13-6 represents the existing and planned wholesale water supplies that were calculated by EGWD for use in the Service Area No. 2 service area. SCWA is under contract with EGWD to supply 4,560 AFY to the District for Service Area # 2. Full use of this supply is not expected to be needed until 2030.

TABLE 3.13-6: FUTURE WATER SUPPLY FOR SERVICE AREA #2

WHOLESALE SOURCES AFY	CONTRACTED VOLUME	2015	2020	2025	2030	2035
Demand	4,560	3,570	3,640	4,100	4,560	4,560

SOURCE: EGWD 2011, P. 22

Surface Water

As previously discussed, water will be supplied to the Project by SCWA. SCWA utilizes surface water and underlying groundwater. The surface water supply would come from the American and/or Sacramento Rivers. All surface water supplies require conventional treatment prior to distribution within the City. Table 3.13-7 illustrates Zone 40's surface water components, the source, entitlement amount, supply estimates, and reliability.

TABLE 3.13-7: ZONE 40 SURFACE WATER SUPPLY COMPONENTS

COMPONENT	WATER SOURCES	ENTITLEMENT AMOUNT (AFY)	ESTIMATED LONG TERM AVERAGE USE (AFY)	RELIABILITY
Appropriative Water: SWRCB 21209	American and Sacramento Rivers	Up to 71,000	21,700	High
SMUD 1 Assignment	American River	15,000	13,000	Moderate
SMUD 2 Assignment	American River	15,000	13,000	Moderate
"Fazio" Water (PP 101-514)	American River	15,000	13,551	Moderate
Other Water Supplies	American and Sacramento Rivers	Undetermined	5,200	Variable
Wholesale Water Agreements within City to serve portion of Zone 40 in City's American River POU	American River	9,300	9,300	High
Total Surface Water - Estimated Long-Term Average			75,751 AFY	

SOURCE: SCWA 2005, SCWA 2011 P. 4-14

The components discussed in Table 3.13-7 above consist of the following:

Appropriative Water. In February 2008, the State Water Resources Control Board (SWRCB) approved SCWA's appropriative right permit application to divert water from the American and Sacramento Rivers (Permit 21209). Water under this permit is considered "intermittent water" that is typically available during the winter months of normal or wet years. These flows could range up to 71,000 ac-ft/yr and a long-term average flow of 21,700 AFY is projected. (SCWA 2011, p. 4-1)

SMUD 1 Surface Water Assignment. Under the terms of a three-party agreement (SCWA, SMUD, and the City), and in accordance with SMUD's PSA, the City provides surface water to SMUD for use at two of SMUD's cogeneration facilities (because the cogeneration facilities are located within the City's American River place of use (POU), authorization by SWRCB is not required). SMUD, in turn, will assign 15,000 AFY of its Reclamation CVP contract water to SCWA for M&I use. This CVP contract assignment is complete.

SMUD 2 Surface Water Assignment. SMUD's PSA directs SMUD to assign a second 15,000 AF/year to SCWA and for SCWA to construct groundwater facilities necessary to meet SMUD's dry year water shortages of up to 10,000 AFY. This CVP contract assignment is complete.

"Fazio Water" (CVP Water Public Law 101-514). In April 1999, the SCWA obtained a CVP water service contract pursuant to PL 101-514 that provides a permanent water supply to Zone 40 of 15,000 AFY.

Other Water Supplies. The SCWA enters into purchase and transfer agreements with other entities that currently hold surface water rights in the north Sacramento River Basin.

Purchase of City of Sacramento Water for use in City Place of Use (POU). SCWA's PSA directs the agency to enter into an agreement with the City of Sacramento whereby the City will sell surface water to the SCWA for use in the portion of the Zone 41 service area within Zone 40 boundaries that lies with the City's American River POU.

EXISTING POTABLE GROUNDWATER SUPPLIES

EGWD pumps groundwater from the South American Subbasin. The groundwater basins underlying the Sacramento County have been divided into three geographic subareas: (1) North Basin, (2) Central Basin, and (3) South Basin. EGWD overlies and extracts groundwater from the Central Basin from seven wells that range in total depth from 450 to 1,075 feet below ground surface. The public water systems or water service providers that receive water from the Central Basin include EGWD, the California American Water Company, SCWA, the Golden State Water Company, and numerous private landowners who have overlying rights on their property.

According to the EGWD UWMP, the Central Basin is not adjudicated or considered to be in a state of being over drafted. Due to the active planning by water agencies, the basin is not foreseen to be over drafted in the future (EGWD 2011, p. 22).

Groundwater use is regularly monitored within the Sacramento County region. The Sacramento Groundwater Authority (SGA) Basin Management Report that was prepared in 2007-2008, found

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that groundwater use in the Central Basin, where EGWD is located, has remained relatively constant at approximately 262,500 AFY during the preceding four years and had a high of 264,860 in 2008. In communication with the other groundwater users from the basin (SCWA, the Golden State Water Company, and the California American Water Company), it is not anticipated that groundwater extraction would have increased in the years of 2009 or 2010, given the dramatic decline in home construction and the depressed local economy. This would indicate a remaining groundwater capacity of approximately 8,140 AFY in regards to the agreed upon sustainable yield of 273,000 AFY for the Central Basin stakeholders (EGWD 2011, p. 22).

The Central Sacramento County Groundwater Master Plan (CSCGMP) was adopted by the SCWA on February 2006. One goal of the CSCGMP was to model the groundwater basin and establish a sustainable annual groundwater yield for the Central Basin. The CSCGMP is the result of the Water Forum process, a decade-long effort involving multiple agencies and stakeholders within the region, and culminated in the negotiation and signing of the Water Forum Agreement. The CSCGMP provides for the long-term protection of groundwater quantity and quality within the region, and contains policies directing the development of surface water supplies, conservation, and other measures to service urban development as it occurs, thereby protecting the sustainable annual groundwater yield threshold of 273,000 AF.

Based upon the Central Basin's total projected water supplies for normal, single-dry, and multiple-dry years over a 20-year projection, as demonstrated by the County's UWMP and GMP, the Central Basin will have sufficient water to meet estimated water demands for the build-out of the EGWD Service Area No. 1 and Service Area No. 2.

Groundwater Sufficiency

EGWD is located in the Central Basin of the Sacramento County Groundwater Basin. The Central Basin is a portion of the South American Subbasin of the greater Sacramento Valley Groundwater Basin. The South American Subbasin is bounded by the American River to the north, the Sacramento River to the west, the Sierra Nevada to the east, and the Cosumnes and Mokelumne Rivers to the south.

The Central Basin includes a number of groundwater users that consist of agriculture, agricultural residential, urban, and environmental uses. The Central Basin boundary was defined by the Sacramento County groundwater model that was used in the Water Forum process. In October 2004, SCWA adopted a Groundwater Management Plan (GMP) for the portion of the Central Basin that is served water through Zone 40 of the SCWA. The Water Forum estimated the long-term average annual sustainable groundwater pumping yield from the Central Basin to be 273,000 AFY.

Numerous water purveyors within Sacramento County pump groundwater from public groundwater wells. This data is being collected as part of the Water Forum Successor Effort's "Central Sacramento County Groundwater Forum," and is presented in the CSCGMP, February 2006. This document presents the expected groundwater pumping rates through 2030, if the groundwater extraction is not supplemented with additional surface water contracts. SCWA also completed a Groundwater Management Plan (GMP) under California Water Code Section 10750. The Water Forum estimated the long-term average annual sustainable groundwater pumping yield from the Central Basin to be 273,000 AFY (EGWD 2011, pg. 25).

Groundwater elevations are regularly monitored within the region by DWR. Some of these records date back to the early 1950s. Hydrographs in the vicinity of EGWD's service areas indicate that the groundwater elevations have declined from the early 1950s through the late 1970s. From approximately 1980, the groundwater elevations have remained relatively consistent, except for a temporary decline in the early to mid-1990s. The static depth to groundwater within EGWD currently ranges between 60 to 110 feet below the ground surface (EGWD 2011, p. 25).

Groundwater Quality

The aquifer system within the Central Basin consists of continental deposits of the late Tertiary to Quaternary age (DWR Bulletin 118). The major fresh water bearing geologic units are the Laguna Formation and the Mehrten Formation. EGWD has wells constructed in both of these formations. The Laguna Formation, which extends to a total depth of approximately 300 feet within the Central Basin, is used for private domestic wells and municipal water supply wells. Water produced from the Laguna Formation and the Mehrten Formation is considered generally good quality with low total dissolved solids. Water produced from the Laguna Formation often meets all CDPH water quality standards, but exceeds the CPPH Maximum Contaminant Level (MCL) for arsenic within some areas of the Central Basin. The Mehrten Formation often contains manganese and odor, which exceed the CDPH MCLs. The upper portion of the Mehrten Formation, (between 300 feet to 700 feet within EGWD), often exceeds the CDPH MCL for arsenic within the Central Basin. The lower portion of the Mehrten Formation, (between 700 to 1,300 feet within EGWD) generally has concentrations of arsenic that are under the CDPH MCL, but still require treatment to remove manganese and odor (EGWD 2011, p. 26).

Water Distribution System

EGWD is responsible for the maintenance and operation of the transmission and distribution mains for Service Area No. 1 and the distribution mains for Service Area No. 2. The EGWD owns and operates a water treatment plant site that receives water from wells. This treatment plant also includes a pump station and two 1.0 million gallon above-ground water storage tanks. This facility is used to serve the customers within Service Area No. 1. The water treatment plant facility is referred to as the Railroad Street Treatment and Storage Facility. EGWD also has a well and water treatment plant in the south end of Service Area No. 1. This facility is currently not in service and is classified as a "stand-by" well with the California Department of Public Health (CDPH). This facility is referred to as the Hampton Water Treatment Plant. There is a single water treatment plant within the Service Area No. 2 service boundary, which is owned and operated by SCWA. This plant is referred to as the East Elk Grove Groundwater Treatment Plant.

REGULATORY SETTING – WATER SUPPLIES

STATE

Senate Bill 610

Senate Bill (SB) 610 requires that public agencies in a position of approving certain projects check with the water agency proposed to serve the project to determine if there are sufficient water supplies available to accommodate the project. SB 610 applies to projects that meet the following criteria:

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- A proposed residential development of more than 500 dwelling units.
- A proposed shopping center or business establishment employing more than 1,000 persons or having more than 500,000 square feet of floor space.
- A proposed commercial office building employing more than 1,000 persons or having more than 250,000 square feet of floor space.
- A proposed hotel or motel, or both, having more than 500 rooms.
- A proposed industrial, manufacturing, or processing plant, or industrial park planned to house more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 square feet of floor area.
- A mixed-use project that includes one or more of the projects specified above.
- A project that would demand an amount of water equivalent to, or greater than, the amount of water required by a 500 dwelling unit project.

SB 610 amended Public Resources Code Section 21151.9 to provide that whenever a city or county decides that a project meets any the above criteria, it must comply with Section 10910 *et seq.* of the Water Code. Section 10910 *et seq.* of the Water Code was also amended by SB 610 to require a city or county to coordinate the CEQA analysis with the water agency proposed to serve the project. Section 10910 *et seq.* requires a city or county to identify any public water system that may supply water to a project. The city or county must ask each of these water providers to indicate whether its “total projected water supplies available during normal, single dry, and multiple dry water years during a 20-year projection will meet the projected water demand associated with the Project, in addition to the public water system’s existing and planned future uses, including agricultural and manufacturing uses.” If the city or county cannot receive this information from the water provider, it must provide the water supply assessment itself.

Senate Bill X7-7

Senate Bill X7-7 was enacted in November 2009, requiring all water suppliers to increase water use efficiency in two sectors, Urban Water Conservation and Agricultural Water Conservation. The urban water reduction goal is to reduce per capita urban water use by 20% by December 31, 2020, with an interim statewide goal of reducing per capita water use by at least 10% by December 31, 2015.

LOCAL

SCWA Zone 40 Water Supply Master Plan

SCWA was formed in 1952 by a special legislative act of the State of California making water available for any beneficial use of lands and inhabitants, and for producing, storing, transmitting, and distributing groundwater. Zone 40 was created by SCWA Resolution No. 663 in May 1985, which describes the exact boundaries of the zone, and defines the projects to be undertaken. SCWA Ordinance No. 18, adopted in 1986, empowered SCWA to establish fees, charges, credits, and regulations for the wholesale supply of water to zones within SCWA.

The Zone 40 Water Supply Master Plan (WSMP) was prepared by the SCWA to provide a flexible program of water management alternatives that can be implemented and revised, if necessary, as the availability and feasibility of water supply sources change in the future. The WSMP also reflects changes from the 1987 Zone 40 Water Supply Master Plan in the pattern of growth in water demands, water quality treatment requirements, expansion of the original service area, and in the availability of potential sources of surface water supplies.

The WSMP has two coequal objectives: (1) to provide a reliable and safe water supply for the region’s economic health and planned development through the year 2030, and (2) to preserve the fishery, wildlife, recreational, and aesthetic values of the lower American River. This plan describes the studies performed and presents findings, conclusions, and recommendations to meet future water demands in Zone 40 through the year 2030.

SCWA Zone 41 2010 Urban Water Management Plan

The Zone 41 UWMP addresses SCWA’s water systems and includes a description of the water supply sources, magnitudes of historical and projected water use, and a comparison of water supply water demands during normal, single-dry, and multiple-dry years. The Zone 41 UWMP is the year 2010 Plan as required by the Urban Water Management Planning Act (Act) (California Water Code Division 6, Part 2.6, Sections 10610 through 10657).

Elk Grove Water District Urban Water Management Plan

The Elk Grove Water District prepared an UWMP in 2011, as required by the Urban Water Management Planning Act of 1983. The focus of the EGWD UWMP is the conservation and efficient use of water in the Elk Grove service area, and the development and implementation of plans to assure reliable water service in the future. The EGWD UWMP contains projections for future water use through 2035, discusses the reliability of the City’s water supply through 2035, describes the City’s water treatment system, and contains a water shortage contingency plan. In addition, the EGWD UWMP contains best management practices for efficient water use.

City of Elk Grove General Plan

The City General Plan contains the following goals and policies that are relevant to water supply for the Project:

- Policy CAQ-1:** Reduce the amount of water used by residential and non-residential uses by encouraging water conservation.
- Policy PF-1:** Except when prohibited by state law, the City shall require that sufficient capacity in all public services and facilities will be available on time to maintain desired service levels and avoid capacity shortages, traffic congestion, or other negative effects on safety and quality of life.
- Policy PF-2:** The City shall coordinate with outside service agencies including water and sewer providers, the Elk Grove Community Services District, and the Elk Grove Unified School District – during the review of plans and development projects.

3.13 UTILITIES

Policy PF-3: Water supply and delivery systems shall be available in time to meet the demand created by new development, or shall be assured through the use of bonds or other sureties to the City's satisfaction.

PF-3-Action 2 The following shall be required for all subdivisions to the extent permitted by state law:

- Proposed water supply and delivery systems shall be identified at the time of tentative map approval to the satisfaction of the City. The water agency providing service to the project may provide several alternative methods of supply and/or delivery, provided that each is capable individually of providing water to the project.
- The agency providing water service to the subdivision shall demonstrate prior to the approval of the Final Map by the City that sufficient capacity shall be available to accommodate the subdivision plus existing development, and other approved projects in the same service area, and other projects that have received commitments for water service.
- Offsite and onsite water infrastructure sufficient to provide adequate water to the subdivision shall be in place prior to the approval of the Final Map or their financing shall be assured to the satisfaction of the City, consistent with the requirements of the Subdivision Map Act.
- Offsite and onsite water distribution systems required to serve the subdivision shall be in place and contain water at sufficient quantity and pressure prior to the issuance of any building permits. Model homes may be exempted from this policy as determined appropriate by the City, and subject to approval by the City.

Policy PF-7: The City shall require that water flow and pressure be provided at sufficient levels to meet domestic, commercial, industrial, and firefighting needs.

THRESHOLDS OF SIGNIFICANCE- WATER SUPPLY

Consistent with Appendix G of the CEQA Guidelines, the Project may have a significant impact on the environment associated with utilities if it would:

1. Require or result in the construction of new water treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects;
or
2. Have insufficient water supplies available to serve the Project from existing entitlements and resources, or if new or expanded entitlements are needed.

IMPACTS AND MITIGATION MEASURES

Impact 3.13-3: The Project would not require construction of new or expanded water treatment facilities and would connect to existing water treatment and conveyance infrastructure. (less than significant)

The provision of public services and the construction of onsite and offsite infrastructure improvements will be required to accommodate development proposed in the Project. The Project will be required to provide services and infrastructure that meet City standards, integrate with existing and planned facilities and connections, and not diminish services to existing residents or businesses within the City.

The Project will require extension of off-site water infrastructure in Bond Road and at the Bond Road/Waterman Road intersection to the Project site for potable water and irrigation water. All offsite water piping improvements will be in or adjacent to existing roadways. All improvements will be developed according to City standards.

Each of the major roadways in the Project site will include a water main. These proposed mains form a looped infrastructure water system into which individual residential parcels will subsequently be connected.

The Project will be served by the EGWD, with water purchased wholesale by EGWD from SCWA. The Project's water would be treated by the SCWA water treatment system and would not require construction of new or expanded water treatment facilities.

General Plan Policy PF-3 requires water delivery systems be available in time to meet the demand created by new development. The delivery systems are in place to convey water to the Project. Policy PF-7 requires that water flow and pressure be provided at sufficient levels to meet domestic, commercial, industrial, and firefighting needs. The Project's water system will be designed to meet the City's requirements for water flow and pressure.

The Project would not require the construction of new water treatment facilities or expansion of existing water treatment facilities for potable water. The Project would not require the construction of new offsite potable water conveyance lines as they will be connecting to existing lines adjacent to the Project site. Therefore, the potential for impacts to water treatment infrastructure and from the connection to the potable water infrastructure is less than significant.

Impact 3.13-4: The Project would be adequately served by existing water supply sources under existing and cumulative conditions. (less than significant)

Table 3.13-8 shows the projected water demand for the Project at buildout. The calculation of total water demand for the Project is based on regional unit water demand factors for Zone 40. The EGWD 2010 UWMP includes water demand projections as required to show total Project water demand in five year increments from 2010 to 2035. To quantify future water demand for purposes of assessing water rights and facility sizing, Table 3.13-8 includes unit water demand factors from the 2005 Zone 40 WSMP which have been used in the design of Zone 41's current water system and in the planning of Zone 40's infrastructure plan.

3.13 UTILITIES

TABLE 3.13-8: PROJECT WATER DEMAND

LAND USE CATEGORIES FOR WSA	LAND USE (ACRES)	UNIT WATER DEMAND FACTOR (AFY PER ACRE)	TOTAL WATER DEMAND (AFY)
Single Family	115.10	2.89	332.64
Multi-Family (Low Density)	2.50	3.70	9.25
Commercial	2.10	2.75	5.78
Public Recreation	13.23	3.46	45.76
Open Space	89.93	-	-
Right of Way	8.21	0.21	1.72
Totals	231.07	-	395.15

Notes: Unit Water Demand Factors are taken from Table 2-2 of the 2005 Zone 40 WSMP

SOURCE: FRCD/EGWD 2013, TABLE 2-2.

Table 13-9 shows the projected water demand for EGWD’s Tariff Area No.2. EGWD’s projected water demand (Columns 2 and 3) include water demand associated with the Project. The last column of Table 3.13-9 identifies the projected water demand for the Project through the 2035 planning horizon with phased Project development occurring from 2014 to 2020. EGWD has an agreement to receive up to 4,560 AFY to serve Tariff Area No. 2. EGWD’s demand projections as shown in Table 3.13-5 and 3.13-9 anticipated development of the Project site consistent with the adopted Elk Grove General Plan. As shown in Table 3.13-9, EGWD has adequate water supply to serve the Project.

TABLE 3.13-9: WATER DEMAND

YEAR	HISTORICAL DEMAND (AFY)	DEMAND WITH SBX7-7 (AFY)	DEMAND WITHOUT SBX7-7 (AFY)	PROJECT WATER DEMAND (AFY)
2005	2,516	-	-	-
2010	2,935	2,935	2,935	-
2014	-	3,443	3,773	40
2015	-	3,570	3,983	119
2016	-	3,584	4,099	198
2017	-	3,598	4,215	277
2018	-	3,612	4,331	316
2019	-	3,626	4,448	356
2020	-	3,640	4,564	395
2025	-	4,100	5,139	395
2030	-	4,560	5,715	395
2035	-	4,560	5,715	395

Notes: 1. Baseline water use average 253 gpcd pre-SBX7-7 (pg 11, EGWD 2010 UWMP). Population based on census data for Service Area No. 2 in Table 3 of UWMP.

SOURCE: FRCD/EGWD, TABLE 2-1.

The Water Supply Assessment determined that EGWD can support the Project. EGWD has shown that sufficient water supplies exist to meet the Project’s build-out water demand, as well as all existing and reasonably foreseeable water demands (FRCD/EGWD 2013, p. 4-1).

EGWD made this determination based on the information provided in the WSA, including the following and on the following specific facts:

- The existing near-term and long-term reliable supplies of surface water supplies and indigenous groundwater supplies can deliver a sustainable reliable water supply to meet existing and foreseeable water demands without impacting environmental values and/or impacting the current stabilization of the groundwater basin underlying the EGWD or Zone 41.
- The Project water demands will be positively affected by the implementation of EGWD’s 11 Demand Management Measure and adherence to SBX7-7.
- The existing and future use of groundwater supplies has been extensively described in the EGWD 2010 UWMP which includes the Groundwater Management Plan for the Central Sacramento County Groundwater Basin. All studies show that sufficient groundwater supplies exist.

The Elk Grove General Plan includes policies which ensure the availability of water for the Project. For example, Policy CAQ-1 requires the reduction in the amount of water used by residential and non-residential uses by encouraging water conservation. The Project is subject to Zoning Code Section 23.54.060 which reduces water use for landscaping through requiring that the irrigation systems of new development within the City be designed to avoid runoff, excessive low head drainage, or overspray. Policy PF-1 and PF-3 require that sufficient water capacity and delivery systems are available to meet the demand created by new development. The WSA shows that adequate water supply is available to serve the Project.

Based on the analysis described above, and the analysis contained in the WSA, the existing water supplies are sufficient to meet the Project’s water demands. Therefore, the Project would result in a less than significant impact to water supplies.

3.13.3 SOLID WASTE

EXISTING SETTING

The City provides 41 waste reduction programs in order to meet its solid waste reduction goal. These programs are:

Composting

- Residential Curbside Greenwaste Collection
- Residential Self-haul Greenwaste
- Commercial On-Site Greenwaste Pick-up
- Commercial Self-Haul Greenwaste

Facility Recovery

- MRF
- Landfill
- Transfer Station
- Alternative Daily Cover

HHW

- Permanent Facility
- Curbside Collection

Waste Exchange

Education Programs

Policy Incentives

- Economic Incentives
- Ordinances

Public Education

- Electronic (radio, TV, web, hotlines)
- Print (brochures, flyers, guides, news articles)
- Outreach (tech assistance, presentations, awards, fairs, field trips)
- Schools (education and curriculum)

Recycling

- Residential Curbside

3.13 UTILITIES

Residential Drop-Off
 Residential Buy-Back
 Commercial On-Site Pickup
 Commercial Self-Haul
 School Recycling Programs
 Government Recycling Programs
 Special Collection Seasonal (regular)
 Special Collection Events
 Other Recycling

Source Reduction

Xeriscaping/Grasscycling
 Backyard and On-Site Composting/Mulching
 Business Waste Reduction Program
 Procurement

School Source Reduction Programs
 Government Source Reduction Programs
 Material Exchange, Thrift Shops

Special Waste Materials

White Goods
 Scrap Metal
 Wood Waste
 Concrete/Asphalt/Rubble
 Rendering

Transformation

Biomass

The City’s annual per capita disposal rate has slightly decreased between 2010 and 2011 as shown in Table 3.13-9 below.

TABLE 3.13-9: DISPOSAL RATE

<i>REPORT YEAR</i>	<i>ANNUAL PER CAPITA DISPOSAL RATE (PPD) PER RESIDENT</i>	<i>ANNUAL PER CAPITA DISPOSAL RATE (PPD) PER EMPLOYEE</i>
2007	4.1	20.2
2008	3.5	17.8
2009	2.6	14.1
2010	3.0	18.9
2011	2.9	17.2

Source: CalRecycle 2011

Solid waste services in Elk Grove are provided by Allied Waste Services. In addition to the weekly garbage service, Allied Waste provides green waste and recycling pickup. Recoverable items include: mixed paper, glass, aluminum cans, steel and tin cans, some plastics, corrugated cardboard, yard waste, and used motor oil.

Commercial waste service in the City, which includes waste generated by multi-family residential developments, is an “open market,” meaning that commercial and multi-family waste is hauled by any permitted hauler selected by the development and is hauled to permitted landfills as chosen by the hauler.

Solid waste generated in Elk Grove is taken to various landfills. Table 3.13-10 shows landfills used for waste generated in Elk Grove and the permitted and remaining capacities of those landfills, as well as the total solid waste generated in Elk Grove in 2011. As shown, all of the landfills serving Elk Grove waste haulers have estimated closure dates beyond the year 2020. (CalRecycle 2013).

TABLE 3.13-10: DISPOSAL FACILITIES AND THEIR CAPACITIES

FACILITY	ESTIMATED CEASE OPERATION DATE	TOTAL ESTIMATED PERMITTED CAPACITY (CUBIC YARDS)	TOTAL ESTIMATED CAPACITY USED			2011 ELK GROVE SOLID WASTE (TONS)
			CUBIC YARDS USED	CUBIC YARDS REMAINING	PERCENT REMAINING	
Altamont Landfill & Resource Recovery (01-AA-0009)	1/1/2025	62,000,000	16,280,000	45,720,000 as of 8/22/2005	82.3%	22
Anderson Landfill (45-AA-0020)	1/1/2055	16,840,000	49,259,75	11,914,025 as of 3/16/2008	29.2%	109
Azusa Land Reclaim. Landfill (19-AA-0013)	1/1/2025	66,670,000	32,570,000	34,100,000 as of 3/31/1996	48.9%	13
Foothill Sanitary Landfill (39-AA-0004)	12/31/2082	138,000,000	13,000,000	125,000,000 as of 6/10/2010	90.6%	4
Forward Landfill, Inc. (39-AA-0015)	1/1/2020	51,040,000	27,340,000	23,700,000 As of 5/19/2008	46.4%	61,123
L and D Landfill Co. (34-AA-0020)	1/1/2023	6,031,055	1,931,055	4,100,000 as of 5/31/2005	60.0%	5,109
North County Landfill (39-AA-0022)	12/31/2048	41,200,000	5,800,000	35,400,000 as of 12/31/2009	85.9%	1,152
Potrero Hills Landfill (48-AA-0075)	2/14/2048	83,100,000	69,228,000	13,872,000 as of 1/1/2006	16.7%	1,060
Sacramento County Landfill (Kiefer) (34-AA-0001)	1/1/2064	117,400,000	4,500,000	112,900,000 as of 09/12/2005	96.2%	9,522
Yolo County Central Landfill (57-AA-0001)	1/1/2081	49,035,200	-	-	-	327
Unknown Destination	-	-	-	-	-	4,280
Total						82,719

SOURCE: CALRECYCLE WEBSITE 2013. [HTTP://WWW.CALRECYCLE.CA.GOV/SWFacilities/DIRECTORY/SEARCH.ASPX](http://www.calrecycle.ca.gov/SWFacilities/Directory/Search.aspx) AND [HTTP://WWW.CALRECYCLE.CA.GOV/LGCENTRAL/REPORTS/DRS/DESTINATION/JURDSPFA.ASPX](http://www.calrecycle.ca.gov/LGCentral/Reports/DRS/Destination/JurDspfa.aspx)

City of Elk Grove Special Waste Collection Center

In late fall 2013, the City is anticipating the grand opening of a household hazardous waste facility which will be called the City Special Waste Collection Center. This facility is being built to accept typical household hazardous waste generated by small businesses and residents in the region.

3.13 UTILITIES

REGULATORY SETTING

STATE

California's Integrated Waste Management Act of 1989 (AB 939)

California's Integrated Waste Management Act of 1989 (AB 939) set a requirement for cities and counties to divert 50 percent of all solid waste from landfills by January 1, 2000, through source reduction, recycling and composting. In order to achieve this goal, AB 939 requires that each City and County prepare and submit a Source Reduction and Recycling Element. AB 939 also established the goal for all California counties to provide at least 15 years of ongoing landfill capacity.

AB 939 also established requirements for cities and counties to develop and implement plans for the safe management of household hazardous wastes. In order to achieve this goal, AB 939 requires that each city and county prepare and submit a Household Hazardous Waste Element.

75 Percent Solid Waste Diversion

AB 341 requires CalRecycle to issue a report to the Legislature that includes strategies and recommendations that would enable the state to divert 75 percent of the solid waste generated in the state from disposal by January 1, 2020, requires businesses that meet specified thresholds in the bill to arrange for recycling services by January 1, 2012, and also streamlines various regulatory processes.

Construction and Demolition Waste Materials Diversion

Senate Bill 1374 (SB 1374), Construction and Demolition Waste Materials Diversion Requirements, requires that jurisdictions summarize their progress realized in diverting construction and demolition waste from the waste stream in their annual AB 939 reports. SB 1374 required the CIWMB to adopt a model construction and demolition ordinance for voluntary implementation by local jurisdictions.

California Green Building Standards Code (CALGreen)

CALGreen requires the diversion of at least 50 percent of the construction waste generated during most new construction projects (CALGreen Sections 4.408 and 5.408) and some additions and alterations to nonresidential building projects (CALGreen Section 5.713).

LOCAL

City of Elk Grove General Plan

The City General Plan contains the following goals and policies that are relevant to solid waste disposal and recycling:

Policy CAQ-25: The City shall encourage:

- Recycling,
- Reduction in the amount of waste, and

- Re-use of materials to reduce the amount of solid waste generated in Elk Grove.

City of Elk Grove Municipal Code, Chapter 30.70

Chapter 30.70 of the City's Municipal Code regulates the management of garbage, recyclables, and other wastes. Chapter 30.70 sets forth solid waste collection, disposal, and diversion requirements for residential, commercial, industrial, and other uses and addresses yard waste, hazardous materials, recyclables, and other forms of solid waste. Chapter 30.70 establishes the diversion of construction and demolition debris, which requires projects necessitating a building permit, to submit a Waste Management Plan for the approval of the City's Building Safety and Inspection Division.

THRESHOLDS OF SIGNIFICANCE- SOLID WASTE

Consistent with Appendix G of the CEQA Guidelines, the Project will have a significant impact on the environment associated with utilities if it will:

1. Be served by a landfill with sufficient permitted capacity to accommodate the Project's solid waste disposal needs.
2. Comply with federal, State, and local statutes and regulations related to solid waste.

IMPACTS AND MITIGATION MEASURES

Impact 3.13-5: The Project would be served by a landfill for solid waste disposal needs and will comply with laws and regulations related to solid waste. (less than significant)

According to CalRecycle, the average solid waste generation rate per capita in the City was 2.9 pounds per day in 2011, which is the most recent data available (CalRecycle 2011).

The Project is projected to have an estimated population 2,100, as previously described. Using the per capita generation rate of 2.9 pounds per day, the Project would generate 6,090 lbs/day of solid waste, 1,111.4 tons per year, from the proposed residential uses. The Project would include approximately 18,000 to 27,700 square feet of commercial uses, which would yield up to 55 employees based on one employee generated per 500 square feet. Using the per employee generation rate of 17.2 pounds per day, the Project would generate 946 lbs/day of solid waste, 168.4 tons per year, from the proposed commercial uses. Total Project waste would be approximately 1,279.8 tons per year.

The Project would be required to comply with applicable state and local requirements including those pertaining to solid waste, construction waste diversion, and recycling. The City's solid waste generation has decreased since 2007 due to the waste diversion efforts of the City and it is anticipated that the City's efforts would continue to reduce the per capita and per employee diversion rates.

The General Plan Draft EIR anticipated urbanization of the City and identified that implementation of the General Plan would result in less than significant impacts to solid waste with implementation of mitigating General Plan Policy CAQ-18 and associated actions (Impact 4.12.5.1;

3.13 UTILITIES

City of Elk Grove, 2003b, pp. 4.12-52 to 4.12-53). The Project will implement construction solid waste reduction measures consistent with Chapter 32.70 of the City Municipal Code and is consistent with General Plan policies and actions related to solid waste including Policy CAQ-18.

As previously described, solid waste generated in the City is disposed of at a variety of different landfills in the area (see Table 3.13-10). None of these landfills are projected to close before the year 2020, many much later. These landfills have a combined remaining capacity of 402,606,025 cubic yards, which is more than adequate to accommodate the waste associated with the Project. Further, the Project is consistent with the General Plan and would not result in generation of solid waste in excess of the amount associated with buildout of the General Plan. This is a less than significant impact.

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CEQA requires an EIR to evaluate a project's effects in relationship to broader changes occurring, or that are foreseeable to occur, in the surrounding environment. Accordingly, this chapter presents a detailed discussion, consistent with the requirements of CEQA, of the cumulative impacts, growth-inducing impacts, and significant and irreversible effects of the Project, and growth inducement associated with the Project.

4.1 CUMULATIVE IMPACTS

This Draft EIR provides an analysis of overall cumulative impacts of the Project taken together with other past, present, and probable future projects producing related impacts, as required by Section 15130 of the California Environmental Quality Act Guidelines (State CEQA Guidelines). The goal of this analysis is two-fold: first, to determine whether the overall long-term impacts of all such projects would be cumulatively significant; and second, to determine whether the Project itself would cause a "cumulatively considerable" incremental contribution to any such cumulatively significant impacts. (See State CEQA Guidelines Sections 15130[a]-[b], Section 15355[b], Section 15064[h], Section 15065[c]; *Communities for a Better Environment v. California Resources Agency* [2002] 103 Ca1.App.4th 98, 120.) In other words, the required analysis intends to first create a broad context in which to assess the project's incremental contribution to anticipated cumulative impacts, viewed on a geographic scale well beyond the Project area itself, and then to determine whether the project's incremental contribution to any significant cumulative impacts from all projects is itself significant (i.e., "cumulatively considerable" in CEQA parlance).

Pursuant to Section 15130(b) of the State CEQA Guidelines, "(t)he discussion of cumulative impacts shall reflect the severity of the impacts and their likelihood of occurrence, but the discussion need not provide as great detail as is provided for the effects attributable to the Project alone. The discussion should be guided by the standards of practicality and reasonableness, and should focus on the cumulative impacts to which the identified other projects contribute rather than the attributes of other projects which do not contribute to the cumulative impact."

Although the environmental effects of an individual project may not be significant when that project is considered separately, the combined effects of several projects may be significant when considered collectively. State CEQA Guidelines Section 15130 requires a reasonable analysis of a project's cumulative impacts, which are defined as "two or more individual effects which, when considered together are considerable or which compound or increase other environmental impacts." The cumulative impact that results from several closely related projects is: the change in the environment which results from the incremental impact of a project when added to other closely related past, present, and reasonable foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time (State CEQA Guidelines 15355[b]).

The State CEQA Guidelines Section 15130(b)(1) provides two approaches to analyzing cumulative impacts. The first is the list approach, which requires a listing of past, present, and reasonably

4.0 OTHER CEQA-REQUIRED TOPICS

anticipated future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the agency. The second is the plan approach, wherein the relevant projections contained in an adopted general plan or related planning document that is designed to evaluate regional or area-wide conditions contributing to the cumulative effect. For this Draft EIR, the plan approach has been used to analyze cumulative impacts.

CUMULATIVE DEVELOPMENT ASSUMPTIONS

The cumulative scenario for the Project includes growth planned for the City in the City's General Plan. The analysis of cumulative effects considered the General Plan growth under cumulative conditions, as described below.

Population

Between 1990 and 2000, the population of what would become the City increased by 71 percent, an average annual increase of seven percent. Elk Grove began to rapidly develop as a result of an increase in jobs in the Sacramento County region and the availability of land outside the downtown Sacramento area. Previous population projections from the Sacramento Area Council of Governments (SACOG) estimated growth through 2015 and had anticipated a gradual increase of four to six percent per year. However, SACOG's current projections show an increase in population at an average rate of 1.4 percent per year from 2010 (based on Department of Finance 2011 demographic report benchmarked to the 2010 Census) through 2035. Growth in recent years can be attributed to new construction (people moving to Elk Grove) and the annexation of the Laguna West-Lakeside Census Designated Place (adding 25,000 residents to the City). The City's population is anticipated to increase to approximately 197,640 persons by 2025.

TABLE 4-1 POPULATION TRENDS

YEAR	POPULATION	CHANGE	AVERAGE ANNUAL % CHANGE
1990 ¹	42,626	N/A	N/A
2000 ¹	72,665	30,039	7.0
2005 ²	121,803	49,138	13.5
2010 ³	153,015	31,212	5.1
2025 ⁴	197,460	44,445	1.9

SOURCE:

¹ City of Elk Grove, 2009. *Housing Element of the Elk Grove General Plan*.

² State of California, Department of Finance. 2010. *E-5 Population and Housing Estimates for Cities, Counties and the State, 2000-2010, with 2010 Benchmark*. Sacramento, California.

³ State of California, Department of Finance. 2011. *E-5 Population and Housing Estimates for Cities, Counties and the State, 2010-2011, with 2010 Benchmark*. Sacramento, California.

⁴ City of Elk Grove, 2011.

Employment

The work force in the Sacramento metropolitan area encompasses professional, technical, production, transportation, and service occupations. The region's manufacturing sector has grown steadily since the late 1970s, spurred by the expansion of high-technology industries.

According to SACOG projections, the City had 11,147 jobs in 2000. The City anticipates job growth increase of 24,722 jobs between the years 2005 and 2025. As shown in Table 4-2, Elk Grove can expect a steady increase in job growth through 2025.

TABLE 4-2 CITY OF ELK GROVE JOBS PROJECTIONS

YEAR	JOBS	PERCENTAGE CHANGE
2000	11,147	--
2005	24,653	121.1%
2025	49,375	100.3%

SOURCE: SACOG, 2002; SACOG, 2008.; CITY OF ELK GROVE, 2011

CUMULATIVE EFFECTS OF THE PROJECT

Cumulative Impacts

Under CEQA, the discussion of cumulative impacts should focus on the severity of the impacts and the likelihood of their occurrence. The cumulative scenario for the Project includes growth planned for the City. The Project is consistent with the General Plan. Specifically, the land uses proposed by the Project are consistent with the General Plan land use designations for the Project site, as described in Section 3.9, Land Use, and would result in fewer dwelling units than allowed under the General Plan. The vehicle trips generated by the Project would be less than would occur under the adopted General Plan, as described in Section 3.2, Transportation and Circulation. The Project would be consistent with the cumulative impacts that were evaluated in the General Plan EIR.

Section 15130(d) and (e) of the State CEQA Guidelines provides the following guidance regarding analysis of cumulative impacts that were addressed in a prior EIR:

“(d) Previously approved land use documents, including, but not limited to, general plans, specific plans, regional transportation plans, plans for the reduction of greenhouse gas emissions, and local coastal plans may be used in cumulative impact analysis. A pertinent discussion of cumulative impacts contained in one or more previously certified EIRs may be incorporated by reference pursuant to the provisions for tiering and program EIRs. No further cumulative impacts analysis is required when a project is consistent with a general, specific, master or comparable programmatic plan where the lead agency determines that the regional or areawide cumulative impacts of the proposed project have already been adequately addressed, as defined in section 15152(f), in a certified EIR for that plan.”

“(e) If a cumulative impact was adequately addressed in a prior EIR for a community plan, zoning action, or general plan, and the project is consistent with that plan or action, then an EIR for such a project should not further analyze that cumulative impacts, as provided in Section 15183(j).”

Section 15168 of the State CEQA Guidelines provides the following guidance regarding the use of a Program EIR with subsequent environmental documents:

4.0 OTHER CEQA-REQUIRED TOPICS

“(d) Use with Subsequent EIRs and Negative Declarations. A program EIR can be used to simplify the task of preparing environmental documents on later parts of the program. The program EIR can:

(1) Provide the basis in an Initial Study for determining whether the later activity may have any significant effects.

(2) Be incorporated by reference to deal with regional influences, secondary effects, cumulative impacts, broad alternatives, and other factors that apply to the program as a whole.

(3) Focus an EIR on a subsequent project to permit discussion solely of new effects which had not been considered before.”

The City’s General Plan was adopted by the City Council on November 19, 2003 and reflects amendments through July 2013. An Environmental Impact Report was prepared to analyze and disclose the environmental impacts associated with General Plan implementation. The General Plan land use designations for the Project site would allow over 1,000 housing units and also would permit commercial/office/multifamily uses on a small portion of the Project site. The General Plan EIR analyzed the potential for 1,022 housing units on the Project site and anticipated development of the entire Project site. The Project would result in 238 fewer units than anticipated on the Project site in the General Plan EIR. The Project also designates 93.7 acres of the 230-acre site for open space uses, including a wetland preservation area. Under cumulative conditions, the Project would result in less traffic and associated air quality and noise impacts as well as less demand for utilities and public services than anticipated in the General Plan EIR. Therefore, the Project is consistent with the environmental analysis and conclusions of the General Plan EIR.

The General Plan EIR (City of Elk Grove, 2003d; SCH#: 2002062082) is hereby incorporated by reference, consistent with State CEQA Guidelines Section 15150, 15168(d)(2). The General Plan EIR is available for review at the City’s Planning Department and on the City’s website. The General Plan EIR evaluated the full range of environmental impacts anticipated with buildout of the General Plan land uses. The following is a summary of the cumulative impacts identified in the General Plan EIR that are relevant to subsequent development activities that may involve implementation of various measures associated with the Project. These subsequent development activities would be reviewed for compliance with the General Plan and would be required to comply with relevant mitigation measures adopted to mitigate cumulative impacts.

Impact 4.1.3 - Cumulative Impacts to Agricultural Resources. Implementation of the proposed General Plan along with potential development in the Urban Study Areas would contribute significantly to the conversion of important farmland and agriculture/urban interface conflicts. This would be a cumulative significant impact.

Impact 4.2.3 - Consistency with Relevant Planning Documents in the Planning Area. Implementation of the proposed General Plan could impact land use plans or study areas outside of the city limits, but within the Planning Area. This is a cumulative significant impact.

Impact 4.2.4 - Land Use Conflicts in the Planning Area. Implementation of the proposed General Plan would increase the potential for land use conflicts outside of the City and within the Planning Area. This is a less than significant cumulative impact.

Impact 4.3.3 – Cumulative Population and Housing Increases. The population and housing unit increases at buildout of the General Plan may exceed SACOG’s population and housing projections for the Planning Area. This is considered a less than significant cumulative impact.

Impact 4.4.5 - Cumulative Hazard Impacts. Implementation of the proposed General Plan and potential development in the Urban Study Areas could result in site-specific hazards being encountered. This is considered a cumulative significant impact.

Impact 4.4.6 - Cumulative Exposure to Hazards Associated with Facilities Utilizing Hazardous Materials. Implementation of the proposed General Plan and the potential development of the Urban Study Areas could result in the exposure of populated areas to accidental incidents and intentional acts at existing and future facilities utilizing hazardous materials. This is considered a less than significant cumulative impact.

Impact 4.5.6 Cumulative Traffic Impacts on Local Roadways and State Highways. Implementation of the proposed General Plan as well as potential development of the Urban Study Areas would contribute to significant impacts on local roadways and state highways under cumulative conditions. This is considered a cumulative significant impact.

Impact 4.5.7 - Cumulative Transit System, Bicycle and Pedestrian Impacts. Implementation of the proposed General Plan along with potential development of the Urban Study Areas would contribute to a cumulative increase in the demand for transit service as well as bicycle and pedestrian usage. This is considered a less than significant impact.

Impact 4.6.6 - Cumulative Traffic Noise Conflicts. Implementation of the proposed General Plan along with potential development of the Urban Study Areas could result in increased traffic noise conflicts. This is considered a less than significant cumulative impact.

Impact 4.6.7 - Cumulative Airport Noise Conflicts. Implementation of the proposed General Plan along with potential development of the Urban Study Areas could result in noise conflicts with the Sunset Sky ranch Airport. This is considered a cumulative significant impact.

Impact 4.6.8 - Regional Traffic Noise Impacts. Implementation of the proposed General Plan along with potential development of the Urban Study Areas would result in impacts to regional noise attenuation levels. This is considered a cumulative significant impact.

Impact 4.7.4 - Regional Air Plan Impacts. Implementation of the proposed General Plan along with potential development of the Urban Study Areas would exacerbate existing regional problems with ozone and particulate matter. This is considered a cumulative significant impact.

4.0 OTHER CEQA-REQUIRED TOPICS

Impact 4.8.6 - Cumulative Water Quality Impacts. Implementation of the proposed General Plan along with the potential development of the Urban Study Areas, could contribute to cumulative water quality impacts. This is considered a cumulative significant impact.

Impact 4.8.7 - Cumulative Flood Hazards. Implementation of the proposed General Plan along with potential development of the Urban Study Areas would increase impervious surfaces and alter drainage conditions and rates in the Planning Area, which could contribute to cumulative flood conditions in the Sacramento River, Cosumnes River, and inland creeks. This is considered a cumulative significant impact.

Impact 4.8.8 - Cumulative Water Supply Impacts. Implementation of the proposed General Plan along with potential development of the Urban Study Areas, would contribute to an increased demand for water supply requiring increased groundwater production and the use of surface water supplies that could result in significant environmental impacts. This is considered a cumulative significant impact.

Impact 4.9.4 - Soil Erosion. Implementation of the proposed General Plan along with potential development of the Urban Study Areas could contribute to cumulative soil erosion impacts. This is considered a less than significant cumulative impact.

Impact 4.9.5 - Expansive Soils and Seismic Hazards. Implementation of the proposed General Plan along with potential development of the Urban Study Areas could result in cumulative impacts to expansive soils and seismic hazards. This is considered a less than significant cumulative impact.

Impact 4.10.4 - Cumulative Biological Resource Impacts. Implementation of the proposed General Plan along with potential development of the Urban Study Areas would contribute to cumulative impacts associated with significant effects to special-status plant and wildlife species and habitat loss. This would be a cumulative significant impact.

Impact 4.11.3 - Cumulative Impacts to Prehistoric and Historic Resources. Implementation of the proposed General Plan along with potential development in the Urban Study Areas could contribute to the disturbance of known and undiscovered prehistoric and historic resources in the Elk Grove area. This is considered a less than significant cumulative impact.

Impact 4.11.4 - Cumulative Impacts to Paleontological Resources. Implementation of the proposed General Plan along with potential development of the Urban Study Areas could contribute to the loss of paleontological resources in the Elk Grove area. This is considered a less than significant cumulative impact.

Impact 4.12.1.2 - Cumulative Fire Protection and Emergency Medical Services. Implementation of the proposed General Plan along with potential development of the Urban Study Areas would contribute to the cumulative demand for fire protection and emergency medical services. This is considered a less than significant cumulative impact.

Impact 4.12.2.2 - Cumulative Law Enforcement Impacts. Implementation of the proposed General Plan along with potential development of the Urban Study Areas would result in the increase of the demand for cumulative law enforcement services. This is considered a less than significant impact.

Impact 4.12.3.2 - Cumulative Public School Impacts. Implementation of the proposed General Plan as well as potential development of the Urban Study Areas, would result in cumulative public school impacts. These cumulative public school impacts are considered less than significant.

Impact 4.12.4.4 - Cumulative Wastewater Demands. Implementation of the proposed General Plan along with potential development of the Urban Study Areas and growth in the SRCS D service area would result in cumulative wastewater impacts. This is considered a cumulative significant impact.

Impact 4.12.5.2 - Cumulative Solid Waste Impacts. Implementation of the proposed General Plan along with potential development of the Urban Study Areas would result in cumulative solid waste impacts. This is considered a less than significant cumulative impact.

Impact 4.12.6.2 - Cumulative Park and Recreation Demands. Implementation of the proposed General Plan along with potential development of the Urban Study Areas would result in cumulative park and recreation impacts. These cumulative impacts are considered less than significant.

Impact 4.12.7.3 - Cumulative Electrical, Telephone and Natural Gas Impacts. Implementation of the proposed General Plan along with potential development in the Urban Study Areas would result in cumulative electric, telephone and natural gas service impacts. These are considered less than significant cumulative impacts.

Impact 4.13.4 - Cumulative Impacts to Visual Resources. Implementation of the proposed General Plan along with potential development of the Urban Study Areas would result in the further conversion of the region's rural landscape to residential, commercial, and other land uses. This would contribute to the alteration of the visual resources in the region. This is considered a cumulative significant impact.

Section 3.6 of this Draft EIR addresses impacts associated with greenhouse gases and climate change, which are cumulative by their nature.

The Project is consistent with the land use designations and development intensities assigned to the Project site by the City of Elk Grove General Plan. Cumulative impacts associated with development and buildout of the Project site, as proposed, were fully addressed in the City of Elk Grove General Plan EIR (SCH# 2002062082). Since the Project is consistent with the land use designation and development intensity for the site identified in the General Plan and analyzed in the General Plan EIR, implementation of the proposed Project would not result in any new or altered cumulative impacts beyond those addressed in the General Plan EIR.

4.0 OTHER CEQA-REQUIRED TOPICS

4.2 GROWTH-INDUCING AND SIGNIFICANT AND IRREVERSIBLE EFFECTS

INTRODUCTION

Section 15126.2(d) of the CEQA Guidelines requires that an EIR evaluate the growth-inducing impacts of a proposed action. A growth-inducing impact is defined by the CEQA Guidelines as:

The way in which a proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this are projects which would remove obstacles to population growth...It is not assumed that growth in an area is necessarily beneficial, detrimental, or of little significance to the environment.

Based on the State CEQA Guidelines, growth inducement is any growth that exceeds planned growth of an area and results in new development that would not have taken place without implementation of the Project. A project can have direct and/or indirect growth inducement potential. Direct growth inducement would result if a project, for example, involved construction of new housing. A project would have indirect growth inducement potential if it established substantial new permanent employment opportunities (e.g., commercial, industrial, or governmental enterprises) or if it would involve a construction effort with substantial short-term employment opportunities that would indirectly stimulate the need for additional housing and services to support the new employment demand (*Napa Citizens for Honest Government v. Napa County Board of Supervisors* (Cal. App. 1st Dist., 2001)). Similarly, a project would indirectly induce growth if it would remove an obstacle to additional growth and development, such as removing a constraint on a required public service. A project providing an increased water supply in an area where water service historically limited growth could be considered growth-inducing.

The State CEQA Guidelines further explain that the environmental effects of induced growth are considered indirect impacts of the proposed action. These indirect impacts or secondary effects of growth may result in significant, adverse environmental impacts. Potential secondary effects of growth include increased demand on other community and public services and infrastructure, increased traffic and noise, and adverse environmental impacts such as degradation of air and water quality, degradation or loss of plant and animal habitat, and conversion of agricultural and open space land to developed uses.

Growth inducement may constitute an adverse impact if the growth is not consistent with or accommodated by the land use plans and growth management plans and policies for the area affected. Local land use plans provide for land use development patterns and growth policies that allow for the orderly expansion of urban development supported by adequate urban public services, such as water supply, roadway infrastructure, sewer service, and solid waste service.

Components of Growth

The timing, magnitude, and location of land development and population growth in a region are based on various interrelated land use and economic variables. Key variables include regional economic trends, market demand for residential and non-residential uses, land availability and cost, the availability and quality of transportation facilities and public services, proximity to employment centers, the supply and cost of housing, and regulatory policies or conditions. Since the general plan of a community defines the location, type, and intensity of growth, it is the primary means of regulating development and growth in California.

EFFECTS OF THE PROJECT

As previously described, the Project is consistent with the General Plan and buildout of the Project site was anticipated in the General Plan EIR. The Project would not result in more housing units or population than was anticipated in the General Plan EIR. Further, the Project does not have any unique aspects peculiar to the Project or site that would result in growth effects beyond those analyzed in the General Plan EIR.

Section 15168 of the State CEQA Guidelines provides the following guidance regarding the use of a Program EIR with subsequent environmental documents:

“(d) Use with Subsequent EIRs and Negative Declarations. A program EIR can be used to simplify the task of preparing environmental documents on later parts of the program. The program EIR can:

(1) Provide the basis in an Initial Study for determining whether the later activity may have any significant effects.

(2) Be incorporated by reference to deal with regional influences, secondary effects, cumulative impacts, broad alternatives, and other factors that apply to the program as a whole.

(3) Focus an EIR on a subsequent project to permit discussion solely of new effects which had not been considered before.”

Chapter 7.0 of the General Plan Draft EIR described the following growth effects, including significant and irreversible environmental effects, of the General Plan:

Growth Effects

POPULATION GROWTH

Growth under the General Plan was anticipated to result in approximately 63,340 housing units and 73,567 jobs. The General Plan accommodates growth projected by SACOG and is anticipated to provide improved jobs/housing balance conditions. The General Plan recognized that future urban development outside of the City limits may be appropriate to accommodate future growth and identified Urban Study Areas as possible annexation areas for the City to accommodate such growth. The Project would result in fewer dwelling units than anticipated for the Project site in the

4.0 OTHER CEQA-REQUIRED TOPICS

General Plan and General Plan EIR and, thus, would not have any additional effect on population growth than that addressed in the General Plan EIR.

GROWTH EFFECTS ASSOCIATED WITH INFRASTRUCTURE IMPROVEMENTS

The General Plan could potentially indirectly induce growth through removal of an obstacle to additional growth and development, such as removing a constraint on a required public service. The City's infrastructure and public services are largely provided by other public and private service providers (e.g., Sacramento County Water Agency for water supply, Sacramento Regional County Sanitation District and County Sanitation District 1 for wastewater service, Sacramento Municipal Utility District for electrical service) that utilize master plans for guiding planned facility and service expansions that are subject to environmental review under CEQA. The General Plan does include proposed roadway improvements that have been designed to support the General Plan Land Use Policy Map and maintain the City's proposed level of service (LOS) standard of LOS "D" where feasible and appropriate. The General Plan does not include any provisions requiring the oversizing of infrastructure facilities to serve growth not anticipated in the General Plan Land Use Policy Map. The Project would provide infrastructure improvements onto the Project site necessary to serve the Project, as described in Chapter 2.0. The Project does not include any oversized infrastructure or infrastructure extensions that would result in growth not envisioned by the General Plan and General Plan EIR.

ENVIRONMENTAL EFFECTS OF GROWTH

The General Plan would induce further population and job growth in the City as well as potentially induce growth outside of the City (e.g., within the Urban Study Areas). Proposed roadway improvements would support such growth within the City. As a result, the proposed General Plan is considered to be growth-inducing. The environmental effects of this growth within the City and in the Urban Study Areas is addressed in Sections 4.1 through 4.13 of the General Plan Draft EIR.

Significant and Irreversible Environmental Effects

CEQA requires that EIRs prepared for the adoption of a plan, policy, or ordinance of a public agency must include a discussion of significant irreversible environmental changes as a result of project implementation. State CEQA Guidelines Section 15126.2(c) describes irreversible environmental changes as:

"Uses of nonrenewable resources during the initial and continued phases of the project may be irreversible since a large commitment of such resources makes removal or nonuse thereafter unlikely. Primary impacts and, particularly, secondary impacts (such as highway improvement which provides access to a previously inaccessible area) generally commit future generations to similar uses. Also irreversible damage can result from environmental accidents associated with the project. Irrecoverable commitments of resources should be evaluated to assure that such current consumption is justified."

The General Plan EIR identified that implementation of the General Plan would result in the conversion of undeveloped open space land areas to residential, commercial, industrial, office, public and recreational uses. Development of the General Plan area would constitute a long-term

commitment to residential land uses. It is unlikely that circumstances would arise that would justify the return of the land to its original condition. Development of the City would irretrievably commit building materials and energy to the construction and maintenance of buildings and infrastructure proposed. Renewable, nonrenewable, and limited resources that would likely be consumed as part of the development of the proposed Project would include, but are not limited to: oil, gasoline, lumber, sand and gravel, asphalt, water, steel, and similar materials. In addition, development of the General Plan would result in the increase demand on public services and utilities (see Section 4.8 Hydrology/Water Quality and 4.12 Public Facilities and Finance).

The Project would result in development of the Project site, as allowed under the General Plan. The Project site would result in a permanent commitment of 136.3 acres to urbanized uses, as described in the Project description. Development of these uses would result in the irretrievable commitment of building materials and energy, consistent with the effects envisions for the General Plan. The Project includes 93.7 acres of open space uses on land that was anticipated for development with rural residential and low density residential uses in the General Plan EIR; the permanent commitment of these lands as open space would result in the overall Project site having a beneficial impact regarding the permanent commitment of undeveloped lands to urban uses, in comparison to the General Plan. The Project would not result in any new significant irreversible environmental changes beyond those anticipated for the General Plan.

4.3 SIGNIFICANT AND UNAVOIDABLE IMPACTS

State CEQA Guidelines Section 15126.2(b) requires an EIR to discuss unavoidable significant environmental effects, including those that can be mitigated but not reduced to a level of insignificance. As discussed in Chapters 3.1 through 3.13, the majority of potential environmental impacts associated with implementation of the Project would be less than significant or would be less than significant with mitigation. The two significant and unavoidable impacts identified for the Project are:

Impact 3.3-8: Potential to have a substantial adverse effect on riparian habitat or other sensitive natural community, specifically the Northern Hardpan Valley Hardpan Vernal Pool, identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service

Impact 3.12-2: Potential to conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system: Freeways. The Project's potential to result in a significant and unavoidable impact associated with State highways is described in Section 3.12 of this Draft EIR.

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5.1 CEQA REQUIREMENTS

CEQA requires that an EIR analyze a reasonable range of feasible alternatives that meet most or all of the project objectives while reducing or avoiding one or more significant environmental effects of the project. The range of alternatives required in an EIR is governed by a “rule of reason” that requires an EIR to set forth only those alternatives necessary to permit a reasoned choice (CEQA Guidelines Section 15126.6{f}). Where a potential alternative was examined but not chosen as one of the range of alternatives, the CEQA Guidelines require that the EIR briefly discuss the reasons the alternative was dismissed.

A Notice of Preparation was circulated to the public to solicit recommendations for a reasonable range of alternatives to the Project. No specific alternatives were recommended by commenting agencies or the general public during the NOP public review process.

PROJECT OBJECTIVES

The alternatives to the Project selected for analysis in the EIR were developed to minimize significant environmental impacts while fulfilling the basic objectives of the Project. As described in Chapter 2, Project Description, the City has identified the following objectives for the Project:

- Create a high-quality residential development that is consistent with the General Plan;
- Provide a residential development that would assist the City in meeting its housing needs, including a range of housing types to serve the senior population;
- Emphasize preservation of open space and sensitive habitats;
- Implement the City’s Trail System Master Plan through providing an on-site trails network that is accessible by the general public and provides opportunities for connectivity with future trails on adjacent property; and
- Create a dual purpose stormwater/open space area.

The Project applicant, Vintara Holdings LLC/Silverado Homes, has submitted the following project objectives for the Silverado Village project.

- Consistency with the General Plan;
- Compatibility with adjacent neighborhoods;
- Respect the Project site’s existing natural features; and
- Creation of a unique age-restricted community that provides a mix of housing types and amenities, including the village core, club house, and swim facility.

5.0 ALTERNATIVES

5.2 ALTERNATIVES CONSIDERED IN THIS EIR

Four alternatives to the Project, the No Project, Reduced Residential Density, Alternative Location, and Revised Project, were considered based on the analysis to reduce or avoid significant impacts associated with the Project. While the majority of significant or potentially significant impacts associated with the Project would be mitigated to less than significant, the Project would result in two significant and unavoidable impacts:

- Impact 3.3-8: Potential to have a substantial adverse effect on riparian habitat or other sensitive natural community, specifically Northern Hardpan Valley Hardpan Vernal Pool, identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.
- Impact 3.12-2: Potential to conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system: State highway facilities.

ALTERNATIVES NOT SELECTED FOR FURTHER ANALYSIS

The following alternatives were considered, but not selected for further analysis for the reasons described below:

- Alternative Location – Due to the size and nature of the Project, true environmental benefits would not be achieved by the selection of an alternative site. Currently, there are no large vacant land areas appropriate for urban uses within the City that are not either already approved for development or subject to a pending development application, such as the Sterling Meadows site, the Southeast Policy Area site, and the Laguna Ridge Specific Plan area. In addition, if the Project site could be relocated, environmental benefits over the Project would not likely be achieved. The Project has been designed to reduce impacts to sensitive biological resources on the Project site, through the designation of the 68.1-acre wetland preservation area and designation of an additional 25.7 acres for open space, stormwater detention, and stormwater release uses. Relocation of the Project to an alternative site would likely result in comparable traffic, air quality, noise, aesthetic, hazards, and hydrology impacts. Therefore, an alternative site was not selected for analysis in this report.
- Traffic Impact Reduction Alternative –Alternative 2 includes a significant reduction in Project density and total dwelling units in order to avoid impacts to sensitive biological habitat and would also reduce potential impacts to State highways. A separate reduced density alternative was not selected to address potential traffic impacts, as according to the thresholds identified in Chapter 3.12, any increase in Project traffic would result in a significant and unavoidable impact to the State highway system.

ALTERNATIVES TO THE PROJECT

The alternatives analyzed in this EIR include the following:

- **Alternative 1: No Project Alternative.** Under Alternative 1, the Project would not be built and the Project site would remain in its current condition.

While the No Project Alternative would result in no development, it is noted that the Project site would remain designated for urbanization by the General Plan and Zoning Code, as described in Chapter 2.0. Development of the Project site consistent with the adopted General Plan and zoning could result in a more intense project in the future. A project consisting of 897 single-family residential units, 125 multi-family units, and 8,000 square feet of commercial and retail uses would be consistent with the adopted land use designations. Under this scenario, Villages 1, 2, and 3 would consist of single-family uses in the same location and at similar densities as the Project. However, the Village Core uses in Village 3 would be moved to the southeast corner of the Project where the Commercial/Office/Multifamily land uses are designated by the General Plan. A new village, or residential neighborhood, would be added to the site, replacing approximately 10.3 acres of open space and 48.9 acres of the wetland preservation area. This scenario has been described to identify the potential future development that could occur on the Project site if the No Project Alternative were selected.

- **Alternative 2: Reduced Density and Reconfigured Project Alternative.** Alternative 2 would avoid the significant and unavoidable impact to the Northern Hardpan Valley Hardpan Vernal Pool complex on the Project site through avoiding all wetland, riparian, vernal pool, and drainage features. Preservation easements, prohibiting access and disturbance, would be placed around all wetland, riparian, vernal pool, and drainage features. There would be no wetland conservation area and the detention basin would be under a preservation easement. An alternative detention basin would be constructed to the east of the current site of the detention basin. This would require removal of adequate fill to provide detention to the Alternative 2 lots. Under this alternative, various lots would be removed and lot sizes would generally be made larger to accommodate the preservation easements. The park sites would be reduced to approximately 3.25 acres and the open space trails would be removed.

Village 1-A Lots 1 through 60 would be developed under this alternative; however, 15 lots would be removed in order to make Lots 1 through 45 larger in order to accommodate preservation easements. Village 1 Lots 66 through 83 would also remain. Village 1 Lots 85 through 99 would be removed.

Village 1-B Lots 1 through 36 would remain, but would be reduced by 10 lots in order to provide larger lot sizes to accommodate the preservation easements. Village 2 would also be extended northward to include another 15 lots. Village 2 lots would be accessed by Campbell Road.

5.0 ALTERNATIVES

Village 2 Lots 1 through 62 would be removed to accommodate the relocated detention basin. Village 2 Lots 69 through 196 would mostly be removed to accommodate relocated Village 3. However, 10 single family lots would remain in Village 2 and would be spread throughout the northern and central portion of the site.

The Village Core uses and 40 patio lots would be relocated to be accessed from Waterman Road. Another 60 Village 3 patio lots would remain in the southeast corner of the site to be accessed by Bond Road.

Alternative 2 would result in 111 single-family lots, 100 patio homes, and an independent, assisted, and/or memory-care multifamily lodge of up to 125 units. The Village 3 clubhouse and swimming pool would be constructed, but the clubhouse would be smaller.

- **Alternative 3 – Reconfigured Project Alternative.** Alternative 3 would be reconfigured to reduce impacts associated with the design of the Project. The majority of potentially significant impacts, such as increased light and glare, exposure to exterior traffic noise, impacts to biological resources, increased air pollutant and greenhouse gas emissions, changes to the drainage pattern, and geotechnical impacts would continue to occur with reconfiguration of the site and would just be relocated. However, and potential impacts to the trees along the western boundary of the Project site could be avoided with reconfiguration of the Project site. Under this alternative, a 10-foot wide pedestrian access easement would be created along the western boundary of the Project site from Bond Road to Lot I (open space overland release). Lots 66 through 84 would generally be made 10 feet wider by extending the lots to the east. C Street would be revised to be moved more eastward after its intersection with Bond Road to its intersection with B Street. Lots 21, 22, 43, and 30 through 65 would be reconfigured and partially replaced with a slender open space lot. Seven of these lots would be moved to Lot F (open space) to accommodate the reconfiguration of C Street and Lots 66 through 84. The proposed uses and unit counts associated with the Project would not change, but would be reconfigured as previously described.

5.3 ENVIRONMENTAL ANALYSIS

The alternatives analysis provides a summary of the relative impact level of significance associated with each alternative for each environmental impact area that would have a significant or potentially significant impact with implementation of the Project, which include aesthetics, air quality, biological resources, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, and transportation and circulation.

ALTERNATIVE 1 – NO PROJECT ALTERNATIVE

Alternative 1 is the No Project Alternative. CEQA Guidelines Section 15126.6(e)(1) states that a No Project Alternative shall be analyzed. Under Alternative 1, the Project would not be developed and the Project site would remain in its current condition, which is an undeveloped site that has grassland vegetation and wetland, vernal pool, and riparian habitat areas. No infrastructure improvements beyond those currently existing on or near the Project site would be installed. The Silverado Village Special Planning Area zoning designation would not be created.

Aesthetics. The existing visual character of the Project site would remain unchanged with implementation of the No Project Alternative. No new light and glare sources would be created. As described in Section 3.1, the Project would result in potentially significant impacts associated with light and glare which would be mitigated to less than significant. The No Project Alternative would avoid these impacts altogether and would have less of an impact than the Project on aesthetics.

Air Quality. No construction or operational emissions of air pollutants would occur in association with the No Project Alternative. Potential air quality impacts associated with vehicle trips and operation of the proposed Project uses, as described in Section 3.2, would be avoided. As described in Section 3.2, potentially significant impacts associated with Project construction would be mitigated to less than significant. Alternative 1 would avoid these impacts altogether and would have less of an impact than the Project on air quality.

Biological Resources. The Project site would remain in its current condition. Potential impacts to special-status species and sensitive habitats on the Project site would be avoided. As described in Section 3.3, the Project's potential impacts to special-status invertebrate, bird, mammal and plant species, on wetlands, and to trees of local importance would be reduced to less than significant with mitigation. However, even with mitigation, the Project would result in significant and unavoidable impacts to sensitive habitats, specifically Northern Hardpan Valley Hardpan Vernal Pool which represents collective wetland, vernal pool, creek, and drainage features on the Project site that would be filled or disturbed with Project implementation. Under Alternative 1, the 68.1-acre wetland conservation area would not be created and maintained in perpetuity. There is no guarantee that future development proposals on the Project site would retain the wetland conservation area as this area is designated for Rural Residential development. However, Alternative 1 would avoid impacts to biological resources, including the significant and unavoidable impact to sensitive Northern Hardpan Valley Hardpan Vernal Pool habitat, and would have a reduced impact to biological resources in comparison to the Project.

Cultural Resources. The Project site would remain in its current condition under Alternative 1 and the potential historic resource described in Section 3.4, as well as any previously undiscovered cultural resources, would not be impacted. Therefore, Alternative 1 would have less of an impact than the Project to cultural resources.

5.0 ALTERNATIVES

Geology and Soils. No development would occur on the Project site under Alternative 1. While the potential impacts associated soil erosion/loss of topsoil, unstable geologic unit, expansive soils, and septic/alternative wastewater facilities that could occur with Project implementation would be mitigated to less than significant as described in Section 3.5, these impacts would be avoided under Alternative 1. Therefore, Alternative 1 would have less of an impact than the Project to geology and soils.

Greenhouse Gases and Climate Change. The Project would result in potential impacts to greenhouse gases and climate change, which would be mitigated through implementation of measures consistent with the City's Climate Action Plan, as described in Section 3.6. The No Project Alternative would not result in any development or vehicle trips and would not increase greenhouse gas emissions, resulting in less of an impact than the Project.

Hazards and Hazardous Materials. As described in Section 3.7, construction activities on the Project site would require mitigation to address potential impacts associated with wells, existing septic systems, and potential minor soils contamination associated with past uses of the Project site. Under the No Project Alternative, no new land uses would be introduced to the site and the potential for future residents to be exposed to contamination or other hazardous conditions on the site would be eliminated. This impact would be reduced when compared to the Project.

Hydrology and Water Quality. Under the No Project Alternative, the Project site would remain undeveloped. As described in Section 3.8, Project implementation has the potential to result in the discharge of pollutants into surface waters, would change the existing drainage pattern on the site, and would result in increased discharge to the stormwater drainage system. Mitigation has been provided in Section 3.8 to reduce these potential impacts to a less than significant level. Under the No Project Alternative, these potential impacts would be eliminated. As such, potential impacts related to hydrology and water quality would be reduced under the No Project Alternative when compared to the Project.

Noise. As described in Section 3.10, implementation of the Project would result in temporary noise impacts associated with Project construction and would introduce new residential uses to the Project site and potentially expose these residences to traffic noise levels in excess of the City's interior and exterior noise standards. Mitigation provided in Section 3.10 would reduce the potentially significant impacts to a less than significant level. Under the No Project Alternative, no construction activities would occur and no new residences would be developed, avoiding potential impacts to existing and new residential uses. Therefore, Alternative 1 would result in less of an impact than the Project.

Transportation and Circulation. The Project would result in increased traffic. While the Project would not result in significant impacts to local roadways, as described in Section 3.12, the Project would contribute additional vehicle trips to State Route 99 and Interstate 5, both of which experience traffic congestion under existing conditions, and would result in a significant and unavoidable impact. The No Project Alternative would not introduce additional vehicle trips onto the study area roadways identified in Section 3.12 and would avoid increased traffic on the state highway system. Under the No Project Alternative, transportation and circulation impacts

would be avoided, and the No Project Alternative would have less of an overall traffic impact than the Project.

ALTERNATIVE 2 – REDUCED DENSITY AND RECONFIGURED PROJECT

Alternative 2 was created to avoid significant and unavoidable impacts to biological resources. Alternative 2 would preserve the wetland, riparian, vernal pool, creek, and drainage features on the Project site through permanent preservation easements that would generally be included in the proposed residential lots. Lot sizes would be larger, where necessary, to accommodate the permanent preservation easements. Alternative 2 significantly reconfigures the Project design and would result in the removal of 449 single-family residential units, approximately 2 acres of parks, the 68-1 acre wetland conservation area, and the proposed open space/trail uses. Alternative 2 would result in 111 single-family lots, 100 patio homes, and the Village 3 independent, assisted, and/or memory-care multifamily lodge and clubhouse.

Aesthetics. The reduction in unit count and decrease in residential densities would result in a more open, rural character on the Project site. New light and glare sources would be reduced. As described in Section 3.1, the Project would result in potentially significant impacts associated with light and glare which would be mitigated to less than significant. Application of the mitigation measures identified in Section 3.1 would reduce potential light and glare impacts associated with Alternative 2 to less than significant. The No Project Alternative would have a decreased impact on aesthetics in comparison to the Project.

Air Quality. Alternative 2 would reduce residential units in comparison to the Project and would have an associated reduction in air pollutant emissions associated with vehicle trips and operation of the Project. Potential air quality impacts associated with vehicle trips and operation of the proposed Project uses, as described in Section 3.2, would be reduced. As described in Section 3.2, potentially significant impacts associated with Project construction would be mitigated to less than significant. These impacts would also be mitigated to less than significant under Alternative 2 with application of the mitigation measures in Section 3.2. The Alternative 2 would have a decreased impact on air quality in comparison to the Project.

Biological Resources. Development on the Project site would be greatly reduced and the Northern Hardpan Valley Hardpan Vernal Pool complex would be avoided under Alternative 2. Potential impacts to sensitive habitats and associate special-status vernal pool and plant species on the Project site would be avoided. As described in Section 3.3, the Project's potential impacts to special-status bird and mammal species and to trees of local importance would be reduced to less than significant with mitigation; these mitigation measures would also reduce impacts associated with Alternative 2 to less than significant. However, even with mitigation, the Project would result in significant and unavoidable impacts to sensitive habitats, specifically Northern Hardpan Valley Hardpan Vernal Pool which represents collective wetland, vernal pool, creek, and drainage features on the Project site that would be filled or disturbed with Project implementation. Under Alternative 2, the significant and unavoidable impact would be avoided. Therefore, Alternative 2 would have a substantial reduction in impacts to biological resources in comparison to the Project.

5.0 ALTERNATIVES

Cultural Resources. Development of the Project site would be decreased under Alternative 2. However, the potential historic resource described in Section 3.4, as well as any previously undiscovered cultural resources, would have the potential to be impacted. The potential impact to undiscovered cultural resources would be reduced, as the extent of development on the Project site would be greatly reduced. Therefore, Alternative 2 would have less of an impact than the Project to cultural resources.

Geology and Soils. Development of the Project site would be decreased under Alternative 2. However, Alternative 2 would also have potential impacts associated with soil erosion/loss of topsoil, unstable geologic unit, expansive soils, and septic/alternative wastewater facilities that could occur with Project implementation. These impacts would be mitigated to less than significant as described in Section 3.5. Since Alternative 2 would result in less disturbance to the Project site, Alternative 2 would reduce potential impacts associated with soil erosion/loss of topsoil, unstable geologic unit, and expansive soils in comparison to the Project.

Greenhouse Gases and Climate Change. The Project would result in potential impacts to greenhouse gases and climate change, which would be mitigated through implementation of measures consistent with the City's Climate Action Plan, as described in Section 3.6. Alternative 2 would result in decreased development and vehicle trips and thus would decrease potential greenhouse gas emissions. Mitigation measures identified in Section 3.6 would be applied to Alternative 2 to ensure consistency with the Climate Action Plan. The reduction in greenhouse gas emissions associated with Alternative 2 would result less of an impact than the Project.

Hazards and Hazardous Materials. As described in Section 3.7, construction activities on the Project site would require mitigation to address potential impacts associated with wells, existing septic systems, and potential minor soils contamination associated with past uses of the Project site. Under Alternative 2, site disturbance would be reduced and the potential for future residents to be exposed to contamination or other hazardous conditions on the site would be decreased accordingly. This impact would be reduced when compared to the Project.

Hydrology and Water Quality. Under Alternative 2, development of the Project site would be significantly reduced. The decrease in residential development and disturbance would also result in a decrease in the amount of stormwater runoff that is associated with impervious surfaces associated with the Project. As described in Section 3.8, Project implementation has the potential to result in the discharge of pollutants into surface waters, would change the existing drainage pattern on the site, and would result in increased discharge to the stormwater drainage system. Mitigation has been provided in Section 3.8 to reduce these potential impacts to a less than significant level. Under Alternative 2, these potential impacts would be reduced and the mitigation identified in Section 3.8 would ensure that the impacts remain less than significant. As such, potential impacts related to hydrology and water quality would be reduced under Alternative 2 when compared to the Project.

Noise. As described in Section 3.10, implementation of the Project would result in temporary noise impacts associated with Project construction and would introduce new residential uses to the Project site and potentially expose these residences to traffic noise levels in excess of the

City's interior and exterior noise standards. Mitigation provided in Section 3.10 would reduce the potentially significant impacts to a less than significant level. Under Alternative 2, the amount of construction would be decreased and fewer residences would be developed. The decrease in construction activities would result in decreased construction noise. However, residential uses to the west of the Project site would be subject to construction noise impacts under Alternative 2. Fewer new residential uses would be exposed to exterior traffic noise associated with Bond and Waterman Roads. Therefore, Alternative 2 would result in less noise impacts in comparison to the Project.

Transportation and Circulation. The Project would result in increased traffic, specifically 5,154 new vehicle trips daily. Alternative 2 would result in 1,855 vehicle trips daily, a reduction of 3,299 trips in comparison to the Project. While the Project would not result in significant impacts to local roadways, as described in Section 3.12, the Project would contribute additional vehicle trips to State Route 99 and Interstate 5, both of which experience traffic congestion under existing conditions, and would result in a significant and unavoidable impact. Alternative 2 would reduce the number of vehicle trips onto the study area roadways identified in Section 3.12 and would reduce traffic on the state highway system. However, based on the thresholds identified in Chapter 3.12, impacts to the State highway facilities would remain significant and unavoidable. While Alternative 2 would result in reduced traffic, both Alternative 2 and the Proposed Project would result in a significant and unavoidable traffic impact. However, impacts under Alternative 2 would be reduced in comparison to the Project.

ALTERNATIVE 3 – RECONFIGURED PROJECT

Alternative 3 involves reconfiguration of the proposed development on the Project site in order to reduce potential impacts associated with the design of the Project. Alternative 3 has the same unit count and proposed uses as the Project, but would reconfigure residential uses in the southwestern area of the Project site to reduce potential impacts to trees of local importance. Lots 21, 22, 43, 30 through 65 and 66 through 84, C Street, and Lot F would be reconfigured to provide a 10-foot-wide open space lot with a pedestrian access easement along the western boundary of the Project site from Bond Road to Lot I. Seven lots would be relocated to Lot F.

Aesthetics. Alternative 3 would result in the same number of units and would also result in conversion of the Project site from its undeveloped state to an urbanized neighborhood with open space areas preserved in the northern portion of the Project site. As described in Section 3.1, the Project would result in potentially significant impacts associated with light and glare which would be mitigated to less than significant. Application of the mitigation measures identified in Section 3.1 would reduce potential light and glare impacts associated with Alternative 2 to less than significant. However, Alternative 3 would result in a greater setback between proposed residential uses and the existing residential uses west of the Project site and would further reduce the potential for light and glare impacts to adjoining uses. Alternative 3 Alternative would have a decreased impact on aesthetics in comparison to the Project.

Air Quality. The Project would result in potential air quality impacts associated with vehicle trips and operation of the proposed Project uses, as described in Section 3.2. As described in

5.0 ALTERNATIVES

Section 3.2, potentially significant impacts associated with Project construction would be mitigated to less than significant. Alternative 3 would result in the same number of residential units and associated vehicle trips. Impacts associated with Alternative 3 would be mitigated to less than significant with application of the mitigation measures in Section 3.2. Alternative 3 would have an impact on air quality that is comparable to the Project.

Biological Resources. Alternative 3 would result in comparable levels of development on the Project site as would occur with the Project. Potential impacts to sensitive habitats and special-status mammals, birds, vernal pool invertebrates, and plant species would occur under both Alternative 3 and the Project. As described in Section 3.3, the Project's potential impacts to special-status bird and mammal species and to trees of local importance would be reduced to less than significant with mitigation; these mitigation measures would also reduce impacts associated with Alternative 3 to less than significant. However, even with mitigation, both the Project and Alternative 3 would result in significant and unavoidable impacts to sensitive habitats, specifically Northern Hardpan Valley Hardpan Vernal Pool which represents collective wetland, vernal pool, creek, and drainage features on the Project site that would be filled or disturbed with Project implementation. Under Alternative 3, the significant and unavoidable impact would occur and impacts to biological resources would only be slightly reduced in comparison to the Project, specifically in relation to trees of local importance.

Cultural Resources. Development of the Project site would occur under Alternative 3 in a manner similar to the Project. The potential to impact historical and undiscovered cultural resources would be the comparable under both Alternative 3 and the Project.

Geology and Soils. Development of the Project site would occur under Alternative 3 in a manner similar to the Project. Alternative 3 would have potential impacts associated with soil erosion/loss of topsoil, unstable geologic unit, expansive soils, and septic/alternative wastewater facilities that could occur with Project implementation. These impacts would be mitigated to less than significant as described in Section 3.5. Potential impacts associated with geology and soils resources would be the comparable under both Alternative 3 and the Project.

Greenhouse Gases and Climate Change. The Project would result in potential impacts to greenhouse gases and climate change, which would be mitigated through implementation of measures consistent with the City's Climate Action Plan, as described in Section 3.6. Alternative 3 would result in the same number of vehicle trips and residential uses as the Project and would thus generate comparable greenhouse gas emissions. Mitigation measures identified in Section 3.6 would be applied to Alternative 3 to ensure consistency with the Climate Action Plan. Potential impacts associated with greenhouse gases and climate change would be the comparable under both Alternative 3 and the Project.

Hazards and Hazardous Materials. As described in Section 3.7, construction activities on the Project site would require mitigation to address potential impacts associated with wells, existing septic systems, and potential minor soils contamination associated with past uses of the Project site. As described in Section 3.7, potentially significant impacts associated with Project construction would be mitigated to less than significant. Alternative 3 would result in a similar

pattern of development and the same acreage of disturbance as the Project. Alternative 3 would have impacts associated with hazards and hazardous materials that are comparable to the Project.

Hydrology and Water Quality. Under Alternative 3, development of the Project site would be comparable to that associated with the Project. The same number of residential uses would be generated, a comparable amount of impervious surfaces and associated stormwater runoff would be created, and the need for on-site stormwater detention would be comparable. As described in Section 3.8, Project implementation has the potential to result in the discharge of pollutants into surface waters, would change the existing drainage pattern on the site, and would result in increased discharge to the stormwater drainage system. Mitigation has been provided in Section 3.8 to reduce these potential impacts to a less than significant level. Under the Alternative 3, these potential impacts would be comparable to the Project.

Noise. As described in Section 3.10, implementation of the Project would result in temporary noise impacts associated with Project construction and would introduce new residential uses to the Project site and potentially expose these residences to traffic noise levels in excess of the City's interior and exterior noise standards. Mitigation provided in Section 3.10 would reduce the potentially significant impacts to a less than significant level for both the Project and Alternative 3. Comparable impacts would occur associated with exposure of future residences on the Project site to exterior and interior traffic noise levels. Under Alternative 3, the setback between new residential uses and existing residences to the west would be increased and the potential for construction noise impacts would be slightly decreased. Therefore, Alternative 3 would result in less noise impacts in comparison to the Project.

Transportation and Circulation. Alternative 3 would result in the same number of vehicle trips as the Project. Alternative 3 would result in slightly more trips from the Project's access onto Waterman Road and slightly fewer trips from the Project's access onto Bond Road. Both the Project and Alternative 3 would contribute additional vehicle trips to State Route 99 and Interstate 5, both of which experience traffic congestion under existing conditions, and would result in a significant and unavoidable impact. Alternative 3 would have traffic impacts that are comparable to the Project.

ENVIRONMENTALLY SUPERIOR ALTERNATIVE

CEQA requires that an environmentally superior alternative be identified among the alternatives that are analyzed in the EIR. If the No Project Alternative is the environmentally superior alternative, an EIR must also identify an environmentally superior alternative among the other alternatives (CEQA Guidelines Section 15126.6(e)(2)). The environmentally superior alternative is that alternative with the least adverse environmental impacts when compared to the proposed project.

As summarized in Table 5-1 below, Alternative 1 (No Project) is the environmentally superior alternative because it provides the greatest reduction of potential impacts in comparison to the Project. Since the environmentally superior alternative is the No Project Alternative, an

5.0 ALTERNATIVES

environmentally superior alternative must be selected between the remaining alternatives consistent with the requirements of CEQA. Alternative 2 (Reduced Density and Reconfigured Project Alternative) is the environmentally superior alternative, when compared to the Project and Alternative 3.

TABLE 5-1: COMPARISON OF ALTERNATIVES TO THE PROPOSED PROJECT

<i>ENVIRONMENTAL ISSUE</i>	<i>ALTERNATIVE 1 NO PROJECT</i>	<i>ALTERNATIVE 2 REVISED PROJECT</i>	<i>ALTERNATIVE 3 -</i>
AESTHETICS	Reduced in comparison to the Project	Reduced in comparison to the Project	Reduced in Comparison to the Project
AIR QUALITY	Reduced in comparison to the Project	Reduced in comparison to the Project	Comparable to the Proposed Project
BIOLOGICAL RESOURCES	Reduced in comparison to the Project	Reduced in comparison to the Project	Generally comparable to the Proposed Project, but reduced in association with impacts to trees of local importance
CULTURAL RESOURCES	Reduced in comparison to the Project	Reduced in comparison to the Project	Comparable to the Proposed Project
GEOLOGY AND SOILS	Reduced in comparison to the Project	Reduced in comparison to the Project	Comparable to the Proposed Project
GREENHOUSE GASES AND CLIMATE CHANGE	Reduced in comparison to the Project	Reduced in comparison to the Project	Comparable to the Proposed Project
HAZARDS AND HAZARDOUS MATERIALS	Reduced in comparison to the Project	Reduced in comparison to the Project	Comparable to the Proposed Project
HYDROLOGY AND WATER QUALITY	Reduced in comparison to the Project	Reduced in comparison to the Project	Comparable to the Proposed Project
NOISE	Reduced in comparison to the Project	Reduced in comparison to the Project	Comparable to the Proposed Project
TRANSPORTATION AND CIRCULATION	Reduced in comparison to the Project	Reduced in comparison to the Project	Comparable to the Proposed Project
Overall	Best in comparison to the Project in terms of overall environmental effects	Better than the Project terms of overall environmental effects	Better than, but most comparable to, the Project in terms of overall environmental effects

CITY OF ELK GROVE

Taro Echiburú, AICP Planning Director
Christopher Jordan, AICP Planning Manager

DE NOVO PLANNING GROUP

Beth Thompson Principal Planner/Project Manager
Steve McMurtry Principal Planner
Ben Ritchie Principal Planner

Fehr & Peers (Transportation and Circulation)

David Robinson, PE Senior Associate

Peak and Associates (Cultural Resources)

Melinda Peak Principal

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**REVISED FINAL
ENVIRONMENTAL IMPACT REPORT**

FOR

SILVERADO VILLAGE

SCH# 2013012060

MAY 2014



Prepared for:

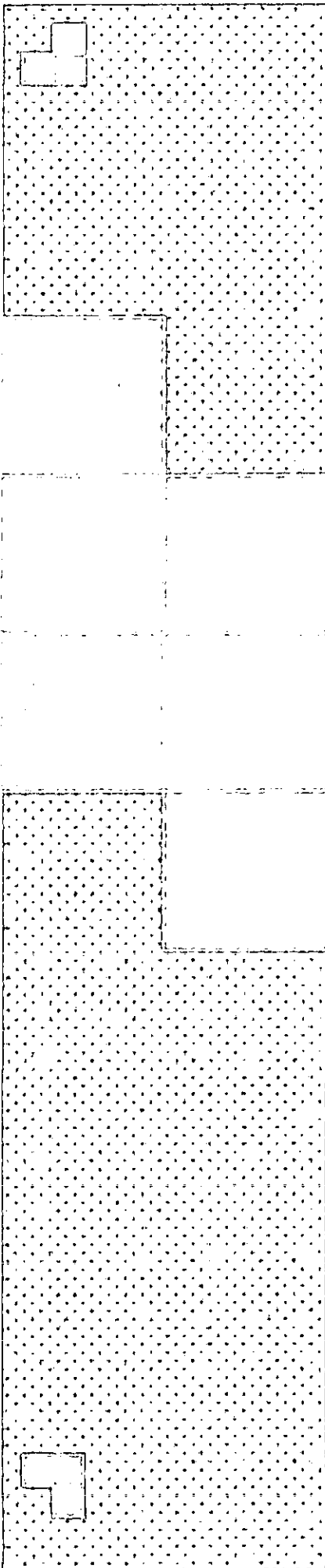
City of Elk Grove
Attn: Christopher Jordan
8401 Laguna Palms Way
Elk Grove, CA 95758

Prepared by:

De Novo Planning Group
4630 Brand Way
Sacramento, CA 95819
www.denovoplanning.com

D e N o v o P l a n n i n g G r o u p

A Land Use Planning, Design, and Environmental Firm



**REVISED FINAL
ENVIRONMENTAL IMPACT REPORT**

FOR

SILVERADO VILLAGE

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8401 Laguna Palms Way
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2.0 Responses to Comments	2.0-1
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 Figure 1: Revised Tentative Subdivision Map	
 Figure 2: Tree Inventory (Tree Associates Survey)	
 Appendix A: Custom Soils Report	

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The City of Elk Grove (City) is the lead agency responsible for the environmental review of the proposed Silverado Village project (Project) evaluated herein. The California Environmental Quality Act (CEQA) requires the preparation of an Environmental Impact Report (EIR) prior to the approval of any project that may have a significant impact on the environment

1.1 PURPOSE AND INTENDED USES OF THE EIR

CEQA REQUIREMENTS FOR A FINAL EIR

This Final EIR (Final EIR) for the Project has been prepared in accordance with CEQA and the State CEQA Guidelines. State CEQA Guidelines Section 15132 requires that a Final EIR consist of the following:

- the Draft Environmental Impact Report (Draft EIR) or a revision of the draft;
- comments and recommendations received on the Draft EIR, either verbatim or in summary;
- a list of persons, organizations, and public agencies commenting on the Draft EIR;
- the responses of the lead agency to significant environmental concerns raised in the review and consultation process; and
- any other information added by the lead agency.

In accordance with State CEQA Guidelines Section 15132(a), the Silverado Village Draft EIR (September 2013) is incorporated by reference into this Final EIR.

An EIR must disclose the expected environmental impacts, including impacts that cannot be avoided, growth-inducing effects, impacts found not to be significant, and significant cumulative impacts, as well as identify mitigation measures and alternatives to the proposed project that could reduce or avoid its adverse environmental impacts. CEQA requires government agencies to consider and, where feasible, minimize environmental impacts of proposed development, and an obligation to balance a variety of public objectives, including economic, environmental, and social factors.

PURPOSE AND USE

The City, as the lead agency, has prepared this Final EIR to provide the public and responsible and trustee agencies with an objective analysis of the potential environmental impacts resulting from adoption and the subsequent implementation of the proposed project.

The environmental review process enables interested parties to evaluate the proposed project in terms of its environmental consequences, to examine and recommend methods to eliminate or reduce potential adverse impacts, and to consider a reasonable range of alternatives to the project. While CEQA requires that consideration be given to avoiding adverse environmental effects, the lead agency must balance adverse environmental effects against other public objectives, including the economic and social benefits of a project, in determining whether a project should be approved.

1.0 INTRODUCTION

This EIR will be used as the primary environmental document to evaluate all subsequent planning and permitting actions associated with the Project. Subsequent actions that may be associated with the Project are identified in Chapter 2.0, Project Description, of the Draft EIR.

1.2 ENVIRONMENTAL REVIEW PROCESS

The review and certification process for the EIR involves the following general procedural steps:

NOTICE OF PREPARATION

The City circulated a Notice of Preparation (NOP) of an EIR for the Project on January 25, 2013 to trustee and responsible agencies, the State Clearinghouse, and the public. A public scoping meeting was held on February 8, 2013 to present the Project description to the public and interested agencies, and to receive comments from the public and interested agencies regarding the scope of the environmental analysis to be included in the Draft EIR. Concerns raised in response to the NOP were considered during preparation of the Draft EIR. The NOP and comments provided by interested parties in response to the NOP are presented in **Appendix A**.

NOTICE OF AVAILABILITY AND DRAFT EIR

The City provided the State Clearinghouse with the Notice of Completion (NOC) and Draft EIR for review on September 27, 2013. The City published a public notice of availability (NOA) for the Draft EIR on September 27, 2013, inviting comment from the general public, trustee agencies, responsible agencies, organizations, and other interested parties. The Draft EIR was available for review from September 27 through November 11, 2013. The City's Planning Commission received comments on the Draft EIR at its meeting on November 7, 2013.

The Draft EIR contains a description of the Project, description of the environmental setting, identification of project impacts, and mitigation measures for impacts found to be significant, as well as an analysis of project alternatives, identification of significant irreversible environmental changes, growth-inducing impacts, and cumulative impacts. The Draft EIR identifies issues determined to have no impact or a less than significant impact, and provides detailed analysis of potentially significant and significant impacts. Comments received in response to the NOP were considered in preparing the analysis in the Draft EIR.

RESPONSE TO COMMENTS/FINAL EIR

The City received oral comments at the November 7, 2013 Planning Commission meeting and received 33 comment letters regarding the Draft EIR. In accordance with CEQA Guidelines Section 15088, this Revised Final EIR responds to the written comments received as required by CEQA. The Revised Final EIR also contains minor edits to the Draft EIR, which are included in Section 3.0, Revisions to the Draft EIR. This document and the Draft EIR, as amended herein, constitute the Revised Final EIR.

CERTIFICATION OF THE EIR/PROJECT CONSIDERATION

The City will review and consider the Revised Final EIR. If the City finds that the Revised Final EIR is "adequate and complete", the City Council may certify the Revised Final EIR in accordance with CEQA. Upon review and consideration of the Revised Final EIR, the City Council may take action to approve, revise, or reject the Project. A decision to approve the Project, for which this EIR identifies significant environmental effects, must be accompanied by written findings in accordance with State CEQA Guidelines Sections 15091 and 15093. A Mitigation Monitoring Program would also be adopted in accordance with Public Resources Code Section 21081.6(a) and State CEQA Guidelines Section 15097 for mitigation measures that have been incorporated into or imposed upon the project to reduce or avoid significant effects on the environment. This Mitigation Monitoring Program will be designed to ensure that these measures are carried out during project implementation, in a manner that is consistent with the EIR.

1.3 ORGANIZATION OF THE REVISED FINAL EIR

This Revised Final EIR has been prepared consistently with Section 15132 of the State CEQA Guidelines, which identifies the content requirements for Final EIRs. This Revised Final EIR is organized in the following manner:

CHAPTER 1.0 – INTRODUCTION

Chapter 1 briefly describes the purpose of the environmental evaluation, identifies the lead, agency, summarizes the process associated with preparation and certification of an EIR, identifies the content requirements and organization of the Revised Final EIR, and summarizes changes made to the Project since the publication of the Draft EIR and the April 2014 Final EIR.

CHAPTER 2.0 – COMMENTS ON THE DRAFT EIR AND RESPONSES

Chapter 2 provides a list of commentors, copies of written comments made on the Draft EIR (coded for reference), and responses to those written comments.

CHAPTER 3.0 – REVISIONS TO THE DRAFT EIR

Chapter 3.0 consists of minor revisions to the Draft EIR. The revisions to the Draft EIR do not provide any significant new information nor do any of the revisions result in substantive changes to the Draft EIR.

1.4 MODIFICATIONS TO THE PROPOSED PROJECT

The following updates have been made to the proposed project since the Draft EIR was released for public review:

Since release of the Draft EIR, the Project has been revised to reduce the total number of single family lots, provide improved pedestrian circulation, improve the interface between the existing Waterman Square Apartments and the Project, and provide larger lot sizes in the northern portion of Village 2 to improve the transition from the open space lots (Lots C and E) to the Village 2 single

1.0 INTRODUCTION

family neighborhood. The revisions to the Project are detailed below and shown on Figure 1 (Revised Tentative Subdivision Map):

- The number of single family lots has decreased from 660 to 651. Three single family lots were removed from Village 2-A and six single family lots were removed from Village 3.
- In Village 2-A, Lots 44 thru 59 were widened to widths from 65' to 80' along Silverado Drive to provide more landscape space between homes and improve the transition from the Lots C and E open space parcels to the single family neighborhood.
- In Village 2-A, the cul-de-sac south of Lot 27 near Waterman Road was eliminated in favor of a stub street to serve Lots 25 and 26, a lot was eliminated to provide Lot GG (a landscape lot of 0.15 acres), and a separated sidewalk is added on the north side of 'U Street.' These changes provide a landscaped pedestrian "window" and clear connection point between the Project and Waterman Road in order to improve pedestrian access from the Waterman Road and the adjacent Waterman Square Apartments by providing a specific point of access and an east-west pedestrian path from the Waterman Road trail west through the Project to access the Project's trail system, open space, and park features.
- The configuration of the lots and streets in Village 3 was revised to provide additional 20' behind Lots 135 thru 139, creating a landscape buffer between the Project and the existing Waterman Square Apartments.
- 'V Lane' was added on the south side of the lodge and clubhouse in Village 3 and 'M Lane' was shifted to the east, as shown on Figure 1.
- The mini-park in the southeast area of Village 3 was removed and the north-south connector streets on 'E Lane' and 'H Lane' were eliminated to provide a 45' wide landscaped paseo/mini-park that provides north-south connectivity to the lodge and clubhouse. A similar paseo/mini-park was provided on the blocks to the south of the lodge and clubhouse complex. Lots KK and LL were expanded to provide more green space.

The modifications to the Project decreased the number of single family units from 660 to 651, a decrease of nine units. The total number of potential residential units has decreased from 785 (660 single family units and up to 125 senior multifamily units) to 776 (651 single family units and up to 125 senior multifamily units). There is no change to the proposed number of units associated with the lodge. There is no change to the overall footprint and potential area of disturbance associated with the Project.

As shown in Table 1 below, approximately half of the Project site (51.3%) would be developed with three single family neighborhoods (Villages 1-A, 1-B, 2-A, 2-B, and 3), the multifamily lodge, and the clubhouse. Approximately 92.9 acres (40.4%) would be dedicated to open space uses, including wetland and habitat preservation, drainage detention, and drainage overland flow. The

Project includes 8.8 acres of parks, trails, and paseos. An additional 5.1 acres would be landscaping and landscaped entry lots and 5.5 acres would be roads. The modifications to the Project do not change the overall development footprint and would not increase the intensity or density of development. The modifications to the Project would not result in any new environmental impacts and would not result in any increase in environmental impacts beyond those impacts identified in the Draft EIR. The decrease in units from 660 to 651 would result in a slight reduction in environmental impacts associated with traffic, air pollutant emissions, noise, and demand for public services and utilities; however, the significance of the impacts presented in the Draft EIR would not be changed and no revisions to the Draft EIR are necessary to address the changes to the Project.

Further, the proposed changes to the Project do not require the recirculation of the EIR prior to certification as required by State CEQA Guidelines Section 15088.5. Specifically, the proposed changes result in a reduction in single family dwelling units to 651 from 660. The total potential dwelling units, including the 125 senior multifamily units, have been reduced from 785 to 776. This change does not alter the analysis or conclusions made in the EIR as the total development has been reduced by nine units from that previously analyzed and the footprint of development is the same. No new significant impacts have been identified or new mitigation measures been required; the severity of the identified impacts would remain the same as previously identified; no new project alternatives or mitigation measures have been identified; and the EIR remains adequate and public review and comment have been provided. Therefore, the EIR is sufficient to consider the proposed Project and no further analysis is required.

TABLE 1: LAND USE SUMMARY

PROPOSED USE	ACRES (GROSS)	DWELLING UNITS	NON- RESIDENTIAL SQUARE FEET	AVERAGE DENSITY (UNITS/ACRE)	ACREAGE AS PERCENTAGE OF TOTAL
Single Family Residential					
Neighborhood 1-A	21.5	99		4.6	
Neighborhood 1-B	8.6	36		4.2	
Neighborhood 2-A	38.8	193		5.0	
Neighborhood 2-B	12.4	62		5.0	
Neighborhood 3 – cottages	31.6	261		7.9	
<i>Subtotal</i>	112.9	551		5.7	49.0%
Multifamily Residential					
Multifamily Lodge ¹	3.6	125 ²	7,500 – 15,200	34.7	1.6%
Community Facilities					
Clubhouse & Atrium	1.5		12,500		0.7%
Open Space					
Wetland Preservation	67.6				
Open Space	9.7				
Detention Area	14.8				
Overland Release	0.6				
<i>Subtotal</i>	92.9				40.4%
Parks and Trails					
Neighborhood Parks	5.5		4,000		
Trail Corridor	3.1				
Paseos	0.2				
<i>Subtotal</i>	8.8				3.8%
Landscape and Entries	5.1				2.0%
Roads	5.5				2.4%
TOTAL	230	651 single family and up to 125 multifamily	24,000 – 31,700	5.65 – developed area	100.0%

2.1 INTRODUCTION

No new significant environmental impacts or issues, beyond those already covered in the Draft Environmental Impact Report (Draft EIR) for Silverado Village, were raised during the comment period. The City, as lead agency, directed that responses to the Draft EIR comments be prepared. Responses to comments received during the comment period do not involve any new significant impacts or “significant new information” that would require recirculation of the Draft EIR pursuant to CEQA Guidelines Section 15088.5.

2.2 LIST OF COMMENTORS

Table 2-1 lists the comments on the Draft EIR that were submitted to the City. The assigned comment letter number, letter date, letter author, and affiliation, if presented in the comment letter or if representing a public agency, are also listed.

TABLE 2-1: LIST OF COMMENTORS			
RESPONSE LETTER/NUMBER	INDIVIDUAL OR SIGNATORY	AFFILIATION	DATE
A	Erick Fredericks	California Department of Transportation District #3	November 8, 2013
B	James Herota	Central Valley Flood Protection Board	November 6, 2013
C	Scott Morgan	Governor’s Office of Planning and Research	November 13, 2013
D	M.C. Dust	Department of California Highway Patrol	October 16, 2013
1	Betty Walters	Resident	November 11, 2013
2	Connie Conley, Linda Ford	Residents	November 8, 2013
3	Nick R. Green	Citizens Advocating Rational Development (CARD)	Undated
4	Carol McElheney	Resident	November 8, 2013
5	Gregory Jones	Resident	November 12, 2013
6	Jane H. White	Resident	November 7, 2013
7	Leo Fassler	Resident	October 30, 2013
8	Patrick and Lisa Pelch	Resident	November 11, 2013
9	Lynn Wheat	Resident	November 8, 2013
10	Lysa Voight, P.E.	Resident	November 11, 2013

2.0 COMMENTS ON DRAFT EIR AND RESPONSES

TABLE 2-1: LIST OF COMMENTORS			
RESPONSE LETTER/NUMBER	INDIVIDUAL OR SIGNATORY	AFFILIATION	DATE
11	Lysa Voight	Resident	November 12, 2013
12	Mark White	Resident	November 1, 2013
13	Dr. Matthew Dekar	Resident	November 8, 2013
14	Nina Stevens	Resident	November 8, 2013
15	Ron Hutcheson	Resident	November 10, 2013
16	Regina Reichenberg	Resident	November 9, 2013
17	Ricardo Bautista	Resident	November 8, 2013
18	Rose Hernandez	Resident	November 8, 2013
19	Sarah Johnson	Resident	November 8, 2013
20	Sandi Cox	Resident	November 6, 2013
21	Seth Stevens	Resident	November 9, 2013
22	Melissa Dekar, M.S.	Resident	November 10, 2013
23	Shirley Peters	Greater Sheldon Rural Estates Homeowners Association	November 11, 2013
24	Kathy Lee	Resident	November 11, 2013
25	Steven M. Lee	Resident	November 11, 2013
26	Angee Wangsgard	Resident	November 11, 2013
27	David and Robin Cole	Residents	November 7, 2013
28	Diana Hutcheson	Resident	November 7, 2013
29	Frank R. Young	Resident	November 7, 2013
30	Frank Young	Resident	November 7, 2013
31	Matthew Dekar	Resident	November 7, 2013
32	Mike Gage	Resident	November 7, 2013
33	Shirley Peters	Resident	November 7, 2013
34	Mark White	Resident	November 7, 2013
35	Nina Stevens	Resident	November 7, 2013

TABLE 2-1: LIST OF COMMENTORS			
RESPONSE LETTER/ NUMBER	INDIVIDUAL OR SIGNATORY	AFFILIATION	DATE
36	Greg Jones	Resident	November 7, 2013
37	Angee Wangsgard	Resident	November 7, 2013
38	Rochelle Winewald	Resident	November 7, 2013
39	Kathy Lee	Resident	November 7, 2013
40	Lysa Voight	Resident	November 7, 2013
41	Sarah Johnson	Resident	November 7, 2013
42	Regina Reichenberg	Resident	November 7, 2013
43	Steve Lee	Resident	November 7, 2013
44	Leo Fassler	Resident	November 7, 2013

2.3 COMMENTS AND RESPONSES

REQUIREMENTS FOR RESPONDING TO COMMENTS ON A DRAFT EIR

CEQA Guidelines Section 15088 requires that the City, as lead agency, evaluate and respond to all comments on the Draft EIR that regard an environmental issue. The written response must address the significant environmental issue raised and provide a detailed response, especially when specific comments or suggestions (e.g., additional mitigation measures) are not accepted. In addition, the written response must be a good faith and reasoned analysis. However, lead agencies need only respond to significant environmental issues associated with the project and do not need to provide all the information requested by the commentor, as long as a good faith effort at full disclosure is made in the EIR (CEQA Guidelines Section 15204(a)).

CEQA Guidelines Section 15204 recommends that commentors provide detailed comments that focus on the sufficiency of the Draft EIR in identifying and analyzing the possible environmental impacts of the project and ways to avoid or mitigate the significant effects of the project, and that commentors provide evidence supporting their comments. Pursuant to CEQA Guidelines Section 15064, an effect shall not be considered significant in the absence of substantial evidence.

CEQA Guidelines Section 15088 also recommends that revisions to the Draft EIR be noted as a revision in the Draft EIR or as a separate section of the Final EIR. Chapter 3.0 of this Final EIR identifies all revisions to the Draft EIR for Silverado Village.

2.0 COMMENTS ON DRAFT EIR AND RESPONSES

RESPONSES TO COMMENT LETTERS

Written comments on the Draft EIR are reproduced on the following pages, along with responses to those comments. To assist in referencing comments and responses, the following coding system is used:

- Each letter is lettered (i.e., Letter A) and each comment within each letter is numbered (i.e., comment A-1, comment A-2).

LETTER A

STATE OF CALIFORNIA—CALIFORNIA STATE TRANSPORTATION AGENCY

EDMUND G. BROWN Jr., Governor

DEPARTMENT OF TRANSPORTATION
DISTRICT 3-SACRAMENTO AREA OFFICE
2379 GATEWAY OAKS DRIVE, SUITE 150
SACRAMENTO, CA 95833
PHONE (916) 274-0635
FAX (916) 274-0602
TTY 711
www.dot.ca.gov



Flex your power!
Be energy efficient!

November 8, 2013

032013-SAC-0141
03-SAC-99/PM 13.9
SCH# 201312060
EG11-046

Mr. Christopher Jordan
City of Elk Grove
8401 Laguna Palms Way
Elk Grove, CA 95758

Silverado Village Project (EG 11-046) – Draft Environmental Impact Report (DEIR)

Dear Mr. Jordan:

Thank you for the opportunity to comment on the DEIR for the Silverado Village Project. The Project proposes establishment of the Silverado Village special planning area, a tentative subdivision map, and rezone to subdivide the project site. The Project will accommodate 660 single family residential lots on 115.1 acres, 77.3 acres of open space and nature preservation area, up to 5.5 acres of parks, 3.5 acres of landscape entry/corridors, a storm water detention area of 14.7 acres, and 5.5 acres of roads. The 230-acre Project site is located in the northwest corner of the intersection of Bond Road and Waterman Road in the City of Elk Grove (City) approximately 2.5 miles from State Route (SR) 99. The following comments are based on the DEIR.

A-1

Fair-Share Mitigation

The DEIR states in Impact 3.12-2: "As previously discussed, bottleneck locations exist on SR 99 and I-5 that cause congested conditions (i.e., vehicle speed of 35 miles per hour or less) on these facilities northbound in the morning and southbound in the evening. The Project would add traffic to these commute corridors, which would exacerbate already congested conditions. This is considered a significant impact based on the Caltrans evaluation criteria."

A-2

Caltrans concurs with this statement.

The DEIR goes on to state in Impact 3.12-2: "To mitigate impacts based on the Caltrans evaluation criteria, the Project Applicant should pay its fair-share of the cost for mobility enhancements consistent with those identified in the most current version of the State Route 99 & Interstate 5 CSMP."

A-3

"Caltrans improves mobility across California"

Mr. Jordan/City of Elk Grove
November 8, 2013
Page 2

Caltrans agrees that the Project Applicant (Applicant) should pay its fair-share costs for mobility enhancements. Caltrans requests the City and Applicant honor the terms of the *Settlement Agreement and Release of All Claims* entered into by Caltrans, the City, and Centex Homes. Pursuant to the Settlement Agreement, the Applicant would be required to pay an Interim Regional Roadway Fee of \$2,500 for each building permit issued for a residential unit in the Project. At such time as the City formally adopts a Permanent Regional Roadway Fee, the Applicant would be required to pay the then-current Permanent Regional Roadway Fee.

A-3

Please provide our office with copies of any further actions regarding this project. We would appreciate the opportunity to review and comment on any changes related to this development.

A-4

If you have any questions regarding these comments or require additional information, please contact Arthur Murray, Intergovernmental Review Coordinator at 916-274-0616 or by email at: Arthur.Murray@dot.ca.gov.

Sincerely,



ERIC FREDERICKS, Chief
Office of Transportation Planning – South

c: Scott Morgan, State Clearinghouse

"Caltrans improves mobility across California"

Letter A Eric Fredericks, California Department of Transportation District #3

Response A-1: The commentator makes introductory remarks and summarizes the Project components. The commentator’s specific comments regarding the Project are addressed under Responses A-2 and A-3 below.

Response A-2: The commentator quotes a portion of the discussion provided under Impact 3.12-2 of the Draft EIR, which identifies that the Project would result in a significant impact associated with traffic conditions on SR 99 and I-5. The commentator concurs with the statement. The comment is noted and no response is necessary.

Response A-3: The commentator quotes a statement from the Draft EIR regarding payment of the Project’s fair-share of the cost for mobility enhancements identified in the SR 99 and I-5 CSMP. The commentator agrees that the Project should pay its fair-share of the cost for mobility enhancements and requests that the City and Project Applicant honor the terms of the *Settlement Agreement and Release of All Claims* (Settlement Agreement) entered into by the City, Caltrans, and Centex Homes. While this comment does not address the adequacy of the Draft EIR, the following revisions are made to pages 3.12-15 and 3.12-16 of the Draft EIR regarding the Settlement Agreement:

“Impact 3.12-2: Potential to conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system: Freeways. (Significant and Unavoidable)

As previously discussed, bottleneck locations exist on SR 99 and I-5 that cause congested conditions (i.e., vehicle speed of 35 miles per hour or less) on these facilities northbound in the morning and southbound in the evening. The Project would add traffic to these commute corridors, which would exacerbate already congested conditions.

This is considered a significant impact based on the Caltrans evaluation criteria. However, this would not be an impact based on the City of Elk Grove evaluation criteria, since the Project would add less than 500 vehicle trips per day to SR 99, which would not increase the volume to capacity ratio by 0.05 or more or increase the volume on SR 99 by more than 5 percent.

MITIGATION MEASURES

To mitigate impacts based on the Caltrans evaluation criteria, the Project Applicant should pay its fair-share of the cost for mobility enhancements consistent with those identified in the most current version of the State Route 99 & Interstate 5 CSMP. Table 13 of the CSMP identifies that the construction of bus/carpool lanes on I-5 from US 50 to Elk Grove Boulevard is fully funded. Another improvement that would improve SR 99, and potentially I-5, operations is construction of carpool lanes on I-5 from Elk Grove to the San Joaquin County line; this is identified as a visionary project in Table 14 of the CSMP with no estimate of cost or identified method of funding. The CSMP does not identify capital projects in either Table 13 or 14 to add additional lanes or other improvements on SR 99 in the vicinity of the City that would improve the existing and planned congested conditions. Construction and implementation of necessary improvements is uncertain because the implementation of such improvements is outside of the City’s jurisdiction. While implementation

2.0 COMMENTS ON DRAFT EIR AND RESPONSES

of capital and operational mobility enhancements would lessen the significant impact associated with I-5 and SR 99, there is not an enforceable fee program that has been adopted by Caltrans and there is no mechanism in place to collect adequate funds for the improvements and ensure that the funds are used to construct the necessary improvements. Consequently, the mitigation is not feasible.

In addition, even with implementation of capital and operational mobility enhancements, some impacts would still remain significant because acceptable levels of service will not be achieved as indicated by the Concept LOS on SR 99 and I-5, which is LOS F in the study area.

Successful implementation of some of the proposed improvements identified in the CSMP will require the cooperation of third party agencies (Caltrans, Sacramento, County, or City of Sacramento) over which Elk Grove has no control. For this latter reason, Elk Grove is conservatively acknowledging the possibility that, despite its own commitment to work with Caltrans, mutually acceptable accommodation may not be reached.

The Project is subject to the Settlement Agreement and Release of All Claims (Settlement Agreement) entered into by Caltrans, the City, and Centex Homes. Pursuant to the Settlement Agreement, the Project is required to pay an Interim Regional Roadway Fee of \$2,500 for each building permit issued for a residential unit in the Project. The Interim Regional Roadway Fee will be collected until the City formally adopts a Permanent Regional Roadway Fee (Permanent Fee) or until all residential building permits have been issued for the Project, whichever occurs first.

The Interim Regional Roadway Fee will be used to fund designated regional traffic improvements to the State highway system, as agreed upon by the City and Caltrans. At this time, no specific improvements have been identified nor has the timing for any improvements been identified. Payment of the Interim Regional Roadway Fee would assist in reducing the Project's impacts to the State highway system by contributing towards improvements to SR 99 and/or I-5. However, since there is no nexus between the fee and the specific impacts of the Project and because no specific improvements or timing of improvements have been identified, the Interim Regional Roadway Fee would not reduce impacts to less than significant.

With regard to fair-share contributions, such as the Interim Regional Roadway Fee, the fair-share fee can only be considered feasible mitigation if the lead agency has sufficient evidence in the record to find that the fee program is sufficiently certain and can be implemented over a defined period of time. As neither the City nor Caltrans have a program to implement mitigation or improvements that would be applicable to the Project, no fair-share mitigation is feasible for the Project. Moreover, there is no evidence that Caltrans has any duty to construct the mitigation improvements that would fully mitigate potential impacts associated with the Project, or that it has made a definite commitment regarding the timing of the implementation of such improvements.

As there is no mechanism to implement the improvements identified in the CSMP, as previously discussed, and as the specific improvements and timing of improvements that would be funded through the Interim Regional Roadway Fee funds have not yet been identified such, this impact is considered significant and unavoidable, and as described above, there is no feasible mitigation available to the City to reduce this impact to a less than significant level."

Response A-4: The commentor makes closing remarks and provides contact information. The comment is noted and no response is necessary.

LETTER B

STATE OF CALIFORNIA - CALIFORNIA NATURAL RESOURCES AGENCY

EDMUND G. BROWN JR., GOVERNOR

CENTRAL VALLEY FLOOD PROTECTION BOARD

3310 El Camino Ave., Rm. 151
SACRAMENTO, CA 95821
(916) 574-0609 FAX: (916) 574-0682
PERMITS: (916) 574-2380 FAX: (916) 574-0682



November 6, 2013

RECEIVED

NOV 12

CITY OF ELK GROVE
PLANNING

Mr. Christopher Jordan
City of Elk Grove
8401 Laguna Palms Way
Elk Grove, California 95758

Subject: Silverado Village (EG-11-046)
SCH Number: 2013012060
Document Type: Draft EIR

Dear Mr. Jordan:

Staff of the Central Valley Flood Protection Board (Board) has reviewed the subject document and provides the following comments:

The proposed project is located adjacent to or within Laguna Creek and Morrison Creek which are under the jurisdiction of the Central Valley Flood Protection Board. The Board is required to enforce standards for the construction, maintenance and protection of adopted flood control plans that will protect public lands from floods. The jurisdiction of the Board includes the Central Valley, including all tributaries and distributaries of the Sacramento River, the San Joaquin River, and designated floodways (Title 23 California Code of Regulations (CCR), Section 2).

B-1

Board staff has reviewed the subject document showing potential adverse impacts to Laguna Creek.

According to page, ES-25, "Mitigation Measure 3.8-1: Prior to approval of grading and improvement plans for the lots in Village 1-A that are served by the Bond Road Trunk Drainage System, the Project Applicant shall enter into an agreement with the City to fund the fair-share cost for the incremental increase in the Bond Road Trunk Drainage system that needed to accommodate the Project. The incremental increase shall be calculated based on any additional amount above the previously identified upsizing required for the Bond Road Trunk Drainage System in the City's Master Drainage Plan. The agreement shall identify the timing for the drainage system improvements and shall require that no building permits be issued for the Lots in Village 1-A that are served by the Bond Road Trunk Drainage System Improvements until such improvements have been completed."

B-2

Drainage System Improvements and drainage within the Laguna Creek and Morrison Creek should be mitigated and are subject to Board permit requirements.

A Board permit is required prior to starting the work within the Board's jurisdiction for the following:

- The placement, construction, reconstruction, removal, or abandonment of any landscaping, culvert, bridge, conduit, fence, projection, fill, embankment, building, structure, obstruction, encroachment, excavation, the planting, or removal of vegetation, and any repair or maintenance that involves cutting into the levee (CCR Section 6);

2.0 COMMENTS ON DRAFT EIR AND RESPONSES

Mr. Christopher Jordan
November 6, 2013
Page 2 of 3

- Existing structures that predate permitting or where it is necessary to establish the conditions normally imposed by permitting. The circumstances include those where responsibility for the encroachment has not been clearly established or ownership and use have been revised (CCR Section 6);
- Vegetation plantings will require the submission of detailed design drawings; identification of vegetation type; plant and tree names (i.e. common name and scientific name); total number of each type of plant and tree; planting spacing and irrigation method that will be utilized within the project area; a complete vegetative management plan for maintenance to prevent the interference with flood control, levee maintenance, inspection, and flood fight procedures (CCR Section 131).

B-2

Vegetation requirements in accordance with Title 23, Section 131 (c) states "Vegetation must not interfere with the integrity of the adopted plan of flood control, or interfere with maintenance, inspection, and flood fight procedures."

The accumulation and establishment of woody vegetation that is not managed has a negative impact on channel capacity and increases the potential for levee over-topping. When a channel develops vegetation that then becomes habitat for wildlife, maintenance to initial baseline conditions becomes more difficult as the removal of vegetative growth is subject to federal and State agency requirements for on-site mitigation within the floodway.

Hydraulic Impacts - Hydraulic impacts due to encroachments could impede flood flows, reroute flood flows, and/or increase sediment accumulation. The project should include mitigation measures for channel and levee improvements and maintenance to prevent and/or reduce hydraulic impacts. Off-site mitigation outside of the State Plan of Flood Control should be used when mitigating for vegetation removed within the project location.

B-3

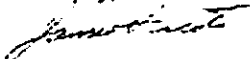
The permit application and Title 23 CCR can be found on the Central Valley Flood Protection Board's website at <http://www.cvfpb.ca.gov/>. Contact your local, federal and State agencies, as other permits may apply.

The Board's jurisdiction, including all tributaries and distributaries of the Sacramento River and the San Joaquin River, and designated floodways can be viewed on the Central Valley Flood Protection Board's website at <http://gis.bam.water.ca.gov/bam/>.

B-4

If you have any questions, please contact me by phone at (916) 574-0651, or via email at jherota@water.ca.gov.

Sincerely,



James Herota
Senior Environmental Scientist
Projects and Environmental Branch

cc: Governor's Office of Planning and Research
State Clearinghouse
1400 Tenth Street, Room 121
Sacramento, California 95814

Letter B James Herota, Central Valley Flood Protection Board (CVFPB)

Response B-1: The commentor makes introductory remarks, identifies the location of the Project, and identifies the jurisdiction of the commenting agency. The commentor's specific comments regarding the Project are addressed under Responses B-2 and B-3 below.

Response B-2: The commentor quotes Mitigation Measure 3.8-1 from page ES-25 of the Draft EIR and states that drainage system improvements and drainage within Laguna Creek and Morrison Creek should be mitigated and are subject to CVFPB permit requirements. The commentor describes the area under CVFPB jurisdiction as established by Title 23 California Code of Regulations (CCR) Section 2. The commentor identifies activities for which a CVFPB permit is required, describes vegetation requirements in accordance with Title 23, CCR Section 131, and describes potential adverse consequences associated with unmanaged woody vegetation.

It should be noted that the commentor does not quote the full language of Title 23 CCR Section 6(a), which reads as follows "Every proposal or plan of work, including the placement, construction, reconstruction, removal, or abandonment of any landscaping, culvert, bridge, conduit, fence, projection, fill, embankment, building, structure, obstruction, encroachment or works of any kind, and including the planting, excavation, or removal of vegetation, and any repair or maintenance that involves cutting into the levee, *wholly or in part within any area for which there is an adopted plan of flood control*, must be approved by the board prior to commencement of work." (italics added) As shown by the italicized portion of the quote, CVFPB approval is only required for the referenced types of work that are wholly or in part within any area for which there is an adopted plan of flood control.

The Project is located outside of the State Plan of Flood Control Planning Area and is also located outside of the Systemwide Planning Area (Central Valley Flood Protection Plan, 2012). The portion of the Project site proposed for development is mostly tributary to Whitehouse Creek; a small area is tributary to Laguna Creek as described under Impact 3.8-4. As described under Impact 3.8-4 on pages 3.8-21 through 3.8-23 of the Draft EIR, the Project would make improvements to the on-site central drainage basin, associated berms, and areas within the Whitehouse Creek stream zone in order to accommodate Project drainage in the Project areas tributary to Whitehouse Creek. It is noted that Whitehouse Creek is tributary to Laguna Creek.

The Project's drainage facilities would be maintained consistent with the California Regional Water Quality Control Board Central Valley Region Section 401 Permit for the Project site which requires that the Project provide for the post-construction maintenance of the Project's drainage facilities through a legally enforceable mechanism. This post-construction maintenance would ensure management of woody vegetation within the Project's drainage facilities.

The portion of the Project that is tributary to Laguna Creek would be served by the City's storm drainage system and would discharge into the Bond Road drainage system. The Project does

2.0 COMMENTS ON DRAFT EIR AND RESPONSES

not propose any improvements or modifications to Laguna Creek. The Draft EIR identifies Mitigation Measure 3.8-1 to ensure there are adequate drainage improvements to serve the Project for the portion of the Project that is tributary to Laguna Creek. The Draft EIR concludes that the Project would alter the existing drainage system but would not result in flooding. The Draft EIR further concludes that implementation of Mitigation Measure 3.8-1 would reduce potential impacts to the existing drainage pattern to less than significant.

The comment does not specifically comment on the adequacy of the Draft EIR. The comment is noted and no revision to the Draft EIR is necessary.

Response B-3: The commentor describes potential effects of hydraulic impacts and recommends that the Project include mitigation measures for channel and levee improvements and maintenance to prevent and/or reduce hydraulic impacts. The commentor recommends that off-site mitigation outside of the State Plan of Flood Control should be used when mitigating for vegetation removed within the Project location. The Project is not within a State Plan of Flood Control and does not affect the channel and levee improvements that are under the jurisdiction of the CVFPB. A Preliminary Drainage Study that addresses potential impacts associated with flood flows and drainage has been prepared for the Project. The Project includes drainage facilities, including improvements to the on-site pond and berms, to address flood flows (see Impact 3.8-4 on pages 3.8-21 through 3.8-23 of the Draft EIR). As described under Impact 3.8-4, implementation of Mitigation Measure 3.8-1 would ensure that potential impacts to the existing drainage pattern are less than significant. Potential impacts associated with sedimentation and erosion would be less than significant with implementation of Mitigation Measures 3.5-1 and 3.5-2 as discussed under impacts 3.8.1 and 3.8-2 on pages 3.8-17 through 3.8-20 of the Draft EIR. The Project is located outside of the State Plan of Flood Control and thus will not encroach on facilities within the State Plan of Flood Control. A Drainage Study was prepared for the Project to address potential flooding, storm drainage, and water quality impacts; the Drainage Study is located at Appendix D of the Draft EIR. The comment does not address the mitigation measures identified in the Draft EIR nor does it address the analysis of potential impacts associated with hydrology and water quality described in Section 3.8 of the Draft EIR. The comment is noted and no revision to the Draft EIR is necessary.

Response B-4: The commentor provides links to on-line information regarding the CVFPB permit application, Title 23 CCR, and area of the CVFPB's jurisdiction. The commentor provides contact information. The comment is noted.

LETTER C

STATE OF CALIFORNIA

Governor's Office of Planning and Research
State Clearinghouse and Planning Unit



Edmund G. Brown Jr
Governor



Ken Alex
Director

RECEIVED

NOV 18 2013

CITY OF ELK GROVE
PLANNING

November 13, 2013

Christopher Jordan
City of Elk Grove
8401 Laguna Palms Way
Elk Grove, CA 95758

Subject: Silverado Village (EG-11-046)
SCH#: 2013012060

Dear Christopher Jordan:

The State Clearinghouse submitted the above named Draft EIR to selected state agencies for review. On the enclosed Document Details Report please note that the Clearinghouse has listed the state agencies that reviewed your document. The review period closed on November 12, 2013, 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(e) 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."

C-1

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 TENTH STREET P.O. BOX 2044 SACRAMENTO, CALIFORNIA 95812-2044
TEL (916) 445-0613 FAX (916) 323-3018 www.opr.ca.gov

2.0 COMMENTS ON DRAFT EIR AND RESPONSES

Document Details Report State Clearinghouse Data Base

SCH# 2013012060
Project Title Silverado Village (EG-11-048)
Lead Agency Elk Grove, City of

Type EIR Draft EIR
Description The Project proposes a 230-acre residential community located north of Bond Road and west of Waterman Road. The Project proposes 660 single family units, up to 125 independent/assisted living/memory care units, a community clubhouse, an 11.4-acre park and trail system, 83.7 acres of open space, including a 68.1-acre wetland preservation area and 14.7 acre detention basin, and supporting infrastructure.

Lead Agency Contact

Name Christopher Jordan
Agency City of Elk Grove
Phone 916 478 2222 **Fax**
email
Address 8401 Laguna Palms Way
City Elk Grove **State** CA **Zip** 95758

Project Location

County Sacramento
City Elk Grove
Region
Cross Streets Bond Road and Waterman Road
Lat / Long 38° 25' 35 68" N / 121° 21' 26 97" W
Parcel No. 127-0010-002, 017, 040, & 104-108
Township 7N **Range** 6E **Section** 30 **Base** MDB&M

Proximity to:

Highways SR-99
Airports No
Railways UPRR
Waterways Whitehouse Creek and Laguna Creek
Schools EGUSD
Land Use GP: Commercial/Office/Multifamily, Low Density Residential, and Rural Residential;
 Z: RD-2, RD-4, RD-5, RD-5(F), and O

Project Issues Aesthetic/Visual; Air Quality; Archaeologic-Historic; Biological Resources; Drainage/Absorption; Flood Plain/Flooding; Geologic/Seismic; Noise; 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

Reviewing Agencies Resources Agency; Department of Fish and Wildlife, Region 2; Department of Parks and Recreation; Department of Water Resources; California Highway Patrol; Caltrans, District 3 S; Regional Water Quality Control Bd., Region 5 (Sacramento); Native American Heritage Commission; Public Utilities Commission; Central Valley Flood Protection Board

Date Received 09/27/2013 **Start of Review** 09/27/2013 **End of Review** 11/12/2013

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

Letter C Scott Morgan, Governor's Office of Planning and Research State Clearinghouse and Planning Unit

Response C-1: The commentor states that the State Clearinghouse submitted the Draft EIR to selected state agencies for review. The commentor states that comments from the responding agencies are enclosed. The enclosed letter from the California Highway Patrol (Letter D) is addressed in the responses to Letter D.

The commentor indicates that the City has complied with State Clearinghouse review requirements for draft environmental documents. The commentor makes closing remarks and provides their contact information. The comment does not identify any issues related to the adequacy of the Draft EIR. This comment is noted.

2.0 COMMENTS ON DRAFT EIR AND RESPONSES

State of California

LETTER D

Transportation Agency

Memorandum

Clear
11/2/13
E

RECEIVED

OCT 28 2013

STATE CLEARING HOUSE

Date: October 16, 2013

To: State Clearing House

From: **DEPARTMENT OF CALIFORNIA HIGHWAY PATROL**
South Sacramento Area

File No.: 252.12796.12919

Subject: ENVIRONMENTAL IMPACT REPORT SCH#2013012060

The California Highway Patrol South Sacramento Area has reviewed the above noted Environmental Impact Report. This project includes the development of a 230-acre housing community. Specifically, three village type residential communities located north of Bond Road and west of Waterman Road that consist of 660 single family units and up to 125 independent/assisted living/memory care units.

D-1

Although this project primarily falls within the city limits of Elk Grove, the freeways and roadways of Sacramento County will be greatly impacted. With the growth of the housing communities, population will increase resulting in additional vehicles on the freeway as well as city and county streets. Additionally, in the proposed documentation, the project will have a significant and unavoidable impact on transportation and circulation. Due to the location of the project, (State Route 99, Interstate 5, State Route 16, and the unincorporated main thoroughfares) traffic congestion enforcement responsibilities will ultimately fall under the jurisdiction of the California Highway Patrol.

D-2

The freeways and roadways of the South Sacramento Area will be considerably impacted by the increase in housing communities, population, and vehicles on the freeway as well as county roadways. Although CHP will experience a minor reduction in roadway responsibility, the increase in traffic will cause changes in traffic congestion patterns which will result in extended emergency response times and additional enforcement demands on freeways (on and off ramps). Therefore, this project would significantly impact the CHP South Sacramento Area operations.

D-3

If you have any questions, please call Lieutenant Elaine Wallace at (916) 681-2300.



M. C. DUST, Captain
Commander

cc: Valley Division
Office of Special Projects

CHP 51WP (Rev. 11-05) DP1076

**Letter D M.C. Dust, Captain, Department of California Highway Patrol
(CHP) South Sacramento Area**

Response D-1: The commentor indicates that they have reviewed the Project and provides a brief summary of the Project. The comment is noted.

Response D-2: The commentor indicates that the freeways and roads of Sacramento County will be greatly impacted by the population increase resulting in additional vehicles on the freeways and streets. The commentor notes that the Project will have a significant and unavoidable impact on transportation and circulation; this is consistent with the discussion presented under Impact 3.12-2 in Section 3.12 of the Draft EIR.

The commentor notes that due to the location of the Project, traffic congestion enforcement responsibilities will ultimately fall under the jurisdiction of the CHP. It should be noted that the Project is located in the City of Elk Grove and the City's Police Department will have jurisdiction over Project traffic occurring on local City streets. The comment does not address the adequacy of the Draft EIR and no further response is required.

Response D-3: The commentor states that the freeways and roadways of the South Sacramento Area will be considerably impacted by the increase in housing communities, population, and vehicles on the freeway as well as County roadways. The commentor notes that the CHP will experience a minor reduction in roadway responsibility, but the change in traffic congestion patterns will result in extended emergency response times and additional enforcement demands on freeways, including on and off ramps. The commentor concludes that the Project would significantly impact CHP operations.

Impacts associated with transportation and circulation are addressed in Section 3.12 of the Draft EIR. The Project would not result in a change in traffic congestion patterns, but would add additional traffic to existing congested conditions as described under Impact 3.12-2. While the commentor concludes there will be a significant impact to the CHP, the commentor does not describe the impact. No substantial adverse physical impact to the environment is anticipated in association with the provision of public services, including law enforcement. Potential impacts to the environment associated with public services are addressed in Section 3.11 of the Draft EIR. While the comment does not address the adequacy of the Draft EIR, it is noted for the decision-makers' consideration.

LETTER 1

November 11, 2013

City of Elk Grove
Planning Department
8401 Laguna Palms Dr.
Elk Grove, CA 95758

RE: Project #2013012060 Silverado Bond Rd @ Waterman Road

Planning Commission:

I'm a relatively new resident of the Quail Ranch Estates development which borders the west side of this proposed development. When I bought my home, which backs up to this open space, I was told that the land was protected from development as a wildlife preserve. With all the wildlife and birds that I see every day that use this land for nesting and foraging, I figured it must be true. Now, I come to find out that a developer wants to build over 780 residences on the land including right up against my property.

1-1

I also understand they want a park, which I would love to have near, but they want to place it in an area north of development where it is secluded and unable to house restrooms as sewer lines are unavailable. It will also likely draw crime to the area due to its seclusion. Why isn't the park centrally located so that all residents in the area can enjoy it? The park is over a quarter mile walk from the over-55 housing, largely negating the ability of the elderly to enjoy it. Please have the developer reconsider this placement and have the park placed in the center of the development so that all can enjoy the open space and children playing.

1-2

It has been brought to my attention that flooding from heavy rainfall may be of concern. As my property backs up to the project site, I am worried about where all of the winter water will be stored and diverted. My street is currently within the 100-year flood plain, meaning my home is just above that. This is a serious concern that needs to be addressed fully and rectified.

1-3

Traffic is also a problem. Adding another 780 residences puts well over 1,100 more vehicles on Bond and Waterman Roads and the highways every day. Kids going to school, parents traveling to work, all during rush hours, worsens an already unacceptable commute on these roads.

1-4

I understand that a "less density" option has been proposed. For all concerned, please study this option closely. Reducing the housing to just 110 home sites makes for a much more acceptable project. The environmental impacts on wildlife should also be greatly diminished with reduced density.

I have a great oak tree in my backyard that I believe is targeted for removal. One reason I purchased this home was the beautiful setting and outdoor space my backyard provides. Removing my tree is quite simply unacceptable to me.

1-5

City of Elk Grove
November 11, 2013
City of Elk Grove

Letter to Planning Commission

-2-

RE: Project #2013012060

The Quail Ranch leaders have also negotiated several important terms that are crucial to our quality of life and I request that these items be placed in the final EIR as "mitigation measures" to assure that they protect us against future developers and their possibly differing plans.

1-6

Thank you,



Betty Walters
9214 Quail Terrace Way
Elk Grove, CA 95624

2.0 COMMENTS ON DRAFT EIR AND RESPONSES

Letter 1 Betty Walters

Response 1-1: The commentor states that when they purchased their home, they were told that the land (Project site) bordering their home was protected from development as a wildlife preserve and that they have found out a developer wants to build over 780 residences on the land including right up against their property. No portion of the Project site is a wildlife preserve; the General Plan designates the Project site for low density residential, rural residential, and commercial/office/multifamily uses. The comment does not address the adequacy of the Draft EIR.

Response 1-2: The commenter indicates that the Project would place the park in an area north of the development where it is secluded and unable to house restrooms as sewer lines are unavailable. The commentor states their belief that the park would draw crime to the area due to its seclusion and questions why the park is not centrally located so that all residents in the area can enjoy it, noting that the park is over a quarter-mile walk from the over-55 housing. The commenter requests that the placement of the park be *reconsidered and placed in the center of the development*.

It should be noted homes proposed on A Street are across the street from the park site proposed on Lot G will have views of the park site. Potential physical impacts to the environment that are associated with public services are addressed in Section 3.11 of the Draft EIR. The park proposed on Lot G has the potential to be served by either the public sewer system or alternative wastewater disposal, as discussed under Impact 3.5-5 in Section 3.5 of the Draft EIR. While the comment does not address the adequacy of the Draft EIR, it is noted for the *decision-makers' consideration*.

Response 1-3: The commentor identifies concerns with flooding, including where winter water will be stored and diverted. The commentor indicates that their street is within the 100-year floodplain. While the comment does not address the adequacy of the Draft EIR, the following discussion identifies the sections of the Draft EIR that address the commentor's concerns.

The Project includes facilities to store and convey stormwater, including a 14.8-acre detention basin and 0.6-acre overland release area, as described on page 2.0-7 of Chapter 2.0, Project Description. The proposed detention basin, water quality separation berms, and overland release area are shown on Figure 3.8-4.

Potential alterations to the existing drainage pattern, including the 100-year floodplain, are addressed under impact 3.8-4 on pages 3.8-21 through 3.8-23 of the Draft EIR. The analysis provided for Impact 3.8-4 describes the proposed drainage for Project areas tributary to Whitehouse Creek and Project areas tributary to Laguna Creek. As described under Impact 3.8-4, drainage from Project areas tributary to Whitehouse Creek would be directed to the existing main central detention basin, which overflows during large storm events under existing conditions. The Project would reconstruct the berms around the central drainage basin in

order to increase the basin's flood storage capacity. The Project would result in a decrease from 217 cubic feet per second of peak discharge during a 100-year flood event to a peak discharge rate of 192.5 cubic feet per second. The Project would not result in an increase in off-site flows during a 100-year flood event. Drainage from the area of the Project site that is tributary to Bond Road would be directed to the City's storm water system and would be conveyed via the Bond Road Trunk pipe to Laguna Creek, as described under Impact 3.8-4. Drainage from the portion of the Project site that is tributary to Laguna Creek would not result in increased stormwater runoff to the neighborhoods and development bordering the Project site.

Response 1-4: The commentor states that traffic is a problem and that 780 residences puts over 1,100 more vehicles on Bond and Waterman Roads. The commentor identifies that trips during rush hours will worsen an unacceptable commute. Impacts to the transportation and circulation system are discussed under Section 3.12 of the Draft EIR.

The commentor states their understanding that a "less density" option has been proposed and requests that this option be studied closely and also notes that environmental impacts on wildlife should be greatly diminished with reduced density. This comment does not address the adequacy of the Draft EIR and is noted for the decision-makers' consideration.

Response 1-5: The commentor indicates that the oak tree in their backyard is targeted for removal and that removing the tree is unacceptable. While this comment does not address the adequacy of the Draft EIR, it is noted for the decision-makers' consideration.

Response 1-6: The commentor indicates that the Quail Ranch leaders have negotiated several important terms that are crucial to their quality of life and requests that the items be placed in the Final EIR as mitigation measures.

Pursuant to the requirements of CEQA, the Draft EIR evaluates the Project's potential to result in adverse physical impacts to the environment. Where the Project has the potential to result in an adverse physical impact, the Draft EIR identifies mitigation that could reduce the environmental impact (see Sections 3.1 through 4.0 of the Draft EIR). The commentor does not identify any specific mitigation measures or terms to be considered for inclusion in the Draft EIR. The commentor also does not identify any environmental impacts that require mitigation beyond that addressed in the Draft EIR. Therefore, no further response to the commentor's reference to mitigation measures can be made. This comment is noted for the decision-makers' consideration.

LETTER 2

From: Connie Conley
To: George Murnhey; Frank Maita; Brian Wilanovsky; Nancy Chaires; Fedelia Harris
Cc: Christopher Jordan; Tam Echiburu; Dan Gousserty; Bryan Gold; Kathy Lee; Rachell Reinwald; monardem@yahoo.com; Lynn Wheat; GSREHA@aol.com; Leo Fessler; Linda Ford; Angela Wangsgard; sofalibrook@yahoo.com; ORFA@FRONTIERNET.NET; Hikki Carpenter; William Myers; markSRG@frontiernet.net; June Coats; Richard Shepard
Subject: Agenda Item 6.1 - Silverado Village DEIR Public Comment
Date: Friday, November 08, 2013 11:28:38 AM
Attachments: Swdrv Background.bmp
Importance: High

Dear City of Elk Grove Planning Commission Members,

As mentioned at last night's meeting, members of the Elk Grove Planning Commission requested more public comment in writing regarding the Silverado Village DEIR Public Comment opportunity.

Though our focus has been elsewhere of late, we have continued to pay close attention to the Silverado Village project. [Connie Conley lives on St. Anthony Court in Sheldon Road Estates, and as noted last night by Mark White, St. Anthony Court abuts the project.]

2-1

In responding to the DEIR, having a lot of experience since 2005 with respect to the scoping meeting held by the planning commission for the Walmart project, we fully understand the language used, the rating levels and CEQA's requirements.

Last night's public comment was well coordinated and the viewpoints brought up by the affected homeowner's associations and residents were compelling and must be taken under stern consideration.

2-2

Silverado Homes is also to be commended for the extensive public outreach they conducted over the last several years. As active citizens of this community involved in many aspects of our local government including proposals, ordinances, land use and planning issues, we cannot remember any other developer hosting as many meetings for all interested stakeholders.

2-3

With that, here is our request, public comment and conclusion. We specifically waited until after last night planning commission meeting to submit our remarks and observations.

We are now requesting that the Elk Grove Planning Commission take all of the comments received last night, earnestly work towards and recommend a DEIR that is in the best interests of the city of Elk Grove, the surrounding homeowners, the affected areas of concern specifically mentioned last night including traffic congestion, water drainage, and the current condition of Waterman Road between Sheldon and Bond Roads. We also noted that many speakers were concerned about the higher density that is currently planned and we believe that should be revisited.

2-4

Side bar: Connie Conley has sent several emails in the past to the city of Elk Grove Public Works Director Richard Shepard regarding the very poor condition of Waterman Road asking when it is scheduled to be repaved. As noted in his reports to the Elk Grove City Council, there is currently no money and the best we can hope for is that potholes will be repaired on as needed basis.

2-5

As demonstrated over the past few years, this planning commission has proven that you take every aspect of every project before you under impartial consideration, that every person before you receives equitable treatment, and in the end your deliberation will attain the best conclusion, and therefore the best project, for all concerned.

2-6

We respectfully request that the same is done here with the Silverado Village project and DEIR before you. | 2-6

Sincerely yours,
Connie Conley
Linda Ford

2.0 COMMENTS ON DRAFT EIR AND RESPONSES

Letter 2 Connie Conley and Linda Ford

Response 2-1: The commentor notes that the City's Planning Commission requested public comments in writing regarding the Project. The commentor states that they have paid close attention to the Project and that they have a full understanding of the language used in the Draft EIR, the rating levels, and CEQA's requirements. The comment does not address the adequacy of the EIR and is noted.

Response 2-2: The commentor state's that the public comment was well coordinated and that the viewpoints brought up by affected homeowner's [sic] associations and residents were compelling and must be taken under stern consideration. This comment does not address the adequacy of the Draft EIR and is noted for the decision-makers' consideration.

Response 2-3: The commentor commends Silverado Homes for the extensive outreach conducted. This comment does not address the adequacy of the Draft EIR and is noted for the decision-makers' consideration.

Response 2-4: The commentor requests that the Planning Commission take the comments regarding the Project and recommend a Draft EIR that is in the best interests of the City, the surrounding homeowners, and the affected areas of concern, including traffic congestion, water drainage, condition of Waterman Road between Sheldon and Bond Roads, and density. This comment does not address the adequacy of the Draft EIR and is noted for the decision-makers' consideration.

Response 2-5: The commentor notes that Connie Conley has contacted the City's Public Works Director regarding the condition of Waterman Road and that, as noted in his reports to the City Council, there is currently no money and that potholes will be repaired on an *as-needed basis*. This comment does not address the adequacy of the Draft EIR and is noted for the decision-makers' consideration.

Response 2-6: The commentor notes that the Planning Commission impartially considers every project and that persons before the commission receive equitable treatment. The commentor indicates that the Planning Commission's deliberation will attain the best conclusion and best project. The commentor requests the same be done for the Project and Draft EIR. This comment does not address the adequacy of the Draft EIR and is noted for the decision-makers' consideration.

LETTER 3



Christopher Jordan
City of Elk Grove
8401 Laguna Palms Way
Elk Grove, CA 95758

Re: Silverado Village (EG-11-046)
SCH Number - 2013012060

Dear Mr. Jordan,

The undersigned represents Citizens Advocating Rational Development ("CARD"), a non-profit corporation dedicated to issues in development and growth.

3-1

This letter contains comments on the Draft Environmental Impact Report on the Silverado Village Project, in accordance with CEQA and the Notice of Completion and Availability. Please ensure that these comments are made a part of the public record.

ENERGY

The DEIR does not discuss any requirements that the Project adopt energy saving techniques and fixtures, nor is there any discussion of potential solar energy facilities which could be located on the roofs of the Project. Under current building standards and codes which all jurisdictions have been advised to adopt, discussions of these energy uses are critical; the construction of a 230-acre residential community, will devour copious quantities of electrical energy, as well as other forms of energy.

3-2

WATER SUPPLY

The EIR (or DEIR – the terms are used interchangeably herein) does not adequately address the issue of water supply, which in California, is a historical environmental problem of major proportions.

3-3

What the DEIR fails to do is:

- 1. Document wholesale water supplies;

3-4

2.0 COMMENTS ON DRAFT EIR AND RESPONSES

2. Document Project demand; 3-5
3. Determine reasonably foreseeable development scenarios, both near-term and long-term; 3-6
4. Determine the water demands necessary to serve both near-term and long-term development and project build-out. 3-7
5. Identify likely near-term and long-term water supply sources and, if necessary, alternative sources; 3-8
7. Identify the likely yields of future water from the identified sources; 3-9
8. Determine cumulative demands on the water supply system; 3-10
9. Compare both near-term and long-term demand to near-term and long-term supply options, to determine water supply sufficiency; 3-11
10. Identify the environmental impacts of developing future sources of water; and 3-12
11. Identify mitigation measures for any significant environmental impacts of developing future water supplies. 3-13
12. Discuss the effect of global warming on water supplies. 3-14

There is virtually no information in the DEIR which permits the reader to draw reasonable conclusions regarding the impact of the Project on water supply, either existing or in the future. 3-15

For the foregoing reasons, this EIR is fatally flawed.

AIR QUALITY/GREENHOUSE EMISSIONS/CLIMATE CHANGE

The EIR lacks sufficient data to either establish the extent of the problem which local emissions contribute to deteriorating air quality, greenhouse emissions or the closely related problem of global warming and climate change, despite the fact that these issues are at the forefront of scientific review due to the catastrophic effects they will have on human life, agriculture, industry, sea level risings, and the many other serious consequences of global warming. 3-16

This portion of the EIR fails for the following reasons:

1. The DEIR does not provide any support or evidence that the Guidelines utilized in the analysis are in fact supported by substantial evidence. References to the work of others is inadequate unless the document explains in sufficient detail the manner and methodology utilized by others. 3-17

2. Climate change is known to affect rainfall and snow pack, which in turn can have substantial effects on river flows and ground water recharge. The impact thereof on the project's projected source of water is not discussed in an acceptable manner. Instead of giving greenhouse emissions and global warming issues the short shrift that it does, the EIR needs to include a comprehensive discussion of possible impacts of the emissions from this project. 3-18

3. Climate change is known to affect the frequency and or severity of air quality problems, which is not discussed adequately. 3-19

4. The cumulative effect of this project taken with other projects in the same geographical area on water supply, air quality and climate change is virtually missing from the document and the EIR is totally deficient in this regard. 3-20

For the foregoing reasons, the EIR is fatally flawed. 3-21

ALTERNATIVE ANALYSIS

The alternative analysis fails in that the entire alternatives-to-the-project section provides no discussion of the effects of the project, or the absence of the project, on surrounding land uses, and the likely increase in development that will accompany the completion of the project, nor does it discuss the deleterious effects of failing to update the project upon those same surrounding properties and the land uses which may or have occurred thereon. 3-22

Thank you for the opportunity to address these factors as they pertain to the referenced DEIR. 3-23

Very truly yours,

CITIZENS ADVOCATING RATIONAL DEVELOPMENT

NICK R. Green

President

2.0 COMMENTS ON DRAFT EIR AND RESPONSES

Letter 3 Nick R. Green, CARD

Response 3-1: *The commentor indicates that they represent CARD and that the letter contains comments on the Draft EIR in accordance with CEQA and the Notices of Completion and Availability. The commentor requests that the comments are made a part of the public record. This comment does not address the adequacy of the Draft EIR and is noted for the decision-makers' consideration.*

Response 3-2: *The commenter states that the Draft EIR does not adequately address energy savings techniques, solar facilities, or current building codes and standards with respect to energy use. The commenter is referred to the analysis under Impact 3.6-1 in the Greenhouse Gas and Climate Change section of the Draft EIR. The issues raised by the commenter are discussed in detail under Impact 3.6-1. As described in this section, the Project is required to implement a range of applicable measures from the adopted Elk Grove Climate Action Plan (CAP).*

CAP Measure BE-6 requires all new construction to achieve a 15 percent improvement over minimum Title 24 CALGreen energy requirements. CAP Measure BE-10 promotes the installation of on-site photovoltaics in new and existing development. Mitigation Measure 3.6-1 requires the implementation of a range of energy-saving measures into the Project, as required by the adopted CAP. As described in greater detail in Section 3.6, the adopted Elk Grove CAP would reduce energy consumption throughout the City throughout buildout of the General Plan, and would reduce GHG emissions throughout the City. The issues raised by the commenter have been thoroughly addressed in the Draft EIR, and no changes are required or warranted.

Response 3-3: *The commentor states that the Draft EIR does not adequately address the issue of water supply and lists 12 areas where the commentor believes the EIR has failed to address water supply. The commentor is referred to the detailed discussion and analysis regarding water supply presented under Section 3.13.2, Water Supplies, in Section 3.13, Utilities, of the Draft EIR and to the Water Supply Assessment included as Appendix G of the Draft EIR. The issues raised by the commentor are fully addressed in Section 3.13 of the Draft EIR. It is noted that the commentor does not reference any of the specific analysis regarding water supply provided in the Draft EIR but just raises general issues regarding water supply. Each issue raised by the commentor is addressed below. The commentor's concerns regarding the water supply analysis are addressed under Responses 3-4 through 3.15.*

Response 3-4: *The commentor states that the Draft EIR fails to document wholesale water supplies. Elk Grove Water District (EGWD) would provide water service to the Project; the Project is located in EGWD's Service (or Tariff) Area 2. EGWD's water supplies, including both surface water and groundwater sources, are documented on pages 3.13-11 through 3.11-15 of the Draft EIR. The documented supplies include wholesale water purchased by EGWD from Sacramento County Water Agency (SCWA). The future wholesale water supply for Service Area No. 2 is summarized in Table 3.13-6 of the Draft EIR. Table 3.13-5 of the Draft EIR identifies*

historical and projected water demand, including the baseline of existing water demand and projected demand, for EGWD Tariff Area No. 2 from 2005 through 2035. The Draft EIR adequately documents the water supply sources, specifically including the wholesale water that would be purchased from SCWA, that would serve the Project. No further response is required.

Response 3-5: The commentor states that the Draft EIR fails to document Project demand. The Project's water demand is described under Impact 3.13-4 on pages 3.13-19 and 3.13-20 of the Draft EIR. Table 3.13-8 identifies the water demand for each of the Project's land use categories and identifies the water demand factor used to determine water demand. As shown in Table 3.13-8, the Project would have a water demand of 395.15 acre-feet per year. The Draft EIR adequately documents the Project's water demand. No further response is required.

Response 3-6: The commentor states that the Draft EIR fails to determine near- and long-term reasonably foreseeable development scenarios. The Draft EIR identifies that phased development of the Project is anticipated. Impact 3.13-4 of the Draft EIR discusses the availability of water supplies to serve the Project. Table 3.13-9 of the Draft EIR identifies the EGWD's water demand from 2010 through 2035, which addresses both near- and long-term reasonably foreseeable development scenarios. Table 3.13-9 identifies that Project water demand will begin phasing in 2014 in the near-term and that the Project's full water demand is anticipated to reach 395 AFY by 2020. Table 3.13-9 identifies the near- and long-term water demand scenarios associated with the Project. As described in the Draft EIR, EGWD's demand projections as shown in Tables 3.13-5 and 3.13-9 anticipated development of the Project site consistent with the adopted General Plan. No further response is required.

Response 3-7: The commentor states that the Draft EIR fails to determine water demands necessary to serve near- and long-term development and Project buildout. As described under Response 3-6, Impact 3.13-4 discusses the availability of water supplies to serve the Project, including near- and long-term demand anticipated by EGWD, which would serve near- and long-term development, as well as the water necessary to serve the Project. As discussed under Impact 3.13-4, EGWD has an agreement to receive up to 4,560 AFY to serve Service Area No. 2; this is adequate to serve EGWD's near-term needs as well as the long-term demand through 2035, including demand associated with the Project. Further, the Water Supply Assessment determined that EGWD can support the Project and that sufficient water supplies existing to meet the Project's buildout demand as well as all existing and reasonably foreseeable water demands. No further response is required.

Response 3-8: The commentor states that the Draft EIR fails to identify near- and long-term water supply sources and, if necessary, alternative sources. See Response 3-4. Water supply sources, including water purchased from SCWA by EGWD and available groundwater, are described in detail on pages 3.13-11 through 3.13-15 of the Draft EIR. No further response is required.

2.0 COMMENTS ON DRAFT EIR AND RESPONSES

Response 3-9: The commentor states that the Draft EIR fails to identify likely yields of future water from the identified sources. The commentor is referred to the discussion of water supply on pages 3.13-11 through 3.13-15 of the Draft EIR, which describes contracted water supplies from SCWA, future water supply for Service Area No. 2 (Table 3.13-6), SCWA's surface water supply components that identify each SCWA supply source and the associated entitlement amount, estimated long-term average use, availability of supply, and reliability (Table 3.13-7 and a detailed discussion of each source is provided in the text), and groundwater pumping demands and yield thresholds. The Draft EIR provides an adequate discussion of water supply sources, including the likely yields of each source. No further response is required.

Response 3-10: The commentor states that the Draft EIR fails to determine cumulative demands of the water supply system. The commentor is referred to the discussion under Impact 3.13-4 which addresses near-term and long-term water supply impacts, including the availability of water to serve foreseeable development as well as the Project (cumulative demands). No further response is required.

Response 3-11: The commentor states that the Draft EIR fails to compare both near- and long-term demand to supply options to determine water supply sufficiency. The commentor is referred to Responses 3-4 through 3-10 where both near- and long-term water supply demand are discussed. No further response is required.

Response 3-12: The commentor states that the Draft EIR fails to identify the environmental impacts of developing future sources of water. As described under Impact 3.13-4, the water demand of the Project is within the planned and contracted water supply for EGWD. No new water sources will need to be developed to serve the Project. No further response is required.

Response 3-13: The commentor states that the Draft EIR fails to identify mitigation measures for any significant impacts of developing future water supplies. As described under Response 3-12, no new water sources will need to be developed to serve the Project. Therefore, no associated mitigation is necessary. No further response is required.

Response 3-14: The commentor states that the Draft EIR fails to discuss the effect of global warming on water supplies. Greenhouse gases and climate change, including potential effects of global warming on water supplies, are discussed under Section 3.6 of the Draft EIR. The commentor is referred to Response 3-18.

Response 3-15: The commentor states that there is virtually no information in the Draft EIR which permits the reader to draw reasonable conclusions regarding the impact of the Project on water supply, either existing or in the future. The commentor states that for the foregoing reasons, the EIR is fatally flawed. As previously described, the Draft EIR thoroughly addressed water supply in Section 3.13.2 of the Draft EIR. This section included a description of the relevant water supply agencies, EGWD and SCWA on page 3.13-10, a description of existing, planned, and future water supplies on pages 3.13-11 through 3.13-15, a description of the

regulatory framework associated with water supply on pages 3.13-15 through 3.13-18, and a discussion of the Project's potential to result in environmental impacts associated with water supply under Impacts 3.13-3 and 3.13-4 on pages 3.13-19 through 3.13-21. In addition to the discussion provided in the Draft EIR, the WSA prepared for the Project was included in Appendix G of the Draft EIR. The WSA was prepared for, and approved by, the Elk Grove Water District consistent with the requirements of State law. The commenter does not address any of the information presented in Section 3.13 of the Draft EIR. A full and thorough discussion of potential impacts associated with water supply has been provided in the Draft EIR, as described above and under Responses 3-4 through 3-14. The commenter's assertion that there is virtually no information in the Draft EIR which permits the reader to draw reasonable conclusions on water supply is erroneous given the various citations provided in this response of discussion of water supply. This issue is adequately addressed in the Draft EIR and no further response is required.

Response 3-16: The commenter states that the Draft EIR lacks sufficient data to establish the extent that local emissions may contribute to deteriorating air quality, global warming, and climate change.

These issues have been thoroughly addressed and quantified in the Draft EIR. The commenter is directed to Section 3.6 of the Draft EIR, which includes a detailed discussion of the potential future implications and consequences of climate change. Section 3.6-1 describes the efforts currently underway by the City to reduce GHG emissions Citywide, through implementation of the adopted Climate Action Plan. Impact 3.6-1 describes the project's consistency with the adopted CAP, and Mitigation Measure 3.6-1 includes a range of requirements to ensure that all applicable CAP measure are incorporated into the Project and correctly implemented by the Project. As described in greater detail in Section 3.6-1, implementation of the adopted CAP would achieve a 15 percent reduction in GHG emissions in Elk Grove by the year 2020, and the CAP is consistent with the requirements of AB 32, which is California's benchmark climate change legislation aimed at reducing statewide GHG emissions across a range of sectors.

The commenter is also directed to Section 3.2 of the Draft EIR, which includes a detailed quantification of construction and operational air quality emissions. As shown under Impact 3.2-1, the Project would not exceed the thresholds of significance for criteria air pollutants established by the Sacramento Metropolitan Air Quality Management District (SMAQMD).

The issues raised by the commenter have been thoroughly and completely addressed in the Draft EIR, and no changes are required.

Response 3-17: The commenter states that the Draft EIR does not provide any support or evidence that the guidelines used in the GHG analysis are supported by substantial evidence. The commenter is referred to Section 3.6 of the Draft EIR, which explains in substantial detail the methodology used to address GHG impacts associated with Project implementation. The Project is required

2.0 COMMENTS ON DRAFT EIR AND RESPONSES

to implement all applicable measures from the adopted Elk Grove CAP. The CAP includes detailed quantifications and substantial supporting evidence that demonstrate that implementation of the CAP would lead to a 15 percent reduction in Citywide GHG emissions by 2020. The Elk Grove CAP underwent extensive CEQA review, and a Subsequent Environmental Impact Report was certified on March 27, 2013 (SCH #2011062031). The analysis in the CAP and the Subsequent Environmental Impact Report demonstrate and quantify the effectiveness of the CAP at reducing Citywide GHG emissions, and Mitigation Measure 3.6-1 establishes a nexus between the Project and the CAP, and identifies the applicable CAP measures that must be implemented by the Project. The methodology used in the Draft EIR's GHG analysis is consistent with the CEQA Guidelines (Section 15064.4), and is explained in detail on pages 3.6-14 and 3.6-15 of the Draft EIR. No changes to the Draft EIR are required.

Response 3-18: The commenter states that the Draft EIR does not adequately address impacts to the Project's source water as it relates to climate change. Section 3.6 of the Draft EIR discusses regional GHG emissions and climate change impacts that could result from implementation of the Project. This section provides a background discussion of greenhouse gases and climate change linkages and effects of global climate change. This section is organized with an existing setting, regulatory setting, approach/methodology, and impact analysis.

The analysis and discussion of the GHG and climate change impacts in this section focuses on the Project's consistency with local, regional, and statewide climate change planning efforts and discusses the context of these planning efforts as they relate to the Project, consistent with the guidance provided by the CEQA Guidelines.

As described in greater detail in Section 3.6 of the Draft EIR, emissions of greenhouse gases (GHGs) have the potential to adversely affect the environment in a cumulative context. The emissions from a single project will not cause global climate change, however, GHG emissions from multiple projects throughout the world could result in a cumulative impact with respect to global climate change. Therefore, the analysis of GHGs and climate change presented in this section is presented in terms of the Project's contribution to cumulative impacts and potential to result in cumulatively considerable impacts related to GHGs and climate change.

Cumulative impacts are the collective impacts of one or more past, present, and future projects that, when combined, result in adverse changes to the environment. In determining the significance of a Project's contribution to anticipated adverse future conditions, a lead agency should generally undertake a two-step analysis. The first question is whether the combined effects from both the Project and other projects would be cumulatively significant. If the agency answers this inquiry in the affirmative, the second question is whether "the Project's incremental effects are cumulatively considerable" and thus significant in and of themselves. The cumulative project list for this issue (climate change) comprises anthropogenic (i.e., human-made) GHG emissions sources across the globe and no project alone would reasonably be expected to contribute to a noticeable incremental change to the global climate. However,

legislation and executive orders on the subject of climate change in California have established a statewide context and process for developing an enforceable statewide cap on GHG emissions. Given the nature of environmental consequences from GHGs and global climate change, CEQA requires that lead agencies consider evaluating the cumulative impacts of GHGs. Small contributions to this cumulative impact (from which significant effects are occurring and are expected to worsen over time) may be potentially considerable and, therefore, significant.

Pages 3.6-3 through 3.6-6 of the Draft EIR provide a discussion of the potential effects of global climate change, including potential impacts to water resources. As described under Impact 3.6-1, the Project's contributions to global climate change would be less than significant and less than cumulatively considerable. As described under Impact 3.6-1, the Project is consistent with local, regional, and statewide plans to reduce GHG levels.

Impact 3.13-4 addresses the adequacy of the water supply for the Project under existing and cumulative conditions. Additionally, a Water Supply Assessment (WSA), consistent with the requirements of SB 610 was prepared for the Project (Appendix G of the Draft EIR). The Water Supply Assessment included an analysis of the available water supply under dry, and multiple dry years. The potential for global climate change to impact future water supply sources was correctly accounted for in the WSA prepared for this project, which meets all applicable State requirements for the analysis of water supply availability, including water supply availability following multiple years of drought. The potential for climate change to alter water supply sources in California does not affect or alter the conclusions contained in the WSA and the Draft EIR. This impact has been thoroughly and correctly addressed in the Draft EIR, and no changes to the Draft EIR are required.

Response 3-19: The commenter states that climate change is known to affect the frequency and severity of air quality problems. The commenter is referred to Section 3.2 of the Draft EIR for a comprehensive discussion of air quality impacts. Air quality impacts were addressed under both existing conditions and cumulative conditions. The methodology used in the air quality analysis is consistent with the guidance provided by the Sacramento Metropolitan Air Quality Management District, and meets all CEQA requirements for a project-level air quality analysis. No changes to the Draft EIR are required.

Response 3-20: The commenter states that the cumulative effects of the Project on water supply, air quality and climate change is virtually missing from the EIR. The commenter is referred to Response 3-9 regarding the cumulative impact analysis approach to climate change. The commenter is referred to Impacts 3.2-1 and 3.2-2 for the discussion of the analysis of cumulative air quality impacts in the Draft EIR. The commenter is referred to Impact 3.13-4 for an analysis of cumulative water supply availability. These topics have been thoroughly addressed in the Draft EIR and no changes to the Draft EIR are required.

2.0 COMMENTS ON DRAFT EIR AND RESPONSES

Response 3-21: The commenter states that for the foregoing reasons, the EIR is fatally flawed. All of the issues raised by the commenter have been thoroughly addressed in the Draft EIR, consistent with all applicable CEQA guidelines and case law. The commenter has not addressed any environmental issues that have not been thoroughly addressed in the Draft EIR, nor has the commenter provided any specific examples of issues that have not been thoroughly or correctly addressed in the Draft EIR. The commenter's assertion that the EIR is fatally flawed is noted, however, the commenter has not provided any supporting evidence of this assertion, and the responses provided above demonstrate that the EIR has thoroughly addressed all issues raised by the commenter. *No changes to the Draft EIR are required or warranted.*

Response 3-22: The commenter states that the alternatives analysis fails because it provides no discussion of the effects of the Project or absence of the Project on surrounding land uses and the likely increase in development that will accompany the completion of the Project. The commenter also states that the alternatives section does not discuss the deleterious effects of "failing to update" the Project on those same surrounding properties and the land uses which may or have occurred thereon.

The comment provided does not address the specific alternatives analysis provided in Chapter 5.0, Alternatives, of the Draft EIR, nor does the commenter address the requirements of CEQA for an alternatives analysis, established at Section 15126.6 of the CEQA Guidelines. The alternatives analysis presents a No Project Alternative (Alternative 1) on page 5.0-3 of the Draft EIR. This alternative addresses the "absence" of the Project. Alternative 1 is analyzed in detail on pages 5.0-5 through 5.0-7 of the Draft EIR; this analysis addresses the potential environmental effects of not approving the Project.

It is unclear what the commenter means by "the deleterious effect of failing to update the project upon those same surrounding properties and the land uses which may or have occurred thereon." It is noted that the environmental impacts of the Project, including impacts to surrounding land uses, are addressed in Sections 3.1 through 4.0 of the Draft EIR.

Response 3-23: The commenter expresses their thanks for the opportunity to address the factors identified in Responses 3-2 through 3-22. The comment is noted.

LETTER 4

From: mon16n21@comcast.net
To: Christopher Jordan
Subject: Silverado Project
Date: Friday, November 08, 2013 12:57:26 PM

Dear Mr. Jordan:

I have carefully read the EIR on the proposed project at the corner of Bond and Waterman Roads in East Elk Grove, known as "Silverado". I noted especially section 3.3 titled Biological Resources.

Under this section it was noted in bold type that there would be substantial adverse effects on bird, mammal, plant, reptile, amphibian, and invertebrate species on the site. Many of these species are associated with vernal pools, which cover the area. Despite what some engineering firms may say, vernal pools cannot be relocated or created. The pools on the parcel are thousands of years old, and once destroyed they will be gone forever, along with the species that inhabit them.

Elk Grove has plenty of houses. We do not need more rooftops! What we do need is more open space and more awareness of our precious natural world. Please do not ruin this site by paving it over. It should be made into a natural preserve for generations to enjoy.

Sincerely,
Carol McElheney

4-1

4-2

2.0 COMMENTS ON DRAFT EIR AND RESPONSES

Letter 4 Carol McElheny

Response 4-1: The commentor indicates that they have carefully read the Draft EIR and that they noted in Section 3.3, Biological Resources, that it was identified in bold type that there would be substantial adverse effects on bird, mammal, plant, reptile, amphibian, and invertebrate species. The commentor notes that many of these species are associated with vernal pools and that, despite what engineers say, vernal pools cannot be relocated or created. The commentor notes that once the [vernal] pools on the parcel are destroyed, they will be gone forever along with the species that inhabit them.

It appears that the commentor is referring to the bolded impact statements presented for Impacts 3.3-1 through 3.3-8 in Section 3.3 of the Draft EIR. As discussed under Impact 3.3-7, the Project would provide a 67.6-acre preserve area on the northern portion of the Project site that would avoid development of and preserve 5.06 acres of vernal pools and 0.32 acres of seasonal wetland. In accordance with the Project's Section 404 permit, which has been issued by the US Army Corps of Engineers, the Project would also create 6.17 acres of vernal pools and 2.63 acres of seasonal wetland within the preserve area and would create 2.08 acres of seasonal wetlands offsite. Impact 3.3-8 identifies that the Project's impacts to 8.31 acres of features that contribute to *Northern Valley Hardpan Vernal Pool* cannot be mitigated to a level of insignificance and concludes that the impact would be significant and unavoidable. All other wetland areas are preserved and additional wetland areas would be created.

Response 4-2: The commentor states that Elk Grove has plenty of houses and does not need more rooftops, but needs more open space and awareness of our precious natural world. The commentor requests that the site not be ruined by paving it over and states that it should be made into a natural preserve for generations to enjoy. This comment does not address the adequacy of the Draft EIR and is noted for the decision-makers' consideration.

LETTER 5

From: Gregory Jones
 To: scmlee24@frontier.net; Kathy; Shirley
 Cc: Frank Maita; George Murobey; Nancy Chaires; Fedolia Harris; Brian Villanueva; Christopher Jordan; Sarah Johnson; Frank Maita; George Murobey; Nancy Chaires; Fedolia Harris; Brian Villanueva; Christopher Jordan
 Subject: Silverado Comments
 Date: Tuesday, November 12, 2013 1:31:20 PM

Silverado Project draft EIR comment notes (some verbally presented at the public hearing)

As a neighbor and Campbell Road rep:

We strongly object to *any* consideration of Campbell Road being used as an access route to the development. We want to keep our rural lifestyle/ urban encroachment buffers.

5-1

Drainage issues of concern/ not adequately addressed:

The existing catch/soak-n-hold dirt will be covered by constructed items — and the overall elevation contours will increase runoff to surrounding areas.

5-2

There were two flows mentioned for storm drainage. One was a Bond Road item with some unspecified issue. That issue needs to be fixed — not just have some money tossed as mitigation.

5-3

The other was the detention pond with an "engineered" berm that will flow into Whitehouse Creek at our street (Campbell Road). That detention pond will collect *and concentrate* urban consumer pollutants/ toxins like fertilizers, herbicides, pesticides, oils, antifreeze — then eventually dump that garbage on my neighborhood and into already impacted waterways. Percolation into our wells supplies is also of concern (no significant earth core samples have been taken to check/ verify permeability).

5-4

As a retired sewer plant employee, I perceive some serious flaws in your waste assessment. The EIR speaks to connecting to a Bond Road sewer line — called out in the EIR as a 10" line in some places — as a 15" line in other places. As there is less than half/ more than double the capacity difference (depending on how you want to say it) — I'd call that a significant "oops".

5-5

The declaration of plenty of capacity based on the 150MGD plant being designed to mirror facilities to double the capacity is problematic. That double capacity design was made with secondary treatment (the level of treatment that was required at the time) Having learned an expensive lesson about encroachment, the Regional Treatment Plant was built with extensive buffer-lands as a fundamental component of the facility design and operation. 15(ish) years ago, preliminary studies/ design work was started on tertiary treatment, anticipating more rigid regulatory requirements.

5-6

The reality is that the plant has already done some of that original designed expansion. And there is a real possibility that that capacity will be *reduced* in order to meet the current licensing requirements. They seem to require more complex treatment/ technology and much longer detention times to accomplish the required testing/ treatment — which means more engineered huge ponds/ tanks and massive loss of buffer-lands. The requirements include particular limits that are *below* current detectable levels — which is one of the issues that has it in the courts. The EIR makes negligible acknowledgment of the new requirements — ignoring the very real possibility that the claimed capacity will not be there.

Gregory N Jones
9020 Campbell Road
Elk Grove, California
916-226-7226

2.0 COMMENTS ON DRAFT EIR AND RESPONSES

Letter 5 Gregory Jones

Response 5-1: *The commentor states their objection to any consideration of Campbell Road being used as an access route to the Project, noting that they want to keep their rural lifestyle/urban encroachment buffers. This comment does not address the adequacy of the Draft EIR and is noted for the decision-makers' consideration.*

Response 5-2: The commentor states that the existing catch/soak-n-hold dirt will be covered by constructed items and the overall elevation contours will increase runoff to surrounding areas. The commentor is referred to Impact 3.8-4 of the Draft EIR, which describes the Project's potential effects to the existing drainage pattern. As described under Impact 3.8-4, the Preliminary Drainage Study for Silverado Village indicated that all on-site runoff from developed areas would be collected and directed to either the central on-site detention basin (for Project areas tributary to Whitehouse Creek) or to the municipal drainage system in Bond Road. The majority of the Project site that would be developed is tributary to Whitehouse Creek and drains into the central on-site detention basin and the flows are attenuated to reduce peak post-Project discharge rates. The Project would improve the central detention basin and the on-site berms to provide adequate capacity to accommodate the 100-year flood condition. The Preliminary Drainage Study indicated a peak post-construction discharge rate of 192.5 cubic feet per second (cfs) compared to the pre-Project peak discharge rate of 217 cfs as described on page 3.8-22 of the Draft EIR. Therefore, the portion of the Project that is tributary to Whitehouse Creek would result in a decrease in peak off-site stormwater flows. The Project will not increase any mapped floodplain downstream.

The portion of the Project development area that is not tributary to Whitehouse Creek would convey drainage to the Bond Road Trunk drainage system. Mitigation Measure 3.8-1 requires that improvements to upsize the Bond Road Trunk drainage system be complete prior to issuance of building permits for Village 1-A. See Response 5-3 for additional information regarding the improvements to the Bond Road Trunk drainage system.

As described above, the Project would provide adequate on-site detention for Project areas tributary to Whitehouse Creek and other developed areas of the site would discharge into the Bond Road Trunk drainage system. Therefore, as described under Impact 3.8-4 of the Draft EIR, the Project would not result in a significant impact to the drainage pattern. No revisions to the Draft EIR are warranted to address this comment and no further response is required.

Response 5-3: The commentor states that two flows were mentioned for stormwater drainage and that the Bond Road item had an unspecified issue that needs to be fixed and not just have some money "tossed" as mitigation. The City's Storm Drainage Master Plan has identified existing deficiencies in the existing pipeline system serving the Laguna Creek watershed. Specifically, there is a need to upsize 3,080 feet of pipeline (the Bond Road Trunk) as described on page 7-44 of the Storm Drainage Master Plan. This is the drainage system that serves the southwest 12 acres of the Project site. Mitigation Measure 3.8-1 does not "toss" money as mitigation but

rather requires the Project to pay its fair share of the incremental increase (upsizing) of the Bond Road Trunk drainage system that is needed to accommodate the Project. Further, Mitigation Measure 3.8-1 requires that the improvements to the Bond Road Trunk drainage system be completed prior to the issuance of building permits for the lots in Village 1-A, ensuring that there is adequate capacity to accommodate the portion of the Project that is served by the Bond Road Trunk prior to the development of housing on that portion. No revisions to the Draft EIR are warranted and no further response is required.

Response 5-4: The commentor indicates their belief that Project's on-site detention pond will collect and concentrate urban consumer pollutants and toxins and then release the pollutants into their neighborhood (Campbell Road) and already impacted waterways. The commentor also states that percolation into their well supplies is also of concern.

The central on-site detention basin for the Project has been designed in conformance with the "Stormwater Quality Design Manual for the Sacramento and South Placer Regions" dated May, 2007. The development of this manual was a collaborative effort of the Sacramento Stormwater Quality Partnership and the City of Roseville, and was developed to satisfy the regulatory requirements of the municipal stormwater permits issued by the Regional Water Quality Control Board. Per this governing design manual, the primary means for urban pollutant treatment for the Project is wet basins that have been programmed within the central on-site detention basin. The drainage leaving the Project site to the west toward Campbell Road will be pretreated for the removal of urban pollutants in these wet basins prior to heading downstream. No revisions to the Draft EIR are warranted to address this comment and no further response is required.

Response 5-5: The commentor identifies himself as a retired sewer plant employee and states their perception of serious flaws in the waste assessment. The commentor states that the Draft EIR speaks to connecting to a Bond Road sewer line that is called out as a 10-inch line in some places and as a 15-inch line in other places. The commentor does not identify any specific pages or discussion in the Draft EIR that are inadequate but rather points to this perceived inconsistency in sizing as a flaw in the document. However, it is noted that there are two references to the Bond Road sewer line that refer to Figure 1-2 of the Sacramento Area Sewer District's Sewer System Capacity Plan (SCP); each of these references refers to the line as "10 inches *or larger*" (emphasis added) as identified on Figure 1-2. These statements do not identify the line as being 10 inches and do not conflict with other references to the line as 15 inches, since 15 inches falls within the range of "10 inches or larger" as shown on Figure 1-2 of the SCP. No revisions to the Draft EIR are warranted to address this comment and no further response is required.

Response 5-6: The commentor states that the declaration of capacity [of the wastewater treatment plant] based on the 150MD plant being designed to mirror facilities is problematic since the design was made with secondary treatment and the plant was built with extensive buffer lands.

2.0 COMMENTS ON DRAFT EIR AND RESPONSES

The commentor states that 15 years ago, preliminary studies/design work was started on tertiary treatment anticipating more rigid regulatory requirements. The commentor states that the plant has already done some of the original designed expansion and that there is a possibility that capacity will be reduced to meet current licensing requirements, which the commentor notes seem to require more complex treatment and longer detention which means more engineered huge ponds/tanks and massive loss of buffer lands. The commentor states that the Draft EIR makes negligible acknowledgement of the new requirements and ignores the possibility that the claimed capacity will not be there.

The Sacramento Regional Wastewater Treatment Plant (SRWTP) has a permitted capacity of 181 million gallons per day (mgd) of dry weather flow and 391 mgd for peak wet weather flow. Current flows treated by the facility are an average 115 mgd dry weather flow and a peak wet weather flow of 259 mgd. The Project would generate approximately 0.28 mgd (see Table 13-4 of the Draft EIR). Wastewater generated by the Project is within the treatment capacity of the SRWTP. As described on page 3.13-6 of the Draft EIR, the CVRWQCB issued a new discharge permit to the Sacramento Regional County Sanitation District (SRCSD) that requires treatment facility upgrades for ammonia removal, nitrate removal, filtration, and additional disinfection.

The commentor indicates that SRCSD began working on preliminary studies and design work 15 years ago anticipating more rigid regulatory requirements, so it would appear that the increased regulatory requirements associated with the discharge permit have been taken into account in the SRCSD's master planning for its facilities. In any case, during 2012, SRCSD began implementing 12 studies and plans to meet the increased treatment requirements. Three other studies are under review by the CVRWQCB. The discharge permit affirmed the SRWTP permitted capacity of 181 mgd. It is speculative to consider that the SRWTP may have to reduce capacity, particularly provided that the most recent permit included increased treatment requirements that were considered in establishing permitted capacity. As described on page 3.13-8 and 9 of the Draft EIR, the existing permitted capacity of the SRWTP is adequate to accommodate the Project and the Project would not cause an exceedance of permitted flows. No additional treatment or capacity is needed to serve the Project and the Project would not cause the SRCSD to exceed its wastewater treatment requirements. Impacts associated with wastewater treatment are less than significant. No revisions to the Draft EIR are necessary and no further response is required.

LETTER 6

November 7, 2013

City of Elk Grove
Development Services, Planning
8401 Laguna Palms Way
Elk Grove, CA 95758



Attn: Christopher Jordan, AICP, Planning Manager

Re: Silverado Village, File # EG-11-o46

I am writing this letter to express my concern in regard to the Silverado Village Project. As a resident on the northern edge of the development I feel the project does not offer the necessary drainage to protect those of us who live to the north. I have lived at 8890 St. Anthony Court since 1999 and during that time the County of Sacramento (Once) and the City of Elk Grove (twice) have come out and improved the drainage ditch south of our property to maintain the grading necessary for proper flow. The initial project plan submitted by Centex (Vintara Park) included the ditch improvements which connected the ditch to the detention basin as part of the development. The Silverado Village Plan does not address the drainage at all. With the loss of vernal pools and the sediment added to the current drainage ditch the water will back up and endanger the homes at the end of St. Anthony, St. Jude and Aramaria Courts. This needs to be addressed as part of the plan to protect those who live here.

6-1

6-2

I have attached a couple of pictures which provide a good view of what we face. The first picture is the ditch on our side as it is today while the pictures on the next page offer a view of what happens when the ditch is not maintained and the water is not allowed to flow freely.

6-3

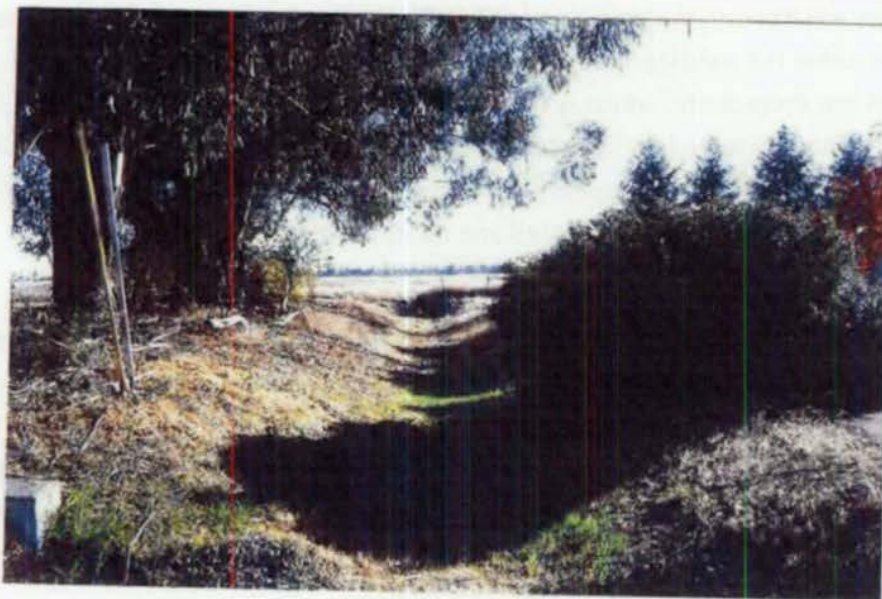
Thank you for your consideration in this matter.

Respectfully,

Jane H. White
8890 St. Anthony Court
Elk Grove, CA 95624
(916) 681-0941



After 4 years of no ditch maintenance in
Silverado Village Property



Current

Letter 6 Jane H. White

Response 6-1: The commentor describes their concerns regarding the existing maintenance of the drainage ditch south of their property. Under CEQA, a Project's impact is related to the change the Project will have on the environment (citation). This means that CEQA does not require the Project to solve the existing drainage conditions described by the commentor. The northern portion of the Project site, which is the area referenced by the commentor, will be a 67.6-acre wetland habitat preserve (see Chapter 2.0 of the Draft EIR), which will be maintained according to the Operations and Management Plan prepared by Foothill Associates in February 2008. No revisions to the Draft EIR are warranted and no further response is required.

Response 6-2: The commentor describes improvements proposed with the Vintara Park site plan that was previously prepared for the Project site and states that the Silverado plan does not address drainage at all. The Project would provide drainage facilities, as identified on page 2.0-7 of the Draft EIR. The Draft EIR discusses potential drainage impacts in Section 3.8 of the Draft EIR; Impact 3.8-4 on pages 3.8-21 through 3.8-23 discusses the potential for the Project to result in changes to the drainage pattern and off-site drainage impacts. No revisions to the Draft EIR are warranted and no further response is required.

Response 6-3: The commentor states their belief that the loss of vernal pools and sediment added to the current drainage ditch will cause water to back up and endanger the homes at the end of St. Anthony, St. Jude, and Aramaria Courts. The commentor has attached pictures of existing conditions, including flooding after a time period where the ditch on the Project site was not maintained.

The Project's drainage facilities would be maintained consistent with the California Regional Water Quality Control Board Central Valley Region Section 401 Permit for the Project site which requires that the Project provide for the post-construction maintenance of the Project's drainage facilities through a legally enforceable mechanism.

The Preliminary Drainage Study prepared for the Project identified that during the 2010/2011 winter season, the central pond on the site was full and that the ponds on-site fill up at the beginning of the wet season and remain full during the majority of the season. The stormwater modeling for the Project took these existing conditions into account and calculated the amount of on-site storage necessary to accommodate the Project's stormwater runoff. As described under Impact 3.8-4 of the Draft EIR, the central on-site detention basin would be improved to elevations from 43 to 45.3 feet and that water quality pools and/or wetland areas would be configured below the bottom of the detention storage. The on-site berms would also be improved to accommodate Project stormwaters. The stormwater modeling for the Project identified a peak post-construction discharge rate of 192.5 cfs compared to the pre-Project peak discharge rate of 217 cfs as described on page 3.8-22 of the Draft EIR, which represents an

improvement in comparison to existing conditions. This decrease in peak discharge rates from the Project site would result from the drainage improvements made by the Project, including increased capacity of the detention basin, increased capacity of the berming system to convey water, the capacity of the water treatment ponds, and the design of the outlet that will discharge drainage from the Project site. The Preliminary Drainage Report concluded that a comparison of water surfaces off-site and downstream (Campbell Road) indicates that the projected water surfaces closely match the FEMA Letter of Map Revision projected surfaces (which represent a decrease in the 100-year floodplain over the previous FEMA Map), with no increases immediately downstream of the Project site. Therefore, the Project would reduce peak discharge rates and would not result in an increase in off-site flood levels. No revisions to the Draft EIR are warranted and no further response is required.

LETTER 7

October 30, 2013

Mayor and City Council; Planning Commission; Planning Staff

RE: Silverado Homes Project

As a lifelong resident in the area, I am very familiar with the project site being analyzed for housing development. After reviewing the draft environmental documents prepared for the project, it is my belief that further assessment is needed in the area of potential hazardous waste contamination and the potential impact on the public health.

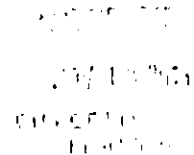
During the 1960s, I personally traveled to the site to dump my household trash. The site was once used as a small disposal site. As I recall, the site was not heavily supervised and you could just drive up and simply empty your load. There was no supervision on what was being dumped. There were skip loaders that would dispose of the trash on a daily basis.

It is my concern that unsupervised dumping likely included toxic materials, and to the extent, which they may be contained in the soil and/or in the groundwater, needs further investigation.

No environmental analysis would be complete until a site contamination study is completed prior to the City taking action on the project. Thank you for your consideration.

Sincerely,


Leo Fassler



7-1

Letter 7 Leo Fassler

Response 7-1: The commentor states they are a lifelong resident of the area and very familiar with the Project site. The commentor states their belief that further assessment is needed in the area of potential hazardous waste contamination and the potential impact on the public health, stating that the Project site was a small disposal site in the 1960s with minimal supervision and skip loaders that disposed of the trash on a daily basis. The commentor is concerned that the dumping included toxic materials and the extent that they may be contained in the soil or groundwater needs further investigation. The commentor indicates that no environmental analysis would be complete until a site contamination study is completed prior to the City taking action on the Project.

The Project site has been the subject of multiple investigations to address potential hazardous materials contamination. Sacramento County Department of Public Works, Water Quality Division, prepared the Soil and Groundwater Testing on District Property Near the Intersection of Bond Road and Waterman Road Memorandum dated May 17, 1988 (1988 Soil and Groundwater Testing Report), which included the results of an inspection of the Project site to determine if there was any toxic contamination on the property. The 1988 Soil and Groundwater Testing Report described the then-current uses of the site, which included use of approximately 2 acres by Independent Disposal Service (IDS) as a truck storage and support area and the use of the remainder of the site for grazing in the winter and spring. The IDS site included an old house and portable structures used for office space, employee areas, and storage. A portion of the 2 acres was paved and used for truck storage and washdown; the trucks were used only for hauling household solid waste refuse. No waste disposal was noted to have occurred in association with IDS operations. The north central portion of the site was identified as a previous site for winery wastewater evaporation ponds. The wastewater that was present on this portion of the site was tank washdown water and grape skin and pit residue from grape crushing operations. The ponds were likely used for at least 20 years. The soil in the bottom of the old winery basins was noted as being rich in organic materials and darker than surrounding natural soils. At some time in the past, the Project site was extensively dammed, diked, and bermed; the 1988 Soil and Groundwater Testing Report notes that it is unknown as to whether this was part of the Gibson Winery operation or created for grazing purposes.

The disposal site referenced by the commentor is addressed in the 1988 Soil and Groundwater Testing Report, which states that there is an old solid waste landfill located about 500 feet south of Bond Road west of Waterman Road. This landfill was in operation from approximately 1952 and closed down by 1981. The landfill site has been shut down and capped with soil. Concerns were raised as to whether this landfill could have contaminated the groundwater

2.0 COMMENTS ON DRAFT EIR AND RESPONSES

under the Bond/Waterman Road parcels. The report noted that contamination is unlikely since Laguna Creek would act as a hydrologic barrier between the landfill site and Project site.

The 1988 Soil and Groundwater Testing Report included soil, groundwater, and surface (standing) water sampling and analysis. The report included soil samples from four areas that were presumed to be undisturbed to provide background samples, the winery evaporation ponds, basins subject to seasonal ponding, and the IDS site. Four locations within each of the four areas was sampled (a total of 16 soil samples). Each location was sampled at the surface and at a depth of one foot. The groundwater well used to supply water at the IDS site was sampled; the well was reported to be 210 feet deep with approximately 100 feet of standing water. Standing surface water that appeared to be runoff from the truck washdown operations was also collected and analyzed. The soil and groundwater samples were analyzed for metals, including antimony, arsenic, barium, cadmium, chromium, copper, lead, nickel, mercury, selenium, silver, and zinc, for pesticides and polychlorinated biphenyls, and for total organic content. Total petroleum hydrocarbons were found to be less than 10 mg/kg at all locations and were not detected. No pesticides, polychlorinated biphenyls, antimony, mercury, or selenium were detected in any samples. With the exception of copper, lead, and zinc, the concentrations of metals were identified as slightly greater in the ponds soils than other locations; however in all cases the metal concentrations were less than 7 percent of the hazardous waste total threshold limit concentrations.

Concentrations of copper, lead, and zinc were significantly higher at the IDS site, with copper found at a concentration of 140 mg/kg, lead at 65 mg/kg, and zinc at 110 mg/kg. However, migration from the surface to lower soil was not observed. The 1988 Soil and Groundwater Testing Report concluded that the concentrations were likely the result of the imported materials associated with the paving and gravel on the IDS site rather than contamination by waste hauling operations. Subsequent soil sampling occurred on this location and was described in the Report of Findings Soil Sampling and Analysis prepared in 2011 (WKA 2011b), which is discussed on pages 3.7-6 and 3.7-7 of the Draft EIR. This subsequent analysis determined that lead levels were at acceptable levels.

The Phase I Environmental Site Assessment (Phase I ESA) prepared in 2011 (WKA 2011a) was prepared to identify potential conditions associated with hazardous materials on the Project site, consistent with ASTM Standard E1527-05 and general industry standards. The Phase I methods and results are described in detail on pages 3.7-5 and 3.7-6 of the Draft EIR. The Phase I ESA did not identify any past use of the site as a waste disposal site and did not identify any recognized environmental conditions in connection with the site. The Phase I ESA included specific recommendations as described on page 3.7-7 of the Draft EIR.

Impact 3.7-1 on pages 3.7-12 through 3.7-14 of the Draft EIR discussed potential hazardous issues associated with the Project site. The discussion presented is consistent with the above-referenced hazardous materials investigations performed in 1988 by Sacramento County and in

2011 by Wallace-Kuhl and Associates (WKA). The recommendations made in the Phase I were incorporated into Mitigation Measures 3.7-1 through 3.7-3 to ensure that potential impacts associated with previously undiscovered hazards would be reduced to less than significant, as described on page 3.7-14 of the Draft EIR.

Based on multiple environmental investigations of the Project site, including groundwater and soil sampling, there is no evidence that the site was formerly a solid waste disposal location and there is no evidence of potential hazards that would not be addressed by Mitigation Measures 3.1-1 through 3.7-3. This solid waste disposal location referenced by the commentor is likely the waste disposal site located 500 feet south of Bond Road and west of Waterman Road that was identified in the 1988 Soil and Groundwater Testing Report. This site is located in the same general area as the Project site and was open during the timeframe referenced by the commentor. Even if illegal dumping had occurred on the Project site during the 1960's, the 1988 Soil and Groundwater Testing Report and 2011 Phase I ESA both investigated the site well after the time frame referenced by the commentor and did not identify the potential of hazardous materials at concentrations that would pose a health risk, as described above and in Response 9-7. No revisions to the Draft EIR are warranted and no further response is necessary.

LETTER 8

From: Lisa Pelch
To: Christopher Jordan
Cc: Frank Mata; George Nurney; Nancy Charles; Fedola Harris; Brian Milanueva
Subject: Silverado EIR Comments
Date: Monday, November 11, 2013 5:23:35 PM

November 11, 2013

Attn: Christopher Jordan, Planning Manager
8001 Laguna Palms
Elk Grove, CA 95758

Subject: Silverado Village Draft EIR

We feel that the draft EIR for the Silverado Village project is not adequate in assessing significant considerations of the project that would greatly impact our neighborhood and broader community. (The largest being increased traffic to an already challenging area.) Please note specifics of the most pressing inadequacies below

8-1

Transportation/Traffic

Cumulative Impact - The DEIR and Transportation Impact Report address only the sole impact of the Silverado Project (with its own concerns, see below). Magnifying these considerations would be the cumulative impact of other developments concurrently under consideration in the area. The DEIR and Transportation Impact Report should take into consideration these cumulative impacts/multiple projects, which would greatly alter the traffic statistics/impact to our area. Additional mitigation measures should follow as a result of recognition of the cumulative significant impacts. Perhaps the most significant mitigation measure would be the planning and implementation of widening roads or increasing throughways to accommodate the large increase in traffic

8-2

Impacts of Trains - The DEIR has not adequately assessed and acknowledged the real impact of trains to the Bond Rd and Elk Grove-Florin Rd traffic flow. The number of trains used to evaluate impacts was 16, this is not correct. More than 16 trains per day cross the bond Road and Elk Grove-Florin crossings. Further, the assessment did not take into account the important considerations of how many cars on each train (e.g., how long the train stops traffic and backs up traffic to intersections all the way to Waterman Rd as well as to inlets/outlets to existing neighborhoods. Also, no consideration was given to the frequency and time of day that the trains run. And these trains often impact traffic during the heaviest flows during school and work commutes (not taken into consideration by the study - therefore no assessment and mitigation offered)

8-3

Health and Safety - Beyond the traffic safety and accident occurrence increased by increasing traffic and back-up across multiple intersections, the response time of emergency vehicles is altered by both trains and by increased traffic around our neighborhoods. This is particularly significant considering there are no hospitals East of Elk Grove-Florin Rd. in the proposed project area. Adding congestion to an already congested area increases risk to residents traveling to health care, and also significantly increases emergency response times for police, fire personnel, or paramedics. This needs to be accurately assessed and thoroughly addressed

8-4

Aesthetics

The nine-foot sound wall that is proposed to mitigate traffic noise for residents in the new development creates an aesthetic challenge to the existing neighborhood. Especially considering the minimal landscaped setbacks that are out of character with existing designs that create an unsightly tunnel effect. Mitigation might include allowance for greater setback, and more significant landscaping.

8-5

Respectfully submitted,
Patrick and Lisa Pelch
Fallbrook residents

Letter 8 Patrick and Lisa Pelch

Response 8-1: The commentor feels that the Draft EIR for the Project is not adequate as it relates to impacts to their neighborhood and broader community. Each of the commentor's specific concerns is addressed below.

Response 8-2: The comment requests the analysis of the Project under cumulative conditions, taking cumulative impact of development under consideration in the area, and recommend additional mitigation measures. Analysis of the Project under cumulative conditions was not conducted because the Project would result in fewer trips than was analyzed in the General Plan EIR and would not result in any increase in the impacts disclosed in the General Plan EIR. The General Plan would allow up to 1,182 residential units on the Project site, as described in Chapter 2.0, Project Description, of the Draft EIR. The General Plan designation for the Project of Low Density Residential would allow for up to 1,022 single family dwelling units that would generate about 9,729 trips per day compared to the Project, which proposes 776 dwelling units that would generate 5,103 trips per day. It is noted that the Project has been revised as described in Section 1.0 and that the Draft EIR analyzed 785 dwelling units for the Project site, which would generate 5,154 trips per day. The General Plan Draft EIR analyzes impacts associated with buildout of the General Plan, which anticipated development of the Project site as previously described.

While conditions have changed since the General Plan EIR was prepared, the General Plan EIR anticipated that growth and development would occur in the City. The General Plan Land Use Map designations for the Project site and lands in the vicinity are comparable, with both version of the map identifying the Project site for Low Density Residential, Commercial/Office/Multifamily, Estate Residential, Rural Residential, Public/Quasi-Public, and Public Open Space/Recreation designated in the Project environs. The amount of Commercial/Office/Multi-family designation has increased slightly (approximately 5.7 acres) in the vicinity of the Project site and is located adjacent to existing parcels designated Commercial/Office/Multi-family. However, this increase is not considered significant in terms of addressing cumulative impacts. For example, traffic conditions in the Project vicinity are generally similar to those described in the General Plan EIR. Waterman Road currently operates at LOS A from Bond Road to Grant Line Road in the northbound direction during the AM and PM peak hours and in the southbound direction during the AM peak hour. During the PM peak hour, Waterman Road operates at LOS B from Bond Road to Grant Line Road in the southbound direction (Fehr & Peers, 2013a). The General Plan EIR anticipated that during the AM peak hour, Waterman Road from Bond Road to Grant Line Road would operate at LOS A in the northbound direction and LOS B in the southbound direction. During the PM peak hour, Waterman Road from Bond Road to Grant Line Road was projected to operate at LOS A in the northbound direction and LOS B in the southbound direction. The City has reviewed the conditions in the vicinity of the Project site and determined, pursuant to CEQA Guidelines

2.0 COMMENTS ON DRAFT EIR AND RESPONSES

Sections 15130(d) and (e) and 15168 as described in Section 4.0 on pages 4.0-3 and 4.0-4 of the Draft EIR, that the cumulative impacts described by the General Plan remain applicable and adequate and that the Project is eligible for streamlined review.

Response 8-3: The comment asserts that the impact of trains was not adequately addressed. Specifically, the commenter indicates that there are more than 16 trains per day across the at-grade Union Pacific Railroad (Crossing Number 752749S) located west of the Project (east of Elk Grove-Florin Road). The data presented in the Draft EIR regarding the subject crossing is from the Federal Railroad Administration Safety Analysis Website. The purpose of the site is to make railroad safety information, including collisions and incidents, inventory and highway-rail crossing data readily available to the public. The website is a comprehensive source of information regarding train operations. The data presented in the Draft EIR is representative of conditions at the crossing in April 2013.

It is acknowledged that during a train crossing, vehicle queuing can occur on Bond Road and that the length of the vehicle queues varies based on train operations, including the length, speed, and time of day. However, the City does not have control of these train operations, which do not follow a specific schedule due to freight operations. Therefore, the analysis of the railroad crossing focused on the adequacy of the crossing's traffic control and review of the accident history at the crossing to determine if there was a physical improvement that could be implemented by the city to address an identified safety concern. As documented, the crossing includes both passive and active traffic control, in good operating condition. Furthermore, the City has implemented special traffic signal timings at the Bond Road/Elk Grove-Florin Road intersection to coordinate operations of the traffic signal with the railroad crossing for improved safety. Based on the Federal Railroad Administration Safety Analysis Website, there have been no collisions at the crossing. In addition, a query of the Statewide Integrated Traffic Records System (SWITERS) data (i.e., most recent 3-year data available) indicated that only three reported collisions occurred on Bond Road between Elk Grove-Florin Road and Waterman Road. Two collisions occurred at the Quail Cove Drive intersection and one collision occurred at the Crowell Drive intersection. All three collisions were rear-end collisions with the primary collision factor reported as a vehicle code violation associated with improper driving. The collision records did not indicate any factors associated with the railroad crossing.

Response 8-4: The comment addresses health and safety associated with the at-grade railroad crossing located west of the Project, specifically that emergency response time may be impacted by train activity. Response 8-3 discusses the at-grade Union Pacific Railroad (Crossing Number 752749S). Relative to traffic operations, impacts associated with traffic operations, including delay at study intersections are addressed in the traffic impact analysis. Specifically, the Project would not cause study area intersections to exceed vehicle delay (and LOS) thresholds of the general plan. Therefore, the addition of Project traffic is not expected to significantly alter emergency response times. In addition, the City is pursuing the grade-separation of the UPRR

at Grant Line Road, which will provide an alternative to the crossing at Bond Road for emergency vehicles. Grade-separation of the Bond Road at-grade railroad crossing is not feasible due to its proximity to Elk Grove-Florin Road, Quail Cove Drive, Earl Fife Driven and adjacent development.

Response 8-5: The commentor states that the nine-foot soundwall proposed to mitigate traffic noise would create an aesthetic challenge to the existing neighborhood, especially considering the minimal landscaped setbacks that are out of character with existing designs, and create an unsightly tunnel effect. The commentor states that mitigation could include allowance for a greater setback and more significant landscaping.

The soundwall along Bond Road that is required by Mitigation Measure 3.10-1 would be separated from the roadway by the landscaping and sidewalk corridor located on Lots L, M, and Q, which vary from approximately 20 to 30 feet in total width. The landscaped corridor adjacent Bond Road is planted with young trees which would provide for visual breaks in views of the soundwall and, over time, would grow and provide a greater visual shield. Additional landscaping, such as hedges and shrubs, would be planted adjacent the soundwall. A tunnel effect is not anticipated between the existing wall on the south side of Bond Road and the soundwall that the Project would construct on the north side of Bond Road. The soundwalls would be separated by approximately 110 feet including a landscaped corridor and sidewalk on the north side of Bond Road, the bike lane, two westbound travel lanes, the central landscaped median and turn lanes, two eastbound travel lanes, a bike lane, and the sidewalk and landscaped corridor on the south side of Bond Road. This is not a tunnel-like corridor, as there is landscaping on both sides of the road as well as a central median which is landscaped with trees and provides a visual break between the existing soundwall to the south and the Project soundwall. The soundwall on the south side of Bond Road is setback from the road and obscured by mature landscaping, including trees as well as mature shrubs and hedges shrubs and hedges that provide for a green, landscaped corridor. Views of the Project soundwall would include landscaping in the foreground and, from eastbound Bond Road, would also include either the landscaped median or turn lanes and two travel lanes in the foreground.

While there is anticipated to be adequate landscaping and setbacks to ensure that aesthetic impacts associated with the soundwall are minimized, the soundwall will have extensive public views from Bond Road. The 9-foot soundwall would be higher than adjacent soundwalls as well as walls across the street. Mitigation Measure 3.10-1 will be revised to require that the soundwall will be 7 feet high. This height will be visually compatible with nearby soundwalls that are visible in the public viewshed along Bond Road and will be consistent with the visual character of the area. The 7-foot soundwall will meet the City's conditionally acceptable standards for outdoor activity noise levels which allows noise levels of up to 65 dB Ldn/CNEL provided that there is practical implementation of the best-available noise reduction measures. A 7-foot high soundwall, combined with the requirements of Mitigation Measure 3.10-2, is

2.0 COMMENTS ON DRAFT EIR AND RESPONSES

considered a practical implementation of best-available noise reduction measures. In order to ensure that the views of the soundwall required by Mitigation Measure 3.10-1 are minimized and to reduce the perceived height of the soundwall, Mitigation Measure 3.10-1 will be revised to ensure adequate landscaping and also to require that the soundwall be a mix of berming and masonry wall:

Mitigation Measure 3.10-1 on page 3.10-11 of the Draft EIR is revised as follows:

“Mitigation Measure 3.10-1: Development plans for the Project shall include the following noise attenuation features:

- A uniform 79-foot tall noise barrier should be constructed along the south property lines of all proposed residential uses adjacent to Bond Road to reduce future traffic noise levels to 60 dB Ldn or less within proposed backyards. The barrier shall have an earthen berm base and the upper portion shall be constructed of solid materials, such as a masonry wall, earthen berm, or combination of the two, and shall wrap at the ends as indicated in Figure 3.10-1. Landscaping, such as dense hedges or bushes, shall be planted in front of the soundwall to minimize unbroken views of the soundwall.*
- A uniform 6-foot tall noise barrier shall be constructed along the eastern property lines of Waterman Road to reduce future traffic noise levels to 60 dB Ldn or less at proposed backyard areas located adjacent to that roadway. The barrier shall be constructed of solid materials, such as a masonry wall, earthen berm, or combination of the two, and shall wrap at the ends as indicated in Figure 3.10-1.*

Timing/Implementation: Prior to issuance of building permits.

Enforcement/Monitoring: City of Elk Grove Planning Department.”

The significance conclusion for Impact 3.10-2 on page 3.10-12 of the Draft EIR is revised as follows:

“SIGNIFICANCE AFTER MITIGATION

To determine the effectiveness of Mitigation Measure 3.10-1, Bollard Acoustical Consultants, Inc. evaluated the sound reduction that would occur with implementation of solid noise barriers adjacent to Bond Road and Waterman Road. The FHWA Model traffic noise barrier insertion loss methodology was used to determine the noise reduction which would be provided by noise barriers of various heights. The summarized results of the FHWA barrier analysis for the proposed residences located nearest to Bond Road and Waterman Road are contained in Table 3.10-7. As shown in Table 3.10-7 data, a noise barrier 79 feet in height would reduce exterior noise levels along Bond Road to 629 dB Ldn, which is within the conditionally acceptable range of 65 dB Ldn identified in footnote 3 of General Plan Table NO-C and, combined with MM demonstrates a practical application of the best-available noise reduction measures. A noise barrier of 6 feet along Waterman Road will reduce exterior traffic noise levels to 55 to 58 dB Ldn. Implementation of Mitigation Measure 3.10-1 would reduce potential impacts to Project residents associated with exterior noise levels associated with traffic noise to less than significant.”

LETTER 9

November 8, 2013

TO: City of Elk Grove
Planning Department
c/o Christopher Jordan, AICP
8401 Laguna Palms Way
Elk Grove, CA 95758

FROM: Lynn Wheat

REGARDING: DEIR Silverado Project (2013012060)

Aesthetics.

The DEIR concludes that the project will not have a significant impact on Aesthetics. This conclusion is flawed and the DEIR should be revised to find that the project will have a potentially significant impact on Aesthetics and requires mitigation for the following reasons:

9-1

The DEIR fails to acknowledge the grading plan that will raise the building pads along a portion of the easterly border of Quail Ranch Estates by up to approximately 3-4 feet above present grade. The project design proposes a 6 foot-high wall along that border, but will actually present a 9 foot-high wall as viewed from the adjacent residences of Quail Ranch along that location. This is unsightly and not typical of a single family residential neighborhood fence.

9-2

The appearance of single family homes on grades of up to 3-4 feet above the adjacent Quail Ranch lot grades may result in significant privacy loss. As an Aesthetic mitigation measure, the abutting lots should be restricted to single story only. Relying on the SPA document is not defensible from a CEQA standpoint.

My particular lot will have three lots located along my rear property line. This (along with the 9 foot high wall) is not a typical configuration of a single family residential subdivision and the DEIR should include a mitigation measure that one lot be placed adjacent to each lot along the easterly border of Quail Ranch Estates.

A portion of the easterly border of Quail Ranch contains mature trees, while possibly not defined by the City as protected species, they nevertheless add to the privacy currently enjoyed by residents and will serve as a visual buffer to the proposed project. The DEIR incorrectly proposes to defer the impact analysis of existing trees along the same location of the easterly border of Quail Ranch until time of construction, and fails to address trees located off-site on those adjacent properties that may be terminally impacted by grading/home construction.

9-3

1

The DEIR should include a mitigation measure that prior to recordation of the final map, a qualified arborist shall examine all trees along the eastern border of Quail Ranch Estates and prepare a report for each affected property owner, indicating the extend of limbing, root excavation, or tree removal that would be required to accommodate the worst-case development scenario of each proposed lot bordering that location, and include a professional opinion on the long-term health of those trees. 9-3

Drainage:

Flooding continues to be a concern for this area. The proposed project is required to detain storm runoff rates at or below existing conditions for 2-10-and 100 year design storm events. The DEIR should also include and address the 200 year event. 9-4

The Silverado Village Site Development Drainage plan states “there is more than sufficient area available in the central detention basin.” This is speculation without demand and capacity analysis. 9-5

The DEIR needs to address demand and capacity.

The City of Elk Grove’s Drainage Master Plan is responsible for ensuring the proposed project doesn’t cause an increase in flow’s leaving the property site. 9-6

The DEIR needs to include and address the Elk Grove Drainage Master Plan.

Hazardous Waste and Soils

The DEIR needs to address and expand the area of soil testing and include deeper borings to assess the presence of landfill waste and possible hazardous content.

The DEIR fails to provide a complete history of past uses of the site as described by an eyewitness account (Leo Fassler, a lifelong resident of Elk Grove, who personally witnessed and engaged in solid waste dumping on the site during the 1960s). The dumping was unsupervised and there was a significant potential for hazardous waste dumping on the site. 9-7

This is further substantiated in a report by Nichols Consulting Engineers (November 18, 2008), which states “The Gibson Winery used the property to dispose of tank wash down water as well as grape skins and residue that resulted from grape crushing operations. The discharge began in approximately 1938 and ended sometime between 1958 and 1976. There are several small dams and dikes (three) located on the western side of the property that are still visible today. Although the exact uses are not known they may have been related to winery operations or for water to support cattle grazing.”

There is a small borrow pit on the southwest portion of the property that retains water during the winter months and has a distinctly different color from the water held on any other area of the property. 9-8

The Soil Sampling as completed by Wallace-Kuhl dated 8/31/11 is limited in nature and does not address the entire property site area. Since the exact use of the retention and treatment ponds is unknown between 1958 and 1976, further analysis and expanded sampling of the project site needs to be completed. 9-9

Biological Resources

The DEIR did not specify the years and location of the 6 field surveys for the Giant Garter Snake. The GGS can migrate and therefore the DEIR needs to address the suitability of the nearby creek east of this site and within 5 miles. This creek area and project site needs to be considered together as there is the potential for suitable critical habitat within the proximity of the project site. The DEIR needs to include the reference source and dates of field surveys. 9-10

Letter 9 Lynn Wheat

Response 9-1: The commentor states that the Draft EIR concludes that the Project will not have a significant impact on aesthetics, that the conclusion is flawed, and that the Project will have a potentially significant impact on aesthetics and requires mitigation. The commentor's specific comments regarding aesthetics are addressed in Responses 9-2 and 9-3.

Response 9-2: The commentor states that the Draft EIR fails to acknowledge that the grading plan will raise the building pads along a portion of the easterly border of Quail Ranch Estates by up to approximately 3 to 4 feet from present grade and that the 6-foot high wall along that border will present as a 9-foot high wall as viewed from the adjacent Quail Ranch Estates residences. The commentor indicates that this will be unsightly and not typical of a single family residential neighborhood fence. The commentor states that the abutting lots should be restricted to single story only and that relying on the SPA document is not defensible from a CEQA standpoint. The commentor also states that their particular lot will have three lots located along their rear property line and this, along with the 9-foot high wall, is not a typical configuration of a single family residential subdivision and the Draft EIR should include a mitigation measure that one lot be placed adjacent each lot along the easterly border of Quail Ranch Estates.

The Project would construct a wall between the Project and Quail Ranch Estates. The wall would have a retaining wall base and would have a solid fence on top of the base. The retaining base would vary in height, based on the lot elevation. However, the retaining base would be less than 1 foot in height behind lots 66 through 77. The retaining base would be from 2- to 3-feet in height behind lots 79 through 82, with a maximum high of 3 feet. For the majority of the boundary between the Project and Quail Ranch Estates, the full wall (base plus fence) would be a 7-foot high wall. However, in approximately three adjoining locations, the wall would be 8- to 9 feet behind Quail Ranch Estates homeowners because of the retaining base. The wall would be visible behind the private residential lots, but would not be significantly visible from any public vantage points. Under CEQA, the threshold of significance considers whether the Project will affect the environment of persons in general, not whether the Project will affect particular persons. The wall would not characterize the visual environment of the Project site or its vicinity and would have a minimal effect on the overall environment. Therefore, no significant impact is associated with the wall between Quail Ranch Estates and the Project and no revision to the Draft EIR is necessary.

The commentor's concern regarding the number of lot lines that would adjoin their property is not a CEQA issue. However it is noted, that this type of configuration is typical when wedge-shaped lots such as those along a curve or cul-de-sac back up to a conventionally-lotted residential lots along a straight street. Similar lotting patterns where multiple single family residential lots abut the rear or side yard lot line of the adjoining residential lot occur within

Quail Ranch Estates neighborhood. No revisions to the Draft EIR are warranted and no further response is necessary.

Response 9-3: The commentor states that a portion of the easterly border of Quail Ranch contains mature trees which add to the privacy enjoyed by residents and will serve as a visual buffer to the Project. The commentor states that the Draft EIR incorrectly proposes to defer the impact analysis of existing trees along the eastern border of Quail Ranch until the time of construction and fails to address trees located off-site that may be impacted by grading/home construction. The commentor states that the Draft EIR should include a mitigation measure requiring a qualified arborist to examine all trees along the eastern border of Quail Ranch and prepare a report for each property owner indicating the extent of limbing, root excavation, or tree removal that would be required to accommodate the worst-case development scenario and include an opinion on the long-term health of the affected trees.

The commentor is referred to Impact 3.3-10 in Section 3.3 of the Draft EIR. A tree evaluation was performed by the Tree Associates in 2011 (Tree Evaluation). The Tree Evaluation included an inventory of on-site trees and off-site trees with greater than 25% of the canopy overhanging the Project site and also include an assessment of potential impacts to trees from construction of a wall along the Project boundary. The Tree Evaluation specifically addressed the trees along the border between the Project and Quail Ranch Estates that could potentially be impacted by the Project. Table 3.3-4 of the Draft EIR includes an Impact Severity Rating column that identifies the potential for trees to be adversely affected by the proposed wall. The final design of the wall has not been prepared and it is speculative to determine the specific trees that would be removed. Mitigation Measure 3.3-11 on page 3.3-37 of the Draft EIR requires that pruning recommended in the Tree Evaluation be completed. Figure 2 (Tree Location) is included in this Final EIR to assist the reader in determining the trees that would be affected. It is recommended that Figure 2 be used in conjunction with Table 3.3-4 of the Draft EIR.

Response 9-4: The commentor states that flooding is a concern for the area and that the Project is required to detain storm runoff rates at or below existing conditions for 2-, 10-, and 100-year design storm events. The Preliminary Drainage Study prepared for the Project addressed drainage for 2-, 10-, and 100-year events. The central detention basin has been designed to accommodate the 100-year event, which is the worst-case of the 2-, 10-, and 100-year events referenced by the commentor.

The commentor also states that the Draft EIR should address the 200-year event. The commentor does not substantiate this comment. The Draft EIR has been prepared consistent with the requirements of CEQA and the drainage analysis presented therein addresses the regulatory requirements related to drainage. No revisions to the Draft EIR are warranted and no further response is necessary.

2.0 COMMENTS ON DRAFT EIR AND RESPONSES

Response 9-5: The commentor states that the Silverado Village Site Development Drainage plan states “There is more than sufficient area available in the central detention basin.” The commentor claims that this is speculation without demand and capacity analysis and that the Draft EIR needs to address demand and capacity.

It is noted that the commentor has taken their quote out of context. The statement in the Preliminary Drainage Study that “there is more than sufficient area available in the central detention basin” went on to clarify “...footprint to achieve the required treatment volume retention and contact time.”

There was detailed modeling and technical data provided in the Preliminary Drainage Study, which was prepared by Wood Rodgers and reviewed and approved by the City Public Works Department, that substantiates the analysis in the study and in the Draft EIR. The Preliminary Drainage Study provides detailed modeling that was conducted to address demand and capacity in Appendices A and C of the study. The modeling of existing conditions and Project conditions is described in the Preliminary Drainage Study. Impact 3.8-4 on pages 3.8-21 through 3.8-23 of the Draft EIR describes the potential impacts of the Project on drainage. The modeling conducted for the Project identified that the 100-year flood condition would result in a maximum water surface elevation of 45.3 feet in the central detention basin. The Project would improve the central detention basin and associated berms to reserve flood storage up to 45.3 feet, consistent with the demand analysis. The Preliminary Drainage Study analyzed the drainage outflow from the Project site taking into accounts the proposed drainage improvements and found that the peak discharge rate would decrease from 217 cfs during existing conditions to 192.5 cfs with Project implementation, meaning that the Project would reduce drainage from the Project site during storm events. The following edits are made to the discussion presented under Impact 3.8-4 on pages 3.8-21 and 22 of the Draft EIR to describe the drainage modeling and analysis that was conducted for the Project.

“On-Site Detention – Project Areas Tributary to Whitehouse Creek

Drainage from areas within the Project site that are tributary to Whitehouse Creek would be directed to the existing main central detention basin area. Under existing conditions, the basin area sits full during large storm events, overtopping and spilling into the downstream channel system. The *Preliminary Drainage Study* prepared for the Project by Wood Rodgers calculated the increase in storm water elevations that would occur with development of the Project. To represent drainage runoff conditions that would occur with development of the Project, Wood Rodgers updated the existing conditions hydrology (SacCalc) provided by the City to calculate the storm flow over time that would enter the detention area with development of the Project. Wood Rodgers then modeled the drainage outlet and storage configuration in HEC-RAS. Storm drain calculations were developed using StormCAD to represent the drainage into the proposed detention basin and into the storm drainage system connecting to Bond Road at the southwest corner of the Project site. The drainage calculations are included in Appendices A and C of the Preliminary Drainage Study (see Appendix D of this Draft EIR for the Preliminary Drainage Study and its appendices). The Preliminary Drainage Study found that the 100-year flood condition would produce a maximum water surface elevation in the central detention basin of 45.3 feet. In order to accommodate the increased water surface elevation, the central drainage basin and associated berms would

need to be improved. While essentially maintaining a similar footprint, the berms would be engineered and reconstructed vertically to reserve flood storage above 43 feet elevation up to 45.3 feet.

The proposed outlet will be configured to attenuate storm events by constructing four 12-inch outlet pipes with an invert elevation of 43 feet embedded in a 40-foot weir with a crest elevation of 44 feet. Downstream of this tiered outlet control would be a large box culvert crossing with a 20-foot bottom under the proposed roadway to the west of the detention basin, having an invert elevation just below 43 feet, as shown on Figure 3.5-4.

Under pre-development conditions, the Project site would result in a peak discharge of 217 cubic feet per second during a 100-year flood event. Implementation of the Project, including the proposed drainage improvements, would result in a peak discharge of 192.5 cubic feet per second during a 100-year flood event (Spokely 2013). The Project would result in a decrease in peak discharge during storm events. Impacts associated with project areas that are tributary to Whitehouse Creek are **less than significant.**"

Response 9-6: The commentor states that the City's Drainage Master Plan is responsible for ensuring the Project doesn't cause an increase in flows leaving the property and that the Draft EIR needs to include and address the Drainage Master Plan.

The Storm Drainage System Master Plan (SDMP) was used as a reference source for Section 3.8, Hydrology and Water Quality, of the Draft EIR (see page 3.8-1) and the Project's proposed drainage facilities were based on the existing conditions data developed for the SDMP and reviewed for consistency with the SDMP. The Project's proposed drainage infrastructure is consistent with the City's Storm Drainage Master Plan. The Draft EIR will be revised to include the SDMP in the Regulatory Framework and to include a more detailed discussion of consistency with the SDMP.

Page 3.8-15 of the Draft EIR is revised to include the following discussion of the SDMP:

"STORM DRAINAGE MASTER PLAN

The City adopted a comprehensive Storm Drainage Master Plan (SDMP) to provide a variety of drainage concepts for upgrading the existing storm drainage and flood control collection (SD&FCC) system. The SDMP identifies and analyzes the existing drainage deficiencies throughout the City; provides a range of drainage concepts for the construction of future facilities required to serve the City at buildout of the General Plan; and establishes criteria for selecting and prioritizing projects.

The SDMP divides the City into specific watershed and subheds for the purposes of identifying storm drainage needs specific to each watershed and/or subshed area. The majority of the Project site is within the Whitehouse Creek subshed of the Laguna Creek watershed, except for the southwest corner which is in the Laguna Creek subshed of the Laguna Creek Watershed. The SDMP identifies existing and new facilities and upgrades to serve buildout conditions of the General Plan."

Pages 3.8-21 and 3.8-22 of the Draft EIR is revised as follows to include discussion of the SDMP:

"Impact 3.8-4: The Project would alter the existing drainage pattern in a manner which would not result in flooding, but could create or contribute runoff in excess of the capacity of stormwater drainage systems. (less than significant with mitigation)

2.0 COMMENTS ON DRAFT EIR AND RESPONSES

As described previously, the topography of the Project site slopes from east to west, with a small portion draining towards the southwest corner of the Project site.

The Project proposes drainage features to ensure that runoff would not result in downstream flooding. Water quality, including potential impacts associated with erosion, siltation, and pollution, are discussed under Impacts 3.8-1 and 3.8-2.

On-Site Detention – Project Areas Tributary to Whitehouse Creek

The SDMP addressed the Whitehouse Creek watershed in detail in Chapter 7 of Volume II of the SDMP. The SDMP anticipated that the majority of the Project site would drain to the central on-site detention basin and then into Whitehouse Creek. While the SDMP identified conceptual drainage facilities for the area, the SDMP anticipated that the actual layout of the system would differ from the conceptual layout in the SDMP and that more detailed analysis will be required with development projects when they occur. The Preliminary Drainage Plan prepared for the Project provides the detailed analysis and specific drainage details and layout for the Project site that was anticipated in the SDMP.

Drainage from areas within the Project site that are tributary to Whitehouse Creek would be directed to the existing main central detention basin area. Under existing conditions, the basin area sits full during large storm events, overtopping and spilling into the downstream channel system. The *Preliminary Drainage Study* prepared for the Project by Wood Rodgers calculated the increase in storm water elevations that would occur with development of the Project. To represent drainage runoff conditions that would occur with development of the Project, Wood Rodgers updated the existing conditions hydrology (SacCalc) provided by the City to calculate the storm flow over time that would enter the detention area with development of the Project. Wood Rodgers then modeled the drainage outlet and storage configuration in HEC-RAS. Storm drain calculations were developed using StormCAD to represent the drainage into the proposed detention basin and into the storm drainage system connecting to Bond Road at the southwest corner of the Project site. The drainage calculations are included in Appendices A and C of the Preliminary Drainage Study (see Appendix D of this Draft EIR for the Preliminary Drainage Study and its appendices).

The Preliminary Drainage Study found that the 100-year flood condition would produce a maximum water surface elevation in the central detention basin of 45.3 feet. In order to accommodate the increased water surface elevation, the central drainage basin and associated berms would need to be improved. While essentially maintaining a similar footprint, the berms would be engineered and reconstructed vertically to reserve flood storage above 43 feet elevation up to 45.3 feet.

The proposed outlet will be configured to attenuate storm events by constructing four 12-inch outlet pipes with an invert elevation of 43 feet embedded in a 40-foot weir with a crest elevation of 44 feet. Downstream of this tiered outlet control would be a large box culvert crossing with a 20-foot bottom under the proposed roadway to the west of the detention basin, having an invert elevation just below 43 feet, as shown on Figure 3.5-4.

Under pre-development conditions, the Project site would result in a peak discharge of 217 cubic feet per second during a 100-year flood event. Implementation of the Project, including the proposed drainage improvements, would result in a peak discharge of 192.5 cubic feet per second during a 100-year flood event (Spokely 2013). The Project would result in a decrease in peak discharge during storm events. Impacts associated with project areas that are tributary to Whitehouse Creek are **less than significant**.

Bond Road Drainage – Project Areas Tributary to Laguna Creek

The southwest corner of the Project site drains to the Laguna Creek watershed, which is addressed in Chapter 4 of the SDMP. West Yost Associates (the author of the SDMP) analyzed drainage from this portion of the Project to

determine whether the drainage would be accommodated by the improvements to the City's drainage system that were anticipated in the SDMP. Drainage from the portion of the southwest corner of the Project site that is tributary to Laguna Creek, including the proposed residential lots adjacent to the Quail Ranch subdivision, would be directed to the Bond Road Trunk pipe and would be conveyed to Laguna Creek. The analysis of the Bond Road Trunk drainage improvements and resulting impacts to Laguna Creek performed by the West Yost Associates is summarized in the *Preliminary Drainage Study* prepared for the Project by Wood Rodgers.

West Yost Associates determined that the increased flows in the Bond Road trunk pipe would not have a significant effect on Laguna Creek. While the Project would result in a 4% increase in the Laguna Creek flow while the Bond Road trunk pipe is at peak flows, the Bond Road trunk pipe is located in the lower part of the Laguna Creek watershed. Therefore, the Bond Road trunk pipe will peak well before Laguna Creek reaches peak flows. At the time Laguna Creek is at peak flow, the flows in the Bond Road trunk pipe, including flows from the Project site, will have receded. Thus, any changes in Laguna Creek flows associated to the Bond Road trunk pipe are negligible.

While the effects on Laguna Creek would be negligible, there are existing deficiencies in the Bond Road drainage system identified in the City's ~~SDMP Drainage Master Plan~~. The City wide ~~SDMP Drainage Master Plan~~ identified existing deficiencies in the trunk drainage system in Bond Road. In this study there was a portion of the Project Site that was tributary to the Bond Road Trunk Drainage System that was excluded from the approved plan. The City has confirmed that this area should be added to the Bond Road Trunk Drainage System.

As described above, the Project would not result in significant increases in flow to Whitehouse Creek and Laguna Creek. By conveying Project drainage to the on-site central detention basin and to the Bond Road trunk pipe, the Project would not result in increases in run-off to adjacent properties. However, the existing Bond Road drainage system has deficiencies that require mitigation. Impacts to the Bond Road trunk pipe are **potentially significant.**"

Response 9-7: The commentor states that the Draft EIR needs to address and expand the area of soil testing and include deeper borings to assess the presence of landfill waste and possible hazardous content. The commentor states that the Draft EIR fails to provide a complete history of past uses, citing Leo Fassler's claim of past solid waste dumping on the site during the 1960s and a report by Nichols Consulting Engineers that identifies the Project site's past use by the Gibson Winery for disposal of wash down water, grape skins, and residue from grape crushing and the potential for past use of small dams and dikes for winery operations or for water to support cattle grazing.

The commentor is referred to Response 7-1 regarding concerns and claims that the Project site was previously a solid waste dump site. The Draft EIR did identify the past use of winery wastewater evaporation ponds on the Project site. The Draft EIR provides a history of past land uses, including agricultural uses prior to the early 1930s, winery wastewater evaporation ponds from the early 1930s to mid-1970s, a historical residential use in the southwestern portion of the site that was developed in the early 1900s, and use of the southwestern portion of the site by IDS for offices and a truck maintenance area, on page 3.7-6. The history presented in the Draft EIR is consistent with the history of the site described in the 1988 Soil and Groundwater Testing Report and the history presented in the Phase I ESA. The literature and record review conducted for the Phase I ESA was a thorough review of historical information, including

2.0 COMMENTS ON DRAFT EIR AND RESPONSES

ownership records, building department records, street directories, and ownership records, available to identify historical land uses at the Project site.

The commentator refers to a report by Nichols Consulting Engineers (NCE). However, it does not appear that NCE prepared any reports for the Project site. In 2008, NCE submitted a proposal to Sacramento County to evaluate the potential presence of elevated concentrations of metals. The NCE proposal included a review of the 1988 groundwater and soils sampling conducted by Sacramento County and described in the 1988 Soil and Groundwater Testing Report. The NCE proposal identified that while the 1988 Soil and Groundwater Testing Report compared the results of the soil and groundwater analysis to hazardous waste criteria referred to a total threshold limit concentrations (TTLCs) that TTLCs may not be the best comparison and that comparison should be made to health-risk based criteria such as the California Human Health Screen Levels (CHHSLs) published jointly by the California Regional Water Quality Control Board and the California Department of Toxic Substance Control. The NCE proposal suggested that while additional groundwater investigation did not appear necessary, additional investigation of the soil around the winery wastewater ponds was appropriate.

The Use of California Human Health Screening Levels in Evaluation of Contaminated Properties (Guide) was published in January 2005 by the California Environmental Protection Agency. The Guide indicates that naturally occurring background concentrations of arsenic, beryllium, cadmium, chromium, and other metals in soils may exceed their respective soil CHHSLs. Further, the Guide indicates that this is common with arsenic in California. Therefore, the use of the CHHSLs in determining site contamination can be challenging.

WKA reviewed the NCE proposal and provided a letter dated December 6, 2013 presenting additional analysis regarding the potential health risks of the arsenic and cadmium levels identified on the Project site, noting that both metals were detected in concentrations in excess of their respective CHHSL. The WKA letter identified that the California Department of Toxic Substances Control (DTSC) policy is that arsenic in surface soil at concentrations less than 12 milligrams per kilogram (mg/kg) do not pose an unacceptable cancer risk to human health. While the arsenic present in one of the two soil samples collected from the former winery wastewater pond was 14 mg/kg, the mean arsenic concentration in soil for the wastewater pond was 11.4, which is less than 11.4. The mean for arsenic concentration using laboratory results for the eight surface soil samples is 6.7 mg/kg.

The WKA letter included a calculation of the hazard quotient for cadmium and arsenic levels; the cadmium hazard quotient was calculated to range from 0.023 to 0.029 and the arsenic hazard quotient was calculated to be 0.76. A hazard quotient of less than one indicates that the concentration of arsenic and cadmium does not pose a significant threat to human health (WKA, 2013). The WKA letter recommended that additional investigation of the winery wastewater ponds would not be required.

The WKA letter noted that the Phase I ESA further concluded that a proposed sensitive land use, such as schools and daycare facilities within the northern portion of the property could be cause for completing an additional investigation, such as a Preliminary Endangerment Assessment (PEA) according to DTSC protocol. The northern portion of the Project site is not proposed for development so no additional investigation of this area is necessary at this time.

The analysis of the hazard quotients for the cadmium and arsenic levels present on the Project site indicates that there is no significant health risk associated with cadmium and arsenic exposure. No additional soil or groundwater testing is necessary and revision to the Draft EIR to require additional soil or groundwater testing is not warranted. No further response is required.

Response 9-8: The commentor notes that there is a small borrow pit on the southwest portion of the Project site that retains water during the winter months and has a different color from the water held on other areas of the site. The comment is noted. The 1988 Soil and Groundwater Testing Report identified the presence of a borrow pit on the Project site. Since this comment does not address the adequacy of the Draft EIR, no further response is required.

Response 9-9: The commentor states that the soil sampling performed by WKA was limited in nature and does not address the entire Project site. The commentor states that since the exact use of the retention and treatment ponds is unknown between 1958 and 1976, further analysis and expanded sampling of the Project site needs to be completed. The commentor is referred to page 3.7-6 of the Draft EIR which includes a description of soil samples collected from four areas on the Project site by Sacramento County. These soil samples are those discussed in the 1988 Soil and Groundwater Testing Report. As described under Response 7-1, the 1988 Soil and Groundwater Testing Report included a review of the entire Project site and conducted soil and groundwater testing and analysis in areas identified to be of potential concern. The 1988 Soil and Groundwater Testing Report was based on testing and analysis conducted in 1988. The Phase I ESA and the WKA Report of Findings Soil Sampling and Analysis were conducted in 2011. These reports, which were based on site visits and investigation of past uses, occurred well after the 1958 to 1976 period referenced by the commentor and addressed uses that occurred during the timeframe referenced by the commentor. No additional investigations are warranted and no revision to the Draft EIR is necessary.

Response 9-10: The commentor states that the Draft EIR did not specify the years and location of the 6 field surveys for the Giant Garter Snake (GGS), noting that the GGS can migrate and therefore the Draft EIR needs to address the suitability of the nearby creek east of this site and within 5 miles. The commentor states that the creek area and Project site need to be considered together as there is the potential for suitable critical habitat within the proximity of the Project site and that the Draft EIR needs to include the reference source and dates of field surveys.

The Giant Garter Snake is addressed on pages 3.3-17 through 3.3-18 of the Draft EIR.

2.0 COMMENTS ON DRAFT EIR AND RESPONSES

***Giant Garter Snake:** The giant garter snake (*Thamnophis gigas*) (GGS) is a large aquatic snake that can reach lengths of 4.5 feet or greater, and is endemic to wetland habitat of the Central Valley. The giant garter snake inhabits marshes, sloughs, ponds, small lakes, low gradient streams, other waterways and agricultural wetlands such as irrigation and drainage canals and rice fields, and the adjacent uplands. Essential habitat components consist of adequate water during the snake's active period, (early spring through mid-fall) to provide a prey base and cover; emergent, herbaceous wetland vegetation, such as cattails and bulrushes, for escape cover and foraging habitat; upland habitat for basking, cover, and retreat sites; and higher elevation uplands for cover and refuge from flood waters.*

GGS typically enter suitable hibernation sites, such as burrows, rubble piles, or canal banks during October, and emerge in late March or early April. They may utilize canals that retain water throughout the summer months, which also contain adequate emergent vegetation which provides cover. These canals must also have an abundant food supply such as small fish, tadpoles, and frogs.

Most important to GGS's survival is the availability of permanent water sources that contain emergent vegetation as well as an abundant food supply. Suitable overwintering habitat should also be located in close proximity to its foraging habitat. This species of snake is commonly observed in close proximity to a combination of permanent and seasonal freshwater sources.

Four CNDDDB records for the GGS are located within five miles of the Project site. No sightings of GGS were observed during the six field surveys of the Project site, all of which occurred during the critical period (May 1 – October 1) for this species, as determined by the USFWS. Furthermore the presence of water on the Project site is variable throughout the year and is largely rainwater driven, with standing water remaining in the on-site ponds until March or June. These water levels are dependent on storm water inflows from Whitehouse Creek and periodic discharges related to urban use activities associated with the residential area to the north. At the time of the rare plant survey conducted on July 6, 2004, the ponds were dry. Due to the limited source of suitable freshwater habitat available throughout the active period for GGS and absence of an abundant food supply observed in the wetland areas, this species is not expected to occur on the Project site. Based on this lack of suitable habitat, and results of the field surveys, the Project is not expected to impact GGS.

Critical habitat has not been formally proposed for giant garter snake. The Project is therefore not expected to result in adverse modification of critical habitat for this federally threatened species. Implementation of the Project would have a less than significant on giant garter snake.

There were surveys performed on the Project site in May 2003, September 2003, May 2004, July 2004, August 2005, and June 2007 (Vintara Park Section 7 Biological Assessment, Foothill Associates, 2004; *Essential Fish Habitat Assessment for Vintara Park in Elk Grove, CA*, August 15, 2005; *Vintara Park Preserve Operations and Management Plan*, February 2008). These surveys were performed within the boundary of the Project site. The Project does not propose to directly disturb habitat on land outside the Project site, therefore, land outside the Project site was not surveyed.

The impacts on giant garter snake are adequately addressed in the Draft EIR. The Draft EIR concludes that the impacts are less than significant due to the lack of suitable habitat. The information provided in this comment letter does not alter the findings or conclusions contained in the Draft EIR with respect to this environmental topic.

LETTER 10

City of Elk Grove
Development Services, Planning
8401 Laguna Palms Way
Elk Grove, CA 95758
Christopher Jordan, AICP, Planning Manager
Submitted via Email: cjordan@elkgrovecity.org

November 11, 2013

SUBJECT: Comments to Silverado Village, File # EG-11-046 Draft EIR

Dear Mr. Jordan:

I am sending you comments in response to the Draft EIR for the Silverado Village and the proposed subdivision in general. I am a resident in the Fallbrook community and would be directly impacted by the development as proposed.

The proposed Silverado Village development:

- Is not compatible with the existing communities adjacent to the proposed project,
- Is inconsistent with the General Plan and the current zoning for the site, and
- Would significantly impact traffic on Waterman Road and other roads that have not been adequately identified.

10-1

The City should require:

- Further development of Alternative 2 (Reduced Density and Reconfigure Project alternative) to reduce the number of housing units,
- Completion of the traffic impacts analysis to include other impacted roads such as Neponset and Colliston which are used as access roads to Elk Grove Elementary,
- Improvements on Waterman Road between Sheldon Road and Elk Grove Boulevard to provide necessary access for drivers, pedestrians and cyclists prior to allowing additional development in this area.

Incompatibility with Existing Communities and Elk Grove General Plan

Page ES-4 of the Draft EIR indicates that the impact to the Land Use is Less than Significant. This is inaccurate and should be re-evaluated based on public comment received at the Planning Commission meeting held on November 7, 2013.

10-2

The net result of the proposed development would be rezoning of an area originally zoned as open space and rural/low density residential with a typical maximum construction of RD-5 to a rezoning for the development as multi-use that contains 20% RD-5, 39% RD-6 and 40% RD-10 with a Senior Care Facility. The impacts of the changes from the proposed development would be additive to impacts from the existing multi-family Silverado Apartments. If the development is approved and moves forward as proposed, it would result in a significant re-zoning and undesirable impacts to the character of the area and the adjacent neighborhoods.

10-3

The adjacent communities that would be impacted by the proposed development are the Fallbrook Subdivision/Summer Place Subdivision, Quail Ranch Estates, Summer Place, and Sheldon Road Ranch Estates. These subdivisions have larger lots than the minimum proposed for the Silverado Development.

10-4

2.0 COMMENTS ON DRAFT EIR AND RESPONSES

The proposed development has listed the General Plan Designation (for the project) in the Project Description as Rural Residential, Low Density Residential, Commercial/Office/Multi-Family. The density indicated does not agree with Elk Grove Planning documents since over 40% of the proposed development area within the project exceed RD-5 requirements.

10-5

The Housing Element in the Elk Grove General Plan states "The City of Elk Grove Zoning Code is the major guide for residential development policies. The policies establish and control the type, location, and density of residential development in Elk Grove. The zoning regulations serve to protect and promote the health, safety, and general welfare of the community residents and also implement the goals and policies of the General Plan. The specific residential land use zones used in Elk Grove and the respective maximum densities are shown in Table 1-35."

Table 1-35 Residential Land Use Zones and Densities lists the following that do not agree with the DEIR zoning descriptions:

Zone	Minimum Area	Lot Width (feet)	Maximum Density (units per acre)	Residential Types
RD-4	8,500 sf	65	4	Detached and attached single-family and two-family residences
RD-5	5,200 sf	52	5	Detached and attached single-family and two-family residences
RD-6	4,000 sf	40	6	Detached and attached single-family and two-family residences and cluster developments
RD-7	No minimum	No minimum	7	Detached and attached single-family and two-family residences and cluster developments
RD-10	No minimum	No minimum	7.1-10	Detached and attached single-family and two-family residences and low density multi-family

10-6

On page 3 of the NOP and also in the Draft EIR, the Project Description indicates that the proposed subdivision includes three distinct Villages:

- Village 1 with 135 single family homes with a minimum lot size of 6,300 sf, typical dimensions of 63'X110', however the tentative subdivision map indicates that the majority of the lots in Villages 1-A and 1-B have dimensions of 60-ft X 105-ft. The total acreage of Village 1A and 1B are 30.1 acres, resulting in a density of 4.5. This Village meets the requirements for a RD-5 zone but not RD-2 or RD-4 (RD-4 requires 8,500 sf and 65 -ft lot width and 4 units maximum per acre).
- Village 2 with 258 single family homes with a minimum lot size of 5775 sf, typical dimensions of 55'X105' which agrees with the Tentative Subdivision Map. The total acreage of Village 2A is 39 acres, resulting in a density of 6.6 homes per acre. The home density indicates RD 7 since RD-6 states 6 units per acre maximum.
- Village 3 with 267 patio homes with a minimum lot size of 4265 sf, typical dimensions of 50'X92.5 as measured from the road centerline, so the actual lot sizes would be much smaller. Adjusting for 7-feet of roadway from the centerline, the typical lot size would be less than 4000sf. The total acreage of Village 3 is 34 acres, resulting in a density of 7.9 homes per acre which is consistent with RD-10 on the above table).

10-7

10-8

10-9

It appears that the proposed zoning described in the DEIR should be approximately 20% RD 5, 39% RD 6 and up to 40% RD 10, multi-use and commercial.

10-10

Note that Lot C (68.1 acre wetland preservation area) and the 14.7 acre detention basin should be removed from consideration in calculations related to residential zoning and gross acreage. These areas are not included in the developable area and are sited on a unique and contiguous plot of land separate from the proposed housing units. Page 27 of the Initial Study / Notice of Preparation indicates "The on-site drainage system and detention pond is intended to collect storm water runoff from the site as well as provide for storm runoff rates to at or below existing conditions for 2-, 10- and 100-year design storm events. The on-site detention facilities need to be adequately sized and designed to ensure that run-off is adequately addressed to ensure that buildings and people do not experience significant risks associated with flooding."

10-11

Impacts to the existing Fallbrook community, where the Elk Grove Elementary School exists, would be significant. The class sizes would increase, the morning and afternoon traffic congestion and noise to homes and residents near the elementary school would increase, and existing conditions would be worsened in manners that have been dismissed in the DEIR.

Table 3.12-5 does not address Neponset Dr or other local roadways in the Fallbrook community where Elk Grove Elementary School is located.

10-12

On page 13, the document indicates that 10% of the outbound trips in the morning are assumed to travel south on Crowell Drive for student drop off at Elk Grove Elementary School...". This section does not address the impacts of the primary street and intersections around the elementary school in the local Fallbrook community, especially along Neponset which is the primary cross street between Whittmore and Crowell that provides access to the school. The intersections and streets near the local elementary school are already backed up to a stop in the morning and afternoon hours for school drop off and pickup.

Additional traffic accessing the elementary school located in the Fallbrook community would worsen existing traffic hazards in and near the Fallbrook community:

10-13

- There are several intersections in this neighborhood with limited visibility where stop signs are placed on affected curved roadways (Whittmore and Crowell) 10-14
- Increased protected and unprotected left hand turns across Bond road to access the Fallbrook and Britschge neighborhoods from the Silverado development 10-15
- Pavement on several of the primary access roads is in poor condition and has been spot patched without adequate repair (Whittmore at Bond is an example). 10-16

The traffic impacts analysis should be completed and should include other impacted roads such as Neponset and necessary improvements on Waterman Road between Sheldon Road and Elk Grove Boulevard for drivers, pedestrians and cyclists. The document does not adequately address the lack of improvements and access for pedestrian and bicycle access along Waterman Road. Page ES-29 of the Draft EIR indicates under the heading Transportation and Circulation that the impacts are Less than Significant and Significant and the mitigation measures are listed as "None Required and None Feasible." These are related to conflicts with plans, ordinances, policies, impacts due to design features, and disruption of bicycle or pedestrian facilities and transit facilities. It appears that the Transportation and Circulation component has not been adequately evaluated.

10-17

The project indicates states that Bond Road "will serve as the project's primary connection to SR 99." The document does not address an access from the project to Waterman Road. Many local residents utilize Bradshaw Road as opposed to Hwy 99 for access to Rancho Cordova, Highway 50, etc. Assumptions made by the report appear to underestimate the traffic impacts to Waterman Road both north and southbound.

10-18

2.0 COMMENTS ON DRAFT EIR AND RESPONSES

The Waterman Road / Sheldon Road intersection is noted to currently operate at LOS E during both the morning and afternoon peak hours. The back-up of traffic on all directions at the single-lane (each way) 4-way stop located at Waterman Road and Sheldon Road is currently significant and will be exacerbated by the project. This problem is not adequately addressed.

10-19

The project proposes one access point on Bond Road with a right-in/ right-out only option for access. However, issues associated with access on Waterman Road and pedestrian / bicyclists are not adequately addressed. The document states on Page 3.12-5 "Class II bicycle lanes (on-street with signage and striping) are provided in both directions Bond Road within the Project study area. Bike lanes are provided on Waterman Road along improved frontage near the Bond Road/Waterman Road intersection. Marked crosswalks are provided at all signalized intersections within the study area. Pedestrian activity was relatively low with no more than six pedestrians using any crosswalk during the two peak hours." This is a misrepresentation.

10-20

There are several existing conditions on Waterman Road that would be exacerbated by the proposed development that should be addressed in the EIR and corrected by either the City or the Developer prior to adding over 700 dwellings including:

10-21

1. The document minimizes the lack of facilities for pedestrians and bicyclists. Pedestrian activity along Waterman Road is likely low, as stated in the document, due to the lack of pedestrian and bicycle facilities. Waterman Road has very limited access for pedestrians and bicyclists between Elk Grove Boulevard and Sheldon Road, making it unsafe for walking and bicycling. This has been a problem for residents in the area for quite some time. For much of this section of roadway, there is no bike lane on either side of the roadway.
2. Traveling north from Bond Road to Waterman, there is a sudden constriction from four lanes to two (single lane on each side). Travelling southbound on Waterman Road and approaching Bond Road, there are two poorly-designed right turn lanes – one into the Silverado Apartments and immediately after, a second right turn lane onto Bond Road. To the north of the project, at the intersection of Waterman and Sheldon, there is congestion at the 4-way stop during peak traffic hours. These conditions are currently unacceptable and would be impacted by additional development in this area.
3. There are no marked crosswalks in the vicinity of the project except along Bond Road –none on Waterman Road between Bond and Sheldon Roads.

10-22

10-23

10-24

Volume of traffic added by the project:

Page 3.12-10 addresses Trip Distribution and Assignment. Villages 1, 2, and 3 will have 670 homes and a total of 785 total living units. Although Village 3 will be restricted to age 55 and over, consideration should be given that the average retirement age is around 61 years old and up to 40% of people age 55 and older continue to work. Table 4 indicates that there will only be 379 additional AM peak hour trips and 496 PM peak hour trips. These numbers seem low based on the number of dwelling units planned. Based on the total number of 5,154 new daily trips mentioned, less than 10% of these are anticipated during peak hours. The accuracy and assumptions of these numbers should be evaluated.

10-25

LOS E is indicated on page 9 for the intersection of Waterman/Sheldon. LOS E was also noted for Waterman Road from Elk Grove Blvd to Bond Road in the Elk Grove Transfer Station Project DEIR but is not noted on the Fehr & Peers Draft Transportation Impact Study. Figures 3 and 4 on pages 14-16 are blank.

10-26

How were the impacts from the retail, office, medical, and commercial uses to serve the community evaluated? It is unclear what these proposed uses would entail.

10-27

Thank you for the opportunity to comment on the referenced document.

10-28

Lysa Voight, P.E.
PO Box 2463 Elk Grove, CA 95759

Letter 10 Lysa Voight, P.E.

Response 10-1: The commentor states that they are providing comments in response to the Draft EIR for the Project and on the proposed subdivision in general. The commentor identifies themselves as a resident of Fallbrook and states they would be impacted by the Project. The commentor provides an overview of their comments and recommendations; each specific *comment and recommendation* is addressed in Responses 10-2 through 10-27.

Response 10-2: The commentor states that page ES-4 of the Draft EIR indicates that the impact to land use is less than significant and states this is inaccurate and should be re-evaluated based on public comment received at the November 7, 2013 Planning Commission meeting. The commentor is referring to the Executive Summary of the Draft EIR, which summarizes the impacts analyzed in detail in subsequent sections within the Draft EIR. The commentor is referred to Section 3.9 of the Draft EIR which discusses potential environmental impacts associated with land use planning and is specifically referred to Impact 3.9-1 discussed on pages 3.9-7 through 3.9-10 of the Draft EIR. This comment does not identify any specific concern with the analysis of potential impacts associated with land use so no further response can be made.

Response 10-3: The commentor states that the net result of the proposed development would be rezoning of an area originally zoned as open space and rural/low density residential for the development as multi-use that contains 20% RD-5, 20% RD-6, and 40% RD-10 with a senior care facility. The commentor states that the impacts would be additive to impacts from the existing multi-family Silverado Apartments. The commentor states that the Project would result in significant rezoning and undesirable impacts to the character of the area and adjacent neighborhoods.

As described in Chapter 2.0, Project Description, of the Draft EIR, the Project would rezone the site from the existing zoning to Silverado Village Special Planning Area (SPA) which would allow uses and setbacks in Villages 1 and 2 consistent with the RD-5 zone, with the exception of the site-specific standards provided by the SPA. The SPA would allow single family patio homes at a maximum density of 8 dwelling units per acre as well as multi-family uses in the Village Core. Environmental impacts associated with the Project, including the rezoning, are addressed in Sections 3.1 through 4.0 of the Draft EIR.

While the commentor states that impacts would be additive to those from the existing multi-family development, the commentor does not identify what the “undesirable” impacts are. No further response can be made to this comment.

Response 10-4: The commentor states that the adjacent communities that would be impacted by the Project are the Fallbrook Subdivision/Summer Place Subdivision, Quail Ranch Estates, Summer Place, and Sheldon Road Ranch Estates and that these subdivisions have larger lots than the

minimum proposed for the Project. This comment does not address the adequacy of the Draft EIR and is noted for the decision-makers' consideration.

Response 10-5: The commentor states that the Project lists the General Plan designations for the Project site as Rural Residential, Low Density Residential, and Commercial/Office/Multi-family. The commentor states that the density indicated does not agree with the City's planning documents since over 40% of the proposed development area within the Project exceeds RD-5 requirements. It is noted that RD-5 is a zoning designation and the Project would rezone the entire site to Silverado Village SPA as described in Chapter 2.0, Project Description of the Draft EIR. The General Plan land use designations on the Project site are consistent with the development densities proposed by the Project. The Project's consistency with the General Plan, including the land use designations, is discussed under Impact 3.9-1 on pages 3.9-7 through 3.9-9 of the Draft EIR. The Low Density Residential designation, which applies to the majority of the site that is proposed for development, allows densities of 4.1 to 7.0 dwelling units per gross acre. The Low Density Residential designation applies to approximately 146 acres of the Project site and would accommodate a maximum of 1,022 units (146 acres x 7 dwelling units per acre). The Rural Residential designation applies to approximately 80 acres of the Project site and would accommodate a maximum of 40 units (80 acres x 0.5 dwelling units per acre). The Commercial/Office/Multifamily designation applies to approximately 4 acres of the Project site and would accommodate a maximum of 120 units (4 x 20 dwelling units per acre). The development proposed by the Project is well under the units allowed by the Low Density Residential Designation alone and is also well under the maximum of 1,182 units that would be allowed under the General Plan. It is noted that because General Plan land use densities are based on gross acreage and not net acreage, General Plan land use designations do not always translate directly to a zoning designation or minimum lot size. Consistent with Policy CAQ-7, the Project clusters development in the central and southern portions of the Project site in order to preserve natural resources.

Response 10-6: The commentor refers to the Housing Element which indicates that the City's Zoning Code is the major guide for residential policies. The commentor includes a portion of Table 1-35 from the Housing Element summarizing requirements for the RD-4, RD-5, RD-6, RD-7, and RD-10 zoning districts and states that they do not agree with the Draft EIR zoning descriptions. Zoning districts which correspond to the Project site and surrounding areas are described on pages 3.9-5 through 3.9-6 of the Draft EIR and include the RD-2, RD-4, RD-5, AR-2, AR-5, SC, O, and SPA zones. The descriptions of each zoning district are consistent with the descriptions established by the Elk Grove Municipal Code Title 23, Zoning. It is noted that the Project would rezone the site to Silverado Village SPA and the proposed SPA document would establish the zoning regulations for the Project as described in Chapter 2.0 of the Draft EIR. No revisions to the Draft EIR are warranted in response to this comment and no further response is necessary.

2.0 COMMENTS ON DRAFT EIR AND RESPONSES

Response 10-7: The commentor describes the general lot dimensions of Village 1 and states that the acreage of Villages 1A and 1B would result in a density of 4.5 [dwelling units per acre] and goes on to say that the Village meets the requirements for the RD-5 zone but not RD-2 or RD-4. The commentor is correct in that Villages 1A and 1B are similar to the RD-5 zone. The Silverado Village SPA indicates that the permitted uses and standards of the RD-5 zone apply to Neighborhood 1, except where otherwise specified by the SPA document, which establishes specific requirements for Village 1 including minimum lot sizes and rear yard setbacks for lots abutting the Quail Ranch Estates community. As previously described, the zoning for the Project would be established by the SPA. The commentor is correct that Village 1 does not meet the requirements for the RD-2 and RD-4 zones; the SPA document would not establish any RD-2 or RD-4 types of designations on the Project site.

The commentor also notes that the typical dimensions of 63' by 110' described in the Project Description differs from many lots that have the dimensions of 60' by 105'. The commentor is referred to page 2.0-4 of the Draft EIR which identifies that the typical dimension for Village 1 lots is 60' by 105'. While lot widths are generally wider in the portion of the Project adjacent Quail Ranch Estates, the typical dimension of 60' by 105' is correct for Village 1. The Draft SPA includes a request that the lot widths match the adjacent Quail Ranch Estates lot widths. There is no adverse environmental impact associated with lot widths proposed by the Project adjacent Quail Ranch Estates. No revisions to the Draft EIR are warranted in response to this comment.

Response 10-8: The commentor describes the characteristics of Village 2 and states that the density of 6.6 homes per acre indicates RD-7 since RD-6 states a 6 units per acre maximum. The commentor's calculations for Neighborhood 2 are incorrect. Village 2 would total 51.2 acres and accommodate 255 homes, which results in density of 5.0 units per acre. It is again noted that the Project would establish the Silverado Village SPA which would provide the zoning standards for the Project site. The Silverado Village SPA would apply the permitted uses and standards of the RD-5 zone to Village 2, with the exception of site-specific standards provided by the SPA. No revisions to the Draft EIR are warranted in response to this comment.

Response 10-9: The commentor describes Village 3 and states that the density of Village 3 is consistent with RD-10 on the above table. The SPA document would establish standards for Village 3 that are specific to the patio home type of unit and lot that is proposed within this Village. The comment is noted and no further response is necessary.

Response 10-10: The commentor states that it appears that the proposed zoning described in the Draft EIR should be approximately 20% RD-5, 39% RD-6, and 40% RD-10, multi-use, and commercial. As previously noted, the commentor's calculations regarding the densities of Village 2 and its similarities to RD-6 are incorrect. As previously stated, the Project would establish the Silverado Village SPA that would provide the zoning regulations for the Project site. The Project would not have RD-5, RD-6, or other zoning designations. The use of SPAs is allowed under

EGMC Title 23, Section 23.16.100 which identifies the purpose, requirements, and procedures for SPAs. The commentor is direct to Table 1, Land Use Summary, which describes the uses proposed by the Project and the related acreage, dwelling units, and average densities proposed by the Project. No revision to the Draft EIR is warranted in response to this comment and the commentor appears to misunderstand how zoning will be applied to the Project.

Response 10-11: The commentor states that Lot C (wetland preservation area) and the 14.7-acre detention basin should be removed from consideration in calculations related to residential zoning and gross acreage. The commentor states that these areas are not included in the developable area and are sites on a unique and contiguous plot of land separate from the proposed housing units. The commentor also includes a quote from page 27 of the Initial Study related to the purpose of the drainage system and detention pond. While the commentor believes that Lot C and the detention basin should not be used for calculating gross acreage, these components are part of the Project as described in Chapter 2.0, Project Description, and the unique lots for each of these components would be created by the Project. It is noted that the Project has a density of 3.4 units per acre if the entire Project site is considered; if the open space areas (Lots E, C, F, I, and J) are excluded from the calculation, the Project density is 5.65 dwelling units per acre as shown in Table 1. As previously described, the Project will establish the Silverado Village SPA which will regulate zoning on the Project site. No revision to the Draft EIR is warranted in response to this comment.

Response 10-12: The comment concerns impacts associated with Project traffic and the Elk Grove Elementary School located in the Fallbrook community. The Project is located in the boundary of the James McKee Elementary School, which is located west of Elk Grove-Florin Road and south of Bond Road. Consequently, except for special intra-district transfers, most elementary school trips from the project will be to James McKee Elementary and not to Elk Grove Elementary School. Therefore, detailed analysis of traffic operations in the Fallbrook community was not necessary. In addition, due to the age-restricted component of the Project, only about half of the project's households would have school-age children. No revision to the Draft EIR is warranted.

Response 10-13: The commentor indicates additional traffic accessing the elementary school located in Fallbrook would worsen existing traffic hazards in and near the Fallbrook community. The commentor is referred to Responses 10-12 and 10-14 through 10-16 which address the specific concerns identified by the commentor and conclude that the Project would not result in significant traffic impacts associated with trips to and from the Fallbrook neighborhood.

Response 10-14: The comment concerns impacts associated with Project traffic and the Elk Grove Elementary School located in the Fallbrook community including limited visibility at the Whittmore Drive/Crowell Drive intersection. Response 10-12 address elementary school traffic. As documented on page 3.10-12 of the Draft EIR, the Project is estimated to add 3 vehicles the AM peak hour and 2 vehicles during the PM peak hour to the Whittmore

2.0 COMMENTS ON DRAFT EIR AND RESPONSES

Drive/Crowell Drive intersection, which has an all-way stop control. Given the intersection traffic control and the low volume of Project traffic, the Project would not create a hazard at this intersection. No revision to the Draft EIR is warranted.

Response 10-15: The comment concerns safety of unprotected left-turn movements across Bond Road. A query of the Statewide Integrated Traffic Records System (SWITRS) data (i.e., most recent 3-year data available) indicated that only three reported collisions occurred on Bond Road between Elk Grove-Florin Road and Waterman Road. Two collisions occurred at the Quail Cove Drive intersection and one collision occurred at the Crowell Drive intersection. All three collisions were rear-end collisions with the primary collision factor reported as a vehicle code violation associated with improper driving. Based on this collision history, there is no pattern indicating an issue with unprotected left-turn movements. No revision to the Draft EIR is warranted.

Response 10-16: The commentor describes that pavement on several of the primary access roads is in poor condition and has been spot patched without adequate repair. The comment does not address the adequacy of the Draft EIR and is noted for the decision-makers' consideration.

Response 10-17: Please refer to Responses 10-11, 10-13, and 10-14.

Response 10-18: The comment concerns adequacy of analysis of Waterman Road. The Project analysis analyzes three intersections on Waterman Road, including the Sheldon Road intersection, the Project access on Waterman Road, and the Bond Road intersection. The distribution of Project trips was based on existing traffic conditions, consistent with the analysis period. Therefore, Project traffic flows are consistent with the origin and destination of existing traffic flows. As documented in the Draft EIR, five percent of Project trips will have an origin/destination to/from the north on Waterman Road and 11 percent to/from the south on Waterman Road (south of Bond Road).

Response 10-19: The comment concerns adequacy of analysis of the analysis of the Waterman Road/Sheldon Road intersection. As noted in the comment, the Waterman Road/Sheldon Road intersection currently operates at LOS E, which is consistent with field operations, including vehicle queuing at the intersection. Based on the City significance criteria, this intersection operates at an unacceptable level without the Project. Therefore, a Project impact is determined based on the increase in control delay at the intersection. A Project impact would be identified if the Project increased control delay by more than five seconds. Although the Project adds traffic to the intersection, the control delay does not change by more than five seconds. Therefore, the addition of Project traffic does not result in an impact.

Response 10-20: The comment concerns Project access on Bond Road and the description of bicycle and pedestrian facilities on Bond Road and Waterman Road. The comment indicates that the Project has only one access point on Bond Road. However, the Project actually proposes two access locations on Bond Road, a right-in/right-out access and a full access at Crowell Drive. In

addition, the Project has a full access intersection on Waterman Road. Regarding the description of bicycle and pedestrian facilities, the commenter states that the Draft EIR misrepresents the existing facilities description. However, upon review and verification the description is accurate and representative of existing conditions at the time field observations were conducted.

Response 10-21: Please refer to Responses 10-22 through 10-24.

Response 10-22: The comment concerns bicycle and pedestrian activity and the lack of associated facilities in the study area and asserts that the Draft EIR minimizes the lack of these facilities. The commenter accurately relates the lack or completeness of these facilities to the low level of bicycle and pedestrian activity. As discussed in Response 10-19, the Draft EIR accurately describes the existing conditions of bicycle and pedestrian facilities in the study area. The City's significance criteria for bicycle and pedestrian impacts are based on whether the Project disrupts or interferes with existing or planned facilities. Although these facilities are incomplete, the Project would not disrupt or interfere with existing and planned facilities. The Project will construct bicycle and pedestrian facilities along its frontage on Waterman Road. Payment of development fees will satisfy the Project's obligation for Citywide bicycle and pedestrian improvements.

Response 10-23: The comment concerns traffic operation on Waterman Road. The Waterman Road/Sheldon Road intersection currently operates at LOS E, which is consistent with field operations, including vehicle queuing at the intersection. Based on the City significance criteria, this intersection operates at an unacceptable level without the Project. Therefore, a Project impact is determined based on the increase in control delay at the intersection. A Project impact would be identified if the Project increased control delay by more than five seconds. Although the Project adds traffic to the intersection, the control delay does not change. Therefore, the addition of Project traffic does not result in an impact. The Bond Road/Waterman Road intersection was also analyzed. As documented in the Draft EIR, the Bond Road/Waterman Road intersection will operate acceptably at LOS C during the AM and PM peak hours with the Project.

Response 10-24: See Response 10-22.

Response 10-25: The comment concerns the Project trip generation relative to senior adult residential land use and the percent of Project trip generation occurring during the peak hours. Specifically, the commenter is concerned that the Project trip generation may be underestimated. The trip generation for the age-restricted portion of the Project (Village 3) is based on trip generation rates from *Trip Generation* (Institute of Transportation Engineers, 2012) from similar age-restricted developments. The surveyed sites include household with working and retired residents. Because many of the residents of these communities do not

2.0 COMMENTS ON DRAFT EIR AND RESPONSES

work, the peak hour trip generation (relative to daily trip generation) is lower than average households. This occurs because there are fewer work-related trips.

Response 10-26: The comment identifies a potential inconsistency between the analysis presented in the Draft EIR and the analysis prepared for the Elk Grove Transfer Station Project Draft EIR. A review of the Elk Grove Transfer Station Project Draft EIR indicated that the roadway segment level of service for the Waterman Road between Elk Grove Boulevard and Bond Road is reported at LOS C or better under existing conditions (the most comparable analysis scenario), which is consistent with the intersection analysis *documented in the Project Draft EIR*.

Response 10-27: The commentor asks how the impacts from retail, office, medical, etc. were evaluated. The proposed retail, office, and medical uses would be part of the senior multifamily care facility and clubhouse. These uses are considered part of the Project and were addressed in the Project-related impacts described in Sections 3.1 through 4.0 of the Draft EIR.

Response 10-28: The commentor expresses their thanks for the opportunity to comment on the document. The comment is noted.

LETTER 11

Submitted via email to cjordan@elkgrovecity.org

Subject: Comments / Photos for Silverado Village DEIR

November 12, 2013

Christopher,

I submitted a letter yesterday related to public comments for the Silverado Village, File # EG-11-046 DEIR. Please find attached a series of photos that shows the existing traffic conditions and lack of shoulder and necessary improvements on Waterman Road at the location of the proposed Silverado development. Please include these in the official comments file.

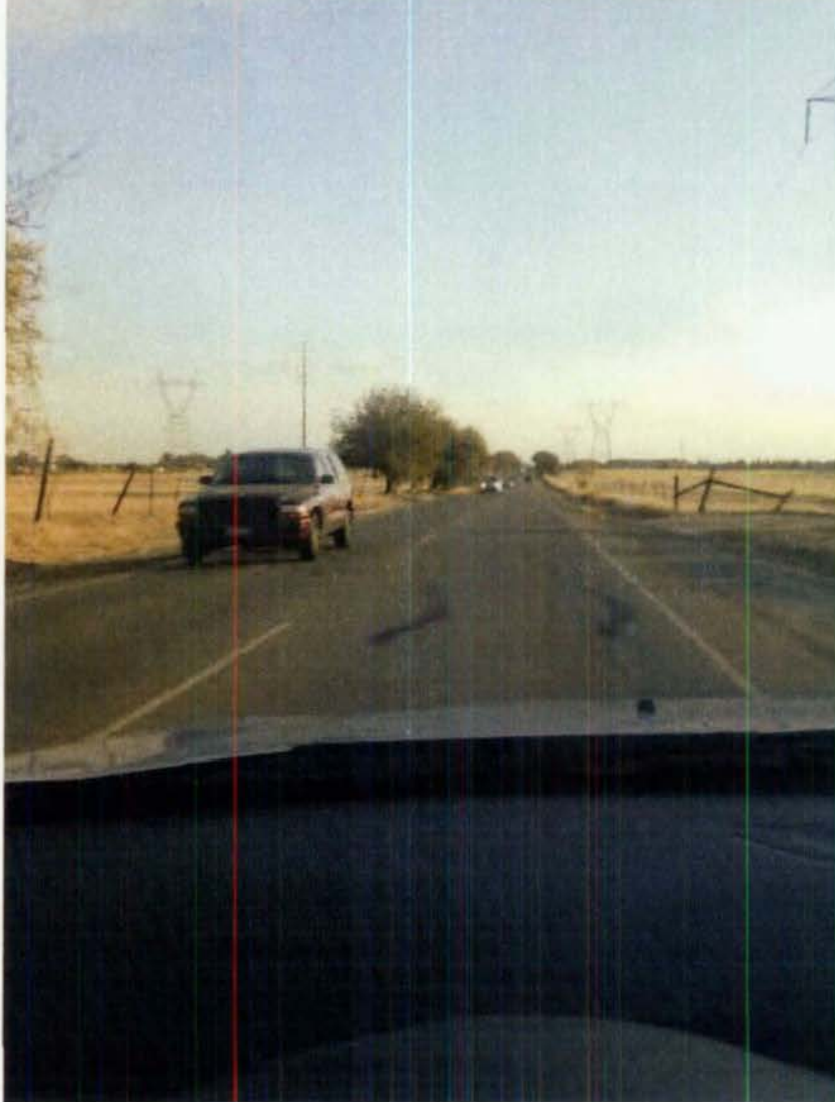
11-1

Thank you!
Lysa Voight

Waterman at Sheldon Rd around 4pm daily.



Unimproved road Waterman between Sheldon and Bond. No shoulder for bikes / pedestrians. No crosswalks. These improvements would be necessary if additional development is constructed.



Bond at Waterman – busy intersection around 4pm daily (poor picture quality). Traffic shown is northbound on Waterman at Bond.



Letter 11 Lysa Voight

Response 11-1: The commentor provided photos regarding the existing traffic conditions and improvements discussed in Letter 10. The commentor is referred to the Responses to Letter 10.

LETTER 12

RECEIVED

NOV 08 2013

CITY OF ELK GROVE
PLANNING

November 1, 2013

City of Elk Grove
Development Services, Planning
8401 Laguna Palms Way
Elk Grove, CA 95758

Re: Silverado Village Project, File # EG-11-046

This letter is to express my opposition to the Silverado Village Project referenced above. The reason for my opposition is that the city planners have not fulfilled their obligation to protect the homeowners on the northern edge of the project from the drainage changes that will take place.

12-1


My home is located at 8890 St. Anthony Court on the end of the street. A city maintained ditch flows from St. Anthony Court through a 3 foot pipe into a ditch on the open space on the northern edge of the Silverado Village Project. During my 15 years at this location first the county and later the city have come out every 3-5 years to improve the drainage ditch on the Silverado Village Property as the ditch fills with sediment and needs to be cleaned on occasion to flow properly. When Centex originally submitted Vintara Park they included ditch improvement which took the ditch all the way to one of the detention ponds within the project. The city of Elk Grove has not included that requirement as part of the project putting those of us north of the project in danger of city negligence flooding. The city of Elk Grove did put in a dry well at the end of St. Anthony Court but has no other plans to improve drainage.

12-2

Until the drainage issue is resolved Silverado Village needs to be delayed to protect those of us on the northern edge of the development. To conclude this letter I am including a quote from City of Elk Grove Planner Christopher Jordan in regard to the project. "Looking back at their (Silverado's) existing Federal permits, re-grading the area directly south of our house isn't very feasible because of the protected wetlands." If protecting current homeowners is not feasible then perhaps the Silverado Village Project is not feasible.

12-3

Please include my comments in the public record for this project.


Mark White
8890 St. Anthony Court
Elk Grove, CA 95624
(916) 681-0941

Letter 12 Mark White

Response 12-1: The commentor expresses their opposition to the Silverado Village Project and indicates that the city planners have not fulfilled their obligation to protect the homeowners on the northern edge of the Project from the drainage changes that will take place.

Drainage is addressed in Section 3.8 of the Draft EIR. As described under Impact 3.8-4, the Preliminary Drainage Study performed for the Project site included modeling and analysis to determine the increase in drainage that would occur with Project implementation. As described on page 3.8-22, the Project would improve the central detention basin and berms in order to accommodate the maximum water surface elevation of 45.3 feet that is modeled to occur from development of the Project. Further, the Preliminary Drainage Study analyzed existing conditions and conditions with development of the Project and determined that the peak discharge rate would decrease from 217 cfs to 192.5 cfs with Project implementation. The Project would not result in an increase in off-site flows and thus would not have an adverse drainage impact on surrounding properties.

Response 12-3: The commentor identifies the location of their home on St. Anthony Court and that a City-maintained ditch flows from St. Anthony Court through a 3-foot pipe into a ditch on the open space on the northern edge of the Silverado Village project. The commentor indicates that the County and City have come out every 3 to 5 years to improve and clean the ditch on the Silverado Village property. The commentor notes that the Vintara Park project would have connected the ditch all the way to one of the detention ponds. The commentor indicates that the requirement for the ditch has not been included for the Project putting those north of the Project in danger of City negligence flooding. The commentor notes that the City put in a dry well at the end of St. Anthony Court but has no other plans to improve the drainage. The commentor states that the Silverado Village needs to be delayed until the drainage issue is resolved.

The commentor's concern is related to an existing condition that the commentor would like the Project to address. CEQA requires that a Draft EIR address the significance of environmental impacts caused by a project (CEQA Guidelines Section 15064). The Draft EIR addresses potential drainage impacts that would occur as a result of the Project in Section 3.8 (see Response 12-1). The Project would not result in adverse off-site drainage impacts, as described under Impact 3.8-4, and CEQA does not require the Project to address an existing condition that would not be adversely affected by the Project. While no revision to the Draft EIR is necessary, the comment is noted for the decision-makers' consideration.

LETTER 13

From: Matthew Dekar
To: Christopher Jordan
Cc: Sandy Kyles; Brian Villanueva; Fedelia Harris; Nancy Cousins; George Mumby; Frank Maula
Subject: comments on draft EIR for Silverado Village - Matt Dekar
Date: Friday, November 08, 2013 12:36:15 PM

City of Elk Grove
Planning Department
c/o Christopher Jordan, AICP
8401 Laguna Palms Way
Elk Grove, CA 95758

Dear Mr. Jordan:

I appreciate the opportunity to review the Draft EIR for Silverado Village. I earned my MS and PhD degrees from the University of Arkansas in Biology with an emphasis in Aquatic Ecology and Fisheries Science. In addition to my graduate degrees, I have worked at some of the leading aquatic research laboratories in North America, including the Aquatic Ecology Laboratory at The Ohio State University, and the Axelrod Institute of Ichthyology at the University of Guelph in Ontario, Canada. Most recently, I was a postdoctoral research fellow at the Center for Reservoir and Aquatic Systems Research at Baylor University. Today, I am speaking as a concerned resident of the Fallbrook Neighborhood and as a member of the Fallbrook Neighborhood Association.

13-1

My primary concerns include impacts to water quality, hydrology, and biological resources. First, the list of impaired water bodies is not complete (Table 3.8-1). The draft EIR does not document Morrison Creek on California's List of Impaired Waters (303(d)) as impaired by pyrethroid insecticides and diazinon and chlorpyrifos. In addition, monitoring data (available on the California Environmental Data Exchange Network) from sites within the Laguna Creek watershed indicate that pyrethroids are contaminants of concern in that sub-watershed because concentrations are approaching water quality objectives. Although, significant and cumulative impacts to water quality are likely as a result of the project due to increased use and runoff of urban pesticides, these impacts are not considered and mitigation measures, such as reducing the coverage of impervious surfaces, were not developed. Therefore, the finding that Impacts 3.8-2 and 3.8.5 are less than significant with mitigation is not supported. Limits on lot coverage and impervious surfaces to provide more vegetated areas that infiltrate and filter runoff during operation are recommended.

13-2

The assertion that the Bond Road trunk pipe would not have a significant effect on Laguna Creek is not supported. Although the model applied by West Yost Associates

13-3

indicated that peak flows from the Bond Road drainage would decline prior to peak flows on Laguna Creek, the model indicated that Laguna Creek would increase by 4-6% during peak flows from the Bond Road trunk after project implementation. Note the draft EIR does not present the range, only the minimum value of 4%. In addition, alternative parameter values with prolonged flows on the project site may increase peak flows on the Bond Road system and Laguna Creek causing significant flooding in the project area and downstream. Overall, a more rigorous evaluation of models and parameterizations is needed to more fully assess the impact of the project on existing drainage patterns for Whitehouse and Laguna creeks (Impact 3.8-4). Again, limits on lot coverage and impervious surfaces are recommended.

13-3

The project does not minimize the impacts of habitat loss and construction activities on vernal pool fairy shrimp and vernal pool tadpole shrimp, despite their status under the Federal Endangered Species Act (ESA) as threatened and endangered, respectively. The draft EIR does not adequately address the reasonable and prudent measures that are described in the incidental take statement under Section 7 (ESA) consultation. In addition, the terms and conditions of exemption from Section 9 (ESA) require that existing vernal pool habitat be preserved at a 2:1 ratio. Therefore, the project requires the protection of 17.56 acres to be preserved, either on or off site, to compensate for the direct and indirect effects of the project that will destroy or harm 8.78 acres of vernal pool habitat and associated flora and fauna (including listed crustaceans and plants). In addition, the vernal pool acreage that will be directly affected by the project is stated as 5.05 under mitigation measure 3.3-1, whereas the direct impact acreage is listed as 4.94 on Table 3.3-3 (from Gibson & Skordal). This discrepancy must be adequately addressed prior to determining potential impacts on Northern Valley Hardpan Vernal Pool and the adequacy of mitigation measures. The draft EIR also fails to describe how reduced density and a reconfigured project may mitigate potentially significant impacts. For example, the current plan proposes a park (Figure 2-3, Lot G) directly on existing vernal pool habitat. As stated in the draft EIR, there is a finite quantity of Northern Valley Hardpan Vernal Pool remaining in California. Therefore, mitigation measures must consider reduced density and reconfiguration, including placing the park within the villages and not on top of a finite resource.

13-5

13-6

As a result of the deficiencies highlighted in the draft EIR, I do not believe the project and mitigation measures are consistent with the City's goal to "Emphasize preservation of open spaces and sensitive habitats" or the project applicant's (Vintara Holdings LLC/Silverado Homes) goal to "Respect the Project site's existing natural features." Further, the draft EIR does not provide sufficient analysis on water quality, hydrology, and biological resources to make decisions regarding the project in contemplation of environmental considerations. Major revisions are needed to the draft EIR, including a more thorough assessment of project alternatives, prior to certification and approval by the City.

13-7

Sincerely,

Dr. Matthew Dekar

2.0 COMMENTS ON DRAFT EIR AND RESPONSES

9242 Whittmore Ave.
Elk Grove, CA 95624

Letter 13 Dr. Matthew Dekar

Response 13-1: The commentor expresses their appreciation for the opportunity to review the Draft EIR and describes their education (MS and PhD in Biology with an emphasis in Aquatic Ecology and Fisheries Science) and describes their work history in the aquatic research field. The commentor identifies that they are a resident of Fallbrook. The comment is noted and no response is necessary.

Response 13-2: The commentor states that their primary concerns include impacts to water quality, hydrology, and biological resources. The commentor states that the list of impaired water bodies is not complete and that the Draft EIR does not document Morrison Creek on California's list of impaired waters as impaired by pyrethroids, diazinon, and chlorpyrifos. The commentor indicates that monitoring data from sites within the Laguna Creek watershed indicate the pyrethroids are contaminants of concern in that sub-watershed because concentrations are approaching water quality objectives. The commentor states that significant and cumulative impacts to water quality are likely as a result of the Project due to increased use and runoff of urban pesticides, these impacts are not considered and mitigation measures were not developed. The commentor indicates that the finding that Impacts 3.8-2 and 3.8-5 are less than significant with mitigation is not supported and recommends limits on lot coverage and impervious surfaces to provide more vegetated areas that infiltrate and filter runoff during operation are recommended.

The commentor is correct that the list of 303(d) impaired water bodies does not include Morrison Creek. Pages 3.8-3 through 3.8-5 of the Draft EIR will be updated to include Morrison Creek and other water bodies in Sacramento County that are included on the 303(d) list of impaired water bodies. While information regarding specific 303(d) listed waterbodies and the pollutants of concern was not included in the Draft EIR, this does not mean that the impact associated with impacts to water quality will be significant and unavoidable. As described under Impacts 3.5-1, 3.8-2, and 3.8-5 of the Draft EIR, the Project will be required to implement Mitigation Measures 3.5-1 and 3.5-2. Mitigation Measure 3.5-1 requires that the Project Applicant submit a Storm Water Pollution Prevention Plan (SWPPP) to the Regional Water Quality Control Board (RWQCB) in accordance with the National Pollution Discharge Elimination System (NPDES) General Construction Permit requirements. Mitigation Measure 3.5-2 requires the Project Applicant to submit a Post-Construction Stormwater Quality Control Plan in accordance with the most recent version of the Stormwater Quality Design Manual for the Sacramento Region. On pages 3.8-18 through 3.8-20 of the Draft EIR, the discussion presented under Impact 3.8-2 identifies that while the Project could result in water quality impacts associated with pollution, including the potential to violate water quality control standards, the Project would implement water quality control measures and apply with applicable regulations which would reduce potential impacts. Impact 3.8-2 also identifies that the Project would be required to comply with Mitigation Measures 3.5-1 and 3.5-2 which would reduce potential

2.0 COMMENTS ON DRAFT EIR AND RESPONSES

impacts on water quality to less than significant. The discussion on page 3.8-23 of the Draft EIR under Impact 3.8-4 describes that through the implementation of mitigation measures 3.5-1 and 3.5-2, the Project's water quality control measures will be refined so that they will functionally minimize stormwater quality impacts, which would reduce the impacts on downstream 303(d) impaired water bodies.

Both the SWPPP and Post-Construction Stormwater Quality Control Plan are Project-specific documents that must be developed consistent with criteria designed to meet state and federal water quality standards. Operational stormwater quality measures for the Project shall be designed in accordance with the applicable Stormwater Quality Design Manual, as required by Mitigation Measure 3.5-2. The Stormwater Quality Design Manual for the Sacramento and South Placer Regions (SWQD Manual) is the manual applicable to development in the City. Table 3-1 of the SWQD Manual identifies categories associated with development and infrastructure projects and the associated potential pollutants for each category. The "residential" category identifies that all potential pollutants (sediment, nutrients, metals, bacteria, oil and grease, and organics/pesticides) are associated with the residential land use category. This means that residential development must include water quality treatment measures to address all potential pollutant categories. The pollutants of concern that the commentor identified, pyrethroids, diazinon, and chlorpyrifos are associated with insecticide use and would be addressed by the required water quality treatment measures. These are pollutants of concern on multiple waterbodies in the region and are addressed through the pollutant control measures in the SWQD Manual. As described under Impact 3.8-2 on pages 3.8-18 through 3.8-20, the Project proposes treatment of stormwater that is discharged from the majority of the Project site through a dedicated wet water quality treatment pond and stormwater from the portion of the Project site that discharges to the Bond Road Trunk system will be treated with a stormwater filter consistent with the water quality certification issued for the site by the Regional Water Quality Control Board. The SWQD Manual (Sheet DB-1) identifies that a wet water quality treatment pond (wet basin) has a high effectiveness for removal of organics, which would include pesticides. A wet basin also has a high level of effectiveness for removing sediment, trash, metals, bacteria, and oil and grease and a medium level of effectiveness for removing nutrients from stormwater. The SWQMD Manual includes a footnote for the wet basin effectiveness that identifies that metals, bacteria, and organics are Target Pollutants for the Sacramento area. The level of effectiveness for a sand filter is high for sediment, trash, metals, and organics, medium for bacteria, and low for nutrients. While additional treatment measures may be included in the SWPP and Post-Construction Stormwater Quality Control Plan, the primary treatment methods for the Project have acceptable levels of effectiveness for removing pollutants of concern. Both have a high level of effectiveness for removing the pollutants identified by the commentor. As described in the Draft EIR, implementation of Mitigation Measures 3.5-1 and 3.5-2 would reduce potential water quality impacts to a less than significant level and would ensure that the Project would

not have a cumulatively considerable contribution to cumulative water quality impacts. Mitigation measures, such as limits on lot coverage and impervious surfaces, are not required as the impact will be less than significant with implementation of the above-described mitigation measures.

Pages 3.8-3 through 3.8-5 of the Draft EIR are revised as follows:

“303(d) Impaired Water Bodies: Section 303(d) of the federal Clean Water Act requires States to identify waters that do not meet water quality standards or objectives and thus, are considered "impaired." Once listed, Section 303(d) mandates prioritization and development of a Total Maximum Daily Load (TMDL). The TMDL is a tool that establishes the allowable loadings or other quantifiable parameters for a waterbody and thereby the basis for the States to establish water quality-based controls. The purpose of TMDLs is to ensure that beneficial uses are restored and that water quality objectives are achieved.

~~According to the California Water Quality Control Monitoring Council, which is part of California Environmental Protection Agency, Natural Resources, the Based on the California 303(d) combined list table prepared by the State Water Resources Control Board, the Project would not discharge directly into~~ are no impaired water bodies within the vicinity of the Project site. However, within Sacramento County there are creeks, sloughs, rivers, lakes, and Delta waterbodies that are included on the 303(d) list of impaired waterbodies. ~~California waters are listed as impaired for uses related to fish or shellfish consumption by humans and which pollutants are involved.~~ Table 3.8-1 identifies waterbodies in Sacramento County which are listed as impaired, including the pollutant of concern and TMDL status.

“TABLE 3.8-1: 303(D) LISTED IMPAIRED WATERBODIES IN SACRAMENTO COUNTY

WATERBODY	AFFECTED AREA	POLLUTANT OF CONCERN	TMDL STATUS ¹
American River, Lower (Nimbus Dam to confluence with Sacramento River)	27 miles	Mercury, PCBs, unknown	All category 5A - expected TMDL completion dates of 2010 for mercury and 2021 for PCBs and unidentified toxicity pollutants
Arcade Creek	10 miles	Chlorpyrifos, Copper, Diazinon, Malathion, Pyrethroids, Sediment Toxicity	Category 5A - expected TMDL completion date of 2021 for copper, malathion, pyrethroids, sediment toxicity Category 5B - USEPA approved TMDL for chlorpyrifos and diazinon in 2004
Carson Creek (from WWTP to Deer Creek)	12 miles	Aluminum, Manganese	All category 5A - expected TMDL completion dates of 2019 for aluminum and 2021 for manganese
Chicken Ranch Slough	8 miles	Chlorpyrifos, Diazinon, Pyrethroids, Sediment Toxicity	Category 5A - pyrethroids and sediment toxicity with expected TMDL completion dates of 2021 Category 5B - USEPA approved TMDL for chlorpyrifos and diazinon in 2004
Cosumnes River, Lower (below Michigan Bar)	36 miles	Escherichia coli (E. coli), Invasive Species, Sediment Toxicity	Category 5A - expected TMDL completion dates of 2021 for E. coli and sediment toxicity and 2019 for invasive species
Cosumnes River, Upper (above Michigan Bar)	17 miles	Invasive Species	Category 5A - expected TMDL completion date of 2019 for invasive species
Deer Creek	12 miles	Iron	Category 5A - expected TMDL completion date of

2.0 COMMENTS ON DRAFT EIR AND RESPONSES

			<u>2019 for invasive species</u>
Delta waterways: Central portion	11,425 acres	Mercury	<u>Category 5A – expected TMDL completion in 2009</u>
		Chlorpyrifos, Invasive Species, Unknown Toxicity	<u>Category 5A – expected TMDL completion in 2019</u>
		Diazinon	<u>Category 5B – USEPA approved TMDL in 2007</u>
		DDT, Group A Pesticides	<u>Category 5A – expected TMDL completion in 2011</u>
Delta waterways: Eastern portion	2,972 acres	Mercury	<u>Category 5A – expected TMDL completion in 2009</u>
		Chlorpyrifos, Diazinon	<u>Category 5B – USEPA approved TMDL in 2007</u>
		Invasive Species, Unknown Toxicity	<u>Category 5A – expected TMDL completion in 2019</u>
		DDT, Group A Pesticides	<u>Category 5A – expected TMDL completion in 2011</u>
Delta waterways: Northern portion	6,795 acres	Mercury	<u>Category 5A – expected TMDL completion in 2009</u>
		Chlorpyrifos, Diazinon	<u>Category 5B – USEPA approved TMDL in 2007</u>
		Invasive Species, PCBs, Unknown Toxicity	<u>Category 5A – expected TMDL completion in 2019</u>
		Chlordane, Dieldrin, DDT, Group A Pesticides	<u>Category 5A – expected TMDL completion in 2011</u>
Delta waterways: Western portion	14,524 acres	DDT, Group A Pesticides	<u>Category 5A – expected TMDL completion in 2011</u>
		Diazinon	<u>Category 5B – USEPA approved TMDL in 2007</u>
		Mercury	<u>Category 5A – expected TMDL completion in 2009</u>
		Chlorpyrifos	<u>Category 5B – expected TMDL in 2006</u>
		Electrical conductivity, Invasive Species, Unknown Toxicity	<u>Category 5A – expected TMDL completion in 2019</u>
Elder Creek	11 miles	Chlorpyrifos, Diazinon, Pyrethroids, Sediment Toxicity	<u>Category 5B - USEPA approved TMDL in 2007 for chlorpyrifos and diazinon</u> <u>Category 5A – expected TMDL in 2021 for pyrethroids and sediment toxicity</u>
Elk Grove Creek	7 miles	Chlorpyrifos, Diazinon	<u>Category 5B – USEPA approved TMDL in 2004</u>
Mokelumne River, Lower	34 miles	Chlorpyrifos, Copper, Mercury	<u>All Category 5A – expected TMDL completion in 2019 for mercury and zinc and in 2021 for all other pollutants</u>

		Dissolved Oxygen, Unknown Toxicity, Zinc	
Morrison Creek	26 miles	Diazinon, Pentachlorophenol (PCP), Pyrethroids, Sediment Toxicity	Category 5A – expected TMDL completion in 2021 for all pollutants; an approved TMDL is identified for diazinon (26 miles) for 2003, however a new completion date for diazinon is identified for 13 miles in 2021
Lake Natoma	485 acres	Mercury	Category 5A – expected TMDL completion in 2019
Beach Lake	26 acres	Mercury	Category 5A – expected TMDL completion in 2021
Folsom Lake	11,064 acres	Mercury	Category 5A – expected TMDL completion in 2019
Natomas East Main Drainage Canal (aka Steelhead Creek, downstream of Arcade Creek)	4 to 12 miles	Mercury, Diazinon, PCBs	Category 5A – expected TMDL completion date in 2008 for diazinon, in 2019 and 2020 for PCBs, and in 2021 for mercury
Sacramento River (Knights Landing to the Delta)	16 miles	Mercury, PCBs, Chlordane, DDT, Dieldrin	All Category 5A – expected TMDL completion date in 2012 for mercury, in 2019 for unknown toxicity, in 2021 for chlordane and DDT, and in 2022 for dieldrin
Sacramento-San Joaquin Delta	41,736 acres,	Mercury,	
		Polychlorinated Biphenyls (PCBs)	
		Chlordane, DDT, Dieldrin	
		Dioxin Compounds (including 2,3,7,8-TCDF), Furan Compounds, PCBs (Polychlorinated biphenyls) (dioxin-like)	
Strong Ranch Slough	6 miles	Chlorpyrifos, Diazinon, Pyrethroids, Sediment Toxicity	Category 5A – TMDL expected in 2021 for pyrethroids and sediment toxicity Category 5B – USEPA approved TMDL for chlorpyrifos and diazinon in 2001

Source: ~~California Water Quality Control Monitoring Council~~ State Water Resources Control Board, CalEPA, 20132012 (map: http://www.waterboards.ca.gov/water_issues/programs/tmdl/integrated2010.shtml and excel table: http://maps.waterboards.ca.gov/webmap/303d/files/2010_USEPA_approv_303d_List_Final_122311wsrscs.xls)

¹Category 5A= TMDL still required, Category 5B= being addressed by USEPA approved TMDL. Note that some Category 5B pollutants have passed the expected TMDL completion date and are identified as “do no delist” although the expected

According to the State Water Resources Control Board, there are three lakes in Sacramento County that are impaired. These are:

- Beach Lake, mercury.
- Folsom Lake, mercury.
- Lake Natomas, mercury.”

2.0 COMMENTS ON DRAFT EIR AND RESPONSES

Response 13-3: The commentor indicates that the assertion that the Bond Road trunk pipe would not have a significant effect on Laguna Creek is not supported, stating that although the model applied by West Yost Associates indicated that peak flows from the Bond Road drainage would decline prior to peak flows on Laguna Creek, the model indicated that Laguna Creek would increase by 4- 6% during peak flows from the Bond Road trunk after Project implementation. The commentor also states that alternative parameter values with prolonged flows on the Project site may increase peak flows on the Bond Road system and Laguna Creek causing significant flooding in the Project area and downstream and recommends a more rigorous evaluation of models and parameterizations to more fully assess the impact of the Project on existing drainage patterns for Whitehouse and Laguna Creeks (Impact 3.8-4). The commentor recommends limits on lot coverage and impervious surfaces.

The comment seems to imply that West Yost Associates model data included in the Preliminary Drainage Study predicts that the Project could increase the peak flow in Laguna Creek by 4 to 6 percent. If that is what is being said, that is not a correct interpretation of the model data.

The Project is predicted to increase the 100-year peak flow in the local watershed by about 60 cfs. Pipeline improvements in Bond Road will mitigate this increase. The increase in the local peak flow would not have a significant impact on the peak 100-year flow in Laguna Creek because the local watershed (that includes the Project) is located near the downstream end of the Laguna Creek watershed and is a much smaller watershed. Therefore, the peak flow from the local watershed will occur much sooner than the peak flow in Laguna Creek.

The timing difference is illustrated on the figure "100-Year Flows - Laguna Creek and Bond Road Trunk" that is shown on page 9 of the Preliminary Drainage Study (see Draft EIR Appendix D), which shows hydrographs for the 100-year, 24-hour storm for the Project watershed (labeled as Bond Road Trunk) and Laguna Creek. Please note that the hydrographs are plotted on different scales that make the Bond Road Trunk flows look closer in magnitude to the Laguna Creek flows than they really are. At the time of the peak local from the Project, the flow in Laguna Creek is at about 1,500 cfs, which is well below the peak flow of approximately 2,600 cfs. Adding 60 cfs to 1,500 results in a 4 percent increase at the time of the local peak flow. The 6 percent increase occurs only if pipe improvements are included within the Quail Ranch Estates subdivision (blue hydrograph on the figure "100-Year Flows - Laguna Creek and Bond Road Trunk") and those improvements are conceptual improvements that are not a part of this Project. Either way, by the time Laguna Creek peaks, about 5 hours after the local peak, the local flow hydrograph has receded and does not have a significant influence on the peak flow in Laguna Creek.

The commentor indicates that different parameter assumptions could change the conclusions of the Draft EIR. The timing difference is too great to be significantly affected by changes in modeling parameters related to runoff timing. The commentor also indicates that prolonged flows on the local watershed could change the conclusions of the Draft EIR. This scenario would

presumably require a 100-year storm on the entire Laguna Creek watershed to be followed by, or to overlap with, another very large storm on the local watershed such that the local peak flow would coincide with the peak flow in Laguna Creek. This type of back to back event would be rare and would no longer be considered a 100-year storm but would be something much larger and beyond the normal range of events that is considered for drainage evaluations. It should be noted that FEMA mapping procedures recognize the effects of timing differences in watersheds of different sizes. When preparing a hydraulic model for a tributary stream that joins a larger stream, if the tributary stream has a watershed area that is 1/3 of the larger watershed or less, then the water surface elevation in the larger stream can be excluded when modeling the tributary. This is a slightly different application, but the concept is the same. The impact is less than significant, as described in the Draft EIR, and mitigation measures, such as limits on lot coverage and impervious surfaces, are not required.

Response 13-4: *The commenter states that the “project does not minimize the impacts of habitat loss and construction activities on vernal pool fairy shrimp and vernal pool tadpole shrimp, despite their status under the Federal Endangered Species Act (ESA) as threatened and endangered, respectively. The draft EIR does not adequately address the reasonable and prudent measures that are described in the incidental take statement under Section 7 (ESA) consultation. In addition, the terms and conditions of exemption from Section 9 (ESA) require that existing vernal pool habitat be preserved at a 2:1 ratio. Therefore, the project requires the protection of 17.56 acres to be preserved, either on or off site, to compensate for the direct and indirect effects of the project that will destroy or harm 8.78 acres of vernal pool habitat and associated flora and fauna (including listed crustaceans and plants). In addition, the vernal pool acreage that will be directly affected by the project is stated as 5.05 under mitigation measure 3.3-1, whereas the direct impact acreage is listed as 4.94 on Table 3.3-3 (from Gibson & Skordal). This discrepancy must be adequately addressed prior to determining potential impacts on Northern Valley Hardpan Vernal Pool and the adequacy of mitigation measures. The draft EIR also fails to describe how reduced density and a reconfigured project may mitigate potentially significant impacts.”*

The vernal pool crustaceans are addressed on pages 3.3-14 through 3.3-16 of the Draft EIR as follows:

***Vernal Pool Crustaceans:** Vernal pool crustaceans are found in ephemeral freshwater habitats, and their life cycles have adapted to the unique habitat conditions of vernal pools. Following the winter rains vernal pools become inundated, and in conjunction with the appropriate environmental cues (temperature, total dissolved solids, alkalinity, pH, etc.), the hatching of vernal pool crustacean eggs is initiated. Vernal pool crustaceans then mature rapidly into adults.*

*There are four special-status freshwater crustaceans, two of which are federal listed, that are documented within five miles of the Project site and have been determined to potentially occur in the vernal pools and seasonal wetlands on the Project site: vernal pool fairy shrimp (*Branchinecta lynchi*), vernal pool tadpole shrimp (*Lepidurus packardii*), midvalley fairy shrimp (*Branchinecta mesovallensis*), and California linderiella (*Linderiella occidentalis*).*

2.0 COMMENTS ON DRAFT EIR AND RESPONSES

Suitable habitat for these vernal pool crustaceans is present on the Project site. Protocol-level surveys were not conducted in the preparation of the Biological Assessment for this Project. In accordance with USFWS policy, given the presence of potential habitat and the absence of protocol surveys, these species are presumed present on the Project site.

Direct Effects: *The Project will result in the direct loss of 5.05 acres of federally listed crustacean habitat, and the death of an unknown number of vernal pool fairy shrimp and vernal pool tadpole shrimp through the direct filling of vernal pools and vernal swales within the Project site. The midvalley fairy shrimp and California linderiella are both non-listed, but they are considered special status species, and the Project will result in a direct loss of habitat and death of an unknown number of these species.*

Indirect Effects: *The Project would result in indirect effects to all vernal pool tadpole shrimp, vernal pool fairy shrimp, midvalley fairy shrimp, and California linderiella, in the form of death, injury, and harm, found in vernal pools that are supported by associated upland areas and swales, and all habitat otherwise damaged by loss of watershed, human intrusion, introduced species, and pollution that will be caused by the Project. The Project would result in indirect effects to 3.73 acres of federally-listed crustacean habitat.*

Cumulative Effects: *Because the vernal pool tadpole shrimp, vernal pool fairy shrimp, midvalley fairy shrimp, and California linderiella are endemic to vernal pools in the Central Valley, coast ranges, and a limited number of sites in the transverse range and Santa Rosa Plateau of California, the USFWS anticipates that a wide range of activities will affect these species. Such activities include, but are not limited to, urban, water, flood control, highway and utility projects, chemical contaminants, as well as conversion of vernal pools to agricultural use.*

Conclusion: *A Section 7 Consultation was initiated for the incidental take of vernal pool tadpole shrimp, vernal pool fairy shrimp in association with the Project. The USFWS reviewed the status of the vernal pool tadpole shrimp, vernal pool fairy shrimp, the environmental baseline, the effects of the Project and the cumulative effects and provided their biological opinion that the Project is not likely to jeopardize the continued existence of these two listed species. They also indicated that the Project site is not located within proposed or designated critical habitat for the vernal pool fairy shrimp or the vernal pool tadpole shrimp, and, therefore, none will be affected.*

The USFWS anticipates incidental take of the vernal pool fairy shrimp and vernal pool tadpole shrimp will be difficult to detect or quantify. The cryptic nature of these species and their relatively small body size make the finding of a dead specimen unlikely. The species occur in habitats that make them difficult to detect. Due to the difficulty in quantifying the number of individuals that will be taken as a result of the Project, the USFWS is quantifying take incidental to the Project as the number of acres of vernal pools/ponded depressions (vernal pool habitat) that will become unsuitable for vernal pool crustaceans due to the Project. Therefore, the USFWS estimates that all vernal pool fairy shrimp and vernal pool tadpole shrimp inhabiting 8.78 acres of vernal pool habitat will be harassed, harmed, injured, or killed, as a result of the Project.

The USFWS determined that the incidental take associated with the Project on vernal pool fairy shrimp and vernal pool tadpole shrimp is exempted from prohibitions of take under Section 9 of the ESA. The USFWS also determined that this level of anticipated take is not likely to result in jeopardy to the federally-listed species or result in destruction or adverse modification of proposed or designated critical habitat.

The USFWS provided a requirement to implement reasonable and prudent measures necessary and appropriate to minimize the effect of the Project on vernal pool fairy shrimp and vernal pool tadpole shrimp. This includes the following:

- 1. The effects to listed vernal pool crustaceans from habitat loss shall be minimized.*
- 2. The effects to listed vernal pool crustaceans from construction activities at the Project shall be minimized.*

These reasonable and prudent measures are addressed through more detailed terms and conditions and reporting requirements, in addition to several conservation recommendations. These USFWS requirements are non-discretionary, and must be implemented so that they become binding conditions of any grant or permit

issued to the Project proponent, as appropriate, in order for the exemption in Section 7(0)(2) to apply. The USACE has a continuing duty to regulate the activity covered by this incidental take statement.

While the midvalley fairy shrimp and California linderiella are not federal or state listed and not addressed within the Section 7 Consultation or another permitting document, these special status species occupy the same vernal pool habitat as is mentioned for the federally listed vernal pool tadpole shrimp and vernal pool fairy shrimp and will have similar impacts. Similar to the above impact discussion, it is estimated that all midvalley fairy shrimp and California linderiella inhabiting 8.78 acres of vernal pool habitat will be affected as a result of the Project.

Impacts to vernal pool tadpole shrimp, vernal pool fairy shrimp, midvalley fairy shrimp, and California linderiella are potentially significant.

MITIGATION MEASURES

Mitigation Measure 3.3-1: The Project applicant shall comply with the Terms and Conditions, Reporting Requirements, and Conservation Recommendations in accordance with the USFWS Incidental Take Statement issued for the Project.

Timing/Implementation: As specified in the permit and throughout all earthmoving and construction activities.

Enforcement/Monitoring: City of Elk Grove Planning Department.

Implementation of Mitigation Measure 3.3-1 requires the Project to adhere to the USFWS Incidental Take Permit which requires the preservation of existing vernal pool habitat at a 2:1 ratio (17.56 acres of wetted vernal pool crustacean habitat to be preserved to compensate for 5.05 directly-affected acres and 3.73 indirectly affected acres), measures to address stormwater quality, notification procedures in the event of death or harm of a listed species, and constructed monitoring to ensure compliance with construction-related impact avoidance measures. This measure will ensure that the potential impacts to vernal pool tadpole shrimp, vernal pool fairy shrimp, midvalley fairy shrimp, and California linderiella are reduced to a less than significant level.

The Draft EIR adequately addresses the reasonable and prudent measures that are described in the incidental take statement under Section 7 (ESA) consultation when it states the following:

"The USFWS provided a requirement to implement reasonable and prudent measures necessary and appropriate to minimize the effect of the Project on vernal pool fairy shrimp and vernal pool tadpole shrimp. This includes the following:

- 1. The effects to listed vernal pool crustaceans from habitat loss shall be minimized.*
- 2. The effects to listed vernal pool crustaceans from construction activities at the Project shall be minimized.*

These reasonable and prudent measures are addressed through more detailed terms and conditions and reporting requirements, in addition to several conservation recommendations. These USFWS requirements are non-discretionary, and must be implemented so that they become binding conditions of any grant or permit issued to the Project proponent, as appropriate, in order for the exemption in Section 7(0)(2) to apply. The USACE has a continuing duty to regulate the activity covered by this incidental take statement."

2.0 COMMENTS ON DRAFT EIR AND RESPONSES

The Draft EIR adequately addresses the requirement that existing vernal pool habitat to be preserved at a 2:1 ratio for a total of 17.56 acres to be preserved, either on or off site, to compensate for the direct and indirect effects of the Project that will destroy or harm 8.78 acres of vernal pool habitat and associated flora and fauna (including listed crustaceans and plants). Mitigation Measure 3.3-1 requires the following:

MITIGATION MEASURES

Mitigation Measure 3.3-1: *The Project applicant shall comply with the Terms and Conditions, Reporting Requirements, and Conservation Recommendations in accordance with the USFWS Incidental Take Statement issued for the Project.*

Timing/Implementation: *As specified in the permit and throughout all earthmoving and construction activities.*

Enforcement/Monitoring: *City of Elk Grove Planning Department.*

Implementation of Mitigation Measure 3.3-1 requires the Project to adhere to the USFWS Incidental Take Permit which requires the preservation of existing vernal pool habitat at a 2:1 ratio (17.56 acres of wetted vernal pool crustacean habitat to be preserved to compensate for 5.05 directly-affected acres and 3.73 indirectly affected acres), measures to address stormwater quality, notification procedures in the event of death or harm of a listed species, and constructed monitoring to ensure compliance with construction-related impact avoidance measures. This measure will ensure that the potential impacts to vernal pool tadpole shrimp, vernal pool fairy shrimp, midvalley fairy shrimp, and California linderiella are reduced to a less than significant level.

The commenter's reference to a discrepancy in the vernal pool acreage calculations under mitigation measure 3.3-1 compared to a calculation by Gibson & Skordal can be explained within the context of the calculations. The 5.05 acre calculation referenced under mitigation measure 3.3-1 refers to "vernal pool crustacean habitat" as assessed in coordination with the United States Fish and Wildlife Service. The 4.94 acre calculation within a wetland delineation as assessed in coordination with the Army Corps of Engineers. It is important to note that not all jurisdictional wetland is vernal pool crustacean habitat. The wetland delineation used other "Classifications" for jurisdictional areas (i.e. Vernal Pool and Seasonal Wetland). The Seasonal Wetland Classification includes the .11 acres of vernal pool crustacean calculation. It is important to note that the wetland delineation calculation is based on the presence of three physical characteristics—hydrology, hydrophytes, and hydric soil. The methodology for delineating a wetland is defined in the 1987 Army Corp Manual and is regulated by the United States Army Corps of Engineers. The vernal pool crustacean habitat calculation is not based on this same methodology. The analysis of Alternative 2 on page 5.0-7 identifies that it would avoid impacts to sensitive habitats and associated special-status vernal pool and plant species. The information provided in this comment letter does not alter the findings or conclusions contained in the Draft EIR with respect to this environmental topic.

Response 13-5: *The commenter states that the "current plan proposes a park (Figure 2-3, Lot G) directly on existing vernal pool habitat. As stated in the draft EIR, there is a finite quantity of Northern Valley Hardpan Vernal Pool remaining in California. Therefore, mitigation measures must*

consider reduced density and reconfiguration, including placing the park within the villages and not on top of a finite resource.”

The Northern Valley Hardpan Vernal Pool is addressed on pages 3.3-31 through 3.3-32 of the Draft EIR as follows:

Impact 3.3-8: The Project has the potential to have a substantial adverse effect on riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service (significant and unavoidable)

The CNDDDB documents two sensitive natural communities within a five mile radius of the Project site including: Great Valley Valley Oak Riparian Forest and Northern Hardpan Valley Hardpan Vernal Pool. The Project site does not contain Great Valley Valley Oak Riparian Forest; however, it does contain Northern Hardpan Valley Hardpan Vernal Pool. The Northern Hardpan Valley Hardpan Vernal Pool is found primarily on old alluvial terraces on the east side of the Great Valley from Tulare or Fresno County north to Shasta County (Holland 1986). This community is dominated by annual grasses and herbs that grow in and out of the water. Germination and growth begin with winter rains, often continuing even when inundated. These pools gradually evaporate during spring, leaving concentric bands of vegetation that colorfully encircle the drying pools (Holland 1986).

This community is typically found through mounded terrain where soils are very acidic, iron and silicemented hardpan soils. Winter rainfall perches on the hardpan, forming pools in the depressions. Evaporation (not runoff) empties the pools in spring (Holland 1986).

The Gibson & Skordal (2012) wetland delineation documented 141 vernal pool features, 34 seasonal wetland features, three pond features, two ephemeral drainages, and White House Creek, which collectively total 26.45 acres of jurisdictional area located on the Project site. All of these features collectively contribute to the unique Northern Valley Hardpan Vernal Pool characteristics of the Project site.

*The Project would involve the discharge of fill material into 8.31 acres of the 26.45 acres described above. This includes discharge of fill into 1.09 acres of seasonal wetlands, 4.94 acres of vernal pools, 2.25 acres of bermed pond, 0.01 acre of Whitehouse Creek and 0.02 acre of ephemeral drainage. In addition, 64.45 acres of avoided area containing 5.64 acres of waters of the United States would be preserved in perpetuity. The proposed detention design will utilize 12.39 acres of bermed pond to control/detain runoff within the residential subdivision. The above referenced discharge of fill material into the Northern Valley Hardpan Vernal Pool is a potentially significant impact. While there are mitigation measures presented in this EIR that are intended to minimize the impacts to the extent feasible, there is a finite quantity of Northern Valley Hardpan Vernal Pool in California and the Elk Grove area, the Project would result in a reduction in that finite quantity. The loss of the habitat cannot be mitigated to a level of insignificance. Implementation of the Project would result in a **significant and unavoidable** impact on Northern Valley Hardpan Vernal Pool.*

The commentor states that mitigation measures must consider reduced density and reconfiguration. Alternative 2, described in Chapter 5.0 of the Draft EIR, would address the impacts to Northern Valley Hardpan Vernal Pool through reducing the Project density and reconfiguring the Project, in a manner similar to that suggested by the commentor. Alternative 2 is described on pages 5.0-3 and 5.0-4 of the Draft EIR and is analyzed on pages 5.0-7 through 5.0-9 of the Draft EIR. The number of residential units under Alternative 2 would be reduced to 211 single family units and a senior living facility of up to 125 units. Alternative 2 would avoid impacts to Northern Valley Hardpan Vernal Pool by placing preservation easements around all

2.0 COMMENTS ON DRAFT EIR AND RESPONSES

wetland, riparian, vernal pool, and drainage features. An alternative detention basin would be constructed to the east and the park sites would be reduced to approximately 3.25 acres.

The impacts on Northern Valley Hardpan Vernal Pool are adequately addressed in the Draft EIR. The information provided in this comment letter does not alter the findings or conclusions contained in the Draft EIR with respect to this environmental topic.

Response 13-6: The commentor states that, as a result of deficiencies highlighted in the Draft EIR, the commentor does not believe that the Project and mitigation measures are consistent with the City's goal to "Emphasize preservation of open spaces and sensitive habitats" or the Project Applicant's goal to "Respect the Project site's existing natural features." The commentor states that the Draft EIR does not provide sufficient analysis on water quality, hydrology, and biological resources to make decisions regarding the Project in contemplation of environmental considerations and recommends major revisions to the Draft EIR, including a more thorough assessment of Project alternatives. The commentor is referred to Responses 13-2 through 13-5 for responses to the commentor's concerns regarding hydrology, water quality, and biological resources. The alternatives analysis in Chapter 5.0 of the Draft EIR was prepared pursuant to the requirements of the CEQA Guidelines, including Section 15126.6. The commentor does not identify any specific concerns regarding the alternatives analysis, so no further response to this issue can be provided. The comment is noted for consideration by the decision-makers.

LETTER 14

November 8, 2013

City of Elk Grove
Planning Department
c/o Christopher Jordan, AICP
8401 Laguna Palms Way
Elk Grove, CA 95758

Cc: Planning Commissioners

Dear Mr. Jordan,

Thank you for the opportunity to make comments on the Draft EIR. I am a resident of the Fallbrook neighborhood and a member of the Fallbrook Neighborhood Association. I recognize that there will be a project developed on this property and know that you will work with the developers to ensure it is a project that meets the City goals, is supported by the community, and limits environmental impacts. A step along the way to make that happen is a thorough and adequate EIR. The draft EIR is inadequate and does not give our decision makers the information they need. 14-1

Land Use:

The DEIR does not adequately address land use impacts. Per CEQA guidelines a project will have a significant impact on land use if it will conflict with any applicable land use plan. The DEIR concludes that land use impacts are "less than significant." But, in actuality, this project conflicts with the General Plan. 14-2

The DEIR supports its finding of "less than significant" based on consistency with the GP EIR. The GP was adopted in 2003, ten years ago. There have been changes to the community and amendments to the GP that have not been considered. When this property was analyzed for residential development, there were also commercial land uses being proposed to serve them. Since then, no commercial development has occurred in the project area and sites intended as commercial have been developed as residential. One example is the rezone from commercial to residential at Bond Rd and Stonebrook Dr. Another is the building of apartments at Waterman and Bond on commercial property. 14-3

The DEIR finds this project consistent with Land Use policy LU-11, which supports the development of neighborhood serving commercial. It states that commercial services planned for this project would serve the community. However the commercial services proposed on this project are not neighborhood serving. They would be restricted to the senior residents living within the gated community. Therefore, it is not accurate to consider those uses as "neighborhood serving" or use them to support this finding. 14-4

The DEIR supports its "less than significant" by finding consistency with policy CAQ-7 which encourages clustering to facilitate protection of on-site natural resources. Clustering on this site appears to be done to facilitate a "convenient" location to 14-5

2.0 COMMENTS ON DRAFT EIR AND RESPONSES

accommodate their legally required open space area so that they can maximize density on the remainder of the property. In fact, the project proposes development on vernal pools and other wetlands that are the most environmentally sensitive. 14-5

Additionally, the park is proposed for the open space on top of existing vernal pools. The park is proposed here because by putting it in the open space, the project can maximize the density of the project. The park is likely to become an attractive nuisance that, along with illegal activity, will bring damaging activity to the environmentally sensitive areas we are trying to protect. 14-6

The DEIR supports its "less than significant" finding with inaccurate data and relies on misrepresenting the policies in an attempt to find consistency with the GP. 14-7

-Possible mitigation includes:

-Planning a less dense project proposal with additional open space scattered throughout the project that actually uses clustering to protect on-site resources.

-Relocating the park to a central area within the community.

Safety and Public Services:

The proposed plan conflicts GP Goal 1-1, a safe community, free from manmade and natural hazards, by placing an unlit park on the fringe of the community surrounded by open space. It is not located where neighbors can have "eyes on the park." Illegal activity could easily occur here without being noticed by neighbors won't be walking or driving by. Not only will this create a hazard, it will discourage many residents from using, or allowing their children to use, the park. 14-8

The DEIR does not analyze the impacts to safety and public services that the location of the park will create. The park will generate more calls for police, EMS and fire services, due to its secluded location and the potential for activity to occur unnoticed.

-An easy mitigation measure for this is to relocate the park within the community where it can be easily accessed and monitored by the community.

Transportation:

The traffic analysis was just inadequate. Anyone who travels these roads during peak traffic times can tell you that regardless of what the traffic counts and "micro-simulation software" tell you, traffic is just horrible. There are people in our neighborhood who time their activities for times when they are more likely to be able to exit their own driveway and turn off their court. The traffic analysis didn't account for people who are so frustrated with traffic that they avoid leaving their homes during certain times of the day. 14-9

-A survey of resident should be included in the traffic analysis to accurately assess traffic conditions.

The DEIR did not adequately assess the impact of trains. The number of trains per day was given as 16, but it is well known that far more than 16 trains come 14-10

through each day. It also doesn't consider the length and speed of the trains. The high speed four-car Amtrak trains stop traffic briefly, whereas the 80+ car, slow moving Union Pacific trains stop traffic for long periods of time causing traffic to back up considerably, not only on Bond Rd but on other roads accessing Bond Rd. It often takes several light cycles for traffic to recover from a slow moving train during peak traffic times. 14-10

- A traffic analysis needs to be conducted that includes the correct number of trains, time of day they are stopping traffic and their speed and length.

The DEIR and Transportation Impact Report do not consider the cumulative impact of the Silverado Development and several other developments currently in planning phases. Plans to allow other development in the area are likely to result in cumulative significant impacts on traffic. The DEIR only considered the increase from this development project. 14-11

- Consideration of cumulative significant impacts should be made.

The DEIR is inadequate in that it did not analyze additional traffic that will be generated by having the park in a less central area of the project where some residents will not be able to walk to and most won't feel comfortable allowing their children to walk to. This will generate additional traffic as well as create a parking problem at the park. 14-12

-A mitigation measure for this is to place the park within the community instead of on the fringe.

Aesthetics

The DEIR didn't adequately address the impact of a 9' sound wall along Bond Road with minimal landscaped setbacks. This will create a tunnel effect that is unsightly. 14-13

-A possible mitigation measure to reduce the impact would be to set the wall further back from the road and provide more landscape buffer.

The EIR needs to address these issues as well as other issues being commented on by the community before making any decisions on certifying the EIR and before reviewing the merits of the project. In addition, a more complete analysis of a less dense project needs to be completed. A less dense project could be found to be consistent with the GP and the City vision and is also likely to result in support from the community. 14-14

Sincerely,

Nina Stevens
9274 Whittemore Dr.
Elk Grove, CA 95624

2.0 COMMENTS ON DRAFT EIR AND RESPONSES

Letter 14 Nina Stevens

Response 14-1: The commentor makes introductory remarks, identifies themselves as a resident of Fallbrook, and states that the Draft EIR is inadequate and does not give the decision-makers the information they need. The commentor's specific concerns regarding the Draft EIR are addressed in Responses 14-2 through 14-14.

Response 14-2: The commentor states that the Draft EIR does not adequately address land use impacts. The commentor states that per CEQA Guidelines a project will have a significant impact on land use if it will conflict with any applicable land use plan. The commentor states that the Project conflicts with the General Plan. The commentor has not quoted the CEQA Guidelines accurately. Section X of Appendix G of the CEQA Guidelines identifies the following threshold for a land use and planning impact “[Would the project] Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the Project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) *adopted for the purpose of avoiding or mitigating an environmental effect?*” (italics added). The CEQA Guidelines address whether the Project would conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the Project that was adopted for the purpose of avoiding or mitigating an environmental effect, not just whether the Project would conflict with a land use plan. The commentor's specific concerns regarding potential conflicts with the General Plan are addressed under Responses 14-3 through 14-5.

Response 14-3: The commentor states that the Draft EIR supports its finding of less than significant based on consistency with the General Plan EIR, noting that the General Plan was adopted in 2003. The commentor states that there have been changes to the community and amendments to the General Plan that have not been considered. The commentor states that when the Project site was analyzed for residential development, commercial land uses were proposed to serve them [residential development]. The commentor states that no commercial has occurred in the Project area and intended commercial sites have developed as residential. The commentor provides examples of rezones to commercial.

The commentor is referred to Response 8-2 regarding the use of the General Plan EIR in regards to streamlined review of environmental impacts pursuant to CEQA Guidelines Section 15130(d) and (e) and 15168. The Draft EIR does not base the finding of less than significant impacts associated with land use solely on consistency with the General Plan EIR. Impact 3.9-1 presented on pages 3.9-7 through 3.9-10 of the Draft EIR analyzes the Project's consistency with adopted land use planning documents and requirements, including the General Plan and the Zoning Code. The analysis of consistency with the General Plan is based on a review of the Project's consistency with the adopted General Plan land use designations and relevant General Plan policies that address the environmental effects of land use. While the discussion identifies the level of development that was addressed in the General Plan EIR, that discussion is in the context of identifying the level of development that would be allowed under the General Plan.

As described on page 3.9-7 of the Draft EIR, the General Plan land use designations on the Project site would accommodate 1,182 residential units under the General Plan land use designations; the revised Project proposes 651 single family residential units and up to 125 senior independent/assisted/memory-care residential units. The commentor's concerns regarding commercial uses do not relate to the adequacy of the Draft EIR. The commentor does not identify any environmental issues or inadequacies of the Draft EIR.

Response 14-4: The commentor states that the Draft EIR finds the Project consistent with Policy LU-11 which supports the development of neighborhood-serving commercial and that the Draft EIR states that the commercial services planned for the Project would serve the community. The commentor states that the commercial services proposed are not neighborhood-serving and would be restricted to the senior residents living within the gated community. The commentor states that it is not accurate to consider those uses as neighborhood-serving to support the finding.

Policy LU-11 states "The City shall support the development of neighborhood-serving commercial uses adjacent to residential areas, which provide quality, convenient and community-serving retail choices in a manner that does not impact neighborhood character." Policy LU-11 does not require development projects to include a specific type of commercial use nor does Policy LU-11 dictate the number of residents or size of "community" that would be served by neighborhood commercial uses. The commercial uses proposed in Village 3 would provide retail services for the Village 3 community and would be integrated into the community in a manner that does not impact the character of the neighborhood. While the commercial uses will not serve the entire community of Elk Grove, they will serve the neighborhood in which they are proposed. The Project does not conflict with Policy LU-11 and there is no environmental impact associated with this issue.

Response 14-5: The commentor states that the Draft EIR supports its less than significant finding by finding consistency with Policy CAQ-7 which encourages clustering to facilitate protection of on-site natural resources. The commentor is of the opinion that the clustering on the Project site appears to be done to facilitate a "convenient" location to accommodate the Project's "legally required open space" so that density can be maximized on the remainder of the property. The commentor states that the Project proposes development on vernal pools and other wetlands that are the most environmentally sensitive.

The commentor is incorrect that the 92.9-acres of open space, including the 67.6-acre wetland preserve, proposed on the Project site are legally required. The General Plan does not require the Project to include a minimum acreage of open space on the Project site. The General Plan designates the Project site for Rural Residential, Low Density Residential, and Commercial/Office/Multifamily uses. The Project site has wetlands, vernal pools, and other waters that are protected by federal and state law and the Project is required to mitigate impacts to those wetlands. The Project Applicant has mitigated impacts through creation of an

2.0 COMMENTS ON DRAFT EIR AND RESPONSES

on-site preserve and mitigation as established by the Section 404 permit issued for the Project. However, the Project could have proposed to develop the northern portion of the Project site with Rural Residential uses and could have proposed more units and less open space, which would have been consistent with the General Plan. The General Plan land use designations would allow approximately 1,182 units on the Project site. The Project Applicant has voluntarily proposed fewer units in order to preserve the wetlands, which are designated Rural Residential and not Open Space by the General Plan, on the northern portion of the Project site. The Project is consistent with Policy CAQ-7 because it does preserve wetland, vernal pool, and open space features, as described on page 3.9-7 of the Draft EIR. The Project would discharge fill into 8.31 acres of the 26.45 acres of wetlands on the Project site. The Project would preserve the majority of wetland features, which collectively contribute to the unique Northern Valley Hardpan Vernal Pool characteristics of the Project site. The Project is consistent with CAQ-7 and no revisions to the Draft EIR are warranted.

Response 14-6: The commentator states that the park is proposed for the “open space on top of existing vernal pools.” The commentator opines that the park is proposed in this location because by putting it in the open space the Project can maximize the density of the Project. The commentator states that the Project is likely to become an attractive nuisance that will bring illegal and damaging activity to the environmentally sensitive areas. The commentator is incorrect that Lot G (park) is being placed within open space. The Lot G park site is primarily designated Rural Residential, with the southern portion of the site designated Low Density Residential. A park is an allowed use within the Rural Residential and Low Density Residential designations. As previously described, the General Plan land use designations on the Project site would allow the entire site to be developed with a mixture of Rural Residential, Low Density Residential, and Commercial/Office/Multifamily uses. The park site is not being located in an area that would otherwise be undevelopable. The wetland preserve requires an operations and maintenance plan to ensure that the preserve is protected from adjoining uses and intrusion into its sensitive features. Impact 3.3-8 discloses the impacts of the Project on Northern Valley Hardpan Vernal Pool features. The commentator has not identified any additional environmental impacts associated with the park site and no revisions to the Draft EIR are warranted. The commentator is referred to Response 14-8 regarding park safety.

Response 14-7: The commentator states that the Draft EIR supports its less than significant finding with inaccurate data and relies on misrepresenting the General Plan policies in an attempt to find consistency with the General Plan. The commentator suggests a less dense project proposal with additional open space scattered throughout the site and relocating the park to a central area as possible mitigation. As described in Responses 14-2 through 14-6, the Project is consistent with the General Plan. Impacts to land use would be less than significant and no mitigation is required. No revision to the Draft EIR is necessary.

Response 14-8: The commentor states that the Project conflicts with General Plan Goal 1-1, a safe community, free from manmade and natural hazards, by placing an unlit park on the fringe of the community surrounded by open space. The commentor states that the park is not located where neighbors can have “eyes on the park” and opines that illegal activity could easily occur without being noticed. The commentor states that this will not only create a hazard but will also discourage many residents from using or allowing their children to use the park. The commentor states that the Draft EIR does not analyze the impacts to safety and public services that the park will create and states that an easy mitigation would be to relocate the park within the community.

The Lot G park site is located directly across the street from nine single family homes, at least seven of which will face the park site. The park would be developed to City or Cosumnes Community Services District standards for neighborhood parks. The site-specific park design would be reviewed by the City Police Department and would include standard safety features. The Project, including the park site, has been reviewed by the City Police Department and no concerns with public safety were identified. There is no evidence that the park would be a hazard and no revisions to the Draft EIR are warranted in response to this comment.

Response 14-9: The commentor raises issues associated with trains that were raised in Comment 8-3. The commentor is referred to Response 8-3.

Response 14-10: The comment concerns the proposed park location and associated trip generation and the potential for increased vehicle travel. The proposed park is located within a reasonable walking distance (1/4 miles) of most of the Project’s households. Therefore, it is not expected to result in significant vehicle travel. In addition, those trip would not use the external street network, so the analysis presented in the Draft EIR, would not change.

Response 14-11: The commentor states that the Draft EIR does not properly address cumulative impacts associated with traffic. The commentor is referred to Response 8-2

Response 14-12: The commentor states that the Draft EIR is inadequate as it did not analyze additional traffic and parking issues that would be created by the park location. Parking for the park would be provided on Project streets, the development of which was considered as a component of the Project in the Draft EIR, and no CEQA analysis of a parking issue is required. The comment concerns the proposed park location and associated trip generation and the potential for increased vehicle travel. The park site is located within a reasonable walking distance (1/4 miles) of most of the project’s households. Therefore, it is not expected to result in significant vehicle travel. In addition, those trip would not use the external street network, so the analysis presented in the Draft EIR, would not change.

Response 14-13: The commentor states that the Draft EIR did not adequately address the impact of a 9’ soundwall along Bond Road with minimal landscaped setbacks. The commentor believes that this will create an unsightly tunnel effect and recommends that the soundwall be set back

2.0 COMMENTS ON DRAFT EIR AND RESPONSES

further from the road and more landscaping buffer be provided. The commentor is referred to Response 8-5.

Response 14-14: The commentor states that the Draft EIR needs to address the above-identified issues as well as other issues identified by the community before making any decisions on certifying the EIR and before reviewing the merits of the Project. The commentor indicates that a more complete analysis of a less dense project needs to be completed. The commentor is referred to Responses 14-1 through 14-13 which address their comments. Comments received on the Draft EIR have been reviewed by the City and are responded to in this chapter of the Final EIR. The commentor's recommendation regarding analysis of a less dense project is noted. Chapter 5.0 of the Draft EIR analyzes alternatives to the Project consistent with the requirements of CEQA. This comment is noted for the decision-makers' consideration.

LETTER 15

From: Ron Hutchison
 To: Christopher Jordan
 Subject: Silverado DEIR
 Date: Sunday, November 10, 2013 9:56:08 AM

As a home owner in the Fallbrook Neighborhood, this is to express my concerns regarding the Draft Environmental Impact Report (DEIR) for Silverado Village on the North side of Bond Road. These concerns are as follows: 15-1

Transportation

The DEIR project impacts to nearby intersections were not sufficiently assessed. Seven of the closest intersections were considered, including Elk Grove Florin Road/Bond Road, Quail Cove Drive/Bond Road, Project Access/Bond Road Driveway (opposite Whittemore Drive), Crowell Drive (East)/Bond Road (Project Access), Waterman Road/Bond Road, Waterman Road/Project Access and Sheldon Road/Waterman Road (Transportation Impact Study (TIS), page 1). Significant impacts to traffic at nearby intersections (e.g., Stonebrook/School Loop Road and Bond (2 schools and one large residential development) and all intersections west of Bond Road/ Elk Grove Florin Road intersections (the primary connections to SR-99) were not accessed. 15-2

The DEIR impacts on traffic due to trains were not sufficiently assessed. The number of trains used to evaluate impacts was sixteen (TIS, App. F, page 7) which is incorrect as more than sixteen trains per day cross the Bond Road and Elk Grove/Florin Road train crossing. Also, no consideration was given to the time of day of the trains (e.g., during school and commute hours) or how long a train stops traffic relative to the number of cars on the train. 15-3

The impacts of trains on traffic with respect to transportation/safety analysis is inadequate and results in concerns that vehicles and trains will significantly increase emergency response times for police, firefighters and EMT personnel. 15-4

The traffic data from the TIS for the DEIR were insufficient as data was collected during December. All traffic data is most likely to be artificially low during the winter season due to weather conditions (December 2012). 15-5

Schools

The DEIR impacts on neighborhood schools is not adequately addressed. While the developer will pay the required new school construction fees, pursuant to GC Section 65995, the city has no land purchased or plans in development to establish a new school. Since there are no mechanisms in place to adequately enforce school zoning, residents of the proposed development may not be truthful about their residential addresses in order in enroll their children in 15-6

2.0 COMMENTS ON DRAFT EIR AND RESPONSES

schools in which they are not zoned (schools which already create traffic congestion and adversely affect the quality of living in these neighborhoods with respect to air quality, noise, litter, etc).

15-6

Water Quality

The DEIR impacts on water quality of Morrison and Laguna creeks was not adequately assessed. The DEIR did not document that Morrison Creek is listed on California's List of Impaired Waters ("303(d) List") as impaired by pyrethroids insecticides and diazinon and chlorpyrifos. Water quality is likely to be negatively affected even more as the result of the Silverado Project and the increased use and runoff the urban pesticides.

15-7

Thank you for your consideration,
Ron Hutcheson

Letter 15 Ron Hutcheson

Response 15-1: The commentor identifies themselves as a home owner in Fallbrook and states that their letter expresses their concerns regarding the Draft EIR for the Project. The commentor's concerns are addressed in responses 15-2 through 15-7.

Response 15-2: The commentor states that Project impacts to nearby intersections were not sufficiently assessed. The commentor does not substantiate their comment nor provide any reason why these intersections should have been evaluated. The Traffic Impact Study prepared for the Project identified intersections where increased volumes associated with the Project may be high enough to result in an environmental impact. No further response is necessary.

Response 15-3: The commentor states that impacts on traffic due to trains was not specifically addressed. The commentor is referred to Response 8-3, which addresses this comment.

Response 15-4: The commentor raises concerns similar to Comment 8-4. The commentor is referred to Response 8-4.

Response 15-5: The commentor states that the traffic data from the TIS for the Draft EIR was insufficient as it was collected during December and likely to be artificially low due to weather conditions. As documented in the Draft EIR, the traffic counts used to document existing conditions were collected on December 6, 2012. During the counts, weather was dry, no unusual traffic patterns were observed, and the Elk Grove Unified School District was in full session. The traffic counts are representative of average conditions and are appropriate for use in the Draft EIR traffic analysis. No revision to the Draft EIR is warranted.

Response 15-6: The commentor states that the Draft EIR impacts on neighborhood schools is not adequately addressed, noting that while the developer will pay the required new school construction fees pursuant to Government Code Section 65995, the City has no land purchased or plans in development to establish a new school. The commentor states that since there are no mechanisms in place to enforce school zoning, residents of the proposed development may not be truthful about their residential addresses in order to enroll their children in schools in which they are not zoned, school which already create traffic congestion and adversely affect the quality of living in these neighborhoods with respect to air quality, noise, litter, etc.

The City does not provide public school services and does not purchase land for schools or prepare site-specific plans for schools. The City does not have a "school" zone established by Title 23, Zoning, and there is no school zoning for the City to enforce. The Elk Grove Unified School District (EGUSD) provides public school services to the Project site. The EGUSD does not guarantee any student attendance at a particular school, regardless of where the student lives. Further, school boundaries are subject to change periodically as school facilities are constructed and as populations age or otherwise change. Section 3.12, Transportation and Circulation, of the Draft EIR evaluates the traffic impacts of the Project which includes school-related trips. Associated air quality impacts are analyzed in Section 3.2 and associated noise

2.0 COMMENTS ON DRAFT EIR AND RESPONSES

impacts are analyzed in Section 3.10 of the Draft EIR. While implementation of the Project may contribute to placing additional students in schools that may be crowded, this is not considered to be a significant impact under CEQA. The Project would be required to pay all applicable school facilities impact fees in accordance with state law. In accordance with Section 65995(h) of the California Government Code, the payment of statutory fees "...is deemed to be full and complete mitigation of the impacts of any legislative or adjudicative act, or both, involving, but not limited to, the planning, use, or development of real property, or any change in governmental organization or reorganization as defined in Section 56021 or 56073, on the provision of adequate school facilities." As described in the Initial Study (Draft EIR Appendix A), the Project would result in fewer students than was anticipated in the General Plan EIR. The Project would be required to comply with adopted General Plan policies related to public schools and would have no additional impact on public schools than was anticipated in the General Plan EIR.

Response 15-7: The commentor states that the Draft EIR impacts on water quality of Morrison and Laguna Creeks was not adequately assessed. The commentor states that the Draft EIR did not document that Morrison Creek is listed on the 303(d) list as impaired by pyrethroids insecticides, diazinon, and chlorpyrifos. The commentor states that water quality is likely to be negatively affected even more as a result of the Project and the increased use and runoff of urban pesticides. The commentor is referred to Response 13-2.

LETTER 16

Regina Reichenberg
 9076 Bobwhite Court
 Elk Grove, CA 95624
 (916) 919-4111

November 9, 2013

City of Elk Grove
 Planning Department
 c/o Chris Jordan
 8401 Laguna Palms Dr.
 Elk Grove, CA 95758

Re: Silverado Project – Project # 2013012060

As a resident of Quail Ranch Estates, I am deeply concerned about the possibility of flooding should the Silverado project be approved and built out. These houses are scheduled to be built on pads higher than our pads in Quail Ranch. Additionally, the capability of the land to store water in the winter and fall months will be diminished forcing the water elsewhere, downstream and into my neighborhood. Please include in your final EIR information as to who will be legally responsible when my home floods due to this water displacement. Will homeowners in Quail Ranch be provided with flood insurance provided by the City? The term "floating wall" paints a very deceptive picture.

16-1

I also was distressed to find that the RD-2 and RD-4 zoning on the land is being ignored so that the maximum number of dwelling units can be built. Considering the already untenable traffic congestion we face along Bond Road and Waterman Road, traffic will become so much more impacted with over 1,000 additional vehicles using these roadways. One of the Alternatives discussed included a "lower density" aspect. Since the developers are willing to offer such an option, I question why this option isn't automatically employed? It isn't often a developer will make such an offer. We need to take advantage of their generosity.

16-2

16-3

The park placement should be in the center of the development, not in the northern portion of the parcel. It is my understanding that bathrooms cannot be placed on that portion of the parcel. I believe that location will be an "attractive nuisance", inviting undesirable activities into an area as remote and secluded as the current placement. The placement also makes it difficult for the over-55 residents to enjoy as it is not centrally located.

16-4

I also understand the "noise" section of the DEIR was taken from another project and "cut and pasted" into this document. This indicates that no real research was done on this issue and calls into question the credibility of the entire DEIR.

16-5

NOV 11 2013
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 CITY OF ELK GROVE
 PLANNING DEPARTMENT

2.0 COMMENTS ON DRAFT EIR AND RESPONSES

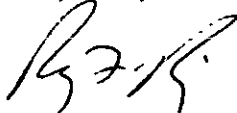
Letter to EG Planning Commission

Silverado Project

In closing, I also ask that the terms negotiated in good faith by our Quail Ranch leaders with the developers be included as "mitigation measures" to best insure those terms are adhered to upon sale to developers. Too many times developers have come to our city council and have had terms or conditions changed or set aside altogether to the detriment of the existing neighborhoods. Having them included as "mitigation measures" serves as a measure of protection for our community and gives us a strong leg to stand on when it comes to enforcing the terms previously agreed upon.

16-6

Thank you for your consideration.



Regina Reichenberg

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CITY OF SAN JOSE
PLANNING DEPARTMENT
MAY 19 2009

Letter 16 Regina Reichenberg

Response 16-1: The commentor states that, as a resident of Quail Ranch Estates, they are deeply concerned about the possibility of flooding should the Project be built out. The commentor notes that the Project houses would be built on pads higher than the pads in Quail Ranch and that the capacity of the land to store water in the fall and winter months will be diminished, forcing the water downstream and into their neighborhood. The commentor requests that information be included in the Final EIR as to who will be legally responsible when their home floods due to this water displacement and asks if Quail Ranch homeowners will be provided flood insurance by the City.

The commentor is referred to the discussion of potential impacts on the existing drainage pattern, including those associated with flooding and increased runoff, provided under Impact 3.8-4 on pages 3.8-21 through 3.8-23 of the Draft EIR. As described under Impact 3.8-4, the Project would not result in increased off-site flows. The majority of the Project site would drain to the central detention basin and drainage from the basin would be conveyed to Whitehouse Creek. The Project would improve the central detention basin and on-site berms to increase capacity. Implementation of the Project would result in a decrease in the peak discharge rate from 217 cfs to 192.5 cfs. The remaining portion of the site would discharge to the City's Bond Road Trunk drainage system. The Project would not result in a significant impact associated with the potential to result in off-site flooding.

Response 16-2: The commentor states that they were distressed to find that the RD-2 and RD-4 zoning on the land is being ignored so that the maximum number of dwelling units can be built. The commentor states that considering the already untenable traffic congestion along Bond and Waterman Roads, traffic will become more impacted with over 1,000 additional vehicles using these roadways. As previously described, the Project would rezone the Project site to SPA and is not proposing the maximum number of units that can be constructed under the General Plan land use designations. The General Plan land use designations allow approximately 1,182 units on the Project site. Potential traffic impacts are addressed in Chapter 3.12, Transportation and Circulation, of the Draft EIR. While the commentor's concerns regarding the change in zoning and increase in traffic do not address the adequacy of the Draft EIR, the comment is noted for the decision-maker's consideration.

Response 16-3: The commentor notes that an alternative with lower density was discussed in the Draft EIR and asks, since the developers are willing to offer such an option, why it is not employed. The alternatives to the Project described in Chapter 5.0 of the Draft EIR are not alternatives suggested by the developer, but alternatives that have been developed to reduce potential impacts of the Project as required by CEQA. This comment does not address the adequacy of the Draft EIR so no further response is required.

2.0 COMMENTS ON DRAFT EIR AND RESPONSES

Response 16-4: The commentor states that the park should be placed in the center of the development, not the northern portion of the parcel. The commentor states their belief that bathrooms cannot be placed on that portion of the parcel. The commentor believes the location will be an attractive nuisance inviting undesirable activities into a remote and secluded area. The commentor also believes that it will be more difficult for residents over 55 to enjoy the location of the park. It is noted that bathrooms can be placed on the park site and served either by a septic system or by the public sewer system. While this comment does not address the adequacy of the Draft EIR, the commentor is referred to Responses 1-2, 14-6, and 14-8. The commentor's opinion regarding the park location is noted for the decision-makers' consideration.

Response 16-5: The commentor states that they understand the noise section of the Draft EIR was taken from another project and cut and pasted into this document. The commentor believes this indicates that no real research was done on this issue and calls into question the credibility of the entire EIR. The commentor is referred to Section 3.10, Noise and Vibration, of the Draft EIR. The headers and footers in the section do have typographical errors that refer to a different project; however, the text of the entire section is specific to the City of Elk Grove and the Project. Section 3.10 identifies the location of the Project site (not another project location), describes potential noise sources that are specific to the Project site, identifies regulatory framework that is specific to the City of Elk Grove (not another jurisdiction), and analyzes noise impacts that are specific to the Project (not another project). If one were to read Section 3.10, it is clear that the section relates to the Project and not to the Novato Housing Element as stated in the footer of this section. The Draft EIR will be revised to change the footers. The Draft EIR discloses the potential noise-related impacts of the Project and no changes to the noise impact analysis presented in the Draft EIR is necessary.

Response 16-6: The commentor asks that the terms negotiated by the Quail Ranch leaders with the developers be included as "mitigation measures" to best insure those terms are adhered to. The commentor states that developers have had terms or conditions changed or set aside altogether to the detriment of existing neighborhoods and that including the terms as "mitigation measures" serves as a measure of protection for their community. The commentor does not identify any specific terms that should be included as mitigation measures and the comment does not identify potential impacts that require mitigation. Therefore, no further response can be made to this comment. The comment is noted for the decision-makers' consideration.

LETTER 17

From: Ricardo
To: Christopher Jordan
Subject: New project
Date: Friday, November 08, 2013 10:13:28 AM

As a resident of fall brook I'm not in favor of the planned development on Bond rd across the street from our neighborhood.

17-1

Thank you

Ricardo bautista

2.0 COMMENTS ON DRAFT EIR AND RESPONSES

Letter 17 Ricardo Bautista

Response 17-1: The commentor states that as a resident of Fallbrook, they are not in favor of the planned development (the Project) on Bond Road across the street from their neighborhood. While this comment does not address the adequacy of the Draft EIR, it is noted for the decision-makers' consideration.

LETTER 18

From: roschmander1@comcast.net
To: [Christopher Jordan](mailto:Christopher.Jordan)
Cc: [Kathy medonovich](mailto:Kathy.medonovich); [Kim Sahlman](mailto:Kim.Sahlman); [Lynette johnson](mailto:Lynette.johnson)
Subject: Silverado Village project
Date: Friday, November 08, 2013 9:08:09 AM

Hello Mr. Christopher Jordan - Planning Manager

I have some concerns in the building of Silverado Village project on Bond Road in Elk Grove. I am a resident in the Fallbrook neighborhood and have noticed a lot of traffic and noise on Bond Road and Crowell. Parents are busy taking their children back and forth to Elk Grove Elementary school which is located in the Fallbrook neighborhood which is fine with me. But if Silverado Village project is built, have anyone thought of what it going to mean to the current congested traffic? A traffic light was put in between Bond Road and Crowell street, yet there are still auto accidents and people running the red lights. I know because I live close by and can hear the car accidents and the siren's. Not to mention that 99 freeway is already congested with traffic north and south bound in the mornings and evenings. 18-1

Secondly, the train that usually passes near Bond Road and Elk Grove Florin railroad crossing does impact our commuting back and forth. There has been many times when the traffic is clogged up for miles. Adding 5154 new daily vehicles trips will severely add to the already problems we have today. 18-2

Finally, every year in the winter times, Fallbrook neighborhood has flooding and drainage problems. Sometimes two to three feet of standing water in my court area. Our water system is not great as well, it is hard water. Has anyone ever considered to improve the water system and drainage problems when proposing to built an additional 660 new single homes? 18-3

2.0 COMMENTS ON DRAFT EIR AND RESPONSES

Based on the above, what does Fallbrook neighborhood have to gain with this new project being built? I believe we have a lot to loose. It is not getting better but worse in Elk Grove area since I moved in 12 years ago.

18-4

Thank you.

Rose Hernandez1@comcast.net
9175 Lagrange court
Elk Grove, CA

Letter 18 Rose Hernandez

Response 18-1: The commentor identifies that they have noticed a lot of traffic and noise on Bond Road and Crowell. The commentor asks whether anyone has thought of what it means to the current congested traffic if the Project is built. The commentor indicates that a stop light was put in between Bond Road and Crowell Street, but there are still accidents and cites as evidence that they can hear the accidents and sirens. The commentor is referred to Response 8-3, which indicates that only three reported collisions occurred on Bond Road between Elk Grove-Florin Road, one of which occurred at the Crowell Drive intersection, during the most recent SWITERS reporting period.

The commentor also states that SR 99 is congested both north and south bound in the mornings and evenings. On page 3.12-5, the Draft EIR indicates that bottleneck locations exist on SR 99 that cause congested (LOS F) conditions northbound in the morning and southbound in the evening as documented in the *Mobility Performance Report*. Further, the Draft EIR states that the *State Route 99 & Interstate 5 Corridor System Management Plan* documents LOS F conditions on SR 99. The Draft EIR addresses potential traffic impacts associated with the Project in Section 3.12, Transportation and Circulation. The analysis presented in Section 3.12 analyzes the Project's potential to result in significant impacts to the transportation system. Impact 3.12-2 on pages 3.12-15 and 3.12-16 identifies that the Project would contribute traffic to SR 99 and I-5 which would result in a significant and unavoidable impact. The commentor is referred to Responses 10-12 through 10-24 regarding potential traffic impacts on local roads and potential traffic hazards. The commentor is also referred to Letter A which is from Caltrans and indicates Caltrans' concurrence with the conclusion presented under Impact 3.12-2 of the Draft EIR, which identifies that the Project would result in a significant impact associated with traffic conditions on SR 99 and I-5.

Response 18-2: The commentor raises concerns regarding train traffic that are addressed in Response 8-3.

Response 18-3: The commentor states that their neighborhood has flooding and drainage problems every year, sometime to three feet of standing water in their court. The commentor also states that their water system is not great. The commentor asks if anyone has considered to improve the water system and drainage problems when proposing to build an additional 660 new homes. The commentor's concerns are related to improvement of existing drainage and water supply issues. As described under Impact 3.8-4 in Section 3.8 of the Draft EIR, the Project would not result in significant impacts associated with flooding or an increase in off-site drainage. While this comment does not address the adequacy of the Draft EIR, it is noted for the decision-makers' consideration.

Response 18-9: The commentor asks, based on the above, what does the Fallbrook neighborhood have to gain with the Project. The commentor indicates their belief that they have a lot to lose and that is getting worse in the Elk Grove area since they moved in 12 years ago. While this

2.0 COMMENTS ON DRAFT EIR AND RESPONSES

comment does not address the adequacy of the Draft EIR, it is noted for the decision-makers' consideration.

LETTER 19

November 8, 2013

Christopher Jordan, AICP
 City of Elk Grove 8401 Laguna Palms Way
 Elk Grove, CA 95758

RE: Silverado DEIR

Traffic & Transportation:

The DEIR wastes page after page of mind numbing numbers on traffic counts, but leaves out important issues. The traffic on Crowell to the elementary school is factored in while the traffic on Bond to the High School and Middle School at Bond and Bradshaw isn't even mentioned. We all recall that that issue was SO important when those schools were being built that the City turned themselves inside out to be sure that Bond was widened and improved prior to their opening in order not to repeat the fiasco that occurred when Franklin High School and Toby Johnson Middle School opened in East Franklin. Therefore, those traffic counts MUST be included and may make the LOS unacceptable. 19-1

The intersection at Waterman Road and Sheldon road is factored in, but the DEIR admits that it operates at LOS E at peak hours, even though LOS E is above the maximum allowed by the General Plan. Also, there is a subdivision going in at that intersection with will add more traffic and that is not mentioned. 19-2

The Fieldstone North subdivision going in on Grant Line Road, south of Elk Grove Blvd. with nearly 400 homes, will have a significant impact on traffic on Bond Road because local traffic from this development will use Bond and Elk Grove Blvd. To access schools, shopping and other services. It would not be logical for that traffic to go south on Grant Line Road to the freeway as it would be much longer and much less convenient. Fieldstone North is part of the East Elk Grove Specific Plan and therefore has long been anticipated so should have been included in Traffic Impact Study (TIS). 19-3

Letter from Sacramento County Transportation asks for TIS for traffic from this development as it crosses into unincorporated Sacramento County. I did not find that this has been done. 19-4

Letter from CalTrans is also asking for more information on traffic impacts to the freeway. 19-5

Many local residents are worried about railroad trains blocking or slowing access to emergency vehicles as well as regular traffic. The DEIR says that there are 16 trains per day. As far as I know that number should be 22 to 24 so this should be verified to be sure it includes all trains including Amtrak. 19-6

The document states that: Potential to result in inadequate emergency access, but then says no mitigation is required. Please help me understand how these words make sense? 19-7

Potential to conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for performance of the circulation system -- freeways. Shows significant impact but says no mitigation is feasible. I can think of some mitigation that IS feasible -- lower density! 19-8

These things all point out the inadequacies of this entire system. Basically, you are saying that if you do enough paperwork, developers can plan anything they want and get approved to do it. Doesn't seem to matter that it will have SIGNIFICANT impacts, oh well, that's okay! 19-9

2.0 COMMENTS ON DRAFT EIR AND RESPONSES

The references to our transit system are an embarrassment. When will you plan for the future instead of using the past? This project will insert potentially thousands of people into the community with no realistic way to get most places other than personal automobile. The hours when bus service runs do not provide workable solutions for many people, both residents getting to their jobs, schools, and services, and employees coming in to work within this project as in the senior housing. You can't simply brush this aside by saying that there is a transit system. 19-10

This kind of planning is what keeps Elk Grove stuck in the past instead of using these opportunities to make it a community of the future. 19-11

Other issues:

The location of the park is a big issue for nearby residents because it makes absolutely no sense in terms of the ability of residents to use the park and the issue of it becoming an attractive nuisance due to the more remote location, especially at night. Proper planning would site this park in a central location within the project in order for all residents to be able to use it and for there to be enough neighborhood eyes on the park for security. If the park is more centrally located, it could have lights if desired and it could have restrooms. The current location would not allow for these. The planned park site puts it right on top of vernal pools and that just is not right. 19-12

Another very significant issue is the drainage. I know that there are several others with expertise in this area that are commenting, so I will refrain. There were people who spoke last night that talked about their knowledge of drainage issues to the properties to the north (GSREHA), to the west (Quail Ranch and Campbell Road), and the size of the various "pipes" to handle the drainage. 19-13

The Drainage Basin surrounded by homes has got to be an issue of maintenance (who does it?), the issue of yard chemicals from the surrounding homes (how to mitigate it?). 19-14

How in the world does the soil testing pass muster? Samples only taken in one small area and only to a depth of six inches. With the knowledge that this was commonly used as a dump site for various things including agricultural waste, this sampling report is an insult to our intelligence. 19-15

In early meetings we had with the developers, we asked for the homes they planned in "Lot E" to be removed and they agreed. That Lot should be removed because continuing to show it causes distrust among residents. 19-16

No one seems to be able to answer what will happen if the Senior Community part of the project does not materialize. If that use is changed, it requires significant reworking of the entire DEIR as it may have critical impacts. 19-17

Sincerely,
Sarah Johnson
9612 Kent Street
Elk Grove, CA 95624
916 686 5858
sjohnson@surewest.net

Letter 19 Sarah Johnson

Response 19-1: The comment concerns the adequacy of data collection (traffic counts) collected in December. As documented in the Draft EIR, the traffic counts used to document existing conditions were collected on December 6, 2012. During the counts, weather was dry, no unusual traffic patterns were observed, and the Elk Grove Unified School District was in full session, so the traffic analysis includes High School and Middle School traffic. No change to the Draft EIR traffic analysis is necessary.

Response 19-2: The comment concerns the adequacy of the analysis of the Waterman Road/Sheldon Road intersection. As noted in the comment, the Waterman Road/Sheldon Road intersection currently operates at LOS E, which is consistent with field operations, including vehicle queuing at the intersection. Based on the City significance criteria, this intersection operates at unacceptable levels even without the Project. Therefore, a Project impact is determined based on the increase in control delay at the intersection. A Project impact would be identified if the Project increased control delay by more than five seconds. Although the Project adds traffic to the intersection, the control delay does not change. Therefore, the addition of Project traffic does not result in an impact.

Response 19-3 The comment concerns adequacy of analysis relative to the proposed Fieldstone North project located on Grant Line Road in the East Elk Grove Specific Plan area. The commenter requests that the Project be included in the analysis. The analysis in the Draft EIR is based on existing conditions. Therefore, it would not be appropriate to include the Fieldstone North project in the Existing Plus Project analysis presented in the Draft EIR, since it is not constructed. The General Plan evaluated cumulative conditions with development in the Project site and development in the East Elk Grove Specific Plan. As outlined in Response 8-2, analysis of the Project under cumulative conditions was not conducted because the Project would result in fewer trips than was analyzed in the General Plan EIR and would not result in any increase in the impacts disclosed in the General Plan EIR. The General Plan land use designations would accommodate 1,182 units on the Project site. The 146 acres designated Low Density Residential would allow for up to 1,022 single family dwelling units that would generate about 9,729 trips per day, while the Project, which proposes 776 dwelling units, would generate approximately 5,103 trips per day. It is noted that the Project has been revised as described in Section 1.0 and that the Draft EIR analyzed 785 dwelling units for the Project site, which would generate 5,154 trips per day.

Response 19-4: The comment concerns analysis of Project traffic on Sacramento County facilities north of the project. As documented on Figure 3.12-3 of the Draft EIR, three percent of Project traffic would use Waterman Road north of Sheldon Road with less than two percent of Project traffic using Sacramento County facilities north of the project, which would represent an increase in

2.0 COMMENTS ON DRAFT EIR AND RESPONSES

the volume-to-capacity ratio of about 0.006. Therefore, due to the low contribution of Project traffic, analysis of Sacramento County facilities was not included in the Draft EIR analysis.

Response 19-5: The comment concerns Caltrans comments on the Draft EIR. The concerns identified in Caltrans' comment letter on the Notice of Preparation were addressed in the Draft EIR. Caltrans concurs with the Draft EIR analysis findings as described in Letter A.

Response 19-6: The commentor raises concerns regarding trains similar to those raised by Comment 8-3. The commentor is referred to Response 8-3.

Response 19-7: The commentor indicates that the Draft EIR states potential to result in inadequate emergency access but states no mitigation is required and asks how this makes sense. The commentor is directed to the discussion provided for Impact 3.12-4 on pages 3.12-16 and 3.12-17 of the Draft EIR. As described under Impact 3.12-4, potential impacts associated with emergency access would be less than significant which is why no mitigation is required.

Response 19-8: The commentor states that the Draft EIR identifies the potential to conflict with an applicable plan, ordinance, or policy establishing a measure of effectiveness for performance of the circulation system relative to freeways and that no mitigation is feasible. The commentor states that less density is feasible mitigation. Alternative 2 presented in Chapter 5.0 of the Draft EIR presents a reduced density alternative that would reduce potential impacts to the freeway system. The commentor is referred to the discussion regarding reduced density in association with traffic under the Traffic Impact Reduction Alternative discussion on Draft EIR page 5.0-2. No revision to the Draft EIR is necessary.

Response 19-9: The commentor discusses the inadequacy of the system. The comment does not address the adequacy of the Draft EIR and is noted for the decision-makers' consideration.

Response 19-10: The commentor discusses references to the transit system, but does not address the Draft EIR. The comment is noted for the decision-makers' consideration.

Response 19-11: The commentor states their opinion regarding City planning. The comment does not address the adequacy of the Draft EIR and is noted for the decision-makers' consideration.

Response 19-12: The commentor states concerns regarding the park site, including the location of the park site in the northern portion of the Project, potential for the park to be an attractive nuisance, need for security, and that the current location will not allow for lights or restrooms. The commentor also notes that the park site is on top of vernal pools. It is noted that the Project does not include any restrictions on the park site that would preclude lighting or restrooms. While this comment does not address the adequacy of the Draft EIR, the commentor is referred to Responses 1-2, 13-5, 14-6, and 14-8. The commentor's opinion regarding the park location is noted for the decision-makers' consideration.

Response 19-13: The commentor states that another significant issue is the drainage and that there are others with expertise who are commenting on this, so they will refrain from commenting. The commentor states that there were people who spoke last night about their knowledge of drainage issues to the properties to the north, to the west, and the size of the various pipes to handle the drainage. The commentor is referred to the responses provided to comments made at the Planning Commission meeting contained herein. Since the commentor does not raise any issues regarding the adequacy of the Draft EIR, no further response is required.

Response 19-14: The commentor states that the drainage basin surrounded by homes has to be an issue of maintenance and an issue of yard chemicals. The Project's drainage facilities would be maintained consistent with the California Regional Water Quality Control Board Central Valley Region Section 401 Permit for the Project site which requires that the Project provide for the post-construction maintenance of the Project's drainage facilities through a legally enforceable mechanism. The commentor is referred to Response 13-2 for a description of water quality treatment measures that will address potential pollutants, including pesticides and other chemicals typically used to maintain a residential yard.

Response 19-15: The commentor asks how the soil testing passed muster with samples only taken in one small area and to a depth of six inches and notes that there is knowledge that this was commonly used as a dump sites for various things including agricultural waste. Multiple environmental investigations have been performed on the Project site to identify potential hazards associated with past uses of the site, including winery wastewater evaporation ponds, cattle grazing, and the IDS site. The commentor is referred to Responses 7-1, 9-7, and 9-8.

Response 19-16: The commentor states that in early meetings with the developers they had asked for homes planned in Lot E to be removed and the developers agreed. The commentor believes the lot should be removed because continuing to show it causes distrust among the residents. It is noted that Lot E is designated as Open Space by the Project. While this comment does not address the adequacy of the Draft EIR, it is noted for the decision-makers' consideration.

Response 19-17: The commentor states that no seems to be able to answer what will happen if the senior community does not materialize and states that if the use is changed it will require significant re-working of the entire Draft EIR. A change to the Project to remove the senior component would require revisions to the SPA. Proposed revisions to the SPA would be reviewed by the City pursuant to the requirements of CEQA prior to any decision on the proposed revisions by the decision-makers. While this comment does not address the adequacy of the Draft EIR, it is noted for the decision-makers' consideration.

2.0 COMMENTS ON DRAFT EIR AND RESPONSES

LETTER 20

From: Sandi Cox
To: Christopher Jordan
Subject: Proposed Silverado Village
Date: Wednesday, November 06, 2013 7:37:41 AM

I do not want this tract of homes to be built unless the builders commit to an age restriction of only age 55+ as residents. If this was a seniors only community, I may not object.

I am not against growth, but I think we should take a look at how fast we are growing. This may really cripple our community in the future.

Thanks,

Sandi Cox
Fallbrook Resident

20-1

Letter 20 Sandi Cox

Response 20-1: The commentor states that they do not want this tract of homes to be built unless the builders commit to an age restriction of only age 55 as residents. The commentor states that they are not against growth, but that they think we should take a look at how fast growth is occurring. The commentor states that this may really cripple their community in the future. While this comment does not address the adequacy of the Draft EIR, it is noted for the decision-makers' consideration.

LETTER 21

From: Seth
To: Christopher Jordan; Frank Maita; George Murrey; Nancy Chares; Brian Villanueva; Fedola Harris; Sandy Kyles
Subject: Silverado EIR
Date: Saturday, November 09, 2013 3:51:29 PM

My name is Seth Stevens and I live in the Fallbrook neighborhood. I go to Joseph Kerr middle school. Sometimes I walk to school and sometime my mom drives me. I get mad when she drives me because of so much traffic and we stop at all the lights. Sometimes we have to wait at the light lots of times. One day it took seven minutes and 22 seconds to get from Bond to Elk Grove florin.

My mom wants me to go on the bus but the same bus that goes near my house doesn't go to my school.

Next year, I am going to Elk Grove high school. It's 3 miles away from the house. But the bus doesn't go past high school either. All the kids in the new neighborhood with 660 houses will be in the same situation. They will all be driving on the same road. Whoever said the buses serve our neighborhood is wrong. Your EIR needs to look at whether buses serve our neighborhood again, because they don't go where we need them. Also whoever decided that it only average 51 seconds at the traffic light is wrong. You need to do that part again also.

Sincerely,
Seth Stevens
9274 Whittermore Dr.

21-1

21-2

Letter 21 Seth Stevens

Response 21-1: The commentor identifies themselves as a resident of Fallbrook and a student at Joseph Kerr Middle School. The commentor identifies that they walk or are driven to school and that they get mad when being driven to school because of the traffic and stopping at lights. The comment concerns existing traffic issues and does not address the adequacy of the Draft EIR, yet is noted for the decision-makers' consideration.

Response 21-2: The comment concerns the calculated delay at the Elk Grove-Florin Road/Bond Road intersection and request the analysis be redone. As documented in the Draft EIR, the Elk Grove-Florin Road/Bond Road intersection currently operates at LOS D with 51 seconds of delay in the AM peak hour and 52 seconds of delay in the PM peak hour. The analysis results are consistent with field observations. The delay reported is average delay, so individual drivers may experience more or less delay than reported. No modification to the Draft EIR analysis is necessary.

LETTER 22

November 10, 2013

City of Elk Grove
Planning Department
c/o Christopher Jordan, AICP
8401 Laguna Palms Way
Elk Grove, CA 95758

Chairman Maita, Commissioners, and Mr. Jordan:

My name is Melissa Dekar. I hold a Master of Science degree in Environmental Science from Baylor University and I have held several environmental protection positions throughout my career in state service. I am commenting on the Draft Environmental Impact Report (DEIR) for Silverado Village as a resident of Fallbrook neighborhood. If there is one thing I would like for you to take from this comment letter on the DEIR, it is that a reduction in the number of homes proposed would serve as the most powerful mitigation measure for many of the concerns raised about this project. In summary of my lengthy comment letter, the analysis and impacts of the proposed project on the environment are inadequate and require additional assessment and mitigation. Specific recommendations are made throughout this letter. In addition, other major revisions are needed to the DEIR, including a more thorough assessment of project alternatives, prior to certification and approval by the City.

22-1

Traffic

The DEIR does not adequately address impacts to traffic at intersections that will be affected by the proposed project. There are several key issues with the Draft Transportation Impact Report (DTIR) that have likely led misleading results and inadequate assessment of the potential impacts on traffic. First, only the seven closest intersections were considered, including Elk Grove Florin Road/Bond Road, Quail Cove Drive/Bond Road, Project Access/Bond Road Driveway (Opposite Whittemore Drive), Crowell Drive (East)/Bond Road (Project Access), Waterman Road/Bond Road, Waterman Road/Project Access, and Sheldon Road/Waterman Road (Transportation Impact Report, pg. 1), however significant impacts to traffic are likely at other nearby intersections (e.g. Whittemore Drive/Bond Road, Stonebrook/School Loop Road/Bond Road, all intersections on Bond Road between the Elk Grove Florin/Bond Road intersection and the Bond Rd/SR-99 intersection, Elk Grove Blvd/Waterman).

22-2

The impacts on traffic at the aforementioned intersections needs to be adequately analyzed as they are likely to be significant. Many of the intersections are of particular concern because they are at the intersection of residential areas and schools (e.g. Stonebrook/School Loop Road/Bond, Whittemore/Bond), highly trafficked residential areas with known traffic issues (e.g. Sheldon Road/Waterman Road), and residential areas with access to shopping centers (e.g. Elk Grove Blvd/Waterman, intersections along Bond Road between its intersection with Elk Grove Florin Road and SR-99).

22-3

- Additional nearby intersections including those mentioned above, should be assessed for impacts and impacts should be mitigated to the fullest extent. Mitigation measures will likely require close coordination with and commitments from the City of Elk Grove. 22-3

The DIER does not adequately analyze the impacts of train traffic on automobile traffic and public safety. No consideration was given to the frequency (e.g. # trains/hour), time of day (e.g. during school and work commutes), or how many cars on each train (e.g. how long train stops traffic), therefore the impact analysis is inadequate and requires further evaluation. Also, the number of trains used to evaluate impacts was 16; this is incorrect. More than 16 trains per day cross the Bond Road and Elk Grove – Florin Road train crossings. Due to these issues, the impact analysis is inadequate and requires revisions, including mitigation measures. 22-4

The addition of 660 homes will significantly impact the already severe traffic problems at Bond train crossing. While a query of the “Federal Railroad Administration accident history database revealed no collisions at this crossing” (DTIR, page 8) is a good statistic, it is also unlikely for accidents to occur at the train tracks due to the bells, lights, gates, etc. It is, however, likely for accidents to occur on Bond Road, east of the train intersection, due to unexpected stopped traffic; therefore previous accidents and impacts on traffic and human health and safety should be evaluated and mitigated at that location as well. 22-5

There is heightened concern that the resulting increase in traffic will cause a significant increase in emergency response times for police, fire fighters, or paramedics. The Elk Grove General Plan SA-27 and SA-28 state that, “The City shall initiate as well as cooperate in improvements at existing railroad-at-grade crossings to improve public safety. This may include construction of grade-separated crossings and other appropriate safety features” and that “The City shall take all appropriate measures to ensure that railroad crossings in Elk Grove are made as safe as possible” (Elk Grove General Plan, page 10). In order for this project to not result in significant impacts to human health and safety, the developer needs to mitigate the significant impacts that will result at the Bond train crossing. 22-6

- An analysis should be conducted that includes the aforementioned oversights of the DTIR; these oversights include, but are not limited to train traffic frequency, time of day trains pass, length of train, accurate number of trains crossing/day, level of service scores, accidents at nearby intersections, impacts to human health and public safety resulting from increased traffic at train crossings). Evaluation of train impacts on traffic at Elk Grove – Florin Road should also be assessed. 22-7

The DEIR is inadequate in that the road grading (e.g. Level of service designations, DTIR) are not realistic. Current traffic issues already exist several of the evaluated intersections. Significant impacts on traffic occur as a result of train traffic across Bond Road, more study is needed of train impacts to all level of service designations, particularly at Elk Grove-Florin and Bond and intersections with Bond, east of the train crossing. 22-8

2.0 COMMENTS ON DRAFT EIR AND RESPONSES

- *Analyze level of service impacts with realistic data and consider cumulative impacts of other developments that are planned and implement meaningful mitigation measures, for example, reducing the number of homes (ie. traffic) in the project.* 22-9

The data used and the analysis done in the DEIR/DTIR are inadequate. Data were collected for the DTIR in December when pedestrians and cyclists are fewer due to colder temperatures and the forecast of rain: this means that pedestrian and cyclist data may be skewed-low. Further analysis is needed to fully characterize the impacts to pedestrians and cyclists due to the proposed project. Additionally, data were not collected at the intersection of Stonebrook/School Loop Road/Bond Road. The traffic at this intersection is likely to be significantly impacted by the proposed Silverado development due to high vehicular, pedestrian, and cyclist traffic: therefore, it should be evaluated for impacts and those impacts should be mitigated to the fullest extent to protect human health and public safety. 22-10

- *The data collection and analysis should be redone with realistic data that represent the worst traffic conditions possible. Mitigation measures, including reduction in the residential density of the proposed project, widening of roads, increasing traffic lights, changing timing on traffic lights, etc. should be implemented. Such mitigations measures will likely require commitments from the city of Elk Grove.* 22-11

The DEIR/DTIR does not consider the cumulative impact of the Silverado Development and several other developments currently in planning phases or under development (e.g. Moore Sheldon Retail Center, residential development under development east of Elk Grove – Florin/Calive Road intersection, residential development proposed at Grant Line/Elk Grove Blvd). Due to these other developments planned in the area, cumulative significant impacts on traffic are likely to result. 22-12

- *Consideration of such significant impacts should be made and mitigation measures, including a reduction in the residential density of the proposed project, widening of roads, increasing traffic lights, changing timing on traffic lights, etc. should be implemented. Such mitigations measures will likely require commitments from the city of Elk Grove.* 22-13

The DEIR is inadequate in that it did not analyze additional traffic that will be generated by having the park in a less accessible area of the project where most residents will not feel comfortable allowing their children to walk to. This will generate additional traffic as well as create a parking problem at the park. 22-14

- *A possible mitigation measure for this is to place the park within the community instead of on the fringe. This is highly supported by the community and would also relieve some of the impacts on biological resources (e.g. vernal pools, fairy shrimp, and water quality).*

Aesthetics

The DEIR didn't adequately address the impact of a 9' sound wall along Bond Road with minimal landscaped setbacks. This will create a tunnel effect that is unsightly. 22-15

-A possible mitigation measure to reduce the impact would be to set the wall further back from the road. 22-15

The DEIR didn't adequately address the aesthetic impacts of a residential development versus a beautiful, green, open space. 22-16

- Significant improvements are needed to mitigate the impact of the project on aesthetics. Such measures may include reducing the number of homes in the project area, increasing the setback distance from Bond Road and Waterman Road, and well-planned landscaping. 22-17

Schools

The DEIR is inadequate in that impacts on neighborhood schools is not adequately mitigated. While the developer will pay the requisite new school construction fees, established pursuant to Government Code section 65995, the city has no land purchased or plans in development to establish a new school. Additionally, there are no mechanisms in place to adequately enforce school zoning (e.g. residents of the proposed development may be untruthful about their residential addresses in order to enroll their children in schools to which they are not zoned). 22-18

- Mitigation measures should be established to allow enforcement of school zoning in Elk Grove. This will require close coordination and commitment from the City of Elk Grove.

Water Quality and Biological Resources

The Draft Environmental Impact Report (DEIR) analysis of the potential impacts to water quality is not adequate. The DEIR did not document that Morrison Creek is listed on the California's List of Impaired Waters (the "303(d) List") as impaired by pyrethroid insecticides and diazinon and chlorpyrifos. Additionally, the current water quality of Laguna Creek is approaching established pesticide thresholds that are protective of aquatic life.

Significant cumulative impacts to water quality are likely due to increase use and runoff of urban pesticides (e.g. pyrethroids and other residentially-used pesticides). Significant impacts include new impairments and continued impairments of the aquatic life beneficial use in the project area watershed and extirpation risk to the fairy shrimp due to urban pesticides. Urban pesticides of particular concern include pyrethroids and fipronil, although urban use herbicide and fungicide products are also of concern. Pyrethroids pesticides are a class of insecticides that are widely used in agricultural and urban settings, with 25 active ingredients registered in California. In the urban setting, pyrethroids are used by professional pest controls as termiticides, for landscape applications, or for perimeter treatments as structural pest control, but more importantly, pyrethroids are the dominate insecticides in consumer sales. Fipronil is a broad-spectrum phenylpyrazole insecticide that was first registered in the United States in 1996 and is also commonly detected in urban (residential) runoff in California and is of concern for residential developments (Ensminger et al. 2013). 22-19

The concentrations of urban-use pesticides in the project watershed are currently approaching or exceeding water quality objectives for several pesticides. Water quality monitoring in the

2.0 COMMENTS ON DRAFT EIR AND RESPONSES

and additional control measures imposed on the City's storm water program due to TMDLs and resulting effluent limit requirements.

- *Evaluate the projects' impacts to water quality in light of the fact that it will contribute discharges upstream of a 303(d)-listed water body (Morrison Creek) and upstream of a water body with detections of pesticides that are approaching water quality objectives (Laguna Creek). Evaluate the impacts of the proposed development on the City's storm water program, impaired waters, and biological resources within the project area's watershed. Mitigation measures include building at a lower density, among others.*

22-19

In addition to the water quality impacts that will result from the use of urban pesticides, impacts will likely result to protected fairy shrimp species: these organisms are crustaceans. Crustaceans are the most sensitive taxa to pyrethroids (Fojut et al. 2012). Some storm water runoff will discharge to the vernal pools that will remain on the site. Therefore, it is real concern that an increase in urban pesticide use on the proposed project site may lead to the extirpation of the fairy shrimp species found in the few vernal pools that are proposed to be preserved.

22-20

- *Additional mitigation measures implemented to protect the listed fairy shrimp species found on site are needed. Measures include a reduction in the residential density on the site, an increase in the undeveloped acreage to protect more habitat, and a change in the park location.*

Land Use

The DEIR has not adequately address land use impacts. The DEIR relies on data gathered and analyzed for the General Plan EIR in 2003. This was over ten years ago and changes to the community have not been considered. There have been amendments to the General Plan land use which have reduced the commercial services in the area and increased the residential development. When such a high population density in this area was planned, there were commercial uses also planned to serve them. The commercial uses planned for this project are not neighborhood-serving in that they would be restricted to the residents living in the gated village 3 community.

22-21

-A possible mitigation measure to reduce impacts would be to reduce the density proposed for this project.

The DEIR relies on inadequate data to conclude that the project is consistent with the Elk Grove General Plan. The zoning code is the document relied on to implement the Elk Grove General Plan. The zoning map shows a significant amount of open space on this project site. Yet the DEIR analyzes the site as if the entire site were intended for residential development. Land uses densities should be calculated for the portion of the site intended for residential development and not include areas intended as open space.

22-22

-A possible mitigation measure to reduce impacts and ensure consistency with the Elk Grove General Plan is to reduce density proposed for this project.

The DEIR relies on the Elk Grove General Plan concept of encouraging clustering to facilitate on-site protection of resources to find the project is consistent with the Elk Grove General Plan. Although clustering on this site does facilitate the creation of a "convenient" open space area, it does not facilitate the protection of the vernal pools and other wetlands on the property. In fact, it proposes development on areas that are most environmentally sensitive. The DEIR is inadequate in that it should analyze the clustering to see if it has is truly protective of sensitive areas.

22-23

-A possible mitigation measure to ensure protection of resources and compliance with the Elk Grove General Plan is to add stagger additional open space throughout the project that respects the existing environmentally sensitive areas. This would result in a less dense project that respects the on-site resources.

The DEIR is inadequate in that it does not analyze the impacts that the poor placement of the park within the open space will cause by negatively impacting the protection of the resources within the open space.

-A possible mitigation measure for this is to place the park within the community instead of on the fringe.

22-24

Safety:

The DEIR is inadequate in that it does not analyze the impacts to safety and public services that the inappropriate location of the park will create. The proposed location is an attractive nuisance and will generate calls for police, EMS and fire services.

-A possible mitigation measure for this is to place the park within the community instead of on the fringe.

Sincerely,

Melissa Dekar, M. S.

References

Ensminger, MP, R Budd, KC Kelley, KS Goh. 2013. Pesticide occurrence and aquatic benchmark exceedances in urban surface waters and sediments in three urban areas of California, USA 2008-2011. *Environmental Monitoring and Assessment* 185:3697-3710.

Fojut TL, Palumbo AJ, Tjeerdema RS. 2012. Aquatic life water quality criteria derived via the UC Davis Method: II. Pyrethroid Insecticides. *Reviews of Environmental Contamination and Toxicology* 216:51-103.

Weston, DP, RW Holmes, MJ Lydy. 2009. Residential runoff as a source of pyrethroid pesticides to urban creeks. *Environmental Pollution* 157:287-294.

Letter 22 Melissa Dekar, M.S.

Response 22-1: The commentor makes introductory remarks, states they have a Masters of Science in Environmental Science from Baylor University, that they have held several environmental protection positions, and identifies themselves as a resident of Fallbrook. The commentor states that a reduction in the number of homes proposed would serve as the most powerful mitigation measure for many of the concerns raised about the Project. The commentor states that the analysis and impacts of the Project on the environment are inadequate and require additional assessment and mitigation and that a thorough assessment of Project alternatives is needed. The commentor’s specific concerns are addressed in Responses 22-2 through 22-24.

Response 22-2: The comment concerns the adequacy of the study area. As outlined in Response 8-2, analysis of the Project under cumulative conditions was not conducted because the Project would result in fewer trips than was analyzed in the General Plan EIR and would not result in any increase in the impacts disclosed in the General Plan EIR. The Low Density Residential designation on the Project site would allow for up to 1,022 single family dwelling units that would generate about 9,729 trips per day compared to the Project, which proposes 776 dwelling units that would generate approximately 5,103 trips per day. It is noted that the Project has been revised to propose fewer units and that the Draft EIR analyzed 785 dwelling units, which would generate 5,154 trips per day. The amount of traffic associated with the Project was within the amount of traffic analyzed for the Project site in the General Plan EIR. Therefore, the project-specific analysis (i.e., analysis conducted under existing conditions) was concentrated to the intersections near the Project that would most likely be impacted by the Project. As documented in the Draft EIR, the Project would result in less than significant impacts to the study intersections but would result in significant and unavoidable impacts to operations on SR 99 and I-5, which was included in the Draft EIR analysis.

Response 22-3: Refer to Response 22-2.

Response 22-4: The commentor raises the concerns raised by Comment 8-3. Refer to Response 8-3.

Response 22-5: The commentor raises the concerns raised by Comment 8-3. Refer to Response 8-3.

Response 22-6: The commentor raises the concerns raised by Comment 8-4. Refer to Response 8-4.

Response 22-7: The commentor raises the concerns raised by Comments 8-3 and 8-4. Refer to Responses 8-3 and 8-4.

Response 22-8: The commentor raises the concerns raised by Comment 8-3. Refer to Response 8-3.

Response 22-9: The commentor states that the road grading is not realistic, that current traffic issues exist, and more analysis is needed due to the train traffic. Please refer to Response 15-5. As

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documented in the Draft EIR, the traffic counts used to document existing conditions were collected on December 6, 2012. During the counts, weather was dry, no unusual traffic patterns were observed, and the Elk Grove Unified School District was in full session. The traffic counts are representative of average conditions and are appropriate for use in the Draft EIR traffic analysis. As outlined in Response 8-2, analysis of the Project under cumulative conditions was not conducted because the Project would result in fewer trips than was analyzed in the General Plan EIR and would not result in any increase in the impacts disclosed in the General Plan EIR. The General Plan land use designations on the Project site would accommodate 1,182 dwelling units. The Low Density Residential designation on the Project site would allow for up to 1,022 single family dwelling units that would generate about 9,729 trips per day compared to the Project, which proposes 776 dwelling units that would generate 5,103 trips per day as described under Response 22-2.

Response 22-10: Please refer to Response 22-9.

Response 22-11: Please refer to Response 22-9. The analysis is based on average conditions, consistent with the methods in the City of Elk Gove Traffic Impact Study Guidelines.

Response 22-12: As outlined in Response 8-2, analysis of the Project under cumulative conditions was not conducted because the Project would result in fewer trips than was analyzed in the General Plan EIR and would not result in any increase in the impacts disclosed in the General Plan EIR. The General Plan land use designations on the Project site would accommodate 1,182 units. The Low Density Residential designation on the Project site would allow for up to 1,022 dwelling units that would generate about 9,729 trips per day, compared to the Project which proposes 776 dwelling units that would generate 5,103 trips per day as described under Response 22-2.

Response 22-13: As outlined in Response 8-2, analysis of the Project under cumulative conditions was not conducted because the Project would result in fewer trips than was analyzed in the General Plan EIR and would not result in any increase in the impacts disclosed in the General Plan EIR. The General Plan designation for the Project of Low Density Residential would allow for up to 1,022 single family dwelling units that would generate about 9,729 trips per day compared to the Project, which proposes 776 dwelling units that would generate 5,103 trips per day as described under Response 22-2.

Response 22-14: Refer to Response 14-12.

Response 22-15: The commentor states that the draft EIR did not address the impact of a 9' soundwall along Bond Road with minimal landscaped setbacks and that it will create an unsightly tunnel effect. The commentor recommends setting the wall farther back from the road as mitigation. The commentor is referred to Response 8-5.

Response 22-16: The commentor states that the Draft EIR did not adequately address the aesthetic impacts of a residential development versus a beautiful, green, open space. The commentor states that significant improvements are needed to mitigate the impact of the Project on aesthetics, such as reducing the number of homes in the Project area, increasing the setback distance from Bond Road and Waterman Road, and well-planned landscaping. The Draft EIR did consider the change in visual character that would occur with Project implementation, including the conversion from open space to a residential neighborhood. The commentor is referred to the discussion presented under Impact 3.1-1 on pages 3.1-6 through 3.1-9 of the Draft EIR and revisions to the analysis or mitigation is required.

Response 22-17: Refer to Response 22-16.

Response 22-18: The commentor states that the Draft EIR does not adequately address impacts on neighborhood schools, noting that while the developer will pay the required new school construction fees pursuant to Government Code Section 65995, the City has no land purchased or plans in development to establish a new school. The commentor states that since there are no mechanisms in place to enforce school zoning, residents of the proposed development may not be truthful about their residential addresses in order to enroll their children in schools in which they are not zoned. The commentor recommends that mitigation measures be established to enforce school zoning, which will require close coordination and commitment from the City. The commentor is referred to Response 15-6.

Response 22-19: The commentor states that the Draft EIR analysis of potential impacts to water quality is not adequate. The commentor states that the Draft EIR did not document that Morrison Creek is listed on the 303(d) list as impaired by pyrethroids, diazinon, and chlorpyrifos. The commentor also states that the water quality of Laguna Creek is approaching established pesticide thresholds that are protective of aquatic life. The commentor states that significant cumulative water quality impacts are likely due to increased use and runoff of urban pesticides and that impacts will include new and continued impairments of aquatic life beneficial use in the Project area watershed and extirpation risk to fair shrimp due to urban pesticides. The commentor states that urban pesticides of particular concern include pyrethroids and fipronil and provides information regarding the use of these pesticides. The commentor indicates that concentrations of urban-use pesticides in the Project watershed are approaching or exceeding water quality objectives and states there have been documented exceedances of pyrethroids thresholds in the Sacramento River and San Joaquin River basins resulting in 15 water body/pyrethroid combinations to the State's 303(d) list. The commentor indicates that a TMDL is required to be developed for Morrison Creek pursuant to the Clean Water Act and that the RWQCB is developing a TMDL for all water bodies in the Central Valley that are impaired by pyrethroids. The commentor states that Morrison Creek is also impaired by Morrison Creek is also impaired by two other pesticides (diazinon and chlorpyrifos), sediment toxicity, and pentachlorophenol. The commentor describes Department of Pest Regulations on structural

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pest control use of pyrethroids and indicates that the regulations do not apply to individual homeowner use. The commentor states that during and post-construction it is likely the homes will be treated with structural pesticides like pyrethroids and fipronil and that while fipronil has not been routinely monitored for purpose of the 303(d) listing it has been measured and detected in levels in excess of the US Environmental Protection Agency's lowest aquatic life benchmarks. The commentor describes a study conducted of pyrethroid pesticides that involved two urban stormwater drains in Roseville and Elk Grove. The commentor indicates that pyrethroids were present in every sample collected and the study indicates that pyrethroids is a source of and contributes to pyrethroids toxicity in urban creeks. The commentor indicates that the two areas studied had fewer homes than the Project and draws a conclusion that because there are more homes in the Project that water quality impacts will be greater. The commentor recommends that the Draft EIR evaluate the Project's impact to water quality related to discharges to Morrison Creek and Laguna Creek and states that mitigation measures include building at a lower density.

The commentor is referred to Response 13-2 which describes the water quality treatment features proposed by the Project and the requirements of Mitigation Measures 3.5-1 and 3.5-2. As described under Response 13-2, the Draft EIR will be revised on pages 3.8-3 through 3.8-5 to update the list of 303(d)-listed waterbodies. The Project includes multiple water quality treatment features that are demonstrated to have a high reduction in pesticide levels, which would reduce pesticide concentrations, including chlorpyrifos, diazinon, fipronil, and pyrethroids, in stormwater. Stormwater on the Project site will be treated prior to being discharged to either Whitehouse Creek or the Bond Road Trunk drainage system.

The Clean Water Act regulates the discharge of pollutants into watersheds. The State Water Resources Control Board monitors and evaluates water quality conditions statewide and updates the 303(d) list every two years. The State Water Resources Control Board implements the Clean Water Act, including developing TMDLs and implementing measures to address pollutants on the 303(d) list, and does through Regional Water Quality Control Boards. The Central Valley Regional Water Quality Control Board (CVRWQCB) is the reviewing authority for the SWPPP and Post-Construction Stormwater Quality Control Plan required by Mitigation Measures 3.5-1 and 3.5-2. The CVRWQCB primary duty is to protect the water quality within the Region for all beneficial uses. The CVRWQCB formulates and adopts water quality plans for specific ground or surface water basins and prescribes and enforces requirements on all new development subject to NPDES requirements, agricultural, domestic and industrial waste discharges. The CVRWQCB has approved the SWQD Manual for use in the Sacramento area as an effective tool to address water quality, including pollutants associated with urban pesticide use as discussed by the commentor. The water quality treatment features proposed by the Project are identified in the SWQD Manual as appropriate treatment methods to reduce pollutants associated with urban runoff. As previously stated, these treatment features have a high reduction capability to reduce pesticide levels.

The Project does not involve any unique uses or features that would result in water quality impacts that are not typical of residential projects. Water quality treatment features that are accepted by the CVRWQCB are appropriate to treat stormwater runoff associated with the Project. Therefore, implementation of Mitigation Measures 3.5-1 and 3.5-2 are adequate to reduce potential water quality impacts associated with the Project to less than significant and will ensure that the Project does not have a considerable contribution to cumulative water quality impacts. No revisions to the Draft EIR are warranted, except for those identified under Response 13-2. No further response is required.

Response 22-20: The commenter states that the *“In addition to the water quality impacts that will result from the use of urban pesticides, impacts will likely result to protected fairy shrimp species; these organisms are crustaceans. Crustaceans are the most sensitive taxa to pyrethroids (Fojut et al. 2012). Some storm water runoff will discharge to the vernal pools that will remain on the site. Therefore, it is real concern that an increase in urban pesticide use on the Project site may lead to the extirpation of the fairy shrimp species found in the few vernal pools that are proposed to be preserved.”* The commentor added that *“Additional mitigation measures implemented to protect the listed fairy shrimp species found on site are needed. Measures include a reduction in the residential density on the site, an increase in the undeveloped acreage to protect more habitat, and a change in the park location.”*

The vernal pool crustaceans, including fairy shrimp species, are addressed on pages 3.3-14 through 3.3-16 of the Draft EIR as follows:

Vernal Pool Crustaceans: *Vernal pool crustaceans are found in ephemeral freshwater habitats, and their life cycles have adapted to the unique habitat conditions of vernal pools. Following the winter rains vernal pool become inundated, and in conjunction with the appropriate environmental cues (temperature, total dissolved solids, alkalinity, pH, etc.), the hatching of vernal pool crustacean eggs is initiated. Vernal pool crustaceans then mature rapidly into adults.*

*There are four special-status freshwater crustaceans, two of which are federal listed, that are documented within five miles of the Project site and have been determined to potentially occur in the vernal pools and seasonal wetlands on the Project site: vernal pool fairy shrimp (*Branchinecta lynchi*), vernal pool tadpole shrimp (*Lepidurus packardii*), midvalley fairy shrimp (*Branchinecta mesovallensis*), and California linderiella (*Linderiella occidentalis*).*

Suitable habitat for these vernal pool crustaceans is present on the Project site. Protocol-level surveys were not conducted in the preparation of the Biological Assessment for this Project. In accordance with USFWS policy, given the presence of potential habitat and the absence of protocol surveys, these species are presumed present on the Project site.

Direct Effects: *The Project will result in the direct loss of 5.05 acres of federally listed crustacean habitat, and the death of an unknown number of vernal pool fairy shrimp and vernal pool tadpole shrimp through the direct filling of vernal pools and vernal swales within the Project site. The midvalley fairy shrimp and California linderiella are both non-listed, but they are considered special status species, and the Project will result in a direct loss of habitat and death of an unknown number of these species.*

Indirect Effects: *The Project would result in indirect effects to all vernal pool tadpole shrimp, vernal pool fairy shrimp, midvalley fairy shrimp, and California linderiella, in the form of death, injury, and harm, found in vernal*

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pools that are supported by associated upland areas and swales, and all habitat otherwise damaged by loss of watershed, human intrusion, introduced species, and pollution that will be caused by the Project. The Project would result in indirect effects to 3.73 acres of federally-listed crustacean habitat.

Cumulative Effects: Because the vernal pool tadpole shrimp, vernal pool fairy shrimp, midvalley fairy shrimp, and California linderiella are endemic to vernal pools in the Central Valley, coast ranges, and a limited number of sites in the transverse range and Santa Rosa Plateau of California, the USFWS anticipates that a wide range of activities will affect these species. Such activities include, but are not limited to, urban, water, flood control, highway and utility projects, chemical contaminants, as well as conversion of vernal pools to agricultural use.

Conclusion: A Section 7 Consultation was initiated for the incidental take of vernal pool tadpole shrimp, vernal pool fairy shrimp in association with the Project. The USFWS reviewed the status of the vernal pool tadpole shrimp, vernal pool fairy shrimp, the environmental baseline, the effects of the Project and the cumulative effects and provided their biological opinion that the Project is not likely to jeopardize the continued existence of these two listed species. They also indicated that the Project site is not located within proposed or designated critical habitat for the vernal pool fairy shrimp or the vernal pool tadpole shrimp, and, therefore, none will be affected.

The USFWS anticipates incidental take of the vernal pool fairy shrimp and vernal pool tadpole shrimp will be difficult to detect or quantify. The cryptic nature of these species and their relatively small body size make the finding of a dead specimen unlikely. The species occur in habitats that make them difficult to detect. Due to the difficulty in quantifying the number of individuals that will be taken as a result of the Project, the USFWS is quantifying take incidental to the Project as the number of acres of vernal pools/ponded depressions (vernal pool habitat) that will become unsuitable for vernal pool crustaceans due to the Project. Therefore, the USFWS estimates that all vernal pool fairy shrimp and vernal pool tadpole shrimp inhabiting 8.78 acres of vernal pool habitat will be harassed, harmed, injured, or killed, as a result of the Project.

The USFWS determined that the incidental take associated with the Project on vernal pool fairy shrimp and vernal pool tadpole shrimp is exempted from prohibitions of take under Section 9 of the ESA. The USFWS also determined that this level of anticipated take is not likely to result in jeopardy to the federally-listed species or result in destruction or adverse modification of proposed or designated critical habitat.

The USFWS provided a requirement to implement reasonable and prudent measures necessary and appropriate to minimize the effect of the Project on vernal pool fairy shrimp and vernal pool tadpole shrimp. This includes the following:

- 3. The effects to listed vernal pool crustaceans from habitat loss shall be minimized.*
- 4. The effects to listed vernal pool crustaceans from construction activities at the Project shall be minimized.*

These reasonable and prudent measures and addressed through more detailed terms and conditions and reporting requirements, in addition to several conservation recommendations. These USFWS requirements are non-discretionary, and must be implemented so that they become binding conditions of any grant or permit issued to the Project proponent, as appropriate, in order for the exemption in Section 7(0)(2) to apply. The USACE has a continuing duty to regulate the activity covered by this incidental take statement.

While the midvalley fairy shrimp and California linderiella are not federal or state listed and not addressed within the Section 7 Consultation or another permitting document, these special status species occupy the same vernal pool habitat as is mentioned for the federally listed vernal pool tadpole shrimp and vernal pool fairy shrimp and will have similar impacts. Similar to the above impact discussion, it is estimated that all midvalley fairy shrimp and California linderiella inhabiting 8.78 acres of vernal pool habitat will be affected as a result of the Project.

Impacts to vernal pool tadpole shrimp, vernal pool fairy shrimp, midvalley fairy shrimp, and California linderiella are potentially significant.

MITIGATION MEASURES

Mitigation Measure 3.3-1: *The Project applicant shall comply with the Terms and Conditions, Reporting Requirements, and Conservation Recommendations in accordance with the USFWS Incidental Take Statement issued for the Project.*

Timing/Implementation: As specified in the permit and throughout all earthmoving and construction activities.

Enforcement/Monitoring: City of Elk Grove Planning Department.

Implementation of Mitigation Measure 3.3-1 requires the Project to adhere to the USFWS Incidental Take Permit which requires the preservation of existing vernal pool habitat at a 2:1 ratio (17.56 acres of wetted vernal pool crustacean habitat to be preserved to compensate for 5.05 directly-affected acres and 3.73 indirectly affected acres), measures to address stormwater quality, notification procedures in the event of death or harm of a listed species, and constructed monitoring to ensure compliance with construction-related impact avoidance measures. This measure will ensure that the potential impacts to vernal pool tadpole shrimp, vernal pool fairy shrimp, midvalley fairy shrimp, and California linderiella are reduced to a less than significant level.

The impact of pollution on vernal pool crustaceans is specifically addressed as an indirect effect of the Project within the Draft EIR. The impacts on vernal pool crustaceans are adequately addressed in the Draft EIR. The Draft EIR concludes that the impacts are potentially significant, but mitigated to a less than significant level. The information provided in this comment letter does not alter the findings or conclusions contained in the Draft EIR with respect to this environmental topic.

Response 22-21: Comment 22-1 is substantially similar to Comment 14-4. The commentor is referred to Response 14-4.

Response 22-22: The commentor states that the Draft EIR relies on inadequate data to conclude the Project is consistent with the General Plan. The commentor states that the Zoning Code is the document relied on to implement the General Plan and that the zoning map shows a significant amount of open space on the Project site, but the Draft EIR analyzes the entire site as if it were intended for residential development. The commentor believes that land use densities should be calculated for the portion of the site intended for residential development and not include areas intended as open space. The commentor states that a possible mitigation measure is to reduce impacts and ensure consistent with the General Plan. The Zoning Map for the City does not determine General Plan land use designations. Rather, zoning is examined for consistency with the General Plan and General Plan land use map. The Project proposes to change the zoning on the Project site to an SPA zoning designation that would accommodate land uses that are consistent with the General Plan's land use designations of Rural Residential, Low Density Residential, and Commercial/Office/Multifamily as described under Impact 3.9-1 on pages 3.9-7 through 3.9-10 of the Draft EIR. No revisions to the Draft EIR are necessary in response to this comment.

Response 22-23: Comment 22-23 is substantially similar to Comment 14-5. The commentor is referred to Response 14-5.

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Response 22-24: The commentor identifies that the Draft EIR does not analyze the impacts that the park will create related to resources within the open space nor the impacts to safety and public services, noting that it is an attractive nuisance that will generate calls for police, EMS, and fire services. The commentor suggests that the park be located within the community instead of on the “fringe” as mitigation. The commentor is referred to Responses 1-2, 13-5, 14-6, and 14-8.

LETTER 23

To: Christopher Jordan, AICP
 From: Shirley Peters, GSREHA President, 8623 Bamarquia Dr., Elk Grove, CA. 95624
 Date: November 11, 2013
 Re: Silverado/Escaton Proposal EG-11-046

Because of the location and size of the Silverado proposal, not only GSREHA residents, but those living in the Quail Ranch and Fallbrook developments will be impacted. Others also being impacted will be residents living on Campbell Road and those living in the old town vicinity. Accordingly, these organizations and residents, the already established residents, have collectively joined together because they have similar concerns and issues that will significantly affect them. These groups also, individually, have their own particular concerns and issues of which GSREHA supports.

23-1

Therefore, I am representing GSRHEA and will discuss issues and concerns that will impact GSREHA residents.

1. **Densities.** GSREHA members support lowering densities on this site which would bring fewer impacts to all components discussed in the DEIR. The health and safety of the residents and the environment must be considered. Not only the already established residents will be affected, but the new residents will be, as well.

23-2

2. **Alternative 2.** GSREHA members support lowering the densities, but do not agree with information in Alternative 2 which states, on page 5.0-7: *Alternative 2 significantly reconfigures the Project design and would result in the removal of 449 single-family units, approximately 2 acres of parks, the 68-1 (should be 68.1) acre wetland conservation area, and the proposed open space/trail uses.* The open space/wetlands/buffer must not be taken out. This portion of the property is zoned Ag/Res 2 which means that one house is allowed on 2 acres. No higher densities are allowed as designated by the General Plan. Trail uses on this site have been approved and exist in the General Plan; therefore, trail uses cannot be removed.

23-3

Alternative 2 may allow developing Ag/Res parcels in the wetland conservation area. This is not a good plan as the Ag/Res dwellings would be directly abutting the high density dwellings. This would cause serious, incompatible conflicts between urban and Ag/Res developments. The General Plan allows animal keeping on Ag/Res parcels and animals do not, and cannot, adjust to being so near to the complexities of urban living. Keeping the conservation area, which serves as a buffer, is the most viable plan to retain compatibility between these two very divergent concepts. Precedence has been established since before the City of Elk Grove was incorporated, and has been found to be very effective.

23-4

3. **The Park.** The wetlands/open space will serve, in perpetuity, as a buffer between Ag/Res parcels and the urban developments. **Question:** The Park will be isolated and constant monitoring would be required to prevent negative behavior that is commonly known to occur in public areas such as parks. Who or which agency will be responsible to monitor the park on a consistent basis?

23-5

4. **Question: Septic System.** Because Ag/Res zoning does not allow public sewers, how will the restroom in the proposed park be facilitated? Will a septic system be established? Which agency will be responsible for this and how will the system be financed?

23-6

5. **Question: Regulations.** From my information, CSD regulations has classified a 5-acre park as a "Neighborhood Park", which means that it will be opened dawn to dusk, locked after dark, have picnic areas, security lighting, etc. Will these regulations be enforced?

23-7

6. **Question:** How can the open space/wetlands—its sensitive plants and wildlife—be protected from individuals who could easily meander throughout this space, rather than stay in the designated park area? GSREHA recommends that if a park is allowed in the buffer area, a 5 to 6 foot wrought iron fence be built around the park.

23-8

7. **Move the Location of the Park.** **Question:** Because there are many concerns about the placement of the park, why not place the park in a place closer to the higher densities where the majority of the residents live and will have better access? This change of placement would resolve the problems of attracting negative and potentially unsafe behavior, and will be better monitored by the nearby residents.

23-9

8. **Question: Why is the square, located in the Open Space, still drawn in the applicants map?** When the applicants first presented their proposal, they had drawn a square in the wetlands/open space/buffer area, on which they showed Rd dwellings. After the GSREHA members rejected these proposed dwellings because the general plan does not allow Rd dwellings in the Ag/Res zoned area, the proposed Rd dwellings were removed. However, the square still remains on the map. It is recommended that this square be immediately removed.

23-10

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Page 2, Silverado

9. "A" Street located between the wetland/open space buffer, north of the Rd-zoned densities. "A" Street intersects into Waterman Road. GSREHA residents, therefore, ask that a roundabout be placed at that intersection for safety and air quality purposes. 23-11

10. **Question: No Services/Air Quality.** Although the Air Quality Act has been amended, communities are still out of compliance. Hence, because there will be hundreds of cars coming from the proposed site that will be using the roads, and will join with the pass-through traffic coming from other areas, and since there are no services available nearby, this component cannot be realistically mitigated. Therefore, *less than significant impact* is not acceptable. What are the realistic, meaningful mitigations to protect the community—toxic air doesn't just stay in one place? Also, there are no toxic air-monitoring sites located in Elk Grove. How can toxic air be validly monitored from the nearest site which is located in Roseville? 23-12

11. **No Services.** According to the proposal, there will be 660 houses built, which means that, one to two cars +/- per household will be brought into the project. A fraction of the Escaton development may not be driving, however many will have their families driving to the proposed site to visit their relatives, to take them shopping, to go to the doctors/dentists, to attend church, etc. Adding to these potential car trips, the residents in the Silverado villages will also have to drive to shop, to take their children to school and to the neighborhood park, as well as trips to their doctors/dentists, to go to the movies, to dine out, etc. This site does not provide for any walkable destinations. 23-13

12. **Endorse Eskaton.** GSREHA members support the Eskaton concept that will serve adults over 55 years of age. Their concern is, however, should Eskaton decide not to include their portion of development in this proposal, what will happen to the overall plans? Will a new EIR be written? Will the SPA designation remain in place? Will clustering be allowed even though the senior community housing element is removed? Hence, should the Eskaton element not be included, this entire proposal should be rejected. 23-14

13. **Logical, Compatible Growth: Working together toward a Good Plan.** Planning Commissioner Frank Maita stated at the November 7 Planning Commission meeting that "the primary concern of the Commission is to retain the character of the area". GSREHA members agree and to retain both the rural character and the established urban character of the area, careful and logical planning must be implemented. 23-15

Cc: Planning Commission Director Taro Echiburu
City of Elk Grove Planning Commissioners
Elk Grove City Manager, Laura Gill
Elk Grove City Engineer, Richard Shepard

Letter 23 Shirley Peters

Response 23-1: The commentor identifies residents and developments that will be impacted by the Project and states that they have collectively joined together because they have similar issues of concern. The commentor notes that the groups, individually, have their own particular concerns and issues of which GSREHA supports. The commentor states they are representing GSREHA and will discuss issues and concerns that will impact GSREHA residents. The commentor's specific concerns are addressed in Responses 23-2 through 23-15.

Response 23-2: The commentor indicates that GSREHA members support lowering densities on this site which would bring fewer impacts to all components discussed in the Draft EIR. The commentor states that the health and safety of the residents and the environment must be considered, for both existing and new residents. The commentor identifies potential addresses potential hazards in Section 3.7. Impacts to the environment are addressed in Sections 3.1 through 4.0 of the Draft EIR. Concerns that have been raised in response to the Draft EIR are responded to in this letter. The Draft and Final EIR provide the decision-makers with the opportunity to consider the potential environmental impacts of the Project.

Response 23-3: The commentor states that GSREHA members support lowering the densities but do not agree with information in Alternative 2 which states that Alternative 2 would result in the removal of 449 single family units, approximately 2 acres of parks, the 68.1 acre wetland conservation area, and the proposed open space/trail uses. The commentor believes that the open space/wetlands/buffer must not be taken out. The commentor also states that this portion of the property is zoned Ag Res 2 which means that one house is allowed on 2 acres and no higher densities are allowed as designated by the General Plan. The commentor also states that trail uses on the site have been approved and exist in the General Plan and cannot be removed.

It is noted that while the wetland preserve would be removed under Alternative 2, all wetlands, riparian, vernal pool, and drainage features would be preserved through preservation easements placed on these features. The General Plan is the authority in determining what land uses are allowed on the Project site and the zoning may be revised to different zoning designations that are consistent with the General Plan. Alternative 2 would provide an average of two units per acre in the Rural Residential designation, but may cluster the units in order to avoid important resources as allowed by Policy CAQ-7. Alternative 2 will be revised as shown below to include the east-west portion of the trail, but to remove the north-south portion of the trail which is identified as an alternative sub-traverse on General Plan Figure PTO-2. No further revisions to the Draft EIR are warranted.

The description of Alternative 2 on page 5.0-3 of the Draft EIR is revised as follows:

“Alternative 2: Reduced Density and Reconfigured Project Alternative. Alternative 2 would avoid the significant and unavoidable impact to the Northern Hardpan Valley Hardpan Vernal Pool complex on the Project site through avoiding all wetland, riparian, vernal pool, and drainage features. Preservation easements, prohibiting access and disturbance, would be placed around all wetland, riparian, vernal

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pool, and drainage features. There would be no wetland conservation area and the detention basin would be under a preservation easement. An alternative detention basin would be constructed to the east of the current site of the detention basin. This would require removal of adequate fill to provide detention to the Alternative 2 lots. Under this alternative, various lots would be removed and lot sizes would generally be made larger to accommodate the preservation easements. The park sites would be reduced to approximately 3.25 acres and the north-south component of the open-space trails would be removed.”

The description of Alternative 2 on page 5.0-7 of the Draft EIR is revised as follows:

“Alternative 2 was created to avoid significant and unavoidable impacts to biological resources. Alternative 2 would preserve the wetland, riparian, vernal pool, creek, and drainage features on the Project site through permanent preservation easements that would generally be included in the proposed residential lots. Lot sizes would be larger, where necessary, to accommodate the permanent preservation easements. Alternative 2 significantly reconfigures the Project design and would result in the removal of 449 single-family residential units, approximately 2 acres of parks, and the 68-1 acre wetland conservation area, and the proposed ~~open-space~~/trail uses would be reconfigured. Alternative 2 would result in 111 single-family lots, 100 patio homes, and the Village 3 independent, assisted, and/or memory-care multifamily lodge and clubhouse.”

Response 23-4: The commentor states that Alternative 2 may allow developing ag/res parcels in the wetland conservation area and states that there would be serious, incompatible conflicts between urban and ag res developments. The commentor states that the General Plan allows animal keeping on ag res parcels and animals do not adjust to being so near the complexities of urban living. The commentor notes that keeping the conservation area, which serves as a buffer, is the most viable plan to retain compatibility between these two very divergent concepts. The commentor states that precedence has been established and found to be very effective. The comment does not address the adequacy of the Draft EIR and is noted for the decision-makers’ consideration.

Response 23-5: The commentor states that the park will be isolated and constant monitoring would be required to prevent negative behavior that is commonly known to occur in public areas such as parks. The commentor asks who or which agency will be responsible to monitor the park on a consistent basis? The park is located within the City and police services would be provided to the Project, including the park site, by the City’s Police Department. The agency that owns and develops the park site, either the City or CCSD, would be responsible for responding to public concerns regarding activities at the park site once it is operational. This comment does not address the adequacy of the Draft EIR and is noted for the decision-makers’ consideration.

Response 23-6: The commentor asks how the restroom in the proposed park will be facilitated because ag res zoning does not allow public sewers and whether a septic system will be established. The commentor also asks which agency will be responsible for this and how the system will be financed. The Project would rezone the Project site to SPA. Restrooms at the park site could be accommodated by either public sewer or a septic system as described on page 3.5-16 of the Draft EIR. The agency that will own and operate the park site may be either

the City or CCSD. The design of the park site has not yet been determined. This comment does not address the adequacy of the Draft EIR and is noted for the decision-makers' consideration.

Response 23-7: The commentor identifies that CSD (CCSD) regulations classify a 5-acre park as a neighborhood park which means that it will be opened dawn to dusk, locked after dark, have picnic areas, security lighting, etc. The commentor asks if these regulations will be enforced. The CCSD will own and operate the park site. The design of the park site has not yet been determined and it is speculative to consider whether specific features (picnic areas, etc.). However, it is anticipated that the park will be developed consistent with the CCSD's standards, which include addressing safety through designing park sites in accordance with established Crime Prevention Through Environmental Design standards. This comment does not address the adequacy of the Draft EIR and is noted for the decision-makers' consideration.

Response 23-8: The commentor asks how the open space and wetlands will be protected from individuals who could easily meander through the space rather than stay in the park area. The commentor recommends that if a park is allowed in the buffer area, a 5 to 6 foot wrought iron fence be built around the park. The park is not proposed within the wetland preserve or within an established "buffer area." The park site is adjacent the proposed wetland preserve. The wetland preserve will have signage to inform the public that it is a restricted area and will be fenced to restrict access as required by the Operations and Management Plan that has been prepared for the preserve. This comment does not address the adequacy of the Draft EIR and is noted for the decision-makers' consideration.

Response 23-9: The commentor asks why the park is not moved to a location with higher densities and better access, noting that the change of placement would resolve problems associated with attracting negative and potentially unsafe behaviors and will be better monitored by nearby residents. The commentor is referred to Responses 1-2, 13-5, and 14-8 regarding the location of the park site.

Response 23-10: This comment is substantially similar to Comment 19-16 and the commentor is referred to Response 19-16.

Response 23-11: The commentor identifies the location of "A" Street and requests that a roundabout be placed at the A Street and Waterman Road intersection for safety and air quality purposes. The Project's proposed street pattern conforms to the City's street standards and has been reviewed by the City's Public Works Department to ensure that the intersection addresses the City's roadway safety requirements. The Project would not result in significant safety impacts associated with the roadway and circulation system as discussed under Impact 3.12-3 on page 3.12-15 of the Draft EIR. Potential environmental impacts associated with air quality are discussed in Section 3.2 of the Draft EIR; a roundabout at the location of "A" Street and Waterman Road would not result in a significant reduction in the air quality impacts associated with the Project.

2.0 COMMENTS ON DRAFT EIR AND RESPONSES

Response 23-12: The commentor states that communities are out of compliance with the Air Quality Act. The commentor states that since there will be hundreds of cars coming from the site joining pass-through traffic from other areas and since there are no services nearby this component cannot be realistically mitigated. The commentor states that less than significant impact is not acceptable. The commentor asks what are the realistic meaningful mitigations to protect the community since toxic air does not stay in one place. The commentor also asks how toxic air can be validly monitored from the nearest site which is located in Roseville.

Air quality impacts from that will result from Project operations are discussed under Impact 3.2-1 on pages 3.2-12 through 3.2-14 of the Draft EIR. The analysis takes into account the vehicle trip characteristics associated with the Project. Table 3.2-7 identifies the air pollutant emissions that will occur in association with the Project in Section 3.2 of the Draft EIR. As shown under Impact 3.2-1, the air pollutant emissions associated with the Project after mitigation will be less than the thresholds of significance established by the Sacramento Metropolitan Air Quality Management District (SMAQMD). The thresholds of significance have been developed by SMAQMD to achieve the objectives of the applicable attainment plans for ozone and PM10. The commentor's opinion that less than significant impacts are not acceptable is noted. No revisions to the Draft EIR are warranted.

Regarding the commentor's statement that "there are no services available nearby", it is noted that a variety of neighborhood-oriented services are less than a mile from the Project site, with services available at each of the four intersections of the Bond Road and Elk Grove-Florin Road intersection. These services include grocery, drugstore, banking, health and beauty, coffee shops, restaurants, gas stations, and a number of other services.

In response to the commentor's concerns regarding toxic air, SMAQMD has developed criteria for determining potential impacts associated with toxic air contaminants. These criteria do not require a monitoring station and, thus, are not invalidated due to the nearest toxic air monitoring site's Roseville location. As described under Impact 3.2-4 on pages 3.2-21 through 3.2-23 of the Draft EIR, the Project does not have a significant potential for public exposure to toxic air contaminants. The Project is not within the minimum separation distances from toxic air pollutant sources described in Table 3.2-9 of the Draft EIR. Further, SMAQMD's publication *Recommended Protocol for Evaluating the Location of Sensitive Land Uses Adjacent to Major Roadways* (March 2011) provides the following screening criteria to determine whether a proposed sensitive receptor would be at risk from proximity to a major roadway: "Determine if the nearest proposed sensitive receptor affected by the project is at least 500 feet from the nearest high traffic volume roadway (defined as a freeway, urban roadway with greater than 100,000 vehicles/day or rural roadway with 500,000 vehicles/day). If outside of the 500-foot distance, no further evaluation is recommended." The Project is not within 500 feet of a high traffic volume roadway (the nearest high traffic volume roadway is State Route 99). Potential

impacts associated with toxic air contaminants would be less than significant. No revisions to the Draft EIR are warranted in response to this comment.

Response 23-13: The commentor states that there will be 660 homes built with one to two cars per household. The commentor states that a faction of the Eskaton (senior community) may not drive, however many will have their families driving to the site to visit their relatives and take them shopping, to the doctor's office, etc. The commentor states that the site does not provide for any walkable destinations. As identified under Response 23-12, the site is less than a mile from neighborhood-oriented shopping destinations. The senior community will include a clubhouse with space for services that serve the community, such as a beauty salon, café, and medical office. The comment does not address the adequacy of the Draft EIR and no further response is required.

Response 23-14: The commentor states that GSREHA members support the Eskaton concept that will serve adults over 55 years of age, but identifies concern with what would happen if Eskaton does not include their portion of development in the Project proposal. The commentor is referred to Response 19-17.

Response 23-15: The commentor agrees with Planning Commission Chairman Maita that the primary concern of the Commission is to retain the character of the area. The commentor states that to retain the rural character and established urban character of the area, careful and logical planning must be implemented. While this comment does not address the adequacy of the Draft EIR, it is noted for the decision-makers' consideration.

LETTER 24

From: Steve & Kathy Lee
To: Frank Mata; George Mumby; Nancy Chairs; Fedoka Harris; Brian Villanueva; Christopher Jordan
Cc: "Steve & Kathy Lee"
Subject: Silverado DEIR comments
Date: Monday, November 11, 2013 5:24:58 PM

(All. Here are my comments to be added to the DEIR for the Silverado Project SCH 2013012060. Hard copies will be delivered to Christopher Jordan (along with the referenced report and letter) on Tuesday, Nov 12, 2013). Regards, Kathy Lee, Quail Ranch Estates 24-1

Planning Commission
Nov 7, 2013
Silverado Project

First and foremost, this Draft EIR is a "project level" EIR which omits cumulative impacts to/and with surrounding neighborhoods. Additionally, the Draft EIR is based on the EG General Plan of 2003 which has been revised via rezones nearly 30 times. Commercial uses in the area have been reduced or rezoned, yet the density of this project has increased over the prior project. Additionally, the commercial uses within the site are restricted to the 55 and over project and not accessible by the general public, thereby making the commercial piece not neighborhood friendly. The validity & accuracy of using a well-manipulated, 10 - year old, outdated EIR as a basis for evaluating this project is inadequate. 24-2

Traffic DEIR does not address the shortcomings of Waterman Road as it relates to widening or improvement. The DEIR does not address streets outside the immediate project site. Waterman Road, south of Bond (leading to the largest commercial/service area) is not addressed relative to widening, improvements or extra traffic. 24-3

Geology & Soils The soil analysis done on 8/17/2011 by Wallace Kuhl and noted as Soil Sampling and Analysis is inadequate. Over a 230-acre project site, only 8 samplings were taken within an approximate 1-acre sphere. Additionally, the samplings were taken at a depth of only 6 inches. As top soil is disturbed in the routine use of the land, sampling taken at a 6 inch depth do not accurately reflect buried or submerged containments such as those activities associated with waste dumping or land fill uses. With known uses on the land ranging from winery waste water evaporation ponds; winery drainage ponds; independent Disposal Services; agricultural & farming activities; possible land fill; and truck maintenance activities to name a few; soil testing on the entire project site is required and the testing depth deep enough to uncover buried land fill materials. EG residents have come forward indicating this land was commonly used for waste disposal over a period of many years. Soil testing for a variety of contaminants/waste/ pesticides at multiple site and deeper depth is required. 24-4

As referenced by the Nichols Consulting Engineers report dated 11/18/2008 and addressed to the county of Sacramento, we respectfully request their "recommended approach" be followed regarding soil testing. (Nichols Consulting Engineers, Chtd).

By way of personal knowledge, the borrow pit that is located on this project site has routinely been found to have slimy film and discolored water. No other area of the land produces these attributes to my knowledge.

By way of personal knowledge, the existence of toads and voles has been disappearing from the land at an alarming rate. Each spring would bring out thousands and thousands of toads and voles. Surrounding neighborhoods where overrun with these toads and voles only to have their presence nearly absent the last few years. 24-5

For these reasons, the DEIR is inadequate to answer soil and soil contamination concerns as well as the disappearing wildlife.

Park Issues: The Custom Soil Survey mentioned on 3.5-16, states specifically that the northern park site (5.5 acres) has "limitations" on its ability to absorb septic tank waste. This report is not included as part of the EIR and we request its inclusion. With the "limitations" and inability to run sewer lines to the park, as situated, issues arise as to the whether this is the proper placement for the park at all. Additionally, the EIR provides no details as to proposed amenities of the park or feasibility and practicality of a park within an "open space / preserve." If the 24-6

developers is going to be given full Quimby credits for this park, the park need to be a fully functioning park, located in a usable and accessible central location and be complete with full restroom facilities. 24-7

The "second park", a 0.6 acre park is actually described as an "overland release" area associated with the storm water detention basin and acts as a storage area for a 100 yr flood. Quimby credits should not be allowed as the size, quality and amenities of this "park" are all inadequate. The "open space" area described as "3.9 acres open space corridor" is land located under the power lines on Waterman Road. This open space should not be intended as park or usable land. Total park space for the entire project is inadequate when these two areas are properly clarified/identified as un-useable (total park area is 5.5 acres for a project consisting of 785 homes). 24-8

Open Space: The DEIR shows a 6.3 open space parcel in the north-eastern portion of the land. This designation is disingenuous and it needs to be removed. The entire northern area is identified as preserve and to try to claim these 6.3 acres as open space is in effect double dipping. 24-9

Compatible Neighborhoods: The DEIR indicates in many locations that the Silverado project provides a "compatible neighborhood" to all surrounding, existing home sites. In theory, perhaps. In reality, Sheldon, Quail Ranch, Fall Brook and Campbell Road all have homes that range from ¼ acre lots to over 1.0+ acre lots and contain many homes considered "estate or executive homes." This current project has no lots that come close to 1.0 acre nor do they contain any home sites that could be identified as "estate or executive homes." 30% of Quail Ranch homes sit on one acre lots and a majority sits on "estate size" lots. All of Sheldon's home sites and all those on Campbell Road are larger than 2.0+ acres. The DEIR is incorrect regarding "compatibility" issues. 24-10

Drainage: There is inadequate documentation in the DEIR regarding drainage/flooding concerns both on the northern open space as it relates to Sheldon residents; and to home elevation concerns along the property line of Quail Ranch Estates and Campbell Road. The DEIR omits discussion on all three areas. Flooding and water flow continue to be a major concern and little information is provided as to how existing homeowners will be impacted with the current Drainage plan. Drainage mitigations are inadequate. 24-11

Trees: No Tree location document is contained within the DEIR. Although some discussion exists regarding some tree removal; the reader is left to wonder where these impacted trees are located/whose property line they border; and if all trees (regardless if they are native, of local importance or protected trees) are listed on the document. If trees are determined to be "non-important" but yet identified as being impacted, how is mitigation addressed (such as apple, walnut, or other non-descript trees)? The DEIR is incomplete in this area. 24-12

Floating Wall: The DEIR discusses a solid masonry wall at a minimum of 6 feet in height boarding the Quail Ranch home sites. The purpose and intent of the wall, as stated by Silverado representatives at a prior community forum, was to prevent water flow from entering Quail Ranch backyards from the higher elevated Village 1 homes. The DEIR is silent on water protection; instead implying the wall is for aesthetic/noise purposes. If this is the case, water and flood protection for existing homes both in Quail Ranch, Campbell Road and Sheldon are inadequately addressed. 24-13

Bond Road Wall: Sight lines for the Bond Road 9ft wall are not addressed. The DEIR fails to discuss the landscape corridor in relationship to the set back of the wall. The current wall that borders Quail Ranch homes along Bond Road presents a traffic hazard due to the location of the limit line in relationship to the sight line of oncoming vehicles. Vehicle stopped at the limit line on Quail Cove who want to enter Bond Road, cannot adequately see traffic heading west on Bond. The existing wall blocks your view requiring residents to inch out nearly seven to 10 feet to determine if the roadway is clear to enter. These limited sight lines, when coupled with older drivers from the 55+ community, may cause significant impacts. The DEIR does not address sight lines and set backs of the wall and the use of landscape corridor to improve visual sight. Enlarging the landscape corridor and increasing the set back of wall needs to be addressed. 24-14

Hazardous Material: DEIR is inadequate as to fails to provide a complete history of this land. Time gaps persist as to the uses, both permitted and unpermitted. Accounts of illegal dumping, waste disposal; and agricultural pesticide use are known; however until all prior history of the land is determined, the DEIR is inadequate. 24-15

Hydrology/Drainage: The DEIR (pg 3.8-15, etc) addresses the City of Elk Grove Floodplain Management Policy and states in part: "Prevents...the construction of flood barriers which will unnaturally divert floodwater or which may increase flood hazards in other areas" and "substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion, siltation, run-off or flooding on or off site". The DEIR states many times the project will use "overland outlets" to move water away from homes; states water will be "directed to main outlets" and water will be "steered" using berms. These seem to imply "unnatural diversion of water" which may increase flood hazards in other, adjoining lands. Additionally, the EG Floodplain Management Policy states that "those who develop in special flood or local flood hazard areas assume responsibilities for their action." Our question is, does that "responsibility" extend to providing flood insurance or written assurances to the existing neighborhoods that we 24-16

2.0 COMMENTS ON DRAFT EIR AND RESPONSES

will not be impacted by run off or flood water generated from this project ?

24-16

Alternative Site Plans: The DEIR contains several alternative site plans and we appreciate Silverado including these for our consideration. All issues contained within my letter would be greatly mitigated if Alternative One is followed. This alternative has the backing of each and every home owners group surrounding the site. Alternative Two has some interesting ideas, however it needs to be thoroughly vetted. The reduced densities in Alternative Two appeal to all home owners groups in the area, however we have concerns about other aspects of Alternative Two. The DEIR contains no conceptual plans/drawing for review by residents for this second alternative. Accordingly, the DEIR is inadequate because the "*least environmentally damaging practicable alternative*" has been merely mentioned as required by CEQA; but clearly not considered.

24-17

Density: As mentioned previously under "*Compatible Neighborhoods*" above; the city fails to acknowledge the entire project (785 homes) when calculating the density. The DEIR only takes into account the 660 homes and completely ignores the additional 125 "assisted living / memory care" housing units in the overall computation of the zoning. The use of this "fuzzy" math continues to be a tool the developer uses to circumvent the spirit and letter of the LG Zoning Code. Additionally, the project as described has NO RD 2 or RD 4 home sites as currently zoned. It appears the entire project is RD 5- RD 7. The DEIR fails in achieving a true RD 2, RD4, and RD5 compatible community as set forth in Silverado's objectives.

24-18

As our neighbors in Fall Brook, GSREHA, and Campbell Road come together to ensure the least environmentally damaging practicable alternative be brought forward, we recognize the diversity of our concerns and join together as one voice. We, as a group, support and appreciate Silverado's willingness to offer a project of reduced density. We look forward to working with Silverado to bring forth a superior product that everyone can appreciate and live with.

24-19

Sincerely,

Kathy Lee
Quail Ranch Estates
9120 Quail Terrace Way
Elk Grove, CA 95624
(916) 685-3381

CC: Planning Commissioners
Maita, Murphey, Chaires, Villanueva, Harris

Letter 24 Kathy Lee

Response 24-1: The commentor identifies that they are submitting comments on the Draft EIR for the Project.

Response 24-2: The commentor states that the Draft EIR is a Project level EIR which omits cumulative impact to and with surrounding neighborhoods. The commentor does not identify any specific cumulative impacts to which the Project would contribute. Cumulative impacts are addressed on pages 4.0-1 through 4.0-7 of the Draft EIR.

Response 24-3: Comment 24-3 is raises the issues raised in Comment 14-3. The commentor is referred to Response 14-3.

Response 24-4: The commentor states that the Draft EIR does not address the shortcomings of Waterman Road as it relates to widening or improvement. The commentor also states that the Draft EIR does not address streets out of the immediate Project site and that Waterman Road, south of Bond Road is not addressed. The commentor is referred to Responses 10-18 and 10-19 regarding analysis of Waterman Road. The commentor is referred to page 3.12-12 for a discussion of the Project's consistency with the General Plan and impacts to Waterman Road from Calvine Road to Grant Line Road that were addressed in the General Plan Draft EIR. No revision to the Draft EIR is warranted.

Response 24-5: The commentor raises issues raised in Comments 9-7 and 19-15. The commentor is referred to Responses 7-1, 9-7, and 9-8.

Response 24-6: The commentor states that toads and voles have been disappearing from the land at an alarming rate and that surrounding neighborhoods were overrun with these toads and voles only to have their present nearly absent the last few years. The commentor states that the Draft EIR is inadequate to answer soil and contamination concerns as well as the disappearing wildlife. The commentor is referred to Response 24-5 regarding soil and contamination concerns. Impacts to biological resources are addressed in Section 3.3 of the Draft EIR; the comment regarding toads and voles does not address the adequacy of the Draft EIR. This comment is noted for the decision-makers' consideration.

Response 24-7: The commentor requests that the Custom Soil Survey mentioned on page 3.5-16 of the Draft EIR be included in the Draft EIR. The commentor questions whether the location of the park is appropriate with the sewage limitations and inability to run sewer lines to the park. The commentor states that the Draft EIR provides no details as to the proposed amenities of the park and the practicality of the park within an open space/preserve. The commentor states that the park needs to be a fully functioning park, located in a usable and accessible central location, and be complete with full restroom facilities in order to receive Quimby credit.

2.0 COMMENTS ON DRAFT EIR AND RESPONSES

The Custom Soil Survey referenced on page 3.5-16 of the Draft EIR is included as Appendix A to this Final EIR. There is no inability to run sewer lines to the Lot G park site. The park could be served by either septic or public sewer, as described under Impact 3.5-5 on pages 3.5-16 and 3.5-17 of the Draft EIR. As described under Impact 3.5-5, if the park were to be served by septic, Mitigation Measure 3.5-4 would reduce potential environmental impacts to less than significant. The commentor is referred to Response 23-8 regarding the location of the park adjacent (not within) the wetland preserve. Information regarding park amenities and design are not available at this time as site-specific park planning has not been conducted. The comment regarding Quimby credit does not address the adequacy of the Draft EIR and is noted for the decision-makers' consideration.

Response 24-8: The commentor states that the second park, a 0.6 acre park, is actually described as an overland release area and states that Quimby credits should not be allowed for this park. The commentor also states that the open space area described as a 3.9-acre open space corridor is located under the power lines on Waterman Road and should not be intended as a park or usable land. The commentor states that the total park space is inadequate when these two areas are properly clarified/identified as unusable. The commentor states that the 0.6-acre park site and the overland release area are the same lot. These lots are not the same. Lot K, the park site, is located southeast of the central water quality detention basin. The overland release area is located to the west of the central area of the detention basin, as shown on Figure 3.8-4. This comment does not address the adequacy of the Draft EIR and is noted for the decision-makers' consideration.

Response 24-9: The commentor states that the 6.3-acre open space parcel is disingenuous and needs to be removed. The commentor states that the entire northern area is identified as a preserve and to claim these 6.3 acres is double-dipping. The 6.3-acre lot is a separate lot and is not included in the 67.6-acre wetland preserve. There is no double-counting of open space. This comment does not address the adequacy of the Draft EIR.

Response 24-10: The commentor states that the Draft EIR indicates that the Project is a compatible neighborhood to all surrounding, existing home sites. The commentor states that Sheldon, Quail Ranch, Fall Brook, and Campbell Road all have homes that range from 0.25-acre lots to over 1.0-acre lots and contain many homes considered "estate or executive homes." The commentor states that the Project does not contain lots close to 1.0 acre nor does it contain "estate or executive home" sites. The commentor concludes that the Draft EIR is incorrect regarding compatibility. The Draft EIR addresses the potential adverse effects of the Project on the environment and does not address a social preference of a neighborhood for nearby lots to be "estate or executive homes." This comment raises a social issue and does not identify any potential adverse environmental impacts that were not addressed in the Draft EIR. The comment and is noted for the decision-makers' consideration.

Response 24-11: The commentor states that there is a lack of documentation in the Draft EIR regarding drainage/flooding concerns both on the northern open space as it relates to Sheldon residents; and to home elevation concerns along the property line of Quail Ranch Estates and Campbell Road. The commentor states that flooding and water flow continue to be a major concern and *little information* is provided as to how existing homeowners will be impacted with the current drainage plan and that drainage mitigations are inadequate.

The northern portions of the Project site are intended to remain as they exist today. There is no plans to do any work along the northern property line and thus it would not change the current drainage condition. The property line along Quail Ranch Estates has been studied throughout the entitlement process. The lots proposed along the western boundary have been preliminarily designed to direct rainfall away from the common boundary back into the Project. This runoff will then be directed back to the central detention basin or the drainage system in Bond Rd. The water leaving the central detention basin will follow the same path that the water from the existing basin onsite has historically followed. The commentor is referred to Response 5-2 regarding the adequacy of the Project's proposed drainage system and the potential for the Project to result in an increase to off-site drainage.

Response 24-12: The commentor states that no tree location document is contained within the Draft EIR. The commentor states that although some discussion exists regarding tree removal, the reader is left to wonder where the trees are located and if all trees are listed on the document. The commentor asks how mitigation is addressed if trees determined to be non-important are impacted. The commentor states that the Draft EIR is incomplete. The commentor is referred to Response 9-3 regarding tree removal.

Response 24-13: The commentor states that the Draft EIR discusses a solid masonry wall at a minimum of six feet in height bordering the Quail Ranch home sites. The commentor states that the *Draft EIR implies the wall is for aesthetic/noise purposes and is silent on water protection*. The commentor concludes that if that is the case (the wall is not for water flow prevention), water and flood protection for existing homes in both Quail Ranch, Campbell Road, and Sheldon are inadequately addressed. The commentor is referred to Responses 1-3 and 5-2 for additional information regarding drainage impacts associated with the Project.

The base of the wall between Quail Ranch Estates and the Project site will be a retaining wall engineered to ensure that drainage from the Project does not flow into the Quail Ranch Estates lots. Chapter 2.0, Project Description, will be modified as follows on page 2.0-7 to identify the wall:

“Stormwater Drainage

Stormwater drainage facilities would be developed on-site and would connect to the City of Elk Grove. An engineered retaining wall would be constructed at the rear lot line of Lots 66 through 84 to ensure that drainage from the Project site does not drain into the adjoining Quail Ranch Estates lots. The Project includes a 14.7-acre

2.0 COMMENTS ON DRAFT EIR AND RESPONSES

detention basin and 0.6-acre overland release area. From the on-site stormwater facilities, run-off would be conveyed to the City of Elk Grove storm drainage and flood control system. Further discussion and details are provided in Section 3.8, Hydrology and Water Quality.”

Response 24-14: The commentor states that sight lines for the 9-foot soundwall on Bond Road are not adequately addressed and that the Draft EIR fails to discuss the landscape corridor in relationship to the setback of the wall. The commentor states that the sight line for the existing wall bordering Quail Ranch presents a traffic hazard due to the location of the limit line in relationship to the sight line of oncoming vehicles and that vehicles who want to enter Bond Rd cannot adequately see, requiring residents to inch out nearly seven to 10 inches to see if the roadway is clear to enter. The commentor states that these limited sight lines coupled with older drivers from the 55+ community would cause significant impacts. The commentor states that the Draft EIR does not address sight lines and setback of the wall and use of the landscape corridor to improve visual sight.

The commentor is referred to Response 8-5 regarding the visual impacts associated with the soundwall.

The intersection design for the entrances/exits from the Project onto Bond Road and Waterman Road are required to be developed in accordance with the City’s Improvement Standards. Section 4-14 of the City’s Improvement Standards specifically address sight distance at intersections. The Project will be required to meet the minimum sight distance requirements established in Section 4-14. No revision to the Draft EIR is warranted to address sight distance.

Response 24-15: The commentor raises issues raised in Comments 7-1 and 9-7. The commentor is referred to Responses 7-1 and 9-7.

Response 24-16: The commentor states that the Draft EIR addresses the City’s Floodplain Management Policy on page 3.8-15 and quotes a portion of the policy. The commentor states that the Draft EIR states many times that the Project will use overland outlets to move water away from homes, water will be directed to main outlets, and water will be steered using berms, which imply “unnatural diversion of water” which may increase flood hazards in other, adjoining lands. The Project will include stormwater pipelines that will collect stormwater throughout the Project site and convey the drainage to the central detention basin or to the Bond Road Trunk drainage system. The Project will make man-made improvements, which appear to be what the commentor is referring to as an “unnatural diversion of water,” to the on-site central detention basin and berms that will be designed and engineered to provide adequate capacity to detain and convey the drainage associated with the Project site. Use of the Project’s existing features and man-made improvements will reduce flood hazards. The commentor is referred to Responses 1-3 and 5-2 which provide additional information regarding drainage associated with the Project site.

The commentor also indicated that the City's Floodplain Management Policy states that those who develop in special flood or local flood hazard areas assume responsibility for their actions and questions if that responsibility extends to providing flood insurance or written assurances to the existing neighborhoods that they will not be impacted by runoff or floodwater generated from the Project. As shown on Figure 3.8-3b of the Draft EIR, the Project site is not within the 100-year floodplain. The Project site is not designated as being within any special flood hazard area or local flood hazard area.

Response 24-17: The commentor indicates that the Draft EIR contains several alternative site plans and notes that all the issues contained in their letter would be greatly mitigated under Alternative 1. The commentor states that Alternative 2 needs to be more thoroughly vetted and that reduced density is appealing, but that they have other (unnamed) concerns about Alternative 2. The commentor states that the Draft EIR contains no conceptual plans/drawings for review of Alternative 2. The commentor concludes that the Draft EIR is inadequate because the least environmentally damaging practicable alternative has been merely mentioned as required by CEQA, but clearly not considered. The Draft EIR identifies and analyzes alternatives in compliance with CEQA Section 15126.6. A site plan is not required to be developed for alternatives and the Draft EIR describes the components of Alternative 2 and the location of those components on pages 5.0-3, 5.0-4, and 5.0-7. The commentor cannot make a conclusion regarding whether Alternative 2 has been considered because the decision-makers' have not yet considered Project approval or denial or approval of any alternatives to the Project. No revisions to the Draft EIR are necessary in response to this comment.

Response 24-18: The commentor states that the City fails to acknowledge the entire Project (785 homes) when calculating density. The commentor believes that the Draft EIR only takes into account the 660 homes and completely ignores the additional 125 assisted living/memory care units in the overall computation of zoning. The commentor states that the Project has no RD-2 or RD-4 homes site and that the entire Project is RD-5 and RD-7 and fails to achieve a true RD-2, RD-4, and RD-5 compatible community as set forth in the Project objectives.

The Draft EIR analyzes the Project as described in Chapter 2.0, Project Description. Table 2-2 summarizes proposed land uses and identifies the average densities of each neighborhood and the multifamily component. The calculations do not ignore the 125 multifamily units. The revised Project proposes 651 single family units and up to 125 senior independent, assisted, and/or memory care units. In evaluating the potential Project impacts that are discussed in Sections 3.1 through 4.0 of the Draft EIR, the Draft EIR considered development of 660 single family homes and up to 125 senior independent, assisted, and/or memory care units. As previously described, the Project would re-zone the Project site to an SPA designation. The commentor is referred to Responses 10-3 and 10-5 through 10-10 which address the zoning issues raised by the commentor. No revisions to the Draft EIR are warranted in response to this comment.

2.0 COMMENTS ON DRAFT EIR AND RESPONSES

Response 24-19: The commentor makes closing comments that do not address the adequacy of the Draft EIR. No response is required.

LETTER 25

From: Steve & Kathy Lee
To: Frank Maita; George Mumber; Nancy Chaires; Fedola Harris; Brian Vilanueva; Christopher Jordan
Cc: "Steve & Kathy Lee"; Sarah Johnson
Subject: Silverado Comments by Steven Lee, Quail Ranch Estates.
Date: Monday, November 11, 2013 5:35:49 PM

November 10, 2013

City of Elk Grove
 Planning Department
 c/o Chris Jordan
 8401 Laguna Palms Dr.
 Elk Grove, CA 95758

Re: Silverado project – Project # 2013-012060

From: Steve Lee, Quail Ranch Estates

Concerns remain as to the possibility of **flooding/drainage** into *Quail Ranch Estates*, along our eastern and northern borders. Due to proposed grading whereby some of the *Quail Ranch* home sites will be up to three (3') feet lower than the future home(s) directly behind their land, these concerns become more dramatic. Keep in mind that the land that used to contain and absorb so much rain, and run off will become asphalt and concrete, forcing the water elsewhere, onto lower ground, our backyards. This is even more problematic, given the plan to construct a "floating wall" along the project's western border that appears to retain the fill dirt, but not prevent drainage seepage below the wall. A study considering the grading and its potential flooding effects as well as a resolution must be included in a final EIR. 25-1

The **density** of the project poses concerns as well. 660 single family units and an additional 125 care facility units create issues of **air quality, noise and especially traffic** on already overburdened Bond and Waterman Roads. The 2003 General Plan EIR is inadequate to rely on based on recently proposed build outs in the area since that document was executed and the large number of amendments enacted since 2003. That document is inadequate for cumulative traffic analysis for this project and Overriding Considerations for a worsened condition cannot be justified. Reducing the density would also keep the project largely within the **current zoning of RD-2, RD-4, RD-5, RD-5(f) and Open Space**. The project as submitted offers no housing in the RD-2 or RD-4 range. The project borders neighborhoods on 3 sides that are estate or rural housing (see DEIR Table 2-1), yet this development offers neither. Residents I have spoken with offer no opposition to rezoning the over-55 restricted living area. 25-2
25-3

The **alternatives** offered indicate a **willingness by the developer to greatly reduce the density** of the project, thereby **greatly reducing every single significant environmental impact** the project will have upon the community and nearby connector roads and freeways. While none of the actual alternatives are fully vetted and researched at this point, they do offer a window for further discussion, an option that all communities surrounding the project find appealing. Applying the industry 25-4

2.0 COMMENTS ON DRAFT EIR AND RESPONSES

standard of acceptability of a project as “**the least environmentally damaging practicable alternative**,” it becomes clear that the proposed lower density alternative needs to be applied here with further input from all concerned parties. Again, the residents of *Quail Ranch Estates, Fallbrook, Campbell Road and Greater Sheldon Road Estate Homeowner’s Association*, look forward in working with *Silverado* to create a great addition to our East Elk Grove community.

25-4

Despite repeated requests for **soil testing** to be done on every portion of the project site, no soil testing has been done on the site since 2011. I personally submitted written requests for increased and detailed soil testing at the NOP time frame and verbally at the project scoping meeting in February, 2013. At that time, I noticed both the representatives from *DeNovo Planning Group* and *Silverado* that this property was at one time a “dump site.” Despite my requests, no testing at all has subsequently been done. More troublesome, the 2011 testing was done on a one acre parcel on the southwest quadrant of the land to a depth of 6”. This depth is woefully inadequate for a former dump site by any standards. Long time resident Leo Fassler came forward at the November 7, 2013 Planning Commission meeting and stated on the record that he personally dumped on that site, as well as did many others, and the site was totally unsupervised allowing anyone to dump anything upon that land for many years. Merely relying on the State list of known hazardous sites and a very small area of testing to conclude that this site is “clean” is unacceptable. A more thorough, extensive and deeper soil study than the one provided completed by *Wallace Kuhl and Associates* in 2011 should be completed and analyzed before the DEIR moves forward.

25-5

It did not go unnoticed that the “Noise” portion of the DEIR was simply taken from another project, “*The Novato Housing Element*” and placed in the *Silverado* DEIR in attempt to pass off as an independent study done for this project. It opens the door for questioning what else in the DEIR has been taken from other documents and attempted to be passed off as original and pertaining specifically to this project. An actual on-site noise study should be required if this document is to have any credibility.

25-6

Most importantly, I request that the items negotiated in good faith with *Silverado Homes* and *Vintara Holdings LLC* over the past two years relating to this project be placed in the final EIR as “**mitigation measures**.” These aforementioned items are found in the DEIR under Project Description, section 2.0. Page 2.0-8 under the description of *Village 1*;

Item 1) minimum size of lots (63'-110') abutting western boundary of project site;

Item 2) minimum 20' rear yard setbacks for lots adjacent to QRE;

Item 3) lots abutting QRE be limited to single story dwellings;

Item 4) Masonry wall minimum height of six feet on westerly property line abutting QRE;

Item 5) pedestrian only connection with EVA bollards across from Bobwhite Ct;

Item 6) lots abutting detention area and parks allow views to open space.

This is critical as *Silverado Homes* and/or *Vintara Holdings LLC* will likely sale these

25-7

home sites to as of yet unknown developers, who may wish to modify or circumvent these items. Placing them as "mitigation measures" gives the QRE homeowners the most secure assurances that what was negotiated and agreed upon in good faith will be carried out upon actual development. These matters are critical to our "quality of life."

25-7

Lastly, I ask that the citizens have a 30-day window in which to review the revised DEIR and responses after public notification before agendizing for approval of the Elk Grove Planning Commission.

25-8

Respectfully submitted,

Steven M. Lee
Quail Ranch Estates
9120 Quail Terrace Way
Elk Grove, CA 95624
(916) 685-3381
smlee24@frontiernet.net

cc/ Frank Maita
George Murphey
Nancy Chaires
Sparky Harris
Brian Villanueva

2.0 COMMENTS ON DRAFT EIR AND RESPONSES

Letter 25 Steven M. Lee

Response 25-1: The commentor states their concerns related to flooding and drainage, noting that some of the Quail Ranch home sites will be up to 3 feet lower than future homes directly behind their land and notes that the Project land that use to contain and absorb rain and runoff will be paved, forcing water elsewhere and into their backyards. The commentor states that this is problematic given the plan to construct a “floating wall” that appears to retain fill dirt but not prevent drainage seepage below the wall. The commentor states that a study considering the grading and its potential flood effects as well as a resolution must be included in the Final EIR.

The floating wall proposed by the Project will be designed and engineered to ensure that drainage and seepage do not occur from the Project site onto adjacent property. Detailed analysis of the changes to the Project site, including changes associated with grading and increased impervious surfaces, occurred and is represented in the Preliminary Drainage Study. The commentor states a study considering the grading and its potential flood effects must be included in the Final EIR; this study has been completed and is included as Appendix D of the Draft EIR. The potential for off-site drainage impacts is addressed in Responses 1-3 and 5-2.

Response 25-2: The commentor states that the density of the Project poses concerns and that the 660 single family and additional 125 care facility units create issues of air quality, noise, and traffic on overburdened Bond and Waterman Roads. Air quality, noise, and traffic impacts of the Project are addressed in Sections 3.2, 3.10, and 3.12 of the Draft EIR.

The commentor states that the 2003 General Plan EIR is inadequate to rely on based on recently proposed buildouts in the area since that document was executed and the large number of amendments since 2003. The General Plan EIR anticipated growth in the City and planning area, including build out of lands identified for development and urbanization. While the General Plan has been amended, these amendments do not invalidate the General Plan EIR. The General Plan EIR provides an analysis of cumulative impacts associated with buildout of the Land Use Map and anticipated significant development in the City. The Project would construct fewer units on the Project site than anticipated in the General Plan and the Project would have less of an impact than was analyzed for the General Plan under cumulative conditions.

Response 25-3: The commentor is referred to Responses 10-3, 10-5 through 10-10, and 24-18 which address the zoning issues raised by the commentor.

Response 25-4: The commentor states that the alternatives offered indicate a willingness by the developer to greatly reduce the density of the Project, thereby greatly reducing every single significant environmental impact the Project will have on the community and nearby roads and freeways. The commentor states that applying the industry standard of acceptability as “the least environmentally damaging practicable alternative,” it is clear that the proposed lower density alternative needs to be applied with further input from concerned parties. While this

comment does not address the adequacy of the Draft EIR, it is noted for the decision-makers' consideration.

Response 25-5: The commentor is referred to Responses 7-1 and 9-7 which address the issues associated with soil testing and concerns regarding a past "dump site" that are raised by the commentor.

Response 25-6: The commentor is referred to Response 16-5 which addresses the noise issue raised by the commentor.

Response 25-7: The commentor requests that six items be placed in the Final EIR as mitigation measures. The commentor states that these items are found in the Draft EIR under the Project Description on page 2.0-8. The issues are included in the SPA for the Project and, as such, are part of the Project and will be enforced by the City. Mitigation measures are not necessary or warranted to enforce the requirements of the SPA. This comment does not address the adequacy of the Draft EIR and is noted for the decision-makers' consideration.

Response 25-8: The commentor requests a 30-day window in which to review the revised Draft EIR and responses after public notification before the item is agendaized for approval by the Planning Commission. The Draft EIR will not be recirculated as the revisions to the Draft EIR do not identify new significant environmental impacts nor do the revisions result in substantive changes to the Draft EIR. This comment does not address the adequacy of the Draft EIR and is noted for the decision-makers' consideration.

LETTER 26

From: Anges and Brian Wassgard
To: Christopher Jordan; Frank Maita; George Murbey; Nancy Chaves; Fedola Harris; Brian Villanueva
Subject: Silverado Draft EIR
Date: Monday, November 11, 2013 4:31:04 PM

City of Elk Grove Planning Department
c/o Christopher Jordan
8401 Laguna Palms Wy
EG, CA 95758

cc: Planning Commissioners

Hi Mr Jordan and Planning Commissioners.

Thanks for speaking with me on the phone last week Mr. Jordan. I appreciated your help clarifying some of my questions. I live in Quail Ranch and own a home in Fallbrook. It is important that this analysis is done carefully and thoroughly. I wanted to be sure my DEIR concerns are recognized and addressed, so here they are in writing. I will be brief because I know others have submitted extensive comments with similar concerns. Please let me know if you have questions for me. And I realized Virginia Fife's address was not included with her letter from the planning meeting. She lives at 8401 Ringe Circle, EG, CA 95624.

26-1

1. **Offsite flooding and drainage-** I am concerned about the potential for flooding in Quail Ranch. I don't believe the figures accurately represent what will happen when homes are placed on the property. If I understand the DEIR documents correctly, Quail Ranch homesites are generally lower than the proposed project. An example: There is a natural water flow that forms behind my home every year that was not acknowledged in the document. It flows from the proposed project and forms a medium to large size pond (with ducks and egrets!) in the field behind my home for most of the winter. With the increased concrete/asphalt on the property, I believe the pond's size could grow substantially, potentially impacting my own property and many others. Please include a study of this issue and solutions to the potential flooding of Campbell Road and Quail Ranch in the final EIR.

26-2

2. **Soil Analysis:** Considering the history of dumping on the site, I believe the current soil study is inadequate. Please address this issue. See Virginia Fife's letter for more information.

26-3

3. **Aesthetics:** I disagree with the DEIR's statement that the change in Aesthetics will not be significant. An empty field with seasonal grasses and wildflowers is much better to look at than a 9 ft wall as proposed along Bond Rd across from the Fallbrook neighborhood. To mitigate this issue, I propose increased space and landscaping adjacent to the road along the southern border of the project. I am also concerned about the actual height of fences between Quail Ranch and the proposed development. If the lots really are 3 ft higher than existing QR lots, the 6 ft fences will appear to be 9 ft fences. This is unacceptable in a residential neighborhood.

26-4

4. **Density:** The density of this project is not similar to surrounding neighborhoods, as we heard during the planning commission meeting. Please accurately address this issue in the EIR. Less dense housing could mitigate this problem.

26-5

5. **Traffic:** The traffic numbers in the DEIR do not consider an accurate number of trains coming through the area. A typical train coming through at a busy time (like school drop/pick up or rush hour) can snarl traffic much longer than the train actually takes to pass through. As residents very near the tracks, we estimate that there are at least 22 trains coming through each day. Please consider accurate traffic numbers to truly recognize what will happen to our quality of life and travel times with such a large number of cars added to this already congested area (see traffic grades for proof). Less dense housing would reduce the road congestion to help mitigate the negative effects we will feel daily.

26-6

6 Alternatives: I believe the alternatives suggestions are not feasible alternatives. Why were these alternatives selected? We need to study realistic solutions like a reduced density option that does not use Campbell Road as a through road, and a reduced density option that places the park in a different location (instead of in unsupervised open space next to Ag land with no sewer possibility). Residents want to see a more realistic alternative. Why not add one? 26-7

General Concern: It is disappointing to see so much cut and pasted from other cities' EIR's (i.e. Novato) without thought of how things will really affect this property. Residents lack confidence in the document when it is evident that no one has actually read through it! 26-8

Thank you for your work on the effects the proposed development will have to our area. I look forward to seeing the revisions. 26-9

Thanks,

Angee Wangsgard
(916) 230-2175
9103 Quail Cove Dr
Elk Grove, CA 95624
wangsgards@frontiernet.net

2.0 COMMENTS ON DRAFT EIR AND RESPONSES

Letter 26 Angee Wangsgard

Response 26-1: The commentor makes introductory remarks and identifies that they live in Quail Ranch and own a home in Fallbrook. She also provides Virginia Fife's address. The commentor's concerns are addressed in Responses 26-2 through 26-9.

Response 26-2: The commentor states their concern for the potential for Quail Ranch flooding and does not believe the figures accurately represent what will happen when homes are placed on the Project site, noting that Quail Ranch homesites are generally lower than the Project. The commentor indicates that there is a natural water flow from the Project site that ponds behind her home for most of the winter and believes the pond's size could grow substantially, potentially impacting their own property and many others. The commentor requests that a study of this issue and solutions to the potential flooding of Campbell Road and Quail Ranch be included in the Final EIR. Potential drainage impacts associated with Project development, including grading and site layout, are addressed in Section 3.8 of the Draft EIR and were analyzed in the Preliminary Drainage Study. As described under Response 24-13, a retaining wall will be built between Quail Ranch Estates and the Project site and will be designed and engineered to ensure that drainage from the Project does not flow into the Quail Ranch Estates lots. The commentor is referred to the discussion provided under Responses 1-3 and 5-2 regarding the potential for off-site drainage impacts.

Response 26-3: The commentor believes that the current soil study is inadequate given the history of dumping on the site and requests that the issue be addressed, referring to Virginia Fife's letter for information. The commentor is referred to Responses 7-1 and 9-7 which address the issues associated with soil testing and concerns regarding a past "dump site".

Response 26-4: The commentor disagrees with the Draft EIR's statement that the changes in aesthetics will not be significant, stating that an empty field with seasonal grasses and wildflowers is much better to look at than a 9-foot wall as proposed along Bond Road across from the Fallbrook neighborhood. The commentor suggests increased space and landscaping adjacent the road along the southern border of the Project to mitigate this issue. The commentor is also concerned about the actual height of fences between Quail Ranch and the proposed development stating that if the lots are really 3 feet higher than existing Quail Ranch lots, the 6-foot fences will appear to be 9 feet and this is unacceptable in a residential neighborhood. The commentor is referred to Response 8-5 regarding visual impacts associated with the soundwall along Bond Road and is referred to Response 9-2 regarding the wall proposed where the Project site borders Quail Ranch Estates.

Response 26-5: The commentor states that the density of the Project site is not similar to surrounding neighborhoods and requests that this issue be addressed in the Draft EIR, indicating that less dense housing could mitigate the problem. The commentor is referred to Responses 10-3, 10-5 through 10-10, and 24-18 which address the zoning issues raised by the commentor.

Response 26-6: The *commentor* raises issues regarding trains that were raised by Comment 8-2 and addressed in Response 8-2.

Response 26-7: The *commentor* states that they believe the alternatives are not feasible alternatives and questions why there were selected. The *commentor* states that a reduced density option that does not use Campbell Road as a through road and a reduced density option with a different park location need to be addressed. The *commentor* states that residents want to see a more realistic alternative. The Project alternatives were designed to reduce or avoid potential environmental impacts as required by CEQA. The rationale behind the selection of the alternatives is provided on pages 5.0-2 through 5.0-4. The *commentor* has requested a decreased density alternative, which Alternative 2 provides, but requests that the access location and park site be changed. The issues raised by the *commentor* (access and park site location) are design preferences that do not reduce or avoid environmental impacts associated with the Project. No revisions to the Draft EIR are necessary in response to this comment.

Response 26-8: The *commentor* states that it is disappointing to see so much cut and pasted from other cities' EIRs without thought of how things will really affect this property. The comments state that residents lack confidence in the document when it is evident that no one has actually read through it. Section 3.10 of the Draft EIR has footers that identify another city, which will be revised as described in Response 16-5. However, Section 3.10, which contains substantive discussion, of the Draft EIR does not reference other jurisdictions and is directly applicable to the Project.

Response 26-9: The *commentor* expresses their thanks for the work on the effects the Project will have to their area and looks forward to seeing the revisions. The comment is noted and no response is necessary.

LETTER 27

From: [Christopher Jordan](#)
To: [Sandy Kyles](#); [Beth Thompson](#)
Subject: FW: The agenda item regarding the Silverado development
Date: Thursday, November 07, 2013 6:21:33 PM
Importance: High

Sent from my Windows Phone

From: [Robin](#)
Sent: 11/7/2013 6:15 PM
To: [Christopher Jordan](#)
Cc: 'Fallbrook'; [Gary Davis](#); [Steve Detrick](#); [Patrick Hume](#); [James Cooper](#); [Robert Trigg](#)
Subject: The agenda item regarding the Silverado development

David and Robin Cole
9290 Dever Circle
Elk Grove CA 95624

11/7/13

Dear Planning Commission and City Council;

I moved to Elk Grove in 1984 attracted, as most people who move here were, by the large expanses of open space. I thrilled at seeing the wildlife, which meanwhile has almost completely disappeared due to over development. I spoke out before against Brischegi Ranch. Both the Planning Commission and the City Council swore the homes would be in the same style as Fallbrook, where I live. We were assured the homes would be on large lots and would not encroach on our homes. Again all that was untrue. The homes were not in the same style, the lots were smaller and more homes were crammed in per acre than we been informed. And, there are several homes looking into the windows of Fallbrook homes, again the idea of encroachment was misleading.

These homes became mostly rentals and foreclosures and many stood empty creating a neighborhood blight, one never experienced in our development before. The development also brought down our home values and we experienced crime as never before.

You heard hours of testimony when Vintara previously attempted to build on the property currently being referenced as Silverado. **None of those factors have changed.** The property is still a haven of vernal pools, wetlands and wildlife, one of the few left in the area. The traffic on Bond road has not changed in these years nor has the problem of congestion been resolved and if anything, it is worse than ever. Adding more homes will only compound that problem. Not to mention all that stalled traffic contributing to environmental and air issues.

At a time when the County and State have not yet recovered from a housing market that was stagnant, the idea that any of you would contemplate throwing in more homes and buildings when there is no market or demand for occupancy is beyond words.

Each of you have a task, not just to increase fiscal revenues but to listen to the citizens and

27-1

27-2

create the community as the citizens want it. Not what you want, or because it will bring in revenue to the city or individual candidacy donations. Before you consider any further development in the East Elk Grove area, look to doing something with the Lent Ranch eyesore that was to be the diamond of Elk Grove. It is a perfect analogy and legacy of what the planning commission and City Council have done to the rest of this once beautiful community in choosing exuberant and rampant growth with no thought to what would happen if there were no occupants or if you ran out of space to build in. Please represent the community desires rather than your own. I would be attending, however, I have been out of town on a legislative conference.

27-2

Sincerely
David Cole and Robin Cole

Letter 27 David and Robin Cole

Response 27-1: The commentor describes what attracted them to Elk Grove in 1984, including open space and wildlife, which they opine has almost completely disappeared due to overdevelopment. They describe their opposition to Brischegi Ranch, commitments from the Planning Commission and City Council regarding the lot sizes and home styles. The commentor states the homes were not in the same style, lots were smaller, and became rentals and foreclosures creating neighborhood blight. The commentor references their testimony for Vintara and states none of the factors have changed; the property is still a haven of vernal pools, wetlands, and wildlife and traffic on Bond Road has not change and, if anything, is worse. The commentor states that adding more homes will compound that problem and contribute to environmental and air quality issues.

The comment does not address the adequacy of the Draft EIR and is noted for the decision-makers' consideration. Potential environmental effects associated with the Project are addressed in Sections 3.1 through 4.0 of the Draft EIR. Impacts to biological resources are addressed in Section 3.2, air quality is addressed in Section 3.1, and traffic is addressed in Section 3.12.

Response 27-2: The commentor indicates that each of you (Planning Commissioners) have a task to not just increase fiscal revenues but to listen to citizens and create the community as the citizens want it. The commentor references Lent Ranch and indicates it is an analogy of what the Planning Commission and City Council have done in choosing exuberant and rampant growth with no thought to what would happen if there were not occupants or if you ran out of space to build it. The commentor requests that the communities desires rather than your (Planning Commission) own be represented. The comment does not address the adequacy of the Draft EIR and is noted for the decision-makers' consideration.

LETTER 28

Diana Hutcheson – 11/7/2013

As a home owner in the Fallbrook Neighborhood, this is to express my concerns regarding the Draft Environmental Impact Report (DEIR) for Silverado Village on the North side of Bond Road. These concerns are as follows:

28-1

Transportation

The DEIR project impacts to nearby intersections were not sufficiently assessed. Seven of the closest intersections were considered, including Elk Grove Florin Road/Bond Road, Quail Cove Drive/Bond Road, Project Access/Bond Road Driveway (opposite Whittmore Drive), Crowell Drive (East)/Bond Road (Project Access), Waterman Road/Bond Road, Waterman Road/Project Access and Sheldon Road/Waterman Road (Transportation Impact Study (TIS), page 1). Significant impacts to traffic at nearby intersections (e.g., Stonebrook/School Loop Road and Bond (2 schools and one large residential development) and all intersections west of Bond Road/ Elk Grove Florin Road intersections (the primary connections to SR-99) were not accessed.

28-2

The DEIR impacts on traffic due to trains were not sufficiently assessed. The number of trains used to evaluate impacts was sixteen (TIS, App. F, page 7) which is incorrect as more than sixteen trains per day cross the Bond Road and Elk Grove/Florin Road train crossing. Also, no consideration was given to the time of day of the trains (e.g., during school and commute hours) or how long a train stops traffic relative to the number of cars on the train.

28-3

The impacts of trains on traffic with respect to transportation/safety analysis is inadequate and results in concerns that vehicles and trains will significantly increase emergency response times for police, firefighters and EMT personnel.

28-4

The traffic data from the TIS for the DEIR were insufficient as data was collected during December. All traffic data is most likely to be artificially low during the winter season due to weather conditions (December 2012).

28-5

Schools

The DEIR impacts on neighborhood schools is not adequately addressed. While the developer will pay the required new school construction fees, pursuant to GC Section 65995, the city has no land purchased or plans in development to establish a new school. Since there are no mechanisms in place to adequately enforce school zoning, residents of the proposed development may not be truthful about their residential addresses in order to enroll their children in schools in which they are not zoned (schools which already create traffic congestion

28-6

2.0 COMMENTS ON DRAFT EIR AND RESPONSES

and adversely affect the quality of living in these neighborhoods with respect to air quality, noise, litter, etc).

28-6

Water Quality

The DEIR impacts on water quality of Morrison and Laguna creeks was not adequately assessed. The DEIR did not document that Morrison Creek is listed on California's List of Impaired Waters ("303(d) List") as impaired by pyrethroids insecticides and diazinon and chlorpyrifos. Water quality is likely to be negatively affected even more as the result of the Silverado Project and the increased use and runoff the urban pesticides.

28-7

Letter 28 Diana Hutcheson

Response 28-1: The commentor identifies themselves as a homeowner in Fallbrook and indicate the letter expresses their concerns regarding the Draft EIR. Their concerns are addressed in Responses 28-2 through 28-7.

Response 28-2: This comment raises issues regarding schools that are addressed in Response 15-6.

Response 28-3: The commentor raises issues regarding trains that were raised in Comment 8-3 and addressed in Response 8-3.

Response 28-4: The commentor raises issues associated with train hazards that were raised in Comment 8-4 and addressed in Response 8-4.

Response 28-5: The commentor raises issues regarding the adequacy of the traffic count data that were raised in Comments 15-5 and 22-9. And addressed in Responses 15-5 and 22-9.

Response 28-6: The commentor is referred to Response 15-6, which addresses the issues the commentor raises regarding schools.

Response 28-7: The commentor is referred to Responses 13-2 and 22-19, which address the issues the commentor raises. regarding water quality.

LETTER 29
RECEIVED

NOV 13 2013

CITY OF ELK GROVE
PLANNING

11-7-13

Comments on Silverado file # EG 11-046
Re: notice of availability
Silverado Village
Draft EIR

By: Frank R Young
9431 Crowl Dr
Elk Grove CA 95624

29-1 I have reviewed the subdivision map and
has the following comments as they relate
to the adequacy of the draft EIR

1. Public Services

29-2 Further analysis is needed as to the
effects of public buses and school buses.
These are not addressed and I foresee
serious problems in the use of buses
in the roundabouts and on the main-
streets with school buses. There are
no loading zones for school buses or
E-Trans buses. In the event fire or emergency
vehicles are needed, the gridlock inherent
to the project will be impossible

2. Aesthetics

29-3 The area facing Bond has spacing by the
narrow sidewalk and a minimum set back
to the sound wall - I consider that
this is totally inappropriate at a minimum the

29-3 plan could mirror Fallbrook set back
or use Legunas wide setbacks. How high will
the sound wall be. Will the above ground electrical lines
remain

3 Transportation & Circulation

29-4 The report dismisses this as not feasible
& consider that there should be an analysis
of the feasibility.
With a proposed buildout of 600 units the
traffic is the 900 lb gorilla problem
both internally within the project and
the concomitant problems on Bond and
Waterman

Heavy traffic on Bond will affect in a
major way. Pinal Ranch people, Fite Ranch,
Butcher Ranch and Fallbrook

General comments:

29-5 This planned project is designed with the
essentially same road grid, and has
smaller footprint as the previous plan
called Elk Ridge estate yet the number
of units are increased by 3 times from
about 220 to the present 660!

Problems all evening when only 3 routes
of ingress & egress

Summary:

29-6 To Silverado this is driven by profits
like ^{new} car dealers who set MSRP prices

Silverado has proposed 600 homes
Both car dealers & Silverado set grossly
high figures so they can negotiate
down and appear to be "flexible"

I recommend back to Elk Ridge Estates
230 - why not Elk Ridge has a
larger foot print while Schuexado
has a smaller foot print

Letter 29 Frank R. Young

Response 29-1: The commentor indicates that they have reviewed the subdivision map and have the following comments as they relate to the adequacy of the Draft EIR. The commentor's specific comments are addressed in Responses 29-2 through 29-8.

Response 29-2: The commentor states that further analysis as to the effects of public buses and school buses is needed. The commentor indicates that these are not addressed and that they see serious problems with the uses of buses in the roundabouts and on the main streets with the school buses and that there are no loading zones for school buses or e-tran buses. In the event of an emergency, the commentor states that gridlock [illegible] to the Project will be [illegible but construed as meaning unacceptable].

The traffic counts collected to document existing conditions includes the entire fleet of vehicles using the study facilities, which includes school buses and e-trans buses, although these vehicles represent a small percentage of vehicles traveling during the morning and evening peak hours. Consequently, the traffic operations analysis incorporates the operational characteristics of these vehicles on study area intersection operations, where the acceleration and deceleration characteristics of larger vehicles are most noticeable. Roundabouts will be designed to accommodate buses, and tractor-trailer vehicles. As part of the development review and conditioning process, the City may require that access and frontage improvements include the accommodation of bus turnouts (i.e., loading zones) if requested by e-tran. No revision to the Draft EIR is necessary.

Response 29-3: The commentor states that the area facing Bond Road has spacing by the narrow sidewalk and a minimum setback to the soundwall. The commentor considers that this is totally inappropriate and at a minimum the plan could mirror Fallbrook's set back or use Laguna's wide setbacks. The commentor asks how big the soundwall will be and if the above-ground electrical lines [will] remain.

The commentor is referred to Response 8-5 regarding impacts associated with view of the Project from Bond Road, including the roadway, setback, landscaping, and the soundwall required by Mitigation Measure 3.10-1.

Response 29-4: The commentor states that the report dismisses transportation and circulation as not feasible and considers that there should be an analysis of the feasibility. The commentor states with a proposed buildout of 660 units, the traffic is the 900-lb gorilla problem both internally within the Project and the concomitant problems on Bond Road. The commentor also states that heavy traffic on Bond Road will affect in a major way Quail Ranch people, Fite Ranch, Britsche [sp.] Ranch, and Fallbrook.

2.0 COMMENTS ON DRAFT EIR AND RESPONSES

The commentor does not state what they mean by feasibility, but it is interpreted to reference the Draft EIR statement that mitigation for impacts to SR 99 was infeasible. The commentor is referred to Response 19-8.

The commentor identifies neighborhoods that will be affected by Project-related traffic. The Project's potential to impact traffic in the Project vicinity is evaluated in Section 3.12 of the Draft EIR. The commentor does not address the analysis presented in the Draft EIR. The commentor is referred to Responses 10-12 through 10-23, 19-2 through 19-4, and 22-9, 22-12, and 22-13 regarding the adequacy of the analysis of traffic issues.

Response 29-5: The commentor states that the Project is designed with essentially the same road grid and has a smaller footprint than the previous Elk Ridge Estates plan which the commentor believes had about 230 units. The commentor indicates that there are problems everywhere – only three routes of ingress and egress.

It is noted that the Elk Ridge Estates project proposed 746 single family units, not 230 units as the commentor has stated. The proposed tentative subdivision map and roadway plan for the Project have been reviewed by the City's traffic engineers, the City's Police Department, and the CCSD Fire Department and has been determined to provide adequate ingress and egress, including access for emergency vehicles. Transportation and circulation impacts, associated with the Project are discussed in Chapter 3.12 of the Draft EIR. This comment does not address the adequacy of the Draft EIR and no further response is necessary.

City of Elk Grove

Minutes of the Planning Commission
Regular Meeting
Thursday, November 7, 2013

Silverado Transcript.

REGULAR AGENDA ITEM:

ITEM 6.1 - SILVERADO VILLAGE (EG-11-046) – DRAFT ENVIRONMENTAL IMPACT REPORT (EIR) – PUBLIC COMMENT

OPPORTUNITY: An opportunity for the public and Planning Commission to comment on the DEIR. The Project consists of a Rezone from the existing zoning of RD-2, RD-4, RD-5, and Open Space to Silverado Village Special Planning Area to develop 660 single family units and up to 125 independent/assisted living/memory care units in three distinct villages. The project site is located north of Bond Road and west of Waterman Road, APNs 127-0010-02, 017, 040, 104, 105 & 106.

Christopher Jordan presented the Draft EIR and answered public comments.

Frank Young –I hadn't anticipated being first but I guess that's right- age before beauty. So I will go ahead and launch. I have been involved with this piece of property now for quite a while. It was a previous Elk Ridge estates was there by Camray and it looked very similar to this except, I would point out, there was a great deal of difference in the traffic that would be created. Elk Ridge estates had 230 or 220 residences, this has 660. The traffic problem is a 900 pound Gorilla as I see it in this category here and they say that there is no way of resolving that. People here say there is no feasible way. There are 2 different opinions on what is feasible and what is not feasible. His definition of feasible does not meet with mine. Mine says you have to explore all feasible options. One of them is you take a look at it, there's inadequate ways of ingress and egress for this piece of property. They go down Waterman Road, I don't know how far an EIR is supposed to go but Waterman Rd still continues to be a 2 lane road and I don't believe there is a traffic stop on Waterman. When I am able to look at the map and if they poured out of there and they go out to Sheldon, they will need a traffic light out there and what this parcel needs and what we said before when we were on Elk ridge estates is that we need a portal to get in and out. Now I don't intend to recommend we go North and i don't intend we go over Campbell Rd but some place up there, there ought to be a way to cut in where the U-Haul place is or where the houses there with the lots that's now for sale, to cut something through there to Elk Grove Florin Rd. I don't understand why they haven't even looked at it- they just say they can't do it. That's not what a plan is in my opinion. So let's talk about what I see here. If you take a look at the roads that are in there, they are roughly the same design as Elk Ridge Estates and I see nothing in here- what they do about public buses. E-tran. Is E-tran gonna go through there and pick the people up and take them to work during rush hour. Are the school buses going to go there. If the school buses go through there you should know that when a school bus stops to embark children, there are no spaces for them to do this then they do it in the road and then the road is stopped right there and that will cause an internal traffic jam. If there is E- Tran in there at the same time, those are generally during rush hours, at least in the morning. If E-Tran is in there with the big buses, if the fire department comes, anything like that, that's going to be a real, real problem. Either they will need to widen the roads or put in a place for the school bus to

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pick kids up. I don't believe they can walk from this parcel to down across to Bond Rd down to Elk Grove Elementary School. That's an impossibility. I would not want my kids to go across Bond.

30-4

Chair Maifa- Sir- I am going to have to ask you to wrap up your immediate thoughts and please feel free to make any additional comments that you weren't able to make in this allotted time to Mr Jordan. Anything that you haven't been able to say tonight does not diminish its value.

Mr. Young- Could I ask this favor. My wife is signed up to follow me. Could I have her 3 minutes?

Chair- You know sir- If we did that, particularly in these large groups and made that a precedent, we have had that request in the past and we've learned over time that it's really not workable.

Mr. Young- so are my three minutes over.

Chair- Actually you are over significantly

Mr. Young- OK

Chair- Thank you Sir. Any more comments, and that's true with everyone, if you can't quite make all your statements in the time, please don't be frustrated by that in itself and make those comments available to the staff.

Mr. Young - should I do it to the staff or do it on the 11th of November and make it a written comment.

Chair- Yes, I am encouraging written comments with anything that someone would not be able to fulfill.

Mr. Young- Would you except longhand I don't have a computer?

Chair- Absolutely. In any manner you can communicate I would be happy to take that.

George Murphey -Chris before we go any further can you put the project map up so we can have a reference point for some of these comments.

Chair- Miss young did you care to speak. (declines). Next we have Matthew Decker and Mike Gage is next.

Matthew Dekar - Good Evening. I just wanted to say thank you for the opportunity to review the EIR. I earned my PhD from the University of Arkansas in Fisheries and Aquatic Sciences. Most recently I was a post doctoral research fellow at the Center for Reservoir and Aquatic Systems Research at Baylor University. Tonight I am talking as a resident of Fallbrook and a member of the Fallbrook neighborhood Association. My three primary concerns with the draft revolve around hydrology, Water Quality and Biological resources. First the list of impaired water bodies in the Draft EIR is not complete. It does not document Morrison Creek on California's 303 D list for pyrethroid insecticides also the Laguna Creek. If you go and look at the California Environmental Data Exchange Network you'll see that Laguna Creek is approaching these thresholds as well. So because this group of contaminants is not considered at all the draft EIR obviously any kind of discussion or mitigation is not adequate. Limits on lot coverage and impervious surfaces, I would suggest, would provide a good mitigation measure and I would recommend that. In terms of the hydrology, the Bond Rd trunk pipe, the analysis by West Yost Associates, indicated that peek

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flows from that drainage would peak prior to peak flows on Laguna Creek. I will say that the analysis also indicated that Laguna Creek would increase in flows by 4-6% and my major complaint is only that the analysis provided by West Yost Associates appears incomplete, a different set of models or a different set of parameterizations, I think could easily lead to flooding in that Bond Rd trunk and flooding downstream of the project area. Finally in terms of the biological resources, I am concerned about the project impact on the vernal pool fairy shrimp and vernal pool tadpole shrimp. The draft EIR does not adequately address the reasonable and prudent measures that are described in the incidental take Section 7 consultation. I will also point out that the acreage that is listed in the document for the vernal pool habitat that would be directly impacted is all over the board. In some sections it's 5.05 acres and in other sections it's 4.49 acres. So the Draft EIR fails to . . .so I would suggest, this discrepancy, if your actually going to understand mitigation measures must be determined, the discrepancy must be resolved. Also, finally, the current plan purposes a park directly on existing vernal pool habitat. So the idea that there is no possible way around of minimizing the impact on vernal pools doesn't add up with putting a pool on vernal pool habitat. That park could be placed within the villages and open up more of that Northern third of open space.

31-1

Mike Gage – Good Evening Chairman, Fellow members and fellow residents. I am a new resident in the Quail Terrace Neighborhood and I have been there a year. I live on Bond Rd, but I do a lot of driving out on Sheldon to Grant Line and down Bond Rd, out to town of Wilton on a daily basis to take my grandchildren to school on Pleasant Grove off of Bader. What I see is a tremendous threat, as Mr young addressed very carefully, I am just giving a general comment, the traffic situation now on Bond Rd is pretty heavy and every morning there is a lot of noise. I bought the house knowing that I am living right on a big street. I am not complaining. I took that risk but I can see a tremendous amount of more traffic coming. My suggestion would be this- Sheldon Rd should be widened all the way to Elk Grove- Florin East to Waterman. You have a small Rd there and it's crowded into 2 lanes. So where is this enormous 600 residency population going to drive? They're not going to come out of there in helicopters. The other hidden giant here is Grant line, if you try to get onto Gran Line, from Sheldon, where it terminates at Grant Line. At rush hour I was waiting almost 15 -10 minutes and then I had to make a suicide crossing on Grant Line. The same thing is for Sheldon. No stop light, narrow road, it's like a country expressway out there except it's not been giving any attention in this proposal. I think this impact should be let's get the road in the first and make sure it can accommodate those kinds of tremendous overloads that we would have in existence

32-1

Shirley Peters – Good Evening, you have my paper as I was writing it I thought so much to say in so little time so that's why I wrote it to share it with you. I am with the Greater Sheldon Road Estates Home Owners Association, working with Fallbrook, Quail Ranch, people who live on Campbell Rd, who are also GSREHA members, any individuals and those who live in Old Town. We are all in agreement with many of the issues that we are going to speak about. GSREHA has the specific ones that I will speak about and the others, when they speak about their issues, we totally agree with that. So we are all in agreement- we are all happy. The biggest issue is the park which is the open space wetlands area and this to be in perpetuity. It's a buffer between the egress and the high density parcel, the questions is the park will be isolated and will need constant monitoring and this presents a problem because we all know that parks can have some negative behavior. Our thoughts were to put the park into the villages and the neighbors can monitor also and that would make it safer place. A big question we have is the septic system. How is that going to work? I don't think the CSD is interested in putting the money in for a

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building and the septic system being that ag res it would be a ag res policy that insists on the septic system being in place there. How can the open space wetlands being sensitive to plants and wildlife be protected from individuals who could easily meander through the whole area and so we suggest a fence be placed around the park but not just a 2 foot high one. We suggest one that would be 5-6 feet tall. A street dividing the open space and the densities, it was mentioned by Elk Grove staff a person that maybe a round-about could be put in onto the end of Sheldon Rd. All we say is lower the densities. That makes the most sense.

33-1

Mark White - Good Evening commissioners. My name is Mark White. I live at 8890 Saint Anthony Court. I sent an e-mail to each one of you so I am hoping that you took a few minutes to read it. Basically what I am concerned about is the drainage from the Northern side of the property. My property in particular but all of us on the North drain into that field, that Northern field, and with the loss of the vernal pools and the lack of maintenance to the drainage there doesn't seem to be a plan to move that water. Over the years, about every 4-5 years, originally it was the County, now it's been the city, they would come out and they would dredge the canal behind my property, dredge the ditch to take out vegetation and sediment so that the water would flow properly. When Centex put their original project together in Vintara Park, they were actually going to dig that ditch all the way out, hook that into the detention basin to allow that proper flow. That's nowhere in this plan. Basically what you're doing is telling us on the North side that "we don't care, were just going to let you guys flood out if have some heavy rains and it makes me very afraid to be a resident of Elk Grove to be honest with you. That drainage issue needs to be resolved before this project moves forward. Thank you.

34-1

Nina Stevens, Good Evening, I am Nina Stevens, I am resident of the Fallbrook neighborhood and also on the Fallbrook Neighborhood Association. I have many comments on the merit of the project and on different sections of the Draft EIR but I am going to speak specifically to the land use section. I understand that ultimately there is going to be a project developed here and I believe the Senior Village will be welcome an appropriate use. I believe that developing the additional 2 villages to their maximum density has not been adequately analyzed and that a more thorough analysis would show that a less dense alternative is the preferred alternative. The Draft EIR has not adequately addressed Land use impact. Per CEQA guidelines a project will have a significant impact on land use if it will conflict with any applicable land use plan. The Draft EIR concludes that land use impacts are less than significant when in actuality this project conflicts with the General Plan. The Draft EIR supports its finding with less than significant based on consistency with the EIR for the General Plan. That GP was adopted in 2003 over, 10 years ago, and there have been changes to the community and amendments to the General Plan that haven't been considered. When this property was analyzed for residential development there was also commercial land use being proposed to serve them. Since then no commercial development has occurred in the area and sites intended for commercial have been developed with residential uses. The Draft EIR finds this project consistent with Land Use policy LU11 which supports the development of neighborhood serving commercial states that commercial services planned for this project would serve the community. However, the commercial services proposed in this project are not neighborhood serving. They are restricted to the senior residents living within the gated community. Therefore it's not accurate to consider those uses as neighborhood serving when using them to support that finding. The Draft EIR also supports it's less than significant finding by finding consistency with policy CAQ7, which encourages clustering to facilitate protection of natural resources.. Clustering on this site appears to be done to facilitate a convenient location for the legally required open space area

35-1

so that they can maximize the density on the remainder of the project. In fact it proposes development on vernal pools and on wetlands that are most environmentally sensitive. Additionally the park is proposed for the open space on top of existing vernal pools. The park is proposed here because by putting it in the open space they can maximize the number of residences they can build. The park is likely to be an attractive nuisance and bring potentially damaging activities to this sensitive area. In conclusion the Draft EIR supports the less than significant finding with inaccurate data and relies on misrepresenting the policies in an attempt to find inconsistencies with the General Plan. Possible mitigation measures include planning a less dense project proposal with additional open space scattered throughout the project that actually uses clustering to protect the onsite resources and relocating the park to a central area of the project. A more complete analysis of a less dense project needs to be completed. A Less dense project could be found to be consistent with the General Plan and the City's vision and is also likely to result in more support from the community. Thank you.

35-1

Greg Jones- I am going to speak with hats tonight. One as a resident on Campbell Road. I have talked to all the neighbors there and we are all one mind. Don't mess with Campbell Road. Don't even think about opening it up to this development please. And the other concern is the White House Creek Shed. We are part of that. This basin is supposedly going to be engineered and elevated higher than things are right now which exposes us to more flooding. That is a real concern to us. Now, your storm drainage on the EIR talks about a problem with the southern part of the thing because the existing storm drainage has some kind of unexplained problem that is going to be mitigated by throwing some money out somewhere somehow- very vague. That is not a satisfactory answer. That problem needs to be identified and fixed before this development goes forward. The other thing- the other hat I am going to wear is as a former employee with the Regional Sewer Treatment Plant. The EIR has two flaws -major flaws. One in some places it says they are going to hook up to the 10 inch line. In other places it says we are going to hook up to the existing 15-inch line. And in another place it says we don't know if it is a 10 or a 15-inch. Excuse me. That is significant I would think. And the EIR blows off, entirely, the permitting thing that is going off right now. Saying we have plenty of capacity at the Regional Treatment Plant. It was designed to be doubled. Yes it was designed to be doubled as a secondary treatment plant. Years ago they were in the planning stages of a tertiary treatment plant but low and behold the regional water board, 2 years ago, threw some impractical technologically impossible requirements- I will just throw one of them out as a example. they want to have a specific limit of diazinon in the discharge. Well, I am sorry, the limit they have there is not measurable in a timely manner by any modern laboratory procedures. It would take a spectrographic analysis which takes hours to perform. Meanwhile you have columns of water going through pipes, big enough to drive a semi through, to the Sacramento River. This requirement is what is behind the district challenging the requirements and your people are totally blowing it off. It's a 5 year licensing thing. The technology is not there to support it and what's gonan happen when those license requirements cannot be met?

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Chair- I will have to ask you to wrap it up. And please if you have any more comments please submit them and there will be responses.

Greg Jones. Yeah, your environmental report totally blew that off.

Angee Wangsgard- Hi I am Angee Wangsgard. I live in Quall Ranch and I own a house in Fallbrook. I appreciate the thorough nature of the EIR, I do have concerns on section on Land Use, Hydrology, Roadway Capacity, Park Location and Aesthetics. I am going to leave those

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concerns to the letter that I am submitting so I won't talk about those tonight. I am concerned about what happens if no company decides to invest in age restricted building. I asked staff and they weren't totally sure. I would like to ask you to direct staff to be sure that the EIR is extremely specific in every way that it can be about studying this about age restricted area. Area A village 3 so if you are able to do that I would really appreciate it. However tonight I am not here to talk about my concerns I have a friend nameed Virginia Fife, she is 96. She has lived in Elk Grove for almost 70 years, since 1945. I want to read a letter from her because she doesn't go out after dark.

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37-2

Planning Commissioners- Thank you for the opportunity to share my thoughts about this environmental document and this project. I have lived in Elk Grove since 1945. My husband and I have raised 5 children here. They all graduated from Elk Grove High School. We have had a happy and successful life in Elk Grove. There are good people here. The Bond and Waterman families were our friends. We have had an excellent standard of living in this area. I know own a home in Fallbrook and I am pleased with this neighborhood. I feel safe here and I am even able to drive when I need to. (Angee-She has lived across from the property for 68 years) I have never spoken publicly in opposition of development in almost 70 years in Elk Grove. But there are 2 concerns about the proposed Silverado development that I would like to share with you tonight. I would appreciate it if you could address these concerns. Number one, I am very concerned that the roads in the area will become more hazardous. I am told that there is a study that states that with the new development the traffic will be the same or a little worse but this is hard for me to believe. When you add that many more cars to the road combined with the increased train traffic that we are seeing and the already bad congestion surrounding Fallbrook, particularly during school pick up and drop off times, traffic will be much worse. I value my independence and want to be able to continue driving. Please carefully review the traffic part of this study to explain how the proposed development will truly affect the existing residents. Number two, many years ago the land for the proposed development was used as a waste dump for a winery. I don't know who the waste got there but it was definitely used as dumping site. There was a terrible smell hat came from the area (Angee- and her family all remembers if she says). This land must be studied with those facts in mind. We need to know that digging and building here is safe. The study shows a few samples taken on such a large parcel. This won't be enough with a known history as a dumping site. We can't treat this piece of land like a regular piece of property because of its past. We also need to be sure that moving the dirt won't bring up the terrible smells that we can still remember today. Please take specific steps to address this concern. Thank you very much Virginia Fife.

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Rochelle Winewald - I am a resident at Quail Ranch estates. It's difficult to follow the words of Virginia Fife so I will do my best. I would like to address some concerns we have regarding the noise and the vibration portion of the Draft EIR. I hope you have access to it but on page 3.10-6. in reference to table 3.10-3 titled *General Plan Table NOC Maximum Allowable Noise Exposure Transportation Noise Sources*, the table shows that the land use of residential along the residential subject to the noise from Railroad Tracks, Aircraft, etc as having a maximum allowable noise exposure of 60 decibels. And yet when I read the predicted existing traffic noise levels, Item Number 2 on Table 3.10-5, it shows existing noise levels to be 66 by itself and 66 for the project. And what I am referring to in the table is item number 2, I believe that is Quail Cove Drive to Elk Grove Florin, if you are familiar with those maps. So the existing right now is showing at 66 decibels and the General Plan Table is showing that acceptable maximum allowable is 60. Now on page 7 on page 10 of the Environmental Noise Assessment included in Appendix E

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38-2

forecasts that by 2025 this number is projected to be as high as 68 both with and without the project. And the Draft EIR finds that the impact in Section 3.10-1 is less than significant but is shown in table 3.10-3 and the data provided we are already above the significant impact threshold of 60 and out of compliance. Also on 3.10-9 under methodology, the predicted future cumulative traffic noise levels used in the formula for predicting the outcome is based on those findings in the Elk grove General Plan noise element. There is no mention of the age of the noise element, there has been a great deal of change along Bond Rd in the last 5-10 years and the methodology for determining the offsite noise levels is not discussed in the Draft EIR. It should be noted that on pages 3.10-2 and 3, there is a reference to Table 3.10-1 listing examples of the noise levels associated with common situations. Currently item 2 is at the decibel of 66 that puts our noise level closer to the 70 decibel point level which is identified as noisy urban daytime lawnmower level and that is pretty much what they expect to have all day long in our neighborhood. On small note, but of importance that I do find, this is just me on technical thorough standpoint, if you look at your Draft EIR portion, everybody else on their footer of every section indicates Draft Environmental Impact Report Silverado Village, on the Noise portion it indicates Novato Housing Element. This is something I think we need to take a look at because unfortunately we are paying for a product and if aren't paying for... we are paying for something to be thoroughly done not something to be cut and paste. Thank you very much

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38-3

Kathy Lee (hands out a document to the board prior to speaking). First and foremost I am a resident at Quail Ranch and I would like to just state for the record that this Draft EIR is a project level EIR which omits cumulative impacts to and with the surrounding neighborhoods. Additionally the draft EIR is based on the Elk Grove General Plan of 2003 which has been revised via rezones nearly 30 times. The validity and accuracy of a well manipulated, 10 year old, outdated EIR as basis for evaluating this project is inadequate. Using the Elk Grove General Plan as the underlying source document that does not evaluate cumulative analysis and impacts is just inadequate. I will be specifically speaking to 3.5 Geology and Soils. The soil analysis done on 8/17/11 by Wallace Cool and noted as Soil Sampling and Analysis is inadequate. Over a 230 acres project site only 8 samples were taken at a depth of just a mere 6 inches. As top soil is distributed in the routine use is the land, sampling taken a 6 inch depth does not accurately reflect buried or submerged contaminants such as those activities associated with waste dumping and landfill and I just want show you what that looks like. What they did is they evaluated a 1 acre piece of land down at the bottom of the project, they didn't evaluate the entire project when they did this study. They only evaluated one acre. So with known uses on this land ranging from Winery waste, water evaporation ponds, winery drainage ponds, the independent disposal services, agricultural and farming activities, possible landfill and truck maintenance activities to name just a few, soil testing on this entire project site is required and the testing depth needs to be enough to uncover buried and landfill items. As referenced by the Nicholas Consulting Engineering report dated 11/18/2008 and addressed to the County of Sacramento on this piece of land we respectfully request that the recommended approaches on that document be followed regarding soil testing. I am going to attach that to my report when I hand that in. By way of personal knowledge there is a burrow pit in that land that is located right behind our house and has been routinely found to have a slimy film covering the top and discolored water in the pit. No other place on that land have we found such attributes on that land to my knowledge. And also by way of personal knowledge is the existence of toads and voles has been disappearing from that land at alarming rates. Each spring would bring out thousands and thousands of toads and voles. Surrounding neighborhoods were overrun with these toads but today they are absent. They're not there at all. For these reason I believe the

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Draft EIR is inadequate to answer some of these concerns. The last . . . I am done. I was going to talk about parks but I will let someone else do that.

39-1

Lysa White, Good Evening, my name is Lysa White and I am from the Fallbrook neighborhood. I echo a lot of the concerns being brought up from my neighbors and I hope that you are hearing a common theme. We enjoy where we live and we don't want that quality of life to be degraded. The Draft EIR has been inadequate in several areas. The areas that I will focus on are incompatibility with local adjacent developments, being Fallbrook, Quail Ridge, Sheldon Ranch Estates and the incompatibility has been very much minimized in the EIR. I note that in the comparison to the Elk Grove General Plan, the EIR seems to focus on an RD 5. I see that frequently noted. That would be the minimum residential development that is proposed. In the surrounding areas there is a lot of open area. There's homes on 1 acre, 2 acres to the north and in Fallbrook, I think our maximum is about RD-5, this is a minimum for the proposed development, if you ignore the open space, which I think is required for the flooding controls and the environmental impacts. So when I did the calculations and I look that Elk Grove General Plan, I am an engineer by trade also, when I look at the calculations I see 25% RD-5, 39% RD-6, and 40% RD-10, plus multi use, plus commercial in addition to the apartments that have already been constructed on the Corner of Waterman and Bond and that is unacceptable. It is not compatible with the existing development. The impacts from this would be mitigatable by looking at alternative number 2 which is a reduced residential density and reconfigured project. So I ask that you guys take a close look at that. The traffic impacts have been minimized, its focus primarily on Bond Rd. Waterman Rd there is also going to be, at least, from what I see, at least one access on Waterman Rd. Waterman Rd is a 2 lane road, one lane in each direction and the pavement has been deteriorating for years. The project evaluates Waterman Rd between Bond and Sheldon and looks at the intersections. Shopping would be used, probably a big portion of the big portion of the shopping would be the Elk Grove market place, it's the Bell Air shopping center on the Corner of Elk Grove Blvd and Waterman Rd. So I believe the traffic should be evaluated on the way down to Elk Grove Blvd and certainly North of Sheldon. A lot of us don't use Hwy 99 to commute to and from work. And in the Fallbrook neighborhood, in particular, Neponset Rd was ignored as far as traffic impacts and Wollaston, which are access roads to Elk Grove elementary school. Fallbrook has curved roads and we already have folks speeding through to get to the elementary school at the start and the stop times of elementary. A lot of our intersections are blind intersections and a lot of our residents are seniors so we would like that to also be looked at and that wasn't even addressed. Plus the condition of the pavement on several of our roads needs to be evaluated if we are going to have increased traffic it's going to impact the safety of our roads and the condition of our pavement. Thank you.

40-1

Sarah Johnson-Good Evening. Nice to see all of you. I haven't been here in a while but here I am. The Draft EIR contains, one of the attachments, contains letters from the state, from Cal Trans and from Sacramento County Department of Transportation and particular the county one asks for a study of traffic from this project as it crosses into unincorporated Sacramento County. I couldn't find that so I am not sure if that's been done or not and of course the Cal Trans letter reminds us of the sad circumstances originally with this project but that's in the past. Unfortunately here are hundreds of pages of mind numbing numbers that really don't mean anything. They leave out important issues. The traffic on Crowell to the elementary school is factored in while the traffic on Bond to the high school and middle school at Bradshaw are not even mentioned. We all recall that the city turned themselves inside out to get Bond Rd to improved and widened before those schools opened. So how can that traffic not be factored in

41-1

if the Crowell traffic is? The intersection at Sheldon and Waterman is factored in but they said that it will operate at a level of service E, which is the below the minimum of the General Plan and it doesn't mention the already one existing project that is going in on that corner which will make more traffic and the other thing that is not mentioned at all is the 400 home subdivision home going in on Grant Line south of Elk Grove Blvd. I imagine that the rationale will be those people will take Grant Line to the freeway. If you're a mother driving your child to school and going to the grocery store you're not going to the freeway. That traffic is all going to come that way. These are things that need to be looked at. The document states that potential to result in inadequate emergency access but then says no mitigation is required. I don't understand that. I would need to find some explanation for that. Reading from EIR "Potential to conflict with an applicable plan, ordinance or policy, establishing majors of effectiveness for performance of the circulation system, freeways, shows significant impact but says no mitigation is feasible". I can think of mitigation that is feasible and that is lower density in this project. These things all point out the inadequacies of the entire system. Basically it's saying if you do enough paperwork you can do whatever you want. The references to our transit system are an absolute embarrassment. It says "yeah we have a transit system" but if you look at the bus lines that go by there and when they go, the hours of operation it's completely inadequate. How is that supposed to relieve traffic congestion, for example. If they don't operate at the days and hours that working people need them. I just wanted to say that in my opinion that is the kind of planning that makes us stuck in the past instead of planning for the future.

41-1

Regina Reichenberg, I have a very brief comment about the park system and a personal comment about the traffic. On the parks, the custom soil survey mentioned on 3.5-16 states specifically that the Northern park site has limitations on the ability to absorb septic tank waste. This report is not included as part of the EIR and we requested its inclusion. With the limitations and inability to run sewer lines to the park as situated, issues arise as to whether this is the proper placement for the park at all. Additionally, the EIR provides no detail as to proposed amenities to the park or feasibility and practicality of a park within an open space preserve. If the developer is going to be given full Quimby credits for this park, the park needs to be a fully functioning park located in a usable and accessible central location and be complete with full restroom facilities. As our neighbors in Fallbrook, Greesha and Campbell Rd come together to ensure the best practical, least environmentally damaging project be brought forward we recognize the diversity of our concern and join together as one voice. We as a group support the option of reduced density. As far as the traffic is concerned I leave for work fairly early in the morning and I live in Quail Ranch which is about 1.4 miles from Hwy 99 and it can at times take me 10 minutes to travel that 1.4 miles with the current traffic. I can't imagine what it would take with this density housing going in there, let alone a train come by, in the morning during traffic, which it often does. I can hear, probably 3-4 trains a morning go by from the time my alarm goes off to the time I leave the house. So I am a little concerned about the traffic as well. Thank you.

42-1

Steve Lee - Thank you commissioner. Always a pleasure to be in front of you folks. I'm from Quail Ranch Estates. I am here to speak on Section 5.0 Alternatives as described in the EIR. CEQA requires applicants to provide a reasonable range of alternatives that meet the project objectives while reducing and avoiding one or more significant environmental effects. One of Silverado's objectives in the EIR they state consistency with the General Plan and compatibility with existing neighborhoods. The EIR addresses 4 alternatives 2 of which I will discuss but please note that all neighboring communities prefer the no build option. My first concern upon reading the EIR is the description of alternative from the submitted plan given overview they were vague

43-1

43-2

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and ambiguous. An example, alternate 2, page 5.0-3, last 2 paragraphs from the bottom, talk about removal of lots, increasing the size of others. Yet they provide no subdivision lot map showing the implementation for review. The last part states that village 2 would need a connector via Campbell Rd yet provide no rational why and also discuss moving lots north of A St, the Northern Border, into the federally protected conservation area. How is this a reasonable alternative? As required by CEQA I believe that is illegal. Alternate 2, also which is considered the reduced density and reconfigured project while allowing the build out avoids or reduces impacts on every single item discussed that carries a significant impact. This alternative if modified and implemented properly may also fill a need for executive or estate homes as stated in the City's recent market study of 2010 that Elk Grove asked to have done. The executive homes would bring better businesses into the region. It would also be compatible with the current general plan zoning on this particular property, RD2 and Rd4, and aggress. There's aggress estate zoning on 3 of the 4 sides of the project keeping with continuity of development, another issue discussed in the 2011 Elk Grove market study. Alternative 3 simply reconfigures the project somewhat improving the environmental footprint but it does save some valuable trees that border the Western portion and allows a 10 foot buffer of a pedestrian trail behind Quail Ranch. This also lacks a lot map indicating what the finished project would look like. We would ask that maps of alternatives 2 and 3 be prepared, justification for connectivity to Campbell Rd and a ruling on the ability to build out north into the protective open area be included. Perhaps even a hybrid of these alternatives allowing for perhaps 300 homes in Villages 1 and 2 would be invited. The LEDPAS Test of accountability should be the industry standard. The least environmentally damaging practical alternative. This project, as proposed, is the most damaging alternative. In closing I would like to acknowledge Fallbrook, Quail Ranch, GSEA and the residents on Campbell Rd who are all here in mutual support in one another and in support of each of the issues brought up before the commission tonight. Each community borders the project and has serious and legitimate concerns based on the information provided ignored or omitted from that EIR. Thank you.

43-2

43-3

43-4

Leo Fassler – Good Evening. Mr. Chairman and planning commissioners. I felt that it would be important to make a couple of comments. I have been living in the area for 50 years now and as you know I live on Sheldon Rd with eh waiving guy out front and when I first used out there I used to go out and dump on Waterman Rd. As well, as Kathy Lee pointed out, there was some dumping and I did it, along with some other people, on the property that they are talking about. The analysis, according to what Kathy pointed out, I don't think was done adequately. The other 2 points I want to bring up is I too, do not think the location is the right place. Couple reasons.. First imposition on the wetland area and secondly the people to the North have animals and, you know who it is when the kids get out there, they get out there and enjoy their games. The holler and scream and carry on and whatnot, that is frightening to animals and, Frank you used to do farming, I think, and you know that that can raise heck with them. So that's one reason I don't think the park belongs there and secondly I think if the park was located, as it was pointed out earlier, down in the central area it would allow the senior citizens walk to the park and enjoy themselves and see the kids play. Whereas now they would have to walk a quarter of a mile at least, up there to see it. I have talked to some commissioners on the CSD and they agreed with me however they approved that going up there I think. The other thing is, I don't understand, and you folks have looked at the maps, why there is a still a parcel near Waterman Rd showing on that map. If you go directly east of the park you'll see that parcel. The reason that parcel is there is they proposed some high density housing in there and we fought it and told them hey, this is only 2 acres you can't do that. So they said okay and they took that out but they left the

44-1

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parcel there. That seems like that is an opening for something down the road. Who knows what could happen. I think that ought to be taken out of here so you have open wetland area that is not disturbed. So those are my point of view on the thing and I appreciate your time. 44-1

2.0 COMMENTS ON DRAFT EIR AND RESPONSES

30 Frank Young

Response 30-1: The commentor raises traffic issues raised in their comment letter (Letter 29). These issues are addressed in Responses 29-1 through 29-3. The commentor also states that access should be provided from Campbell Road. This comment is noted for the decision-makers' consideration.

31 Matthew Dekar

Response 31-1: The commentor states their credential and describes concerns with water quality (Morrison Creek is on the 303(d) list for pyrethroid insecticides), the drainage analysis for the Bond Road Trunk and Laguna Creek, vernal pool impacts, calculation of vernal pool acreage, and park site location. The commentor's written comment letter (Letter 13) raised the concerns that the commentor orally presented at the Planning Commission meeting. The commentor is referred to Responses 13-1 through 13-6.

32 Mike Gage

Response 32-1: The commentor indicates that traffic on Bond Road is heavy, suggests widening Sheldon Road from Elk Grove-Florin Road to Waterman Road, asks where the 600 residency population will drive, and indicates that if you try to get to Grant Line from Sheldon that there is a long wait.

The question as to where the residents will come from is unclear. It would be speculative to guess where residents may move from to live in Elk Grove. If the commentor is asking where Project trips will be distributed, the commentor is referred to Draft EIR Figure 3.12-3, Trip Distribution. As documented on Figure 3.12-3, one percent of Project traffic would use Sheldon Road between Waterman Road and Grant Line Road, which would represent less than a 0.006 increase in the volume-to-capacity ratio of about 0.033 and would not increase delay to a level that would be significant. Similarly, one percent of Project traffic would use Sheldon Road between Waterman Road and Elk Grove-Florin Road with a similar minimal increase in volume-to-capacity. The Project would not require the widening of Sheldon Road. No revision to the Draft EIR is warranted.

33 Shirley Peters

Response 33-1: The commentor states their affiliation with the Greater Sheldon Road Home Owners Association (GSREHA) and described concerns with the park site location, septic system at the park site, and protection of wetlands in the vicinity of the park site, and recommends that densities be lowered. The commentor's written comment letter (Letter 23) raised the concerns that the commentor orally presented at the Planning Commission meeting. The commentor is referred to Responses 23-1, 23-2, 23-3, 23-4, 23-8, and 23-9.

34 Mark White

Response 34-1: The commentor describes concerns with the drainage from the northern side of the Project site. Jane White's written comment letter (Letter 6) raised the concerns that the commentor orally presented at the Planning Commission meeting. The commentor is referred to Responses 6-1 and 6-2.

35 Nina Stevens

Response 35-1: The commentor describes concerns with land use impacts and the park location/vernal pool impacts and recommends mitigation approaches. The commentor's written comment letter (Letter 14) raised the concerns that the commentor orally presented at the Planning Commission meeting. The commentor is referred to Responses 14-2 through 14-8, 14-12, and 14-14.

36 Greg Jones

Response 36-1: The commentor requests that Campbell Road not be "messed with." The commentor describes concerns with the Whitehouse Creek Shed and concerns with the Draft EIR's analysis of capacity at the Regional Sewer Treatment Plan. The commentor's written comment letter (Letter 5) raised the concerns that the commentor orally presented at the Planning Commission meeting. The commentor is referred to Responses 5-1 through 5-6.

37 Angee Wangsgard

Response 37-1: The commentor states they have concerns with land use, hydrology, roadway capacity, park location, and aesthetics and that they will leave those concerns to the letter they are submitting. The commentor's written comment letter (Letter 26) is addressed in Responses 26-1 through 26-9.

Response 37-2: The commentor states concerns about what will happen if no company decides to invest in age-restricted building and asks that the EIR be extremely specific in every way that it can be about studying the age-restricted area. This comment does not address the adequacy of the Draft EIR and is noted for the decision-makers' consideration.

Response 37-3: The commentor reads a comment letter from Virginia Fife. The letter states that they have lived in Elk Grove since 1945 and raised their children here. The letter describes an excellent standard of living in the area and states they own a home in Fallbrook, feels safe, and drive when they need to. The comment makes introductory statements. The commentor's specific concerns regarding the Project are addressed in Responses 37-4 and 37-5.

Response 37-4: The comment states concerns with the roads becoming more hazardous and that it is hard to believe that traffic will be the same or a little worse, particularly considering the increased train traffic. The commentor requests that the traffic study be carefully reviewed and is referred to Responses 10-12 through 10-23, 19-2 through 19-4, and 22-9, 22-12, and 22-

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13 regarding the adequacy of the analysis of traffic issues and concerns related to increased traffic and potential hazards associated with traffic and is referred to Responses 8-3 and 8-4 regarding increased train traffic and associated hazards. The comment is noted for the decision-makers' consideration.

Response 37-5: The comment identifies concerns with past use of the Project as a waste dump for a winery, that there was a terrible smell, and states that the land must be studied with those facts in mind to ensure that digging and building here is safe. The commentor also identifies concerns regarding the sampling on the parcel. The commentor also states that they need to be sure that moving the dirt won't bring up terrible smells. The commentor is referred to Responses 7-1 and 9-7 which describe the past use of the Project site, studies that have been conducted to review the site for potential hazardous contaminants, and the extent of soil and groundwater sampling that has been conducted. Significant impacts associated with odors are not anticipated; the 1988 Groundwater and Soil Testing Report and the Phase I ESA did not identify any significant odors on the site and did not identify any contamination on the site that would result in odors. No revisions to the Draft EIR are warranted.

38 Rochelle Winewald

Response 38-1: The commentor makes introductory remarks. No response is necessary.

Response 38-2: The commentor refers to Table 3.10-3 on page 3.10-6 of the Draft EIR, which shows that residential land uses subject to noise from railroad tracks, aircraft, etc. have a maximum allowable noise exposure level of 60 dB. The commentor states that when they read the predicted existing traffic noise levels on Table 3.10-5, it shows existing noise levels as 66 db and 66 dB for the Project. The commentor also states that by 2025, the number is projected to be as high as 68 both with and without the Project. The commentor states that the Draft EIR finds the impact less than significant, but the data shows it is already above the 60dB threshold and out of compliance.

Section 3.10 of the Draft EIR evaluates the effect of the Project on the noise environment. As the commentor notes, existing noise levels are above the 60dB threshold identified in Table 3.10-5. As identified on Table 3.10-8, if ambient noise levels are 65 dB or more, a 1.5 dB increase is necessary for the impact to be considered significant. As the commentor noted, the Project would not result in an increase in projected noise levels, both under existing and cumulative conditions. Therefore, the impact is less than significant as described on page 3.10-9 of the Draft EIR. No revision to the Draft EIR is necessary.

Response 38-3: The commentor indicates that the cumulative traffic noise levels used in the formula is based on the findings of the General Plan Noise Element, that there is no mention of the age of the noise element, that there has been a great deal of change along Bond Road in the last 5-10 years, and that the methodology for determining off-site noise levels is not addressed in the Draft EIR.

The General Plan Noise Element is a long-term policy document that establishes the City's policies and standards for noise. Until the City opts to update the Noise Element, it will be the City's guiding policy document relative to noise and an appropriate and required document to use when evaluating noise impacts under CEQA. As previously discussed, the City's General Plan would allow more units on the Project site than are proposed by the Project. The FHWA model was used to identify existing traffic noise levels and the methodology for determining existing traffic noise levels is described on page 3.10-4 of the Draft EIR. The FHWA model was used to predict traffic noise levels that would occur with development of the Project as described on page 3.10-9 of the Draft EIR. No revision to the Draft EIR is necessary.

39 Kathy Lee

Response 39-1: The commentor describes concerns regarding cumulative impacts and the soil testing and analysis. The commentor's written comment letter (Letter 24) raised the concerns that the commentor orally presented at the Planning Commission meeting. The commentor is referred to Responses 24-2, 24-3, 24-5, and 24-15.

40 Lysa Voight

Response 40-1: The commentor describes concerns regarding the compatibility with adjacent neighborhoods that was addressed in the Draft EIR, describing densities based on the commentor's zoning calculations and traffic and pavement concerns. The commentor indicates that the impacts from densities would be reduced by Alternative 2. The commentor's written comment letter (Letter 10) raised the concerns that the commentor orally presented at the Planning Commission meeting. The commentor is referred to Responses

41 Sarah Johnson

Response 41-1: The commentor describes concerns regarding traffic. The commentor's written comment letter (Letter 19) raised the concerns that the commentor orally presented at the Planning Commission meeting. The commentor is referred to Responses 19-1 through 19-10.

42 Regina Reichenberg

Response 42-1: The commentor states concerns regarding the park location. The commentor is referred to Responses 1-2, 14-6, 14-8, and 16-4 regarding the location of the Lot G park site and use of septic at the park site. The commentor also identifies concerns regarding traffic conditions, but the concerns do not address the adequacy of the Draft EIR. No further response is necessary.

43 Steve Lee

Response 43-1: The commentor discusses the alternatives presented in the Draft EIR, noting that one of the Project's objectives is consistency with the General Plan and compatibility with existing neighborhoods. The commentor states that the EIR addresses four alternatives, two of which

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they will discuss noting that all neighboring communities prefer the no build option. The comment does not address the adequacy of the Draft EIR and is noted for the decision-makers' consideration.

Response 43-2: The commentor states that the written description of alternatives were vague and ambiguous, indicating that page 5.0-3 last two paragraphs discuss removal of lots, increasing the size of others, but does not provide a subdivision lot map. The commentor also indicates that there is no rationale as to why Village 2 would need a connector via Campbell Road and indicates that moving lots into the federally protected conservation area is illegal.

The Draft EIR will be revised as shown below to clarify the description of Alternative 2. CEQA does not require a subdivision map to be prepared for each alternative and the description of Alternative 2, which identifies the location of development and specific uses (111 single-family lots, 100 patio homes, a multifamily lodge of up to 125 units, and the Village 3 clubhouse and swimming pool) is adequate for its meaningful consideration by the decision-makers. The Campbell Road connector would be provided in order to increase lot sizes so that wetland easements can be accommodated within the residential lots while still providing adequate area for development and because constructing a street from Bond Road to the northern area would result in wetland impacts. The Project would create the wetland preserve – it does not currently exist on the Project site and the reconfiguration described for Alternative 2 would avoid wetland impacts.

The description of Alternative 2 will be revised on pages 5.0-3 and 5.0-4 of the Draft EIR as shown below:

- **“Alternative 2: Reduced Density and Reconfigured Project Alternative.** Alternative 2 would avoid the significant and unavoidable impact to the Northern Hardpan Valley Hardpan Vernal Pool complex on the Project site through avoiding all wetland, riparian, vernal pool, and drainage features. Preservation easements, prohibiting access and disturbance, would be placed around all wetland, riparian, vernal pool, and drainage features. There would be no wetland conservation area and the detention basin would be under a preservation easement. An alternative detention basin would be constructed to the east of the current site of the detention basin. This would require removal of adequate fill to provide detention to the Alternative 2 lots. Under this alternative, various lots would be removed and lot sizes would generally be made larger to accommodate the preservation easements. The park sites would be reduced to approximately 3.25 acres and the north-south component of the open space trails would be removed.

The land area of Village 1-A Lots 1 through 60 would be developed under this alternative; however, the area would be configured to have 15 lots would be removed in order to make Lots 1 through 45 lots to allow larger lot sizes in order to accommodate preservation easements. Village 1 Lots 66 through 83 would also remain. Village 1 Lots 85 through 99 would be removed.

The land area of Village 1-B Lots 1 through 36 would remain, but would be reconfigured to have 26 lots reduced by 10 lots in order to provide larger lot sizes to accommodate the preservation easements. Village 2 would also be extended northward to include another 15 lots. Village 2 lots would be accessed

by Campbell and Bond Roads. The Campbell Road access would provide access to lots that would avoid wetland impacts that would occur in association with extending a street from Bond Road.

Village 2 Lots 1 through 62 would be removed to accommodate the relocated detention basin. Village 2 Lots 69 through 196 would be reconfigured to accommodate 3 single family lots in association with Village 2 and to mostly be removed to accommodate relocated Village 3. However, A total of 10 single family lots would remain in Village 2 and would be spread throughout the northern and central portion of the site.

The Village Core uses and 40 patio lots would be relocated to be accessed from Waterman Road. ~~Another 60 patio lots in Village 3 patio lots~~ would remain in the southeast corner of the site to be accessed by Bond Road.

Alternative 2 would result in 111 single-family lots, 100 patio homes, and an independent, assisted, and/or memory-care multifamily lodge of up to 125 units. The Village 3 clubhouse and swimming pool would be constructed, but the clubhouse would be smaller.”

Response 43-3: The commentor describes Alternative 3 and requests that maps of Alternative 2 and 3 be provided and that a ruling on the ability to build out north into the open space area be included. As previously described, the Project would create the wetland preserve and open space lots; these lots do not currently exist and could be reconfigured. The text description of Alternatives 2 and 3 is adequate for decision-makers to consider whether the alternatives should be considered in lieu of the Project and no revision is required to the Draft EIR. The comment is noted for the decision-makers’ consideration.

Response 43-4: The commentor references a hybrid of these alternatives (2 and 3) and states that the LEDPAS test of accountability should be the industry standard, the least environmentally damaging practical alternative. The commentor states that the Project is the most damaging alternative and makes closing remarks. This comment does not address the adequacy of the Draft EIR and is noted for the decision-makers’ consideration

44 Leo Fassler

Response 44-1: The commentor’s concerns related to the assumed dump site on the Project. The commentor’s written comment letter (Letter 7) raised the concerns that the commentor orally presented at the Planning Commission meeting. The commentor is referred to Response 7-1.

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Revisions made to the Draft EIR are identified below. None of the revisions identify new significant environmental impacts, nor do any of the revisions result in substantive changes to the Draft EIR.

Modifications to the Project

As described in Chapter 1.0, Introduction, the Project has been revised. The number of single family units has been reduced from 660 to 651. Three dwelling units were removed from Village 2-A and the circulation system was slightly revised to provide for larger and wider lots facing the wetland preservation and open space area (Lots C and E) and to provide a landscape lot and pedestrian path for pedestrian connectivity from Waterman Road to the Project’s interior features. Six lots were removed from Village 3 and the lotting and street pattern was revised to improve the internal circulation pattern in Village 3 and to improve the transition between the existing Waterman Square Apartments and the Project by creating a landscape buffer. The changes to the Project are described in Chapter 1.0 and summarized in Table 1. The modifications to the Project do not require revisions to the Draft EIR, as there would be no new significant environmental impacts or increase in the significance of environmental impacts. The reduction of nine units and revisions to the site plan would result in slight reductions in overall impacts associated with aesthetics, air quality, noise, traffic, and public services/utilities, but would not change the level of significance of any of the impacts identified in the Draft EIR. Therefore, no changes are made to the Draft EIR to address the modifications to the Project. The Draft EIR provides a conservative analysis of environmental impacts anticipated in association with the Project and the impact statements, mitigation measures, and alternatives presented in the Draft EIR remain appropriate and adequate.

The last paragraph on page 2.0-1 of the Draft EIR is revised as follows:

The Project site is generally bounded by Waterman Road, vacant land, rural residential uses, and Laguna Creek to the east; Waterman Square Apartments adjacent the southeast corner; Bond Road and single family residential uses to the south; and single family residential development to the west, with a vacant area adjacent to the northwest. The Project site is designated for rural residential, low density residential, and commercial/office/multifamily uses by the General Plan. The designated uses would accommodate up to 1,182 units on the Project site (Low Density Residential - 1,022 units (146 acres x 7 units/acre, Rural Residential – 40 units (80 acres x 0.5 units/acre), and Commercial/Office/Multifamily – 120 units (4 acres x 30 units/acre)). General Plan and Zoning designations and land uses adjacent to the Project site are summarized in Table 2-1.

Page 2.0-4 of the Draft EIR is revised as follows:

“Village 1

Village 1, located along the western boundary of the Project site abutting Quail Ranch Estates to the west and Bond Road to the south, includes 135 single-family detached homes with a typical dimension of 60’ by 105’ and a minimum lot size of 6,300 square feet (s.f.). The lots abutting Quail Ranch Estates along the western property line are sized to match the width of these off-site lots to the extent possible with dimensions ranging from 63’ to 78’ wide by 110’ deep; these lots may measure less than 100’ deep, provided

3.0 REVISIONS TO THE DRAFT EIR

they comply with the minimum lot size requirement, with the objective to protect existing trees along the property line or adjacent property to the extent feasible.

Village 2

Village 2 is located to the west of Waterman Road, south of the proposed detention basin and open space, and north of Village 3. An open space parcel separates Village 2 from Village 1. Village 2 includes 258 single-family detached homes with a typical dimension of 55' by 105' and a minimum lot size of 5,775 s.f.

Village 3

Village 3 is located in the southeast corner of the Project site, adjacent to Village 1 to the west and Village 2 to the north, and is west of Waterman Road and north of Bond Road. Village 3 is age-restricted to adults 55 and over. Village 3 includes a maximum of 267 active adult patio homes on a ~~minimum~~typical lot size of ~~4,600~~4,265 s.f. ~~with a typical dimension of 50' by 92.5'~~ as measured from the centerline of the internal private streets to the rear property line. These homes would be single-family detached and generally one story.

Within the "village core" a lodge facility and clubhouse are proposed. The lodge would have a maximum of 125 units for independent living, assisted living, and/or memory care for seniors. The approximately 6,500 s.f. clubhouse and associated swim facility would be located adjacent to the lodge, serving as a recreation, community gathering, activity, and information hub for area residents."

Page 2.0-8 of the Draft EIR is revised as follows:

"SITE SPECIFIC DEVELOPMENT STANDARDS AND DESIGN GUIDELINES

The SPA includes the following site specific requirements for Village 1:

1. Lots abutting the western boundary adjacent to the Quail Ranch community shall ~~be a minimum of 63' x 110', with~~have lot widths matching the adjacent off-site lots to the extent possible. These lots may measure less than 100' deep provided they comply with the minimum lot size requirement, with the objective being to protect existing trees along the property line or on adjacent property to the extent feasible.
2. Minimum rear yard setback for the primary dwelling for lots adjacent to the Quail Ranch community shall be 20 feet. Deviations to a minimum of 15' feet may be approved through Master Home Plan Design Review when lot width reductions are required under section 4 below. Accessory structures shall comply with the development standards of the Citywide Code.
3. Lots abutting the Quail Ranch neighborhood shall be limited to single story homes.
4. A solid masonry wall a minimum of six feet in height shall be constructed at the westerly property line abutting the Quail Ranch neighborhood. The wall shall be designed to minimize potential impacts to off-site trees. Potential solutions include, but are not limited to, pier foundations or modifications in lot depth as provided in section 1 above.
5. A pedestrian only connection with Emergency Vehicle Access (EVA) with "knockdown" bollards shall be extended 110 feet from the terminus of Bob White Court located in the Quail Ranch community to the interior street within Village 1.
6. Lots abutting the detention area and parks (i.e., lot 99) shall have rear yard fence designs that enables views of the open space areas while providing security and privacy for the homeowners. Wood fences at these locations are prohibited."

Page 2.0-8 of the Draft EIR is revised as follows:

“Patio Homes

The ~~minimum~~^{typical} patio home lot size will be 4,600~~25~~ s.f. (50’ to 60’ wide by 92.5’ long), with ~~no minimum required lot size and~~ maximum densities of 8.0 du/ac. Minimum lot width is measured at the front or rear setback line. Lot depth is measured from the private street centerline. Front and side setbacks require 18 feet from the street to garage door, 12 feet from street to front living area, 10 feet from street to covered porch, and 12 feet from a second frontage street. There is an interior side setback of 5 feet and a rear setback of 10 feet will be required. The maximum building height is 30 feet, with typical dimensions of 60’ wide by 105’ deep. Irregular lots may vary from the typical dimensions. Front, side, and rear yard setbacks will be consistent with the RD-5 zone, with the exception of site specific standards provided by the SPA.”

Mitigation Measure 3.3-8 on pages 3.3-28 and 3.3-29 of the Draft EIR is revised as follows:

“Mitigation Measure 3.3-8: *Up to thirty days prior to any ground disturbance activities, the Project Applicant shall retain a qualified botanist to conduct confirmation plant survey(s) for Peruvian dodder, Slender Orcutt grass, and Sanford’s arrowhead. These plants have not been observed on the Project site through previous surveys; however, appropriate habitat for these species is present. If the confirmation survey(s) reveal the presence of these plants, then the qualified botanist shall notify the City of Elk Grove and the appropriate regulatory agency with jurisdiction over the plant. If the confirmation survey(s) reveal the presence of these plants, mitigation measures shall be implemented to reduce potential impacts to the extent feasible. Mitigation shall include relocation/transplanting the plants and/or seed bank that would be affected by the Project to areas proposed for wetland creation or another appropriate area for either re-establishment after construction is complete or for planting. If the confirmation survey(s) do not reveal the presence of these plants, then the Project Applicant is free to move forward with ground disturbance activities, subject to all permits and other Project mitigation requirements.*

Timing/Implementation: Prior to issuance of grading permits or approval of improvement plans, whichever occurs first.

Enforcement/Monitoring: City of Elk Grove Planning Department.”

Mitigation Measure 3.5-2 on pages 3.5-12 and 3.5-13 of the Draft EIR is revised as follows:

“Mitigation Measure 3.5-2: *The Project Applicant shall prepare and submit a Post-Construction Stormwater Quality Control Plan in accordance with the most recent version of the Stormwater Quality Design Manual for the Sacramento Region. Post-construction source and treatment controls shall be designed in accordance with the City of Elk Grove Improvement Standards and the Stormwater Quality Design Manual. The design of post-construction source and treatment controls shall be submitted for approval with the improvement plans regardless of whether they constitute private or public improvements.*

Drainage from all paved surfaces, including streets, parking lots, driveways, and roofs shall be routed either through water quality treatment ponds, swales, buffer strips, or sand filters or treated with a filtering system prior to discharge off-site to the storm drain system. Landscaping shall be designed to effect some treatment, along with the use of a Stormwater Management filter to permanently sequester hydrocarbons, if necessary. Permeable pavers and pavement shall be utilized to construct the facilities, where appropriate.

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A separate maintenance manual describing proper maintenance practices for the specific treatment controls to be constructed shall also be submitted. If the maintenance manual needs revisions, Applicant shall make the requested revisions in a timely manner.

Timing/Implementation: Prior to issuance of grading permits or approval of improvement plans, whichever occurs first.

Enforcement/Monitoring: City of Elk Grove Public Works Department."

The second paragraph on page 3.8-19 of the Draft EIR is revised as follows:

"The Project has an approved and valid United States Army Corp of Engineers (USACE) 404 permit (No. SPK-2001-00584) and 401 certification, dated April 2008. This permit outlines the allowable modifications to jurisdictional wetlands that will be the primary water quality treatment areas and flood control structure for the Project. The existing earthen berms that currently contain these jurisdictional wetlands, which will serve as water quality treatment and flood control structures, will be reconstructed to modern construction standards to provide the necessary water quality (WQ) and Flood Control storage volumes need by the Project. These proposed modifications are consistent with the approved 404 permit (Wood Rodgers 2013, pg. 3)."

Page 3.6-22 of the Draft EIR is revised as follows:

"SUMMARY

The implementation of Mitigation Measure 3.6-1 would ensure that the Project incorporates all of the relevant and applicable measures contained in the Elk Grove CAP. The Project is consistent with the Rural Residential, Low Density Residential, and Commercial/Office/Multifamily land use designation assigned to the site by the General Plan Land Use Map, as described in Section 3.9. The General Plan land use designations would accommodate approximately 1,182,022 residential units on the Project site (Low Density Residential - 1,022 units (146 acres x 7 units/acre, Rural Residential – 40 units (80 acres x 0.5 units/acre), and Commercial/Office/Multifamily – 120 units (4 acres x 30 units/acre))); †The Project proposes 660 single family units and up to 125 independent/assisted living units, which is less than the development allowed under the adopted land use designations. As such, the cumulative greenhouse gas impacts associated with the Project are consistent with the greenhouse gas emissions projections and analysis in the Elk Grove Sustainability Element and Climate Action Plan Subsequent EIR. Implementation of the Project would not result in greenhouse gas emissions beyond the levels assumed in the CAP and analyzed in the SEIR."

Mitigation Measure 3.6-1 on page 3.6-21 of the Draft EIR is revised as follows:

"Mitigation Measure 3.6-1: Prior to the issuance of building permits, the Project shall demonstrate compliance with the ~~following~~ Climate Action Plan, including, but not limited to, mandatory measures BE-6, BE-10, RC-1, RC-2, TACM-5, and TACM-12.

The Project Applicant shall consider incorporating additional recommended GHG Reduction Measures. The Project Applicant shall provide reasons/justification, in the form of a written letter, for any recommended GHG Reduction Measures (BE-7 and BE-9), that are not incorporated into the Project. This does not apply to the mandatory measures, which must be incorporated.

- ~~• Achieve Tier 1 of Title 24, Part 11, green building standards to exceed minimum Title 24 energy efficiency standards by 15%.~~
- ~~• Incorporate the use of energy efficient appliances and equipment that maximize efficiency in new buildings and facilities.~~
- ~~• Incorporate the use of high albedo material for outdoor surfaces to the greatest extent feasible, including but not limited to parking lots, median barriers, roadway improvements, and sidewalks.~~
- ~~• Prewiring or conduit for solar photovoltaics shall be provided in all non-residential structures.~~
- ~~• Utilize drought tolerant vegetation in landscape areas, and design grading improvements to maximize runoff into designated landscape and planter areas.~~
- ~~• Achieve a minimum waste diversion rate of 65%, which shall be demonstrated through the Project's Waste Management Plan, for all construction and demolition activities.~~
- ~~• Utilize recycled concrete in base material for new road construction to the greatest extent feasible.~~
- ~~• Provide prewiring for plug-in electric vehicles.~~
- ~~• Provide a solar option for homebuyers.~~

Timing/Implementation: Prior to issuance of building permits

Enforcement/Monitoring: City of Elk Grove Planning Department"

Page 3.8-15 of the Draft EIR is revised to include the following discussion of the SDMP:

"STORM DRAINAGE MASTER PLAN

The City adopted a comprehensive Storm Drainage Master Plan (SDMP) to provide a variety of drainage concepts for upgrading the existing storm drainage and flood control collection (SD&FCC) system. The SDMP identifies and analyzes the existing drainage deficiencies throughout the City; provides a range of drainage concepts for the construction of future facilities required to serve the City at buildout of the General Plan; and establishes criteria for selecting and prioritizing projects.

The SDMP divides the City into specific watershed and subsheds for the purposes of identifying storm drainage needs specific to each watershed and/or subshed area. The majority of the Project site is within the Whitehouse Creek subshed of the Laguna Creek watershed, except for the southwest corner which is in the Laguna Creek subshed of the Laguna Creek Watershed. The SDMP identifies existing and new facilities and upgrades to serve buildout conditions of the General Plan."

3.0 REVISIONS TO THE DRAFT EIR

The following edits are made to the discussion presented under Impact 3.8-4 on pages 3.8-21 and 22 of the Draft EIR:

“Impact 3.8-4: The Project would alter the existing drainage pattern in a manner which would not result in flooding, but could create or contribute runoff in excess of the capacity of stormwater drainage systems. (less than significant with mitigation)”

As described previously, the topography of the Project site slopes from east to west, with a small portion draining towards the southwest corner of the Project site.

The Project proposes drainage features to ensure that runoff would not result in downstream flooding. Water quality, including potential impacts associated with erosion, siltation, and pollution, are discussed under Impacts 3.8-1 and 3.8-2.

On-Site Detention – Project Areas Tributary to Whitehouse Creek

The SDMP addressed the Whitehouse Creek watershed in detail in Chapter 7 of Volume II of the SDMP. The SDMP anticipated that the majority of the Project site would drain to the central on-site detention basin and then into Whitehouse Creek. While the SDMP identified conceptual drainage facilities for the area, the SDMP anticipated that the actual layout of the system would differ from the conceptual layout in the SDMP and that more detailed analysis will be required with development projects when they occur. The Preliminary Drainage Plan prepared for the Project provides the detailed analysis and specific drainage details and layout for the Project site that was anticipated in the SDMP.

Drainage from areas within the Project site that are tributary to Whitehouse Creek would be directed to the existing main central detention basin area. Under existing conditions, the basin area sits full during large storm events, overtopping and spilling into the downstream channel system. The Preliminary Drainage Study prepared for the Project by Wood Rodgers calculated the increase in storm water elevations that would occur with development of the Project. To represent drainage runoff conditions that would occur with development of the Project, Wood Rodgers updated the existing conditions hydrology (SacCalc) provided by the City to calculate the storm flow over time that would enter the detention area with development of the Project. Wood Rodgers then modeled the drainage outlet and storage configuration in HEC-RAS. Storm drain calculations were developed using StormCAD to represent the drainage into the proposed detention basin and into the storm drainage system connecting to Bond Road at the southwest corner of the Project site. The drainage calculations are included in Appendices A and C of the Preliminary Drainage Study (see Appendix D of this Draft EIR for the Preliminary Drainage Study and its appendices).

The Preliminary Drainage Study found that the 100-year flood condition would produce a maximum water surface elevation in the central detention basin of 45.3 feet. In order to accommodate the increased water surface elevation, the central drainage basin and associated berms would need to be improved. While essentially maintaining a similar footprint, the berms would be engineered and reconstructed vertically to reserve flood storage above 43 feet elevation up to 45.3 feet.

The proposed outlet will be configured to attenuate storm events by constructing four 12-inch outlet pipes with an invert elevation of 43 feet embedded in a 40-foot weir with a crest elevation of 44 feet. Downstream of this tiered outlet control would be a large box culvert crossing with a 20-foot bottom under the proposed roadway to the west of the detention basin, having an invert elevation just below 43 feet, as shown on Figure 3.5-4.

Under pre-development conditions, the Project site would result in a peak discharge of 217 cubic feet per second during a 100-year flood event. Implementation of the Project, including the proposed drainage improvements, would result in a peak discharge of 192.5 cubic feet per second during a 100-year flood event (Spokely 2013). The Project would result in a decrease in peak discharge during storm events. Impacts associated with project areas that are tributary to Whitehouse Creek are **less than significant**.

Bond Road Drainage – Project Areas Tributary to Laguna Creek

The southwest corner of the Project site drains to the Laguna Creek watershed, which is addressed in Chapter 4 of the SDMP. West Yost Associates (the author of the SDMP) analyzed drainage from this portion of the Project to determine whether the drainage would be accommodated by the improvements to the City's drainage system that were anticipated in the SDMP. Drainage from the portion of the southwest corner of the Project site that is tributary to Laguna Creek, including the proposed residential lots adjacent to the Quail Ranch subdivision, would be directed to the Bond Road Trunk pipe and would be conveyed to Laguna Creek. The analysis of the Bond Road Trunk drainage improvements and resulting impacts to Laguna Creek performed by the West Yost Associates is summarized in the *Preliminary Drainage Study* prepared for the Project by Wood Rodgers.

West Yost Associates determined that the increased flows in the Bond Road trunk pipe would not have a significant effect on Laguna Creek. While the Project would result in a 4% increase in the Laguna Creek flow while the Bond Road trunk pipe is at peak flows, the Bond Road trunk pipe is located in the lower part of the Laguna Creek watershed. Therefore, the Bond Road trunk pipe will peak well before Laguna Creek reaches peak flows. At the time Laguna Creek is at peak flow, the flows in the Bond Road trunk pipe, including flows from the Project site, will have receded. Thus, any changes in Laguna Creek flows associated to the Bond Road trunk pipe are negligible.

While the effects on Laguna Creek would be negligible, there are existing deficiencies in the Bond Road drainage system identified in the City's ~~SDMP Drainage Master Plan~~. The City wide ~~SDMP Drainage Master Plan~~ identified existing deficiencies in the trunk drainage system in Bond Road. In this study there was a portion of the Project Site that was tributary to the Bond Road Trunk Drainage System that was excluded from the approved plan. The City has confirmed that this area should be added to the Bond Road Trunk Drainage System.

As described above, the Project would not result in significant increases in flow to Whitehouse Creek and Laguna Creek. By conveying Project drainage to the on-site central detention basin and to the Bond Road trunk pipe, the Project would not result in increases in run-off to adjacent properties. However, the existing Bond Road drainage system has deficiencies that require mitigation. Impacts to the Bond Road trunk pipe are **potentially significant**."

Page 3.9-7 of the Draft EIR is revised as follows:

"The Project proposes extensive open space uses, including a 68.1-acre wetland habitat preservation area, 10.3 acres of open space lots, a 14.7-acre stormwater detention area, and a 0.6-acre overland stormwater release area. The Project also proposes 8.3 acres of parks and trails. The open space/habitat preserve and parks uses in the northern portion of the Project site are allowed in the Rural Residential designation. The Project site would accommodate up to 1,182 residential units under the adopted General Plan land use designations and approximately 1,022 residential units under the adopted General Plan land use designations, and this is the amount of development that was anticipated for the Project site in the General Plan EIR. The Project proposes 660 single family units and up to 125 independent/assisted living units, which is less than the development allowed under the adopted land use designations. The Village Core uses (the

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clubhouse, swimming atrium, and up to 125 independent/assisted living units) are consistent with the uses allowed by the Commercial/Office/Multi-Family designation. The Project does not propose growth beyond the areas envisioned for urbanization on the Land Use Map. The Project would shift the Commercial/Office/Multi-Family uses from the southeast corner of the Project site to an area within Village 3, as allowed by Policy LU-5 and described below.”

Mitigation Measure 3.10-1 on page 3.10-11 of the Draft EIR is revised as follows:

“Mitigation Measure 3.10-1: *Development plans for the Project shall include the following noise attenuation features:*

- *A uniform 79-foot tall noise barrier should be constructed along the south property lines of all proposed residential uses adjacent to Bond Road to reduce future traffic noise levels to 60 dB Ldn or less within proposed backyards. The barrier shall have an earthen berm base and the upper portion shall be constructed of solid materials, such as a masonry wall, earthen berm, or combination of the two, and shall wrap at the ends as indicated in Figure 3.10-1. Landscaping, such as dense hedges or bushes, shall be planted in front of the soundwall to minimize unbroken views of the soundwall.*
- *A uniform 6-foot tall noise barrier shall be constructed along the eastern property lines of Waterman Road to reduce future traffic noise levels to 60 dB Ldn or less at proposed backyard areas located adjacent to that roadway. The barrier shall be constructed of solid materials, such as a masonry wall, earthen berm, or combination of the two, and shall wrap at the ends as indicated in Figure 3.10-1.*

Timing/Implementation: Prior to issuance of building permits.

Enforcement/Monitoring: City of Elk Grove Planning Department.”

The significance conclusion for Impact 3.10-2 on page 3.10-12 of the Draft EIR is revised as follows:

“SIGNIFICANCE AFTER MITIGATION

To determine the effectiveness of Mitigation Measure 3.10-1, Bollard Acoustical Consultants, Inc. evaluated the sound reduction that would occur with implementation of solid noise barriers adjacent to Bond Road and Waterman Road. The FHWA Model traffic noise barrier insertion loss methodology was used to determine the noise reduction which would be provided by noise barriers of various heights. The summarized results of the FHWA barrier analysis for the proposed residences located nearest to Bond Road and Waterman Road are contained in Table 3.10-7. As shown in Table 3.10-7 data, a noise barrier 79 feet in height along Bond Road would reduce exterior noise levels along Bond Road to 62 dB Ldn, which is within the conditionally acceptable range of 65 dB Ldn identified in footnote 3 of General Plan Table NO-C and, combined with MM demonstrates a practical application of the best-available noise reduction measures. A noise barrier of 6 feet along Waterman Road will reduce exterior traffic noise levels to 55 to 58 dB Ldn. Implementation of Mitigation Measure 3.10-1 would reduce potential impacts to Project residents associated with exterior noise levels associated with traffic noise to **less than significant.**”

The following revisions is made to page 3.12-11 of the Draft EIR:

“The General Plan land use designations on the Project site, as described in Chapter 2.0, Project Description, allow for up to 1,182 units. The Draft EIR for the City of Elk Grove General Plan assumed full buildout of the Project site. The Project proposes 659 single family units and 125 independent, assisted, or memory care multi-family units in the Village 3 Core Lodge for a total of 784 units. The Project would result in

~~398238~~ fewer units than allowed by the General Plan land use designations and fewer units than analyzed in the General Plan EIR.”

The following revisions are made to pages 3.12-15 and 3.12-16 of the Draft EIR regarding the Settlement Agreement:

“Impact 3.12-2: Potential to conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system: Freeways. (Significant and Unavoidable)

As previously discussed, bottleneck locations exist on SR 99 and I-5 that cause congested conditions (i.e., vehicle speed of 35 miles per hour or less) on these facilities northbound in the morning and southbound in the evening. The Project would add traffic to these commute corridors, which would exacerbate already congested conditions.

This is considered a significant impact based on the Caltrans evaluation criteria. However, this would not be an impact based on the City of Elk Grove evaluation criteria, since the Project would add less than 500 vehicle trips per day to SR 99, which would not increase the volume to capacity ratio by 0.05 or more or increase the volume on SR 99 by more than 5 percent.

MITIGATION MEASURES

To mitigate impacts based on the Caltrans evaluation criteria, the *Project Applicant should pay its fair-share of the cost for mobility enhancements consistent with those identified in the most current version of the State Route 99 & Interstate 5 CSMP. Table 13 of the CSMP identifies that the construction of bus/carpool lanes on I-5 from US 50 to Elk Grove Boulevard is fully funded. Another improvement that would improve SR 99, and potentially I-5, operations is construction of carpool lanes on I-5 from Elk Grove to the San Joaquin County line; this is identified as a visionary project in Table 14 of the CSMP with no estimate of cost or identified method of funding. The CSMP does not identify capital projects in either Table 13 or 14 to add additional lanes or other improvements on SR 99 in the vicinity of the City that would improve the existing and planned congested conditions. Construction and implementation of necessary improvements is uncertain because the implementation of such improvements is outside of the City’s jurisdiction. While implementation of capital and operational mobility enhancements would lessen the significant impact associated with I-5 and SR 99, there is not an enforceable fee program that has been adopted by Caltrans and there is no mechanism in place to collect adequate funds for the improvements and ensure that the funds are used to construct the necessary improvements. Consequently, the mitigation is not feasible.*

In addition, even with implementation of capital and operational mobility enhancements, some impacts would still remain significant because acceptable levels of service will not be achieved as indicated by the Concept LOS on SR 99 and I-5, which is LOS F in the study area.

Successful implementation of some of the proposed improvements identified in the CSMP will require the cooperation of third party agencies (Caltrans, Sacramento, County, or City of Sacramento) over which Elk Grove has no control. For this latter reason, Elk Grove is conservatively acknowledging the possibility that, despite its own commitment to work with Caltrans, mutually acceptable accommodation may not be reached.

The Project is subject to the Settlement Agreement and Release of All Claims (Settlement Agreement) entered into by Caltrans, the City, and Centex Homes. Pursuant to the Settlement Agreement, the Project is required to pay an Interim Regional Roadway Fee of \$2,500 for each building permit issued for a residential unit in the Project. The Interim Regional Roadway Fee will be collected until the City

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formally adopts a Permanent Regional Roadway Fee (Permanent Fee) or until all residential building permits have been issued for the Project, whichever occurs first.

The Interim Regional Roadway Fee will be used to fund designated regional traffic improvements to the State highway system, as agreed upon by the City and Caltrans. At this time, no specific improvements have been identified nor has the timing for any improvements been identified. Payment of the Interim Regional Roadway Fee would assist in reducing the Project's impacts to the State highway system by contributing towards improvements to SR 99 and/or I-5. However, since there is no nexus between the fee and the specific impacts of the Project and because no specific improvements or timing of improvements have been identified, the Interim Regional Roadway Fee would not reduce impacts to less than significant.

With regard to fair-share contributions, such as the Interim Regional Roadway Fee, the fair-share fee can only be considered feasible mitigation if the lead agency has sufficient evidence in the record to find that the fee program is sufficiently certain and can be implemented over a defined period of time. As neither the City nor Caltrans have a program to implement mitigation or improvements that would be applicable to the Project, no fair-share mitigation is feasible for the Project. Moreover, there is no evidence that Caltrans has any duty to construct the mitigation improvements that would fully mitigate potential impacts associated with the Project, or that it has made a definite commitment regarding the timing of the implementation of such improvements.

As there is no mechanism to implement the improvements identified in the CSMP, as previously discussed, and as the specific improvements and timing of improvements that would be funded through the Interim Regional Roadway Fee funds have not yet been identified such, this impact is considered significant and unavoidable, and as described above, there is no feasible mitigation available to the City to reduce this impact to a less than significant level."

The description of Alternative 2 on pages 5.0-3 and 5.0-4 of the Draft EIR is revised as follows:

- **“Alternative 2: Reduced Density and Reconfigured Project Alternative.** Alternative 2 would avoid the significant and unavoidable impact to the Northern Hardpan Valley Hardpan Vernal Pool complex on the Project site through avoiding all wetland, riparian, vernal pool, and drainage features. Preservation easements, prohibiting access and disturbance, would be placed around all wetland, riparian, vernal pool, and drainage features. There would be no wetland conservation area and the detention basin would be under a preservation easement. An alternative detention basin would be constructed to the east of the current site of the detention basin. This would require removal of adequate fill to provide detention to the Alternative 2 lots. Under this alternative, various lots would be removed and lot sizes would generally be made larger to accommodate the preservation easements. The park sites would be reduced to approximately 3.25 acres and the north-south component of the open-space trails would be removed.

The land area of Village 1-A Lots 1 through 60 would be developed under this alternative; however, the area would be configured to have 15 lots would be removed in order to make Lots 1 through 45 lots to allow larger lot sizes in order to accommodate preservation easements. Village 1 Lots 66 through 83 would also remain. Village 1 Lots 85 through 99 would be removed.

The land area of Village 1-B Lots 1 through 36 would remain, but would be reconfigured to have 26 lots reduced by 10 lots in order to provide larger lot sizes to accommodate the preservation easements. Village 2 would also be extended northward to include another 15 lots. Village 2 lots would be accessed by Campbell and Bond Roads. The Campbell Road access would provide access

to lots that would avoid wetland impacts that would occur in association with extending a street from Bond Road.

Village 2 Lots 1 through 62 would be removed to accommodate the relocated detention basin. Village 2 Lots 69 through 196 would be reconfigured to accommodate 3 single family lots in association with Village 2 and to ~~mostly be removed to~~ accommodate relocated Village 3. ~~However,~~ A total of 10 single family lots would remain in Village 2 and would be spread throughout the northern and central portion of the site.

The Village Core uses and 40 patio lots would be relocated to be accessed from Waterman Road. ~~Another 60~~ patio lots in Village 3 ~~patio lots~~ would remain in the southeast corner of the site to be accessed by Bond Road.

Alternative 2 would result in 111 *single-family lots*, 100 *patio homes*, and an independent, assisted, and/or memory-care multifamily lodge of up to 125 units. The Village 3 clubhouse and swimming pool would be constructed, but the clubhouse would be smaller.”

The description of Alternative 2 on page 5.0-7 of the Draft EIR is revised as follows:

“Alternative 2 was created to avoid significant and unavoidable impacts to biological resources. Alternative 2 would preserve the wetland, riparian, vernal pool, creek, and drainage features on the Project site through permanent preservation easements that would generally be included in the proposed residential lots. Lot sizes would be larger, where necessary, to accommodate the permanent preservation easements. Alternative 2 significantly reconfigures the Project design and would result in the removal of 449 single-family residential units, approximately 2 acres of parks, and the 68-1 acre wetland conservation area, and the proposed ~~open space/trail~~ uses would be reconfigured. Alternative 2 would result in 111 single-family lots, 100 patio homes, and the Village 3 independent, assisted, and/or memory-care multifamily lodge and clubhouse.”

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Village 2-B
55x105'
62 DU
12.3± AC.
5.0 du/ac

LOT H
TRAIL CORRIDOR
0.5± AC.

LOT G
PARK
4.9± AC.

LOT BE
TRAIL CORRIDOR
0.4± AC.

LOT E
OPEN SPACE
6.3± AC.

LOT AA
TRAIL CORRIDOR
0.6± AC.

LOT CC
TRAIL CORRIDOR
0.7± AC.

LOT D
TRAIL CORRIDOR
0.9± AC.

LOT W
PASEO
0.10± AC.

LOT J
DETENTION
AREA
14.8± AC.

LOT V
LANDSCAPE
0.10± AC.

LOT U
LANDSCAPE
0.40± AC.

LOT K
LANDSCAPE
0.6± AC.

LOT T
PARK
0.10± AC.

LOT S
DRIVEWAY
0.3± AC.

LOT A
AGE RESTRICTED
LODGE
3.6± AC.

LOT R
LANDSCAPE
0.10± AC.

LOT B
AGE RESTRICTED
CLUBHOUSE
1.5± AC.

EXISTING
MULTIFAMILY

FUTURE
COMMERCIAL

LOT L
LANDSCAPE LOT
50± AC.

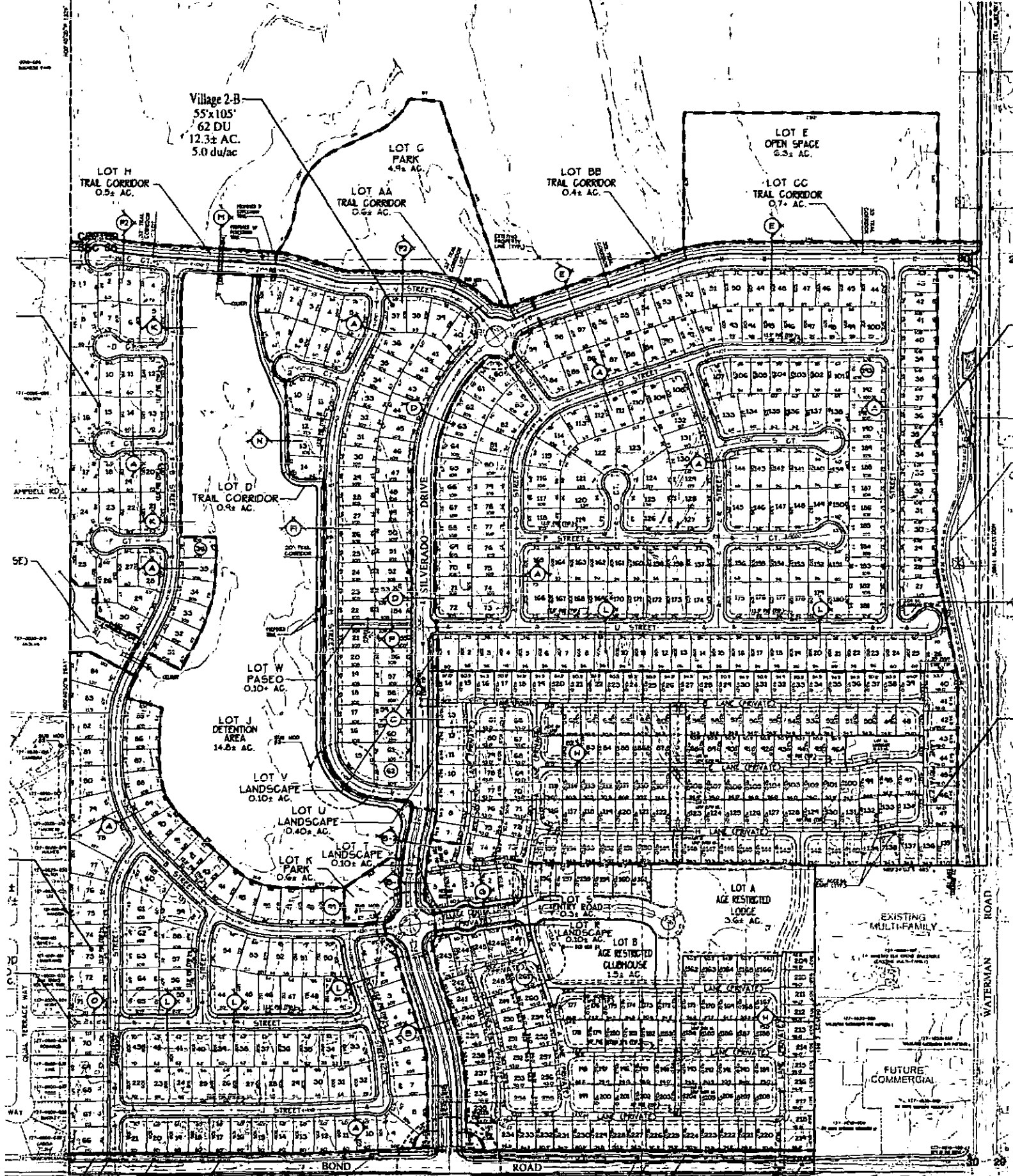
LOT M
EX. LANDSCAPE LOT
0.4± AC.

SEE ENTRY DETAIL

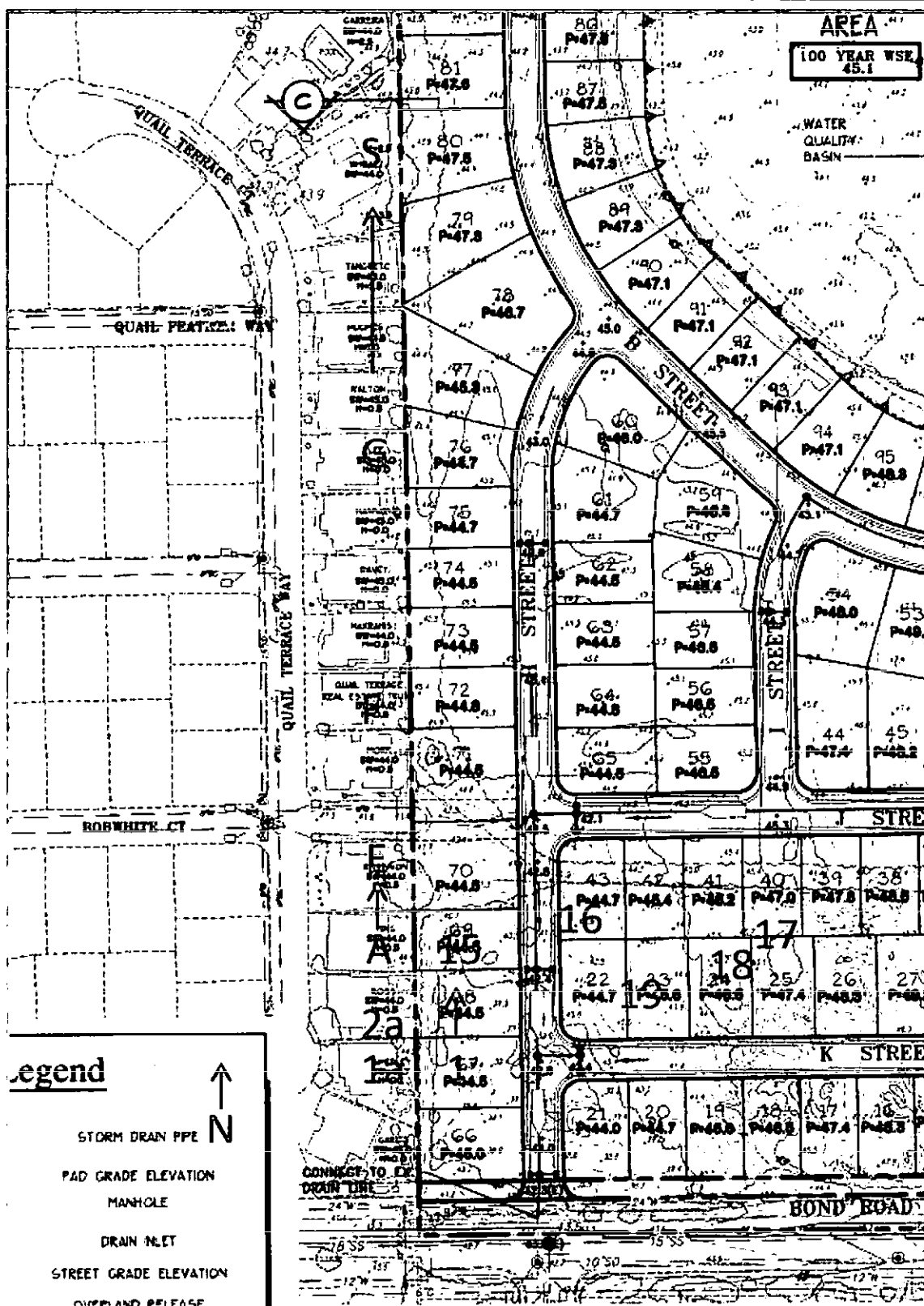
SHEET 1 OF 4

LOT Q
EX. LANDSCAPE LOT
0.7± AC.

LOT P
EX. LANDSCAPE LOT
0.7± AC.



LOT L LANDSCAPE LOT 50± AC. LOT M EX. LANDSCAPE LOT 0.4± AC. SEE ENTRY DETAIL SHEET 1 OF 4. LOT Q EX. LANDSCAPE LOT 0.7± AC. LOT P EX. LANDSCAPE LOT 0.7± AC.



De Novo Planning Group
 A Land Use Planning, Design, and Environmental Firm

Figure 2
 Tree Inventory

Source: Tree Associates, 2012

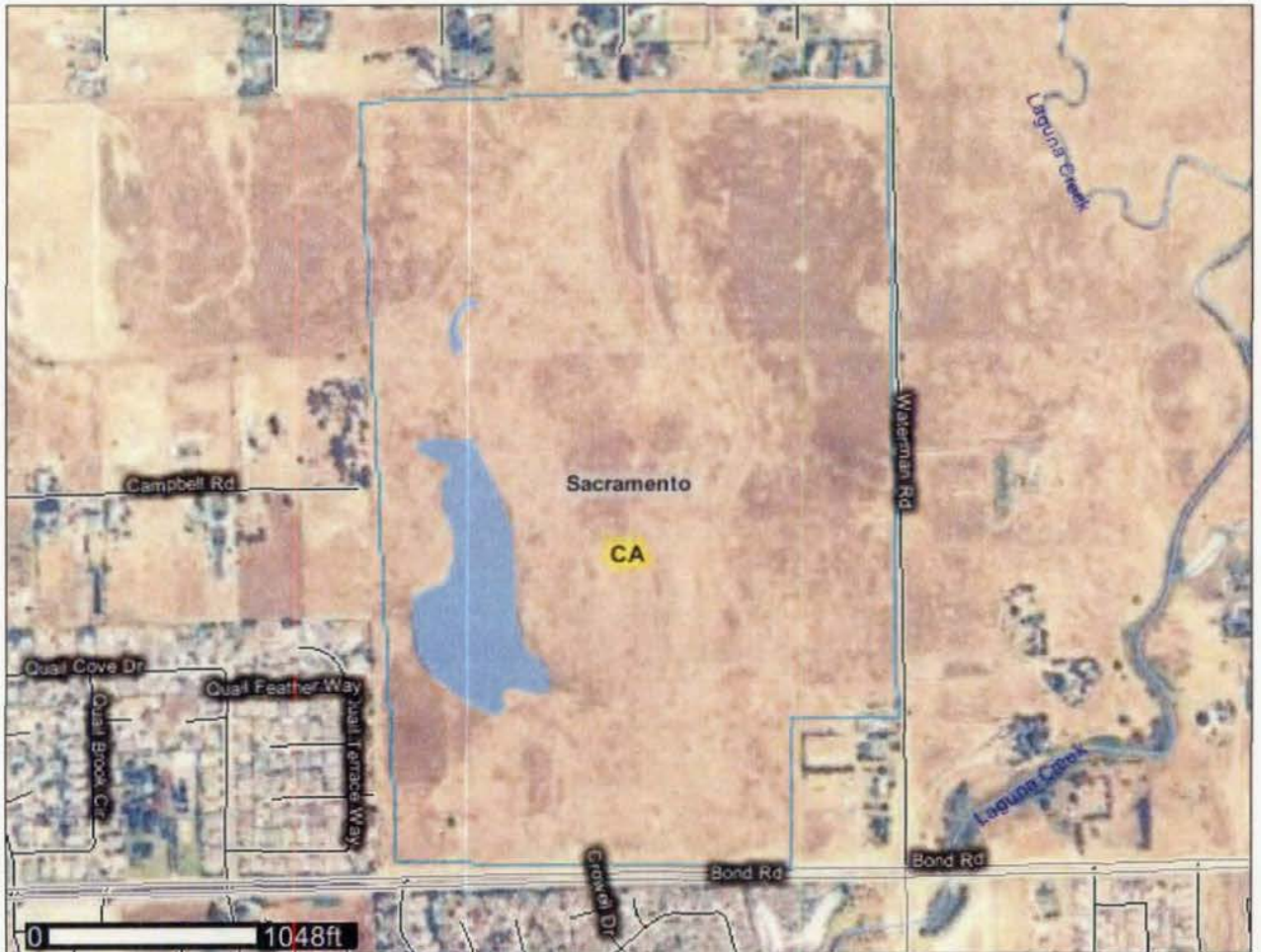
APPENDIX A

Custom Soils Report



A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Sacramento County, California



Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (<http://soils.usda.gov/sqi/>) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (<http://offices.sc.egov.usda.gov/locator/app?agency=nrcs>) or your NRCS State Soil Scientist (http://soils.usda.gov/contact/state_offices/).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Soil Data Mart Web site or the NRCS Web Soil Survey. The Soil Data Mart is the data storage site for the official soil survey information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means

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How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil scientists classified and named the soils in the survey area, they compared the

Custom Soil Resource Report

individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

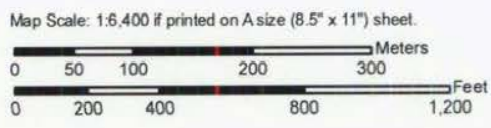
Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.


Custom Soil Resource Report Soil Map



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MAP LEGEND




Area of Interest (AOI)


 Area of Interest (AOI)


Soils

 Soil Map Units

Special Point Features




-  Blowout
-  Borrow Pit
-  Clay Spot
-  Closed Depression
-  Gravel Pit
-  Gravelly Spot
-  Landfill
-  Lava Flow
-  Marsh or swamp
-  Mine or Quarry
-  Miscellaneous Water
-  Perennial Water
-  Rock Outcrop
-  Saline Spot
-  Sandy Spot
-  Severely Eroded Spot
-  Sinkhole
-  Slide or Slip
-  Sodic Spot
-  Spoil Area
-  Stony Spot

 Very Stony Spot

 Wet Spot

 Other

Special Line Features

-  Gully
-  Short Steep Slope
-  Other






Political Features

 Cities

Water Features

 Streams and Canals

Transportation

-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

MAP INFORMATION

Map Scale: 1:6,400 if printed on A size (8.5" x 11") sheet.

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for accurate map measurements.

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL: <http://websoilsurvey.nrcs.usda.gov>
 Coordinate System: UTM Zone 10N NAD83

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Sacramento County, California
 Survey Area Data: Version 10, Aug 31, 2009

Date(s) aerial images were photographed: 6/29/2005

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Sacramento County, California (CA067)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
198	Redding gravelly loam, 0 to 8 percent slopes	208.5	95.9%
214	San Joaquin silt loam, 0 to 3 percent slopes	7.8	3.6%
216	San Joaquin-Durixeralfs complex, 0 to 1 percent slopes	1.1	0.5%
Totals for Area of Interest		217.5	100.0%

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If

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intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Sacramento County, California

198—Redding gravelly loam, 0 to 8 percent slopes

Map Unit Setting

Elevation: 100 to 1,500 feet

Mean annual precipitation: 14 to 25 inches

Mean annual air temperature: 61 to 63 degrees F

Frost-free period: 230 to 320 days

Map Unit Composition

Redding and similar soils: 75 percent

Minor components: 25 percent

Description of Redding

Setting

Landform: Terraces

Landform position (two-dimensional): Toeslope

Landform position (three-dimensional): Tread

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Gravelly alluvium

Properties and qualities

Slope: 0 to 8 percent

Depth to restrictive feature: 28 to 66 inches to duripan

Drainage class: Moderately well drained

Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 to 0.00 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Available water capacity: Very low (about 2.9 inches)

Interpretive groups

Land capability classification (irrigated): 4e

Land capability (nonirrigated): 4e

Ecological site: GRAVELLY LOAMY (R017XD090CA)

Typical profile

0 to 7 inches: Gravelly loam

7 to 20 inches: Gravelly loam

20 to 28 inches: Gravelly clay loam

28 to 66 inches: Indurated

Minor Components

Corning

Percent of map unit: 4 percent

Hicksville

Percent of map unit: 4 percent

Keyes

Percent of map unit: 4 percent

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Pardee

Percent of map unit: 4 percent

Xerorthents

Percent of map unit: 4 percent

Unnamed

Percent of map unit: 1 percent

Landform: Depressions

Durixeralfs

Percent of map unit: 1 percent

Xerarents

Percent of map unit: 1 percent

Hardpan below 40 inches

Percent of map unit: 1 percent

Steeper slopes, unnamed

Percent of map unit: 1 percent

214—San Joaquin silt loam, 0 to 3 percent slopes

Map Unit Setting

Elevation: 20 to 500 feet

Mean annual precipitation: 10 to 22 inches

Mean annual air temperature: 61 to 63 degrees F

Frost-free period: 250 to 300 days

Map Unit Composition

San joaquin and similar soils: 85 percent

Minor components: 15 percent

Description of San Joaquin

Setting

Landform: Terraces

Landform position (two-dimensional): Toeslope

Landform position (three-dimensional): Tread

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Alluvium derived from granite

Properties and qualities

Slope: 0 to 3 percent

Depth to restrictive feature: 28 to 54 inches to duripan

Drainage class: Moderately well drained

Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 to 0.00 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

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Frequency of ponding: None
Available water capacity: Low (about 3.7 inches)

Interpretive groups

Land capability classification (irrigated): 3s
Land capability (nonirrigated): 3s
Ecological site: LOAMY (R017XD045CA)

Typical profile

0 to 23 inches: Silt loam
23 to 28 inches: Clay loam
28 to 54 inches: Indurated
54 to 60 inches: Stratified sandy loam to loam

Minor Components

Galt

Percent of map unit: 4 percent
Landform: Depressions

Bruella

Percent of map unit: 4 percent

Hedge

Percent of map unit: 3 percent

Kimball

Percent of map unit: 3 percent

Rarely flooded, unnamed

Percent of map unit: 1 percent

216—San Joaquin-Durixeralfs complex, 0 to 1 percent slopes

Map Unit Setting

Elevation: 20 to 500 feet
Mean annual precipitation: 10 to 22 inches
Mean annual air temperature: 61 to 63 degrees F
Frost-free period: 250 to 300 days

Map Unit Composition

San joaquin and similar soils: 55 percent
Durixeralfs and similar soils: 35 percent
Minor components: 10 percent

Description of San Joaquin

Setting

Landform: Terraces
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear

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Parent material: Alluvium derived from granite

Properties and qualities

Slope: 0 to 1 percent

Depth to restrictive feature: 28 to 54 inches to duripan

Drainage class: Moderately well drained

Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 to 0.00 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Available water capacity: Low (about 3.7 inches)

Interpretive groups

Land capability classification (irrigated): 4s

Land capability (nonirrigated): 4s

Typical profile

0 to 23 inches: Silt loam

23 to 28 inches: Clay loam

28 to 54 inches: Indurated

54 to 60 inches: Stratified sandy loam to loam

Description of Durixeralfs

Setting

Landform: Terraces

Landform position (two-dimensional): Toeslope

Landform position (three-dimensional): Tread

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Alluvium derived from granite

Properties and qualities

Slope: 0 to 1 percent

Depth to restrictive feature: 20 to 60 inches to duripan

Drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 to 0.00 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Maximum salinity: Nonsaline (0.0 to 2.0 mmhos/cm)

Available water capacity: Very low (about 2.9 inches)

Interpretive groups

Land capability classification (irrigated): 4s

Land capability (nonirrigated): 4s

Typical profile

0 to 6 inches: Clay

6 to 20 inches: Clay loam

20 to 60 inches: Indurated

Minor Components

Galt

Percent of map unit: 4 percent

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Landform: Depressions

Kimball

Percent of map unit: 4 percent

Xerarents

Percent of map unit: 2 percent

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EXHIBIT C

FINDINGS OF FACT AND STATEMENT OF OVERRIDING CONSIDERATIONS FOR THE SILVERADO VILLAGE PROJECT

REQUIRED UNDER THE CALIFORNIA ENVIRONMENTAL QUALITY ACT
(Public Resources Code, Section 21000 et seq)

I. INTRODUCTION

The City of Elk Grove (City), as lead agency, has prepared an Environmental Impact Report (EIR) for Silverado Village Project (Project), State Clearinghouse No. 2013012060. The EIR consists of the Draft EIR and the Final EIR. The EIR is a project-level EIR pursuant to Section 15161 of the California Environmental Quality Act (CEQA) Guidelines and analyzes the significant effects on the environment of the Project.

CEQA requires the City as the lead agency to: 1) make written findings when it approves a project for which an environmental impact report (EIR) was certified, and 2) identify overriding considerations for significant and unavoidable impacts identified in the EIR.

These findings explain how the City, as the lead agency, approached the significant and potentially significant impacts identified in the EIR prepared for the Project. The statement of overriding considerations identifies economic, social, technological, and other benefits of the Project that override any significant environmental impacts that would result from the Project.

As required under CEQA, the Final EIR describes the Project, adverse environmental impacts of the project, and mitigation measures and alternatives that would substantially reduce or avoid those impacts. The information and conclusions contained in the EIR reflect the City's independent judgment regarding the potential adverse environmental impacts of the Project.

The Final EIR (which includes the Draft EIR, comments on the Draft EIR, responses to comments, and revisions to the Draft EIR) for the Project, examined several alternatives to the Project that were not chosen as part of the approved project (the No Project Alternative, Reduced Density and Reconfigured Project Alternative, and Reconfigured Project Alternative).

The Findings and Statement of Overriding Considerations set forth below ("Findings") are presented for adoption by the City Council, as the City's findings under CEQA (Public Resources Code, Section 21000 et seq.) and the State CEQA Guidelines (Cal. Code Regs., Title 14, Section 15000 et seq.) relating to the Project. The Findings provide the written analysis and conclusions of this City Council regarding the Project's environmental impacts, mitigation measures, alternatives to the Project, and the overriding considerations, which in this City Council's view, justify approval of the Project, despite its environmental effects.

II. PROJECT DESCRIPTION

PROJECT LOCATION

The Project proposes a 230-acre residential community located north of Bond Road and west of Waterman Road within the incorporated boundary of the City (APNs 127-0010-104, 127-0010-105, 127-0010-017, 127-0010-002, 127-0010-040, and 127-0010-106).

OVERVIEW

The Project proposes 651 single family units, up to 125 independent/assisted living/memory care units, a community clubhouse, an 11.4-acre park and trail system, 93.7 acres of open space, including a 67.6-acre wetland preservation area and 14.7 acre detention basin, and supporting infrastructure. Figures 2-3 and 2-4 of the Draft EIR depict the key Project characteristics and Table 2-2 of the Draft EIR summarizes the proposed uses.

The Project site is designated by the General Plan Land Use Policy Map as Rural Residential, Low Density Residential, and Commercial/Office/Multi-Family. The Project site is zoned RD-2, RD-4, RD-5, RD- 5(F), and O.

The residential component of the Project would be developed in three villages. Villages 1 and 2 would include 390 single family residential uses. Village 3 would be a private senior community, with 261 single family patio homes, up to 125 units for independent, assisted, and/or memory-care in a multifamily lodge, and a Village clubhouse, atrium, and swimming pool. The lodge and clubhouse facilities would include retail, office, medical, and commercial uses to serve the senior community.

Primary access would be from Bond and Waterman Roads. There would also be a secondary point of access from Bond Road. The Project includes pedestrian and bicycle features to provide both internal connectivity as well as connections to adjacent bicycle and pedestrian facilities. Two emergency vehicle accesses would be provided.

PROJECT OBJECTIVES

As set forth in Chapter 2.0 of the Draft EIR (p. 2.0-2), the City has identified the following objectives for Project:

- Create a high-quality residential development that is consistent with the General Plan;
- Provide a residential development that would assist the City in meeting its housing needs, including a range of housing types to serve the senior population;
- Emphasize preservation of open space and sensitive habitats;
- Implement the City's Trail System Master Plan through providing an on-site trails network that is accessible by the general public and provides opportunities for connectivity with future trails on adjacent property; and
- Create a dual purpose stormwater/open space area.

As set forth in Chapter 2.0 of the Draft EIR (pp. 2.0-2 and 2.0-3), the Project applicant, Vintara Holdings LLC/Silverado Homes, has submitted the following Project Objectives for the Project:

- Consistency with the General Plan;
- Compatibility with adjacent neighborhoods;
- Respect the Project site's existing natural features; and
- Creation of a unique age-restricted community that provides a mix of housing types and amenities, including the village core, club house, and swim facility.

DISCRETIONARY APPROVALS

The discretionary actions by the City, as lead agency, that are required to fully implement the Project are listed below.

- Certification of the EIR;
- Establishment of the Silverado Village Special Planning Area (Silverado Village SPA) which will establish development standards, design guidelines, and allowed uses for the Project site, as provided by Section 23.16.100 of the City's Municipal Code;
- A rezone of the Project site from the existing zoning of RD-2, RD-4, RD-5, and Open Space to Silverado Village SPA;
- A Tentative Subdivision Map to subdivide the Project site to accommodate:
 - 651 single-family residential lots on 115.1 acres;
 - An age restricted-multi-family lodge of up to 125 units and Village Center on 5.1 acres;
 - 67.6 acres of open space and nature preservation area;
 - Up to 5.5 acres of parks;
 - 3.5 acres of landscape entry/corridors;
 - A stormwater detention area of 14.8 acres and overland release area of 0.6 acres; and
 - 5.5 acres of roads;
- A Development Agreement requiring the Project to conform to the Silverado Village SPA; and.
- Design review.

Permits and approvals that the Applicant has obtained or may be required to obtain from responsible and federal agencies include, but are not limited to:

- California Department of Fish & Wildlife - 1602 Streambed Alteration Agreement. Agreement.
- Central Valley Regional Water Quality Control Board - General Permit for Discharges of Storm Water Associated with Construction Activity, Storm Water Pollution Prevention Plan approval prior to construction activities, and permitting of isolated wetlands under the State's Porter-Cologne Act.
- Central Valley Flood Protection Board– Board permit for activities associated with Laguna Creek.
- Elk Grove Water District - Water Supply Assessment.
- Sacramento Metropolitan Air Quality Management District - Approval of construction-related air quality permits.
- U.S. Army Corps of Engineers– Issuance of 404 permit under the Clean Water Act for the discharge of fill material into waters of the United States and use of seasonal wetlands as a detention basin; and
- U.S. Fish and Wildlife Service - Consultation under the Endangered Species Act to determine impacts to special-status species and Incidental Take Statement.

III. ENVIRONMENTAL REVIEW PROCESS

In accordance with Section 15082 of the CEQA Guidelines, the City circulated a Notice of Preparation (NOP) of an EIR for the Project on January 25, 2013 to trustee and responsible agencies, the State Clearinghouse, and the public. A public scoping meeting was held on February 8, 2013 to present the Project description to the public and interested agencies, and to receive comments from the public and interested agencies regarding the scope of the environmental analysis to be included in the Draft EIR. Concerns raised in response to the NOP were considered during preparation of the Draft EIR. The NOP and comments provided by interested parties in response to the NOP are presented in Appendix A of the Draft EIR.

The City provided the State Clearinghouse with the Notice of Completion (NOC) and Draft EIR for review on September 27, 2013. The City published a public notice of availability (NOA) for the Draft EIR on September 27, 2013, inviting comment from the general public, trustee agencies, responsible agencies, organizations, and other interested parties. The Draft EIR was available for review from September 27 through November 11, 2013. The City's Planning Commission received comments on the Draft EIR at its meeting on November 7, 2013.

The Draft EIR contains a description of the Project, description of the environmental setting, identification of project impacts, and mitigation measures for impacts found to be significant, as well as an analysis of project alternatives, identification of significant irreversible environmental changes, growth-inducing impacts, and cumulative impacts. The Draft EIR identifies issues determined to have no impact or a less than significant impact, and provides detailed analysis of potentially significant and significant impacts. Comments received in response to the NOP were considered in preparing the analysis in the Draft EIR.

The City received oral comments at the November 7, 2013 Planning Commission meeting and received 48 comment letters regarding the Draft EIR. In accordance with CEQA Guidelines Section 15088, the Final EIR responds to the written comments received as required by CEQA and identifies edits to the Draft EIR.

The City will review and consider the Final EIR. If the City finds that the Final EIR is "adequate and complete", the City Council may certify the Final EIR in accordance with CEQA. Upon review and consideration of the Final EIR, the City Council may take action to approve, revise, or reject the Project.

A Mitigation Monitoring Program would also be adopted in accordance with Public Resources Code Section 21081.6(a) and State CEQA Guidelines Section 15097 for mitigation measures that have been incorporated into or imposed upon the project to reduce or avoid significant effects on the environment. This Mitigation Monitoring Program will be designed to ensure that these measures are carried out during project implementation, in a manner that is consistent with the EIR.

IV. GENERAL FINDINGS

RECORD OF PROCEEDINGS AND CUSTODIAN OF RECORD

For purposes of CEQA and the findings set forth herein, the record of proceedings for the City's findings and determinations consists of the following documents and testimony, at a minimum:

- The NOP and all other public notices issued by the City in relation to the Project (e.g., Notice of Availability).
- The Silverado Village Draft EIR and Final EIR and technical materials cited in the documents.
- All comments submitted by agencies or members of the public during the comment period on the NOP (Draft EIR Appendix A);
- All comments submitted by agencies or members of the public during the comment period on the Draft EIR (Final EIR Chapter 2.0);
- All non-draft and/or non-confidential reports and memoranda prepared by the City and consultants in relation to the EIR.
- Minutes and transcripts of the discussions regarding the Project and/or Project components at public hearings held by the City.
- The Elk Grove General Plan;
- Elk Grove Municipal Code Title 23, Zoning, and all other Municipal Code provisions cited in materials prepared by or submitted to the City;
- Staff reports associated with City Council and Planning Commission meetings on the Project.
- Any and all resolutions adopted by the City regarding the Project, and all staff reports, analyses, and summaries related to the adoption of those resolutions; and
- Those categories of materials identified in Public Resources Code Section 21167.6.

The City Council has relied on all of the documents listed above in reaching its decision on the Project, even if not every document was formally presented to the City Council or delivered to City Staff and stored in City files specifically generated in connection with the Project.

The City Clerk is the custodian of the administrative record. The documents and materials that constitute the administrative record are available for review at the City of Elk Grove City Hall, at 8401 Laguna Palms Way, Elk Grove, CA 95758.

CONSIDERATION OF THE ENVIRONMENTAL IMPACT REPORT

In adopting these Findings, this City Council finds that the Final EIR was presented to this Council, the decision-making body of the lead agency, which reviewed and considered the information in the Final EIR prior to approving the Project. By these findings, this City Council ratifies, adopts, and incorporates the analysis, explanation, findings, responses to comments, and conclusions of the Final EIR. The City Council finds that the Final EIR was completed in compliance with the California Environmental Quality Act. The Final EIR represents the independent judgment and analysis of the City.

SEVERABILITY

If any term, provision, or portion of these Findings or the application of these Findings to a particular situation is held by a court to be invalid, void, or unenforceable, the remaining provisions of these Findings, or their application to other actions related to the Project, shall continue in full force and effect unless amended or modified by the City.

CONSISTENCY WITH APPLICABLE PLANS AND ORDINANCES

The Elk Grove General Plan was adopted in 2003 and has been amended through 2013. The City amended the General Plan to include the Sustainability Element in 2013. The City's Housing Element is currently undergoing an update. The General Plan includes goals, objectives, and policies for growth management in the City.

The Project site is designated by the General Plan Land Use Policy Map as Rural Residential, Low Density Residential, and Commercial/Office/Multi-Family. The Project, which includes single family uses, a multi-family lodge, the Village 3 community facility, parks and trails, the wetland preserve, and infrastructure proposed by the Project are consistent with the General Plan, including the land use designations, as described under Impact 3.9-1 in the Draft EIR.

The Project site is zoned RD-2, RD-4, RD-5, RD- 5(F), and O. The Project site will be rezoned to Silverado Village SPA and the SPA document will ensure the Project's consistency with the City's Zoning requirements. As described under Impact 3.9-1 in the Draft EIR, the Project is consistent with the applicable adopted land use planning policies and regulations.

V. FINDINGS AND RECOMMENDATIONS REGARDING SIGNIFICANT AND UNAVOIDABLE IMPACTS

A. BIOLOGICAL RESOURCES

1. THE PROJECT HAS THE POTENTIAL TO HAVE A SUBSTANTIAL ADVERSE EFFECT ON RIPARIAN HABITAT OR OTHER SENSITIVE NATURAL COMMUNITY IDENTIFIED IN LOCAL OR REGIONAL

PLANS, POLICIES, REGULATIONS OR BY THE CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE OR U.S. FISH AND WILDLIFE SERVICE. (EIR IMPACT 3.3-8)

- (a) **Potential Impact.** The potential for the Project to affect riparian habitat and sensitive natural communities is described at pages 3.3-31 and 3.3-32 of the Draft EIR.
- (b) **Mitigation Measures.** The following mitigation measures are hereby adopted and will be implemented as provided by the Mitigation Monitoring Program: Mitigation measures 3.3-7, 3.3-8, 3.3-9, and 3.3-10.
- (c) **Findings.** Based upon the EIR and the entire record before this City Council, this City Council finds that:
 - (1) **Effects of Mitigation and Remaining Impacts.** Mitigation measures 3.3-9 and 3.3-10 require the Project Applicant to ensure that the Section 404 permit issued by the US Army Corps of Engineers, the Section 401 Water Quality Certification issued by the Regional Water Quality Control Board, and the Section 1602 Streambed Alteration Agreement issued by the California Department of Fish and Wildlife are valid and active and to comply with the requirements and recommendations of these agreements and permits. The Section 404 permit requires the Project Applicant to establish, maintain, and monitor a 64.45-acre preserve on the northern portion of the Project site, containing 5.75 acres of avoided and preserved waters of the United States, including 5.06 acres of avoided and preserved vernal pools, 0.32 acres of avoided and preserved seasonal wetland, and 0.37 acres of avoided and preserved Whitehouse Creek. The Section 404 permit requires the Project to compensate for the direct loss of 8.31 acres of waters of the U.S., including 4.94 acres of vernal pools, 1.09 acres of seasonal wetland, 2.25 acres of pond, 0.02 acres of ephemeral drainage and 0.01 acre of creek through creating 8.80 acres of wetlands (6.17 acres of vernal pools and 2.63 acres of seasonal wetlands) within the on-site preserve area and creating 2.08 acres of seasonal wetlands off-site. The Section 404 permit requires the Project Applicant to create 6.25 acres of seasonal wetlands off-site to compensate for the indirect loss of functions associated with 12.39 acres of bermed pond that would be impacted by the Project. Specific requirements for the operation and maintenance of the preserve are included in the Section 404 permit to ensure long-term viability of on-site mitigation. The Section 1602 Streambed Alteration Agreement requires mitigation for loss of 2.25 acres of aquatic habitat and includes specific measures to address potential impacts to special-status species. While there are mitigation measures presented in this EIR that are intended to minimize the impacts to the extent feasible, there is a finite quantity of Northern Hardpan Valley Hardpan Vernal Pool in California and the Elk Grove area, the Project would result in a reduction in that finite quantity. The loss of the habitat cannot be mitigated to a level of insignificance. This would represent a significant and unavoidable impact of the Project.
 - (2) **Overriding Considerations.** The environmental, economic, social and other benefits of the Project override any remaining significant adverse impact of the Project

associated with impacts to scenic resources and visual character, as more fully stated in the Statement of Overriding Considerations in Section X, below.

B. TRANSPORTATION AND CIRCULATION

1. **THE PROJECT HAS THE POTENTIAL TO CONFLICT WITH AN APPLICABLE PLAN, ORDINANCE, OR POLICY ESTABLISHING MEASURES OF EFFECTIVENESS FOR THE PERFORMANCE OF THE STATE HIGHWAYS CIRCULATION SYSTEM. (EIR IMPACT 3.12-2)**
 - (a) **Potential Impact.** The potential for the Project to impact State highway facilities, specifically State Route 99 and Interstate 5, is discussed at pages 3.12-15 and 3.12-16 of the Draft EIR.
 - (b) **Mitigation Measures.** Implementation of capital and operational mobility enhancements and the payment of a fee for the Project's fair-share contribution toward such enhancements would less the significant impact associated with SR 99 and I-5, as discussed on pages 3.12-15 and 3.12-16 of the Draft EIR. However, as described on pages 3.12-15 and 3.12-16 of the Draft EIR, there are no feasible mitigation measures available to the City at this time.
 - (c) **Findings.** Based upon the EIR and the entire record before this City Council, this City Council finds that:
 - (1) **Effects of Mitigation and Remaining Impacts.** As identified on pages 3.12-15 and 3.12-16 of the Draft EIR, implementation of capital and operational mobility enhancements and the payment of a fee for the Project's fair-share contribution toward such enhancements would serve as mitigation to lessen the significant impact associated with SR 99 and I-5. However, these State highway facilities are under the exclusive jurisdiction of Caltrans (Streets and Highways Code, Section 90). The City is not aware of any plan, enforceable by the City that would ensure funding of these improvements. While the Project would be required to pay a roadway fee pursuant to the *Settlement Agreement and Release of All Claims* that would be used to fund designated regional traffic improvements in the State highway system, this fee is not considered feasible mitigation because there is not sufficient evidence in the record to find that the fee program is sufficiently certain and can be implemented over a defined period of time, as discussed on pages 3.12-15 and 3.12-16 of the Draft EIR. Therefore, this would represent a significant and unavoidable impact of the Project.
 - (2) **Overriding Considerations.** The environmental, economic, social and other benefits of the Project override any remaining significant adverse impact of the Project associated with impacts to important or unique farmlands, as more fully stated in the Statement of Overriding Considerations in Section X, below.

VI. FINDINGS AND RECOMMENDATIONS REGARDING SIGNIFICANT IMPACTS WHICH ARE MITIGATED TO A LESS THAN SIGNIFICANT LEVEL

A. AESTHETICS

1. PROJECT IMPLEMENTATION MAY RESULT IN LIGHT AND GLARE IMPACTS. (EIR IMPACT 3.1-2)

- (a) Potential Impact. The potential for the Project introduce new sources of light and glare that would have a significant impact is discussed at pages 3.1-9 through 3.1-11 of the Draft EIR.
- (b) Mitigation Measures. The following mitigation measures are hereby adopted and will be implemented as provided by the Mitigation Monitoring Program: Mitigation measures 3.1-1, 3.1-2, and 3.1-3.
- (c) Findings. Based upon the EIR and the entire record before this City Council, this City Council finds that implementation of mitigation measures 3.1-1, 3.1-2, and 3.1-3 would ensure that all exterior lighting associated with the Project is properly shielded and directed downward in order to eliminate light spillage onto adjacent properties, reduce impacts to “dark skies” to the greatest extent feasible, and reduce potential daytime glare impacts by ensuring that the multifamily and clubhouse facilities minimize use of reflective surfaces. Mitigation measures 3.1-1, 3.1-2, and 3.1-3 would reduce impacts associated with light and glare to a less than significant level. As authorized by Public Resources Code Section 21081(a)(1) and Title 14, California Code of Regulations Section 15091(a)(1), the City finds that changes or alterations have been required herein, incorporated into the project, or required as a condition of project approval, which mitigate or avoid the significant environmental impact listed above, and as identified in the FEIR. The City further finds that the change or alteration in the project or the requirement to impose the mitigation as a condition of project approval is within the jurisdiction of the City to require, and that this mitigation is appropriate and feasible.

B. AIR QUALITY AND CLIMATE CHANGE

1. PROJECT CONSTRUCTION HAS THE POTENTIAL TO CAUSE A VIOLATION OF AN AIR QUALITY STANDARD OR CONTRIBUTE SUBSTANTIALLY TO AN EXISTING OR PROJECTED AIR QUALITY VIOLATION. (EIR IMPACT 3.2-2)

- (a) Potential Impact. The potential for the Project to result in temporary construction related air quality impacts is discussed at pages 3.2-14 through 3.3-19 of the Draft EIR.
- (b) Mitigation Measures. The following mitigation measures are hereby adopted and will be implemented as provided by the Mitigation Monitoring Program: Mitigation measures 3.2-1 and 3.2-2.
- (c) Findings. Based upon the EIR and the entire record before this City Council, this City Council finds that implementation of Mitigation measures 3.3-1 and 3.3-2 would implementation of the Sacramento Metropolitan Air Quality Management District (SMAQMD) Basic Construction Emission Control Measures and the Enhanced Exhaust

Control Practices to reduce air pollutant emissions. Mitigation measures 3.3-1 and 3.3-2 would reduce construction emissions to a less than significant level. As authorized by Public Resources Code Section 21081(a)(1) and Title 14, California Code of Regulations Section 15091(a)(1), the City finds that changes or alterations have been required herein, incorporated into the project, or required as a condition of project approval, which mitigate or avoid the significant environmental impact listed above, and as identified in the FEIR. The City further finds that the change or alteration in the project or the requirement to impose the mitigation as a condition of project approval is within the jurisdiction of the City to require, and that this mitigation is appropriate and feasible.

C. BIOLOGICAL RESOURCES

1. THE PROJECT HAS THE POTENTIAL FOR SUBSTANTIAL ADVERSE EFFECTS, EITHER DIRECTLY OR THROUGH HABITAT MODIFICATIONS, ON INVERTEBRATE SPECIES IDENTIFIED AS CANDIDATE, SENSITIVE, OR SPECIAL-STATUS SPECIES IN LOCAL OR REGIONAL PLANS, POLICIES, OR REGULATIONS, OR BY THE CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE OR U.S. FISH AND WILDLIFE SERVICE. (EIR IMPACT 3.3-1)
 - (a) Potential Impact. The potential for the Project to have a direct or indirect impact on special-status invertebrate species is discussed at pages 3.3-14 through 3.3-16 of the Draft EIR.
 - (b) Mitigation Measures. The following mitigation measure is hereby adopted and will be implemented as provided by the Mitigation Monitoring Program: Mitigation measure 3.3-1.
 - (c) Findings. Based upon the EIR and the entire record before this City Council, this City Council finds that the impacts to special-status invertebrate species will be mitigated to a less than significant level as Mitigation measure 3.3-1 requires the Project to adhere to the USFWS Incidental Take Permit which requires the preservation of existing vernal pool habitat at a 2:1 ratio (17.56 acres of wetted vernal pool crustacean habitat to be preserved to compensate for 5.05 directly-affected acres and 3.73 indirectly affected acres), measures to address stormwater quality, notification procedures in the event of death or harm of a listed species, and constructed monitoring to ensure compliance with construction-related impact avoidance measures. This measure will ensure that the potential impacts to vernal pool tadpole shrimp, vernal pool fairy shrimp, midvalley fairy shrimp, and California linderiella are reduced to a less than significant level. Any remaining impacts related to special-status invertebrate species after implementation of Mitigation measure 3.3-1 would not be significant. As authorized by Public Resources Code Section 21081(a)(1) and Title 14, California Code of Regulations Section 15091(a)(1), the City finds that changes or alterations have been required herein, incorporated into the project, or required as a condition of project approval, which mitigate or avoid the significant environmental impact listed above, and as identified in the FEIR. The City further finds that the change or alteration in the project or the requirement to impose the mitigation as a condition of project approval is within the jurisdiction of the City to require, and that this mitigation is appropriate and feasible.

2. THE PROJECT HAS THE POTENTIAL FOR SUBSTANTIAL ADVERSE EFFECTS, EITHER DIRECTLY OR THROUGH HABITAT MODIFICATIONS, ON BIRD SPECIES IDENTIFIED AS CANDIDATE, SENSITIVE, OR SPECIAL-STATUS SPECIES IN LOCAL OR REGIONAL PLANS, POLICIES, OR REGULATIONS, OR BY THE CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE OR U.S. FISH AND WILDLIFE SERVICE. (EIR IMPACT 3.3-3)
- (a) Potential Impact. The potential for the Project to have a direct or indirect impact on special-status bird species is discussed at pages 3.3-19 through 3.3-25 of the Draft EIR.
- (b) Mitigation Measures. The following mitigation measures are hereby adopted and will be implemented as provided by the Mitigation Monitoring Program: Mitigation measures 3.3-2, 3.3-3, 3.3-4, and 3.3-5.
- (c) Findings. Based upon the EIR and the entire record before this City Council, this City Council finds that the impacts to special-status bird species will be mitigated to a less than significant level with implementation of mitigation measures 3.3-2, 3.3-3, 3.3-4, and 3.3-5. Mitigation measure 3.3-2 will ensure that if burrowing owls are present on the Project site, the burrowing owls will be avoided or relocated. Mitigation Measures 3.3-3 will ensure that if migratory birds or raptors are nesting on the Project site, the nests will not be significantly disturbed during construction activities. Mitigation Measure 3.3-4 requires the Project Applicant to preserve 126.39 acres of suitable Swainson's hawk habitat. Mitigation Measure 3.3-5 will ensure that if Swainson's hawk is nesting on the Project site, the nests will not be significantly disturbed during construction activities.. Any remaining impacts related to special-status plant species after implementation of mitigation measures 3.3-2, 3.3-3, 3.3-4, and 3.3-5 would not be significant. As authorized by Public Resources Code Section 21081(a)(1) and Title 14, California Code of Regulations Section 15091(a)(1), the City finds that changes or alterations have been required herein, incorporated into the project, or required as a condition of project approval, which mitigate or avoid the significant environmental impact listed above, and as identified in the FEIR. The City further finds that the change or alteration in the project or the requirement to impose the mitigation as a condition of project approval is within the jurisdiction of the City to require, and that this mitigation is appropriate and feasible.
3. THE PROJECT HAS THE POTENTIAL FOR SUBSTANTIAL ADVERSE EFFECTS, EITHER DIRECTLY OR THROUGH HABITAT MODIFICATIONS, ON MAMMAL SPECIES IDENTIFIED AS CANDIDATE, SENSITIVE, OR SPECIAL-STATUS SPECIES IN LOCAL OR REGIONAL PLANS, POLICIES, OR REGULATIONS, OR BY THE CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE OR U.S. FISH AND WILDLIFE SERVICE. (EIR IMPACT 3.3-5)
- (a) Potential Impact. The potential for the Project to have a direct or indirect impact on special-status mammal species is discussed at pages 3.3-25 and 3.3-26 of the Draft EIR.
- (b) Mitigation Measures. The following mitigation measure is hereby adopted and will be implemented as provided by the Mitigation Monitoring Program: Mitigation measure 3.3-6.

- (c) Findings. Based upon the EIR and the entire record before this City Council, this City Council finds that the impacts to special-status mammal species will be mitigated to a less than significant level as mitigation measure 3.3-6 would ensure that if bats are roosting on the Project site, the bat roosts will not be significantly disturbed during construction activities. Any remaining impacts related to special-status mammal species after implementation of mitigation measure 3.3-6 would not be significant. As authorized by Public Resources Code Section 21081(a)(1) and Title 14, California Code of Regulations Section 15091(a)(1), the City finds that changes or alterations have been required herein, incorporated into the project, or required as a condition of project approval, which mitigate or avoid the significant environmental impact listed above, and as identified in the FEIR. The City further finds that the change or alteration in the project or the requirement to impose the mitigation as a condition of project approval is within the jurisdiction of the City to require, and that this mitigation is appropriate and feasible.
4. THE PROJECT HAS THE POTENTIAL FOR SUBSTANTIAL ADVERSE EFFECTS, EITHER DIRECTLY OR THROUGH HABITAT MODIFICATIONS, ON BIRD SPECIES IDENTIFIED AS CANDIDATE, SENSITIVE, OR SPECIAL-STATUS PLANT SPECIES IN LOCAL OR REGIONAL PLANS, POLICIES, OR REGULATIONS, OR BY THE CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE OR U.S. FISH AND WILDLIFE SERVICE. (EIR IMPACT 3.3-6)
- (a) Potential Impact. The potential for the Project to have a direct or indirect impact on special-status plant species is discussed at pages 3.3-26 through 3.3-29 of the Draft EIR.
- (b) Mitigation Measures. The following mitigation measures are hereby adopted and will be implemented as provided by the Mitigation Monitoring Program: Mitigation measures 3.3-7 and 3.3-8.
- (c) Findings. Based upon the EIR and the entire record before this City Council, this City Council finds that the impacts to special-status plant species will be mitigated to a less than significant level as mitigation measure 3.3-7 would require the relocation and transplanting of populations of Dwarf downingia and Legenere that would otherwise be lost as a result of the Project and mitigation measure 3.3-8 would require pre-construction surveys for special-status plant species (Peruvian dodder, Slender Orcutt grass, and Sanford's arrowhead) and the relocation and transplanting of any identified populations of Dwarf downingia and Legenere that would otherwise be lost as a result of the Project. Any remaining impacts related to special-status plant species after implementation of mitigation measures 3.3-7 and 3.3-8 would not be significant. As authorized by Public Resources Code Section 21081(a)(1) and Title 14, California Code of Regulations Section 15091(a)(1), the City finds that changes or alterations have been required herein, incorporated into the project, or required as a condition of project approval, which mitigate or avoid the significant environmental impact listed above, and as identified in the FEIR. The City further finds that the change or alteration in the project or the requirement to impose the mitigation as a condition of project approval is within the jurisdiction of the City to require, and that this mitigation is appropriate and feasible.

5. THE PROJECT HAS THE POTENTIAL TO HAVE A SUBSTANTIAL ADVERSE EFFECT ON WETLANDS, INCLUDING FEDERALLY PROTECTED AS DEFINED BY SECTION 404 OF THE CLEAN WATER ACT, THROUGH DIRECT REMOVAL, FILLING, HYDROLOGICAL INTERRUPTION, OR OTHER MEANS. (EIR IMPACT 3.3-7)

(a) Potential Impact. The potential for the Project to result in adverse effects on protected wetlands is discussed at pages 3.4-29 through 3.3-31 of the Draft EIR.

(b) Mitigation Measures. The following mitigation measures are hereby adopted and will be implemented as provided by the Mitigation Monitoring Program: Mitigation measures 3.3-9 and 3.3-10.

(c) Findings. Based upon the EIR and the entire record before this City Council, this City Council finds that the impacts to protected wetlands will be mitigated to a less than significant level as Mitigation measures 3.3-9 and 3.3-10 require the Project Applicant to ensure that the Section 404 permit issued by the US Army Corps of Engineers, the Section 401 Water Quality Certification issued by the Regional Water Quality Control Board, and the Section 1602 Streambed Alteration Agreement issued by the California Department of Fish and Wildlife are valid and active and to comply with the requirements and recommendations of these agreements and permits. The Section 404 permit requires the Project Applicant to establish, maintain, and monitor a 64.45-acre preserve on the northern portion of the Project site, containing 5.75 acres of avoided and preserved waters of the United States, including 5.06 acres of avoided and preserved vernal pools, 0.32 acres of avoided and preserved seasonal wetland, and 0.37 acres of avoided and preserved Whitehouse Creek. The Section 404 permit requires the Project to compensate for the direct loss of 8.31 acres of waters of the U.S., including 4.94 acres of vernal pools, 1.09 acres of seasonal wetland, 2.25 acres of pond, 0.02 acres of ephemeral drainage and 0.01 acre of creek through creating 8.80 acres of wetlands (6.17 acres of vernal pools and 2.63 acres of seasonal wetlands) within the on-site preserve area and creating 2.08 acres of seasonal wetlands off-site. The Section 404 permit requires the Project Applicant to create 6.25 acres of seasonal wetlands off-site to compensate for the indirect loss of functions associated with 12.39 acres of bermed pond that would be impacted by the Project. Specific requirements for the operation and maintenance of the preserve are included in the Section 404 permit to ensure long-term viability of on-site mitigation. The Section 1602 Streambed Alteration Agreement requires mitigation for loss of 2.25 acres of aquatic habitat and includes specific measures to address potential impacts to special-status species. Any remaining impacts related to protected wetlands after implementation of mitigation measures 3.3-9 and 3.3-10 would not be significant. As authorized by Public Resources Code Section 21081(a)(1) and Title 14, California Code of Regulations Section 15091(a)(1), the City finds that changes or alterations have been required herein, incorporated into the project, or required as a condition of project approval, which mitigate or avoid the significant environmental impact listed above, and as identified in the FEIR. The City further finds that the change or alteration in the project or the requirement to impose the mitigation as a condition of project approval is within the jurisdiction of the City to require, and that this mitigation is appropriate and feasible.

6. THE PROJECT HAS THE POTENTIAL TO CONFLICT WITH LOCAL POLICIES OR CODES PROTECTING BIOLOGICAL RESOURCES, SUCH AS ELK GROVE MUNICIPAL CODE CHAPTER 19.12. (EIR IMPACT 3.3-10)
- (a) Potential Impact. The potential for the Project to conflict with local policies or codes protecting biological resources is discussed at pages 3.3-32 through 3.3-38 of the Draft EIR.
 - (b) Mitigation Measures. The following mitigation measures are hereby adopted and will be implemented as provided by the Mitigation Monitoring Program: Mitigation measures 3.3-11 and 3.3-12
 - (c) Findings. Based upon the EIR and the entire record before this City Council, this City Council finds that conflict with local policies or codes protecting biological resources, specifically Elk Grove Municipal Code Chapter 19.12, will be mitigated to a less than significant level as mitigation measures 3.3-11 and 3.3-12 will ensure that the potential impacts to protected trees are minimized to the extent possible and that the Project compensated for the loss of any trees in compliance with the City of Elk Grove Tree Preservation and Protection Chapter 19.12. Any remaining impacts related to Chapter 19.12 after implementation of mitigation measures 3.3-11 and 3.3-12 would not be significant. As authorized by Public Resources Code Section 21081(a)(1) and Title 14, California Code of Regulations Section 15091(a)(1), the City finds that changes or alterations have been required herein, incorporated into the project, or required as a condition of project approval, which mitigate or avoid the significant environmental impact listed above, and as identified in the FEIR. The City further finds that the change or alteration in the project or the requirement to impose the mitigation as a condition of project approval is within the jurisdiction of the City to require, and that this mitigation is appropriate and feasible.

D. CULTURAL RESOURCES

1. PROJECT IMPLEMENTATION MAY CAUSE A SUBSTANTIAL ADVERSE CHANGE TO A SIGNIFICANT HISTORICAL OR ARCHAEOLOGICAL RESOURCE, OR DIRECTLY OR INDIRECTLY DESTROY OR DISTURB A UNIQUE PALEONTOLOGICAL RESOURCE OR HUMAN REMAINS. (EIR IMPACT 3.4-1)
- (a) Potential Impact. The potential for the Project to have an impact on a significant historical, archaeological, or paleontological resource or human remains is discussed at pages 3.4-8 through 3.4-10 of the Draft EIR.
 - (b) Mitigation Measures. The following mitigation measures are hereby adopted and will be implemented as provided by the Mitigation Monitoring Program: Mitigation measure 3.4-1 and 3.4-2.
 - (c) Findings. Based upon the EIR and the entire record before this City Council, this City Council finds that impacts to significant historical, archaeological, or paleontological resources or human remains will be mitigated to a less than significant level as mitigation measure 3.4-1 would ensure that the wire-wrapped redwood stave pipe on the Project site is appropriately documented and mitigated and implementation of

mitigation measure 3.4-2 would ensure that if an previously undiscovered cultural or paleontologic resources or human remains are encountered, appropriate steps will be taken to identify the significance of the resources and mitigate any potential impacts. Any remaining impacts related to cultural or archeological resources after implementation of mitigation measures 3.4-1 and 3.4-2 would not be significant. As authorized by Public Resources Code Section 21081(a)(1) and Title 14, California Code of Regulations Section 15091(a)(1), the City finds that changes or alterations have been required herein, incorporated into the project, or required as a condition of project approval, which mitigate or avoid the significant environmental impact listed above, and as identified in the FEIR. The City further finds that the change or alteration in the project or the requirement to impose the mitigation as a condition of project approval is within the jurisdiction of the City to require, and that this mitigation is appropriate and feasible.

E. GEOLOGY AND SOILS

1. IMPLEMENTATION AND CONSTRUCTION OF THE PROJECT MAY RESULT IN SUBSTANTIAL SOIL EROSION OR THE LOSS OF TOPSOIL. (EIR IMPACT 3.5-2)
 - (a) Potential Impact. The potential for the Project to result in substantial soil erosion or the loss of topsoil is discussed at pages 3.5-12 and 3.5-13 and of the Draft EIR.
 - (b) Mitigation Measures. The following mitigation measures are hereby adopted and will be implemented as provided by the Mitigation Monitoring Program: Mitigation measures 3.5-1 and 3.5-2.
 - (c) Findings. Based upon the EIR and the entire record before this City Council, this City Council finds that impacts to risks associated with soil erosion or loss of topsoil will be mitigated to a less than significant level as mitigation measure 3.5-1 requires an approved Storm Water Pollution Prevention Plan (SWPPP) that includes best management practices for grading, and preservation of topsoil and mitigation measure 3.5-2 requires the Project Applicant to submit an erosion control plan to the City which incorporates design measures that treat 85-90 percent of annual average stormwater runoff in accordance with the standards of the California Stormwater Best Management Practice New Development and Redevelopment Handbook. Any remaining impacts related to soil erosion or loss of topsoil after implementation of mitigation measures 3.5-1 and 3.5-2 would not be significant. As authorized by Public Resources Code Section 21081(a)(1) and Title 14, California Code of Regulations Section 15091(a)(1), the City finds that changes or alterations have been required herein, incorporated into the project, or required as a condition of project approval, which mitigate or avoid the significant environmental impact listed above, and as identified in the FEIR. The City further finds that the change or alteration in the project or the requirement to impose the mitigation as a condition of project approval is within the jurisdiction of the City to require, and that this mitigation is appropriate and feasible.
2. THE PROJECT HAS THE POTENTIAL TO BE LOCATED ON A GEOLOGIC UNIT OR SOIL THAT IS UNSTABLE, OR THAT COULD BECOME UNSTABLE AS A RESULT OF PROJECT IMPLEMENTATION, AND

POTENTIALLY RESULT IN LANDSLIDE, LATERAL SPREADING, SUBSIDENCE, LIQUEFACTION OR COLLAPSE. (EIR IMPACT 3.5-3)

- (a) Potential Impact. The potential for the Project to be exposed to impacts from unstable soils is discussed at pages 3.5-13 through 3.5-15 of the Draft EIR.
- (b) Mitigation Measures. The following mitigation measure is hereby adopted and will be implemented as provided by the Mitigation Monitoring Program: Mitigation measure 3.5-3.
- (c) Findings. Based upon the EIR and the entire record before this City Council, this City Council finds that impacts to risks associated with unstable soils will be mitigated to a less than significant level as mitigation measure 3.5-3 requires a geotechnical report to be prepared for the Project and would ensure that appropriate measures are implemented to reduce potential impacts associated with unstable soils. Any remaining impacts related to unstable soils after implementation of mitigation measure 3.5-3 would not be significant. As authorized by Public Resources Code Section 21081(a)(1) and Title 14, California Code of Regulations Section 15091(a)(1), the City finds that changes or alterations have been required herein, incorporated into the project, or required as a condition of project approval, which mitigate or avoid the significant environmental impact listed above, and as identified in the FEIR. The City further finds that the change or alteration in the project or the requirement to impose the mitigation as a condition of project approval is within the jurisdiction of the City to require, and that this mitigation is appropriate and feasible.

3. THE PROJECT HAS THE POTENTIAL TO BE LOCATED ON EXPANSIVE SOILS, POTENTIALLY CREATING SUBSTANTIAL RISKS TO LIFE OR PROPERTY (EIR IMPACT 3.5-4)

- (a) Potential Impact. The potential for the Project to be exposed to impacts from expansive soils is discussed at pages 3.5-15 through 3.5-16 of the Draft EIR.
- (b) Mitigation Measures. The following mitigation measure is hereby adopted and will be implemented as provided by the Mitigation Monitoring Program: Mitigation measure 3.5-3.
- (c) Findings. Based upon the EIR and the entire record before this City Council, this City Council finds that impacts to risks associated with unstable soils will be mitigated to a less than significant level as mitigation measure 3.5-3 requires a geotechnical report to be prepared for the Project and would ensure that appropriate measures are implemented to reduce potential impacts associated with expansive soils. Any remaining impacts related to expansive soils after implementation of mitigation measure 3.5-3 would not be significant. As authorized by Public Resources Code Section 21081(a)(1) and Title 14, California Code of Regulations Section 15091(a)(1), the City finds that changes or alterations have been required herein, incorporated into the project, or required as a condition of project approval, which mitigate or avoid the significant environmental impact listed above, and as identified in the FEIR. The City further finds that the change or alteration in the project or the requirement to impose

the mitigation as a condition of project approval is within the jurisdiction of the City to require, and that this mitigation is appropriate and feasible.

4. THE PROJECT HAS THE POTENTIAL TO LOCATE SEPTIC FACILITIES ON SOILS INCAPABLE OF ADEQUATELY SUPPORTING THE USE OF SEPTIC TANKS OR ALTERNATIVE WASTEWATER DISPOSAL SYSTEMS. (EIR IMPACT 3.5-5)
 - (a) Potential Impact. The potential for the Project to result in impacts to soils associated with septic facilities is discussed at pages 3.5-16 through 3.5-17 of the Draft EIR.
 - (b) Mitigation Measures. The following mitigation measure is hereby adopted and will be implemented as provided by the Mitigation Monitoring Program: Mitigation measure 3.5-4.
 - (c) Findings. Based upon the EIR and the entire record before this City Council, this City Council finds that impacts associated with a potential septic system at the park site will be mitigated to a less than significant level as mitigation measure 3.5-3 requires an evaluation of the ability of the soils at the park site to accommodate a septic system if a septic system is proposed and, if the soils do not have the capacity to support a septic system, requires the park site be connected to the public sewer system or that restroom facilities shall be prohibited. Any remaining impacts related to expansive soils after implementation of mitigation measure 3.5-4 would not be significant. As authorized by Public Resources Code Section 21081(a)(1) and Title 14, California Code of Regulations Section 15091(a)(1), the City finds that changes or alterations have been required herein, incorporated into the project, or required as a condition of project approval, which mitigate or avoid the significant environmental impact listed above, and as identified in the FEIR. The City further finds that the change or alteration in the project or the requirement to impose the mitigation as a condition of project approval is within the jurisdiction of the City to require, and that this mitigation is appropriate and feasible.

F. GREENHOUSE GASES AND CLIMATE CHANGE

1. THE PROJECT MAY GENERATE GREENHOUSE GAS EMISSIONS, EITHER DIRECTLY OR INDIRECTLY, THAT MAY HAVE A SIGNIFICANT IMPACT ON THE ENVIRONMENT, OR CONFLICT WITH AN APPLICABLE PLAN, POLICY, OR REGULATION ADOPTED FOR THE PURPOSE OF REDUCING THE EMISSIONS OF GREENHOUSE GASES. (EIR IMPACT 3.6-1)
 - (a) Potential Impact. The potential for the Project to result in greenhouse gas emissions that may have a significant impact on the environment or conflict with an applicable plan, policy, or regulation adopted for the reduction of greenhouse gas emissions is discussed at pages 3.6-9 of the Draft EIR.
 - (b) Mitigation Measures. The following mitigation measure is hereby adopted and will be implemented as provided by the Mitigation Monitoring Program: Mitigation measure 3.6-1.

- (c) Findings. Based upon the EIR and the entire record before this City Council, this City Council finds that impacts with greenhouse gas emissions will be mitigated to a less than significant level as mitigation measure 3.6-1 requires the Project to implement the applicable City of Elk Grove Climate Action Plan measures, consistent with the requirements of CEQA Guidelines Section 15183.5(b)(2). Any remaining impacts related to greenhouse gas emissions after implementation of mitigation measure 3.6-1 would not be significant. As authorized by Public Resources Code Section 21081(a)(1) and Title 14, California Code of Regulations Section 15091(a)(1), the City finds that changes or alterations have been required herein, incorporated into the project, or required as a condition of project approval, which mitigate or avoid the significant environmental impact listed above, and as identified in the FEIR. The City further finds that the change or alteration in the project or the requirement to impose the mitigation as a condition of project approval is within the jurisdiction of the City to require, and that this mitigation is appropriate and feasible.

G. HAZARDS AND HAZARDOUS MATERIALS

1. THE PROJECT HAS THE POTENTIAL TO CREATE A SIGNIFICANT HAZARD THROUGH THE ROUTINE TRANSPORT, USE, OR DISPOSAL OF HAZARDOUS MATERIALS OR THROUGH THE REASONABLY FORESEEABLE UPSET AND ACCIDENT CONDITIONS INVOLVING THE RELEASE OF HAZARDOUS MATERIALS INTO THE ENVIRONMENT. (EIR IMPACT 3.7-1)
- (a) Potential Impact. The potential for the Project to be exposed to hazards or hazardous materials is discussed at pages 3.7-12 and 3.7-14 of the Draft EIR.
- (b) Mitigation Measures. The following mitigation measures are hereby adopted and will be implemented as provided by the Mitigation Monitoring Program: Mitigation measures 3.7-1, 3.7-2, and 3.7-3.
- (c) Findings. Based upon the EIR and the entire record before this City Council, this City Council finds that impacts to risks associated with the potential for the Project to create a hazard through the routine transport, use, or disposal of hazardous materials or through the reasonably foreseeable upset and accident conditions involving the release of hazardous materials, including hazards associated with abandoned wells, possible abandoned septic systems, and pre-existing undiscovered hazards will be mitigated to a less than significant level. Mitigation measures 3.7-1 and 3.7-2 require removal of existing wells and septic systems in accordance with the requirements of Sacramento County Environmental Health Division. Mitigation measure 3.7-3 requires that construction be halted in the vicinity of any previously undiscovered soil staining, soil odors, or potentially non-hazardous soil artifacts, if such conditions are discovered during construction, and that a licensed geotechnical engineer evaluate the conditions and submit recommendations to be implemented by the Project Applicant following City acceptance of the recommendations. Any remaining impacts related to abandoned wells, existing septic systems, or previously undiscovered soil hazards after implementation of mitigation measures 3.7-1, 3.7-2, and 3.7-3 would not be significant. As authorized by Public Resources Code Section 21081(a)(1) and Title 14, California Code of Regulations Section 15091(a)(1), the City finds that changes or alterations have been

required herein, incorporated into the project, or required as a condition of project approval, which mitigate or avoid the significant environmental impact listed above, and as identified in the FEIR. The City further finds that the change or alteration in the project or the requirement to impose the mitigation as a condition of project approval is within the jurisdiction of the City to require, and that this mitigation is appropriate and feasible.

H. HYDROLOGY AND WATER QUALITY

1. THE PROJECT COULD RESULT IN WATER QUALITY IMPACTS ASSOCIATED WITH EROSION, SILTATION, OR POLLUTION, INCLUDING THE POTENTIAL TO VIOLATE WATER QUALITY STANDARDS OR WASTE DISCHARGE REQUIREMENTS DURING CONSTRUCTION. (EIR IMPACT 3.8-1)

(a) Potential Impact. The potential for the Project to result in water quality impacts associated with erosion, siltation, or pollution during construction is discussed at pages 3.8-17 and 3.8-18 of the Draft EIR.

(b) Mitigation Measures. The following mitigation measure is hereby adopted and will be implemented as provided by the Mitigation Monitoring Program: Mitigation measure 3.5-1.

(c) Findings. Based upon the EIR and the entire record before this City Council, this City Council finds that impacts associated with construction-related water quality will be mitigated to a less than significant level as mitigation measure 3.5-1 requires the Project applicant to submit a NOI and SWPPP to the RWQCB in accordance with the NPDES General Construction Permit requirements.. Any remaining impacts related to water quality associated with Project construction after implementation of mitigation measure 3.5-1 would not be significant. As authorized by Public Resources Code Section 21081(a)(1) and Title 14, California Code of Regulations Section 15091(a)(1), the City finds that changes or alterations have been required herein, incorporated into the project, or required as a condition of project approval, which mitigate or avoid the significant environmental impact listed above, and as identified in the FEIR. The City further finds that the change or alteration in the project or the requirement to impose the mitigation as a condition of project approval is within the jurisdiction of the City to require, and that this mitigation is appropriate and feasible.

2. THE PROJECT COULD RESULT IN WATER QUALITY IMPACTS ASSOCIATED WITH EROSION, SILTATION, OR POLLUTION, INCLUDING THE POTENTIAL TO VIOLATE WATER QUALITY STANDARDS OR WASTE DISCHARGE REQUIREMENTS DURING OPERATION. (EIR IMPACT 3.8-2)

(a) Potential Impact. The potential for the Project to result in water quality impacts associated with erosion, siltation, or pollution during operation is discussed at pages 3.8-18 through 3.8-20 of the Draft EIR.

(b) Mitigation Measures. The following mitigation measure is hereby adopted and will be implemented as provided by the Mitigation Monitoring Program: Mitigation measure 3.5-2.

(c) Findings. Based upon the EIR and the entire record before this City Council, this City Council finds that impacts associated with result in water quality impacts associated with erosion, siltation, or pollution during Project operation will be mitigated to a less than significant level as mitigation measure 3.5-2 requires the Project applicant to prepare and submit a Post-Construction Stormwater Quality Control Plan in accordance with the most recent version of the Stormwater Quality Design Manual for the Sacramento Region. Post-construction source and treatment controls shall be designed in accordance with the City of Elk Grove Improvement Standards and the Stormwater Quality Design Manual. Any remaining impacts related to increased storm water runoff after implementation of mitigation measure 3.5-2 would not be significant. As authorized by Public Resources Code Section 21081(a)(1) and Title 14, California Code of Regulations Section 15091(a)(1), the City finds that changes or alterations have been required herein, incorporated into the project, or required as a condition of project approval, which mitigate or avoid the significant environmental impact listed above, and as identified in the FEIR. The City further finds that the change or alteration in the project or the requirement to impose the mitigation as a condition of project approval is within the jurisdiction of the City to require, and that this mitigation is appropriate and feasible.

3. THE PROJECT WOULD ALTER THE EXISTING DRAINAGE PATTERN IN A MANNER WHICH WOULD NOT RESULT IN FLOODING, BUT COULD CREATE OR CONTRIBUTE RUNOFF IN EXCESS OF THE CAPACITY OF STORMWATER DRAINAGE SYSTEMS. (EIR IMPACT 3.8-4)

(a) Potential Impact. The potential for the Project to result in increased runoff resulting from changes to the existing drainage pattern is discussed at pages 3.8-21 through 3.8-23 of the Draft EIR.

(b) Mitigation Measures. The following mitigation measure is hereby adopted and will be implemented as provided by the Mitigation Monitoring Program: Mitigation measure 3.8-1.

(c) Findings. Based upon the EIR and the entire record before this City Council, this City Council finds that impacts associated with in increased runoff resulting from changes to the existing drainage pattern will be mitigated to a less than significant level as mitigation measures 3.8-1 requires the Project to contribute its fair-share to the cost of the necessary Bond Road Trunk Drainage improvements that are needed to accommodate the Project and requires that the portion of the Project site served by such improvements (Village 1-A) is not constructed until the improvements are completed. Any remaining impacts related to changes to the drainage pattern after implementation of mitigation measure 3.8-1 would not be significant. As authorized by Public Resources Code Section 21081(a)(1) and Title 14, California Code of Regulations Section 15091(a)(1), the City finds that changes or alterations have been required herein, incorporated into the project, or required as a condition of project approval, which mitigate or avoid the significant environmental impact listed above, and as identified in the FEIR. The City further finds that the change or alteration in the project or the requirement to impose the mitigation as a condition of project approval is within

the jurisdiction of the City to require, and that this mitigation is appropriate and feasible.

I. NOISE

1. EXPOSURE OF PERSONS TO, OR GENERATION OF NOISE LEVELS IN EXCESS OF APPLICABLE STANDARDS - EXPOSURE OF PROJECT RESIDENTS TO EXTERIOR TRAFFIC NOISE. (EIR IMPACT 3.10-2)

- (a) Potential Impact. The potential for the Project to expose Project residents to exterior traffic noise in excess of applicable standards is discussed at pages 3.10-10 through 3.10-13 of the Draft EIR.
- (b) Mitigation Measures. The following mitigation measures are hereby adopted and will be implemented as provided by the Mitigation Monitoring Program: Mitigation measures 3.10-1 and 3.10-2.
- (c) Findings. Based upon the EIR and the entire record before this City Council, this City Council finds that impacts associated with exposure of Project residents to traffic noise will be mitigated to a less than significant level as mitigation measures 3.10-1 and 3.10-2 require construction of a soundwall and noise attenuating features that would reduce exposure to traffic noise to conditionally acceptable levels. Any remaining impacts related to Project exposure to traffic noise after implementation of mitigation measures 3.10-1 and 3.10-2 would not be significant. As authorized by Public Resources Code Section 21081(a)(1) and Title 14, California Code of Regulations Section 15091(a)(1), the City finds that changes or alterations have been required herein, incorporated into the project, or required as a condition of project approval, which mitigate or avoid the significant environmental impact listed above, and as identified in the FEIR. The City further finds that the change or alteration in the project or the requirement to impose the mitigation as a condition of project approval is within the jurisdiction of the City to require, and that this mitigation is appropriate and feasible.

J. PUBLIC SERVICES AND RECREATION

1. THE PROJECT MAY RESULT IN SIGNIFICANT ENVIRONMENTAL IMPACTS ASSOCIATED WITH THE CONSTRUCTION AND OPERATION OF PARKS AND RECREATION FACILITIES. (EIR IMPACT 3.11-3)

- (a) Potential Impact. The potential for the Project to result in significant impacts associated with construction and operation of parks and recreation facilities is discussed at page 3.11-12 of the Draft EIR.
- (b) Findings. Based upon the EIR and the entire record before this City Council, this City Council finds that environmental impacts associated with the construction and operation of parks and recreation facilities are addressed in Chapters 3.1 through 3.10, 3.12, and 3.13 of the Draft EIR and appropriate findings are made under Sections V, VI (A through I), and VII of these Findings. No additional findings are necessary to address Impact 3.11-3.

VII. FINDINGS AND RECOMMENDATIONS REGARDING THOSE IMPACTS WHICH ARE LESS THAN SIGNIFICANT OR LESS THAN CUMULATIVELY CONSIDERABLE

Specific impacts within the following categories of environmental effects were found to be less than significant as set forth in more detail in the Draft EIR and Final EIR.

Aesthetics: The following specific impact was found to be less than significant: 3.3-1.

Air Quality: The following specific impacts were found to be less than significant: 3.2-1, 3.2-3, 3.2-4, and 3.2-5.

Biological Resources: The following specific impacts were found to be less than significant: 3.3-2, 3.3-4, 3.3-9, and 3.3-11.

Geology and Soils: The following specific impact was found to be less than significant: 3.5-1.

Hazards and Hazardous Materials: The following specific impacts were found to be less than significant or to have no impact: 3.7-2 and 3.7-3.

Hydrology and Water Quality: The following specific impacts were found to be less than significant: 3.8-3, 3.8-5, and 3.8-6.

Land Use and Population: The following specific impact was found to be less than significant: 3.9-1.

Noise: The following specific impacts were found to be less than significant: 3.10-1 and 3.10-3.

Public Services and Recreation: The following specific impacts were found to be less than significant: 3.11-1 and 3.11-2.

Traffic and Circulation: The following specific impacts were found to be less than significant: 3.12-1, 3.12-3, 3.12-4, 3.12-5, and 3.12-6.

Utilities: The following specific impacts were found to be less than significant: 3.13-1, 3.13-2, 3.13-3, 3.13-4, and 3.13-5.

The above impacts are less than significant because the EIR determined that each impact is less than significant for the Project.

VIII. IMPACTS ADDRESSED IN A PREVIOUS EIR

The City's General Plan was adopted by the City Council on November 19, 2003 and reflects amendments through July 2013. An Environmental Impact Report was prepared to analyze and disclose the environmental impacts associated with General Plan implementation. The General Plan land use designations for the Project site that were analyzed in the General Plan EIR had the potential for up to 1,090 housing units on the Project site (150 acres of Low Density Residential =

1,050 housing units and 80 acres of Rural Residential = 40 housing units). The General Plan EIR anticipated development of the entire Project site. The Project would result in 308 fewer units than anticipated on the Project site in the General Plan EIR. The Project also designates 93.7 acres of the 230-acre site for open space uses, including a wetland preservation area, and thus would result in less disturbance and development than was anticipated in the General Plan EIR. The Project would result in population and housing, and as a result would have less traffic and associated air quality and noise impacts as well as less demand for utilities and public services than anticipated in the General Plan EIR. The Project would have less of a contribution to cumulative impacts than was anticipated for the Project site in the General Plan EIR. Therefore, the Project is consistent with the environmental analysis and conclusions of the General Plan EIR.

The General Plan EIR evaluated the full range of environmental impacts anticipated with buildout of the General Plan land uses. The following is a summary of the impacts identified in the General Plan EIR that are relevant to subsequent development activities that may involve implementation of various measures associated with the Project. These subsequent development activities, such as the Project, are required to be reviewed for compliance with the General Plan and to comply with relevant mitigation measures adopted in the General Plan EIR to mitigate cumulative impacts. All of the mitigation measures identified in the General Plan EIR were incorporated into the General Plan or were included in a subsequent policy document, such as the Design Guidelines, and as are applied to and required of the Project.

Development has occurred in the City and throughout the region since the adoption of the General Plan. However, the General Plan EIR anticipated that development would occur and conditions in the City are consistent with the evaluation in the General Plan EIR, which identified increases in traffic, air pollutant emissions, noise, population and housing, an increased demand for public services and utilities, and the potential for development to reduce the amount of agricultural resources and open space and to have impacts associated with aesthetics, biological resources, cultural resources, geology and soils, hazards, hydrology and soils.

The City makes the following findings regarding impacts addressed in the General Plan EIR.

A. POPULATION AND HOUSING

1. POPULATION AND HOUSING INCREASES - IMPACT 4.3.1

a) Impact: Implementation of the General Plan could result in population and housing projections that may exceed the SACOG projections. This is a less than significant impact. Impact analysis and discussion of mitigation is located at General Plan Draft EIR pages 4.3-14 through 4.3-16.

b) Mitigation Measures: None required.

c) Finding: Pursuant to Public Resources Code Section 21083.3(b), the City Council finds that the Project is consistent with the General Plan and that the certified General Plan EIR addressed environmental impacts associated with population and housing increases, including those associated with the Project. There are no effects

on the environment related to population and housing that are peculiar to the parcel or Project that were not addressed in the General Plan EIR and there is not substantial new information that shows that impacts to population and housing increases will be more significant than described in the General Plan EIR. Pursuant to Public Resources Code Section 21083.3(c), the City Council finds that no mitigation measures were identified in the General Plan EIR for Impact 4.3.1 and, therefore, no mitigation is required of the Project in association with Impact 4.3.1.

2. JOBS-HOUSING BALANCE - IMPACT 4.3.2:

a) Impact: The increase in the number of employed persons versus the increase in housing units may result in a jobs-housing imbalance. This is considered a less than significant impact. Impact analysis and discussion of mitigation is located at General Plan Draft EIR pages 4.13-16 and 4.13-17.

b) Mitigation Measures: None required.

c) Finding: Pursuant to Public Resources Code Section 21083.3(b), the City Council finds that the Project is consistent with the General Plan and that the certified General Plan EIR addressed environmental impacts associated with jobs-housing balance, including those associated with the Project. There are no effects on the environment related to jobs-housing balance that are peculiar to the parcel or Project that were not addressed in the General Plan EIR and there is not substantial new information that shows that impacts to jobs-housing balance will be more significant than described in the General Plan EIR. Pursuant to Public Resources Code Section 21083.3(c), the City Council finds that no mitigation measures were identified in the General Plan EIR for Impact 4.3.2 and, therefore, no mitigation is required of the Project in association with Impact 4.3.2.

B. TRAFFIC

1. LOCAL ROADWAY SYSTEM - IMPACT 4.5.1:

a) Impact: Implementation of the General Plan would result in increased traffic volumes, volume-to-capacity ratios, and a decrease in LOS on area roadways during the A.M. and P.M. peak hours. Impact analysis and discussion of mitigation is located at General Plan Draft EIR pages 4.5-52 and 4.5-80. Impacts in the Project vicinity include:

- Bond Road 4 Lanes (East Stockton Boulevard to Elk Grove Florin Road) – LOS F (eastbound) and LOS E (westbound)
- Bond Road 4 Lanes (Elk Grove Florin Road to Bradshaw Road) – LOS C (eastbound) and LOS B (westbound)
- Waterman Road 4 Lanes (Calvine Road to Bond Road) – LOS C (northbound) and LOS B (southbound)

- Waterman Road 4 Lanes (Bond Road to Grant Line Road) – LOS B (northbound) and LOS A (southbound)

b) Mitigation Measures: *MM 4.5.1 - The City shall coordinate and participate with the City of Sacramento, Sacramento County and Caltrans on roadway improvements that are shared by the jurisdictions in order to improve operations. This may include joint transportation planning efforts, roadway construction and funding.* (General Plan Draft EIR page 4.5-80)

c) Finding: Pursuant to Public Resources Code Section 21083.3(b), the City Council finds that the Project is consistent with the General Plan and that the certified General Plan EIR addressed environmental impacts associated with the local roadway system, with the exception of those impacts specific to the Project site addressed under Impact 3.12-1 of the Silverado Village Draft EIR. There is not substantial new information that shows that impacts to local roadway facilities will be more significant than described in the General Plan EIR.

MM 4.5.1 was identified to mitigate this impact and was implemented through revising the General Plan to include Policy CI-2. Pursuant to Public Resources Code Section 21083.3(c), the City Council finds that MM 4.5.1 has been complied with during the City's processing and review of the Project. The City Council further finds that there are no adopted regional plans for the funding or development of regional roadway facilities that provide certainty regarding funding, facility improvements, and timing that the Project Applicant may participate in. Therefore, MM 4.5.1 has been undertaken by the Project to the extent feasible.

2. STATE HIGHWAYS - IMPACT 4.5.2

a) Impact: Implementation of the General Plan would result in increased traffic volumes, V/C ratios, and a decrease in LOS on state highways during the A.M. and P.M. peak hours. This is considered a significant impact. Impact analysis and discussion of mitigation is located at General Plan Draft EIR page 4.5-81.

b) Mitigation Measures: *MM 4.5.1 - The City shall coordinate and participate with the City of Sacramento, Sacramento County and Caltrans on roadway improvements that are shared by the jurisdictions in order to improve operations. This may include joint transportation planning efforts, roadway construction and funding.* (General Plan Draft EIR pages 4.5-80 and 4.5-81)

c) Finding: Pursuant to Public Resources Code Section 21083.3(b), the City Council finds that the Project is consistent with the General Plan and that the certified General Plan EIR addressed environmental impacts associated with the local roadway system, with the exception of those impacts addressed under Impact 3.12-2 of the Silverado Village Draft EIR. There is not substantial new information that shows that impacts to local roadway facilities will be more significant than described in the General Plan EIR.

MM 4.5.1 was identified to mitigate this impact and was implemented through revising the General Plan to include Policy CI-2. Pursuant to Public Resources Code Section 21083.3(c), the City Council finds that MM 4.5.1 has been complied with during the City's processing and review of the Project. The City Council further finds that there are no adopted regional plans for the funding or development of regional roadway facilities that provide certainty regarding funding, facility improvements, and timing that the Project Applicant may participate in. Therefore, MM 4.5.1 has been undertaken by the Project to the extent feasible.

C. PUBLIC SERVICES AND FACILITIES

1. PUBLIC SCHOOL FACILITIES - IMPACT 4.12.3.1:

a) Impact: Implementation of the General Plan would increase demand for EGUSD facilities and services. This is considered a less than significant impact. Impact analysis and discussion of mitigation is located at General Plan Draft EIR page 4.12-26 through 4.12-28.

b) Mitigation Measures: None required.

c) Finding: Pursuant to Public Resources Code Section 21083.3(b), the City Council finds that the Project is consistent with the General Plan and that the certified General Plan EIR addressed environmental impacts associated with public school facilities, including those associated with the Project. There are no effects on the environment related to public school facilities that are peculiar to the parcel or Project that were not addressed in the General Plan EIR and there is not substantial new information that shows that impacts to public school facilities will be more significant than described in the General Plan EIR. Pursuant to Public Resources Code Section 21083.3(c), the City Council finds that no mitigation measures were identified in the General Plan EIR for Impact 4.12.3.1 and, therefore, no mitigation is required of the Project in association with Impact 4.12.3.1.

2. ELECTRICAL, NATURAL GAS, AND TELEPHONE SERVICES – IMPACT 4.12.7.1:

a) Impact: Implementation of the General Plan would increase the demand for electric, telephone, and natural gas services. This is considered a less than significant impact. Impact analysis and discussion of mitigation is located at General Plan Draft EIR pages 4.12-72 through 4.12-73.

b) Mitigation Measures: None required.

c) Finding: Pursuant to Public Resources Code Section 21083.3(b), the City Council finds that the Project is consistent with the General Plan and that the certified General Plan EIR addressed environmental impacts associated with the demand for demand for electric, telephone and natural gas services, including those associated with the Project. There are no effects on the environment related to demand for

electric, telephone, and natural gas services that are peculiar to the parcel or Project that were not addressed in the General Plan EIR and there is not substantial new information that shows that impacts to demand for electric, telephone, and natural gas services will be more significant than described in the General Plan EIR. Pursuant to Public Resources Code Section 21083.3(c), the City Council finds that no mitigation measures were identified in the General Plan EIR for Impact 4.12.7.1 and, therefore, no mitigation is required of the Project in association with Impact 4.12.7.1.

D. CUMULATIVE IMPACTS

1. CONSISTENCY WITH RELEVANT PLANNING DOCUMENTS IN THE PLANNING AREA - IMPACT 4.2.3:

a) Impact. Implementation of the General Plan could impact land use plans or study areas outside of the city limits, but within the Planning Area. The General Plan EIR concluded that the impact was significant and unavoidable as a result of conflicts between Sacramento County General Plan policies and the City of Elk Grove's vision of the Urban Study Area. Impact analysis and discussion of mitigation is located at General Plan Draft EIR pages 4.2-30 through 4.2-32.

b) Mitigation Measures: None required. Implementation of General Plan policies CAQ-6 and associated action items, CI-21, LU-15 and LU-15 Action 1, and LU-38.

c) Finding: Pursuant to Public Resources Code Section 21083.3(b), the City Council finds that the Project is consistent with the General Plan and that the certified General Plan EIR addressed environmental impacts associated with land use planning consistency, including those associated with the Project. The Project would not have a contribution to cumulative land use planning consistency that was not addressed in cumulative analysis the General Plan EIR. The City Council finds that the Project is required to comply with the General Plan, including those policies that were identified to address Impact 4.2.3 and, as such, the policies and actions identified to address Impact 4.2.3 are required of the Project. Pursuant to Public Resources Code Section 21083.3(c), the City Council finds that the Project has been required to implement the applicable policies and actions identified as mitigation measures for Impact 4.2.3.

2. LAND USE CONFLICTS IN THE PLANNING AREA - IMPACT 4.2.4:

a) Impact: Implementation of the General Plan would increase the potential for land use conflicts outside of the City and within the Planning Area. This is a less than significant cumulative impact. Impact analysis and discussion of mitigation is located at General Plan Draft EIR pages 4.2-32 through 4.2-34.

b) Mitigation Measures: None required.

c) Finding: Pursuant to Public Resources Code Section 21083.3(b), the City Council finds that the Project is consistent with the General Plan and that the certified General Plan EIR addressed environmental impacts associated with cumulative land use conflicts. There are no effects on the environment related to cumulative land use conflicts that are peculiar to the parcel or Project that were not addressed in the General Plan EIR and there is not substantial new information that shows that impacts to population and housing increases will be more significant than described in the General Plan EIR. Pursuant to Public Resources Code Section 21083.3(c), the City Council finds that no mitigation measures were identified in the General Plan EIR for Impact 4.2.4 and, therefore, no mitigation is required of the Project in association with Impact 4.2.4.

3. CUMULATIVE POPULATION AND HOUSING INCREASES IMPACT - 4.3.3:

a) Impact: The population and housing unit increases at buildout of the General Plan may exceed SACOG's population and housing projections for the Planning Area. This is considered a less than significant cumulative impact. Impact analysis and discussion of mitigation is located at General Plan Draft EIR pages 4.13-17 through 4.13-19.

b) Mitigation Measures: None required.

c) Finding: Pursuant to Public Resources Code Section 21083.3(b), the City Council finds that the Project is consistent with the General Plan and that the certified General Plan EIR addressed environmental impacts associated with population and housing increases, including those associated with the Project. There are no effects on the environment related to cumulative population and housing increases that are peculiar to the parcel or Project that were not addressed in the General Plan EIR and there is not substantial new information that shows that impacts to population and housing increases will be more significant than described in the General Plan EIR. Pursuant to Public Resources Code Section 21083.3(c), the City Council finds that no mitigation measures were identified in the General Plan EIR for Impact 4.3.3 and, therefore, no mitigation is required of the Project in association with Impact 4.3.3.

4. CUMULATIVE HAZARD IMPACTS - IMPACT 4.4.5.

a) Impact: Implementation of the General Plan and potential development in the Urban Study Areas could result in site-specific hazards being encountered. This is considered a cumulative significant impact that would be reduced to less than significant with mitigation. Impact analysis and discussion of mitigation is located at General Plan Draft EIR pages 4.4-32 through 4.13-34.

b) Mitigation Measures: *MM 4.4.5 The City shall ensure that new development near airports be designed to protect public safety from airport operations consistent with*

recommendations and requirements of the Airport Land Use Commission, Caltrans, and the Federal Aviation Administration.

c) Finding: Pursuant to Public Resources Code Section 21083.3(b), the City Council finds that the Project is consistent with the General Plan and that the certified General Plan EIR addressed environmental impacts associated with cumulative hazards, including those associated with the Project. There are no effects on the environment related to potential contribution to cumulative hazards that are peculiar to the parcel or Project that were not addressed in the General Plan EIR and there is not substantial new information that shows that impacts to cumulative hazards will be more significant than described in the General Plan EIR. Pursuant to Public Resources Code Section 21083.3(c), the City Council finds that MM 4.4.5 identified in the General Plan EIR is not applicable to the Project as the Project is not in the vicinity of an airport and, therefore, no mitigation is required of the Project in association with Impact 4.4.5.

4. CUMULATIVE EXPOSURE TO HAZARDS ASSOCIATED WITH FACILITIES UTILIZING HAZARDOUS MATERIALS - IMPACT 4.4.6.

a) Impact: Implementation of the General Plan and the potential development of the Urban Study Areas could result in the exposure of populated areas to accidental incidents and intentional acts at existing and future facilities utilizing hazardous materials. This is considered a less than significant cumulative impact. Impact analysis and discussion of mitigation is located at General Plan Draft EIR pages 4.4-314 through 4.13-35.

b) Mitigation Measures: None required.

c) Finding: Pursuant to Public Resources Code Section 21083.3(b), the City Council finds that the Project is consistent with the General Plan and that the certified General Plan EIR addressed environmental impacts associated with the cumulative exposure to hazards associated with facilities using hazardous materials, including those associated with the Project. There are no effects on the environment related to cumulative exposure to hazards associated with facilities using hazardous materials that are peculiar to the parcel or Project that were not addressed in the General Plan EIR and there is not substantial new information that shows that impacts to cumulative exposure to hazards associated with facilities using hazardous materials will be more significant than described in the General Plan EIR. Pursuant to Public Resources Code Section 21083.3(c), the City Council finds that no mitigation measures were identified in the General Plan EIR for Impact 4.4.6 and, therefore, no mitigation is required of the Project in association with Impact 4.4.6.

5. CUMULATIVE TRAFFIC IMPACTS ON LOCAL ROADWAYS AND STATE HIGHWAYS - IMPACT 4.5.6:

a) Impact: Implementation of the General Plan as well as potential development of the Urban Study Areas would contribute to significant impacts on local roadways

and state highways under cumulative conditions. This is considered a cumulative significant and unavoidable impact. Impact analysis and discussion of mitigation is located at General Plan Draft EIR pages 4.5-86 through 4.5-89.

b) Mitigation Measures: Mitigation Measure 4.5.1.

c) Finding: Pursuant to Public Resources Code Section 21083.3(b), the City Council finds that the Project is consistent with the General Plan and that the certified General Plan EIR addressed environmental impacts associated with local roadways and State highway facilities, including those associated with the Project. As disclosed under Impact 3.12-2, the Project would result in a significant and unavoidable impact on State highway facilities. The General Plan EIR identified that implementation of the General Plan would result in significant and unavoidable impacts to local roadways and State highway facilities. The Project would result in less traffic than anticipated for the Project site in the General Plan EIR. There are no effects on the environment related to cumulative traffic on State highway facilities that are peculiar to the parcel or Project that were not disclosed under Impact 3.12-2 or addressed in the General Plan EIR and there is not substantial new information that shows that impacts to traffic on local roadways and State highways will be significantly different than described in the General Plan EIR. MM 4.5.1 was identified to mitigate this impact and was implemented through revising the General Plan to include Policy CI-2. Pursuant to Public Resources Code Section 21083.3(c), the City Council finds that MM 4.5.1 has been complied with during the City's processing and review of the Project. The City Council further finds that there are no adopted regional plans for the funding or development of regional roadway facilities that provide certainty regarding funding, facility improvements, and timing that the Project Applicant may participate in. Therefore, MM 4.5.1 has been undertaken by the Project to the extent feasible.

6. CUMULATIVE TRANSIT SYSTEM, BICYCLE AND PEDESTRIAN IMPACTS - IMPACT 4.5.7:

a) Impact: Implementation of the General Plan along with potential development of the Urban Study Areas would contribute to a cumulative increase in the demand for transit service as well as bicycle and pedestrian usage. This is a less than significant cumulative impact. Impact analysis and discussion of mitigation is located at General Plan Draft EIR pages 4.5-89 through 4.5-91.

b) Mitigation Measures: None required.

c) Finding: Pursuant to Public Resources Code Section 21083.3(b), the City Council finds that the Project is consistent with the General Plan and that the certified General Plan EIR addressed environmental impacts associated with transit system, bicycle, and pedestrian circulation under cumulative conditions, including those associated with the Project. There are no effects on the environment related to transit system, bicycle, and pedestrian circulation under cumulative conditions that

are peculiar to the parcel or Project that were not addressed in the General Plan EIR and there is not substantial new information that shows that impacts to transit system, bicycle, and pedestrian circulation under cumulative conditions will be more significant than described in the General Plan EIR. Pursuant to Public Resources Code Section 21083.3(c), the City Council finds that no mitigation measures were identified in the General Plan EIR for Impact 4.5.7 and, therefore, no mitigation is required of the Project in association with Impact 4.5.7.

7. CUMULATIVE TRAFFIC NOISE CONFLICTS - IMPACT 4.6.6:

a) Impact: Implementation of the General Plan along with potential development of the Urban Study Areas could result in increased traffic noise conflicts. This is considered a less than significant cumulative impact. Impact analysis and discussion of mitigation is located at General Plan Draft EIR pages 4.6-39 through 4.6-40.

b) Mitigation Measures: None required.

c) Finding: Pursuant to Public Resources Code Section 21083.3(b), the City Council finds that the Project is consistent with the General Plan and that the certified General Plan EIR addressed environmental impacts associated with cumulative traffic noise conflicts, including those associated with the Project. There are no effects on the environment related to cumulative traffic noise conflicts that are peculiar to the parcel or Project that were not addressed in the General Plan EIR and there is not substantial new information that shows that impacts to cumulative traffic noise conflicts will be more significant than described in the General Plan EIR. Pursuant to Public Resources Code Section 21083.3(c), the City Council finds that no mitigation measures were identified in the General Plan EIR for Impact 4.6.6 and, therefore, no mitigation is required of the Project in association with Impact 4.6.6.

8. REGIONAL TRAFFIC NOISE IMPACTS - IMPACT 4.6.8:

a) Impact: Implementation of the General Plan along with potential development of the Urban Study Areas would result in impacts to regional noise attenuation levels. This is considered a cumulative significant and unavoidable impact. Impact analysis and discussion of mitigation is located at General Plan Draft EIR pages 4.6-31 through 4.6-43.

b) Mitigation Measures: None available. (General Plan Draft EIR page 2.0-12)

c) Finding: Pursuant to Public Resources Code Section 21083.3(b), the City Council finds that the Project is consistent with the General Plan and that the certified General Plan EIR addressed environmental impacts associated with regional traffic noise, including those associated with the Project. There are no effects on the environment related to regional traffic noise that are peculiar to the parcel or Project that were not addressed in the General Plan EIR and there is not substantial new information that shows that impacts to regional traffic noise will be more

significant than described in the General Plan EIR. Pursuant to Public Resources Code Section 21083.3(c), the City Council finds that no mitigation measures were adopted in association with the General Plan EIR for Impact 4.6.8 and, therefore, no mitigation is required of the Project in association with Impact 4.6.8.

9. REGIONAL AIR PLAN IMPACTS - IMPACT 4.7.4:

a) Impact: Implementation of the General Plan along with potential development of the Urban Study Areas would exacerbate existing regional problems with ozone and particulate matter. This is considered a cumulative significant and unavoidable impact. Impact analysis and discussion of mitigation is located at General Plan Draft EIR pages 4.7-19 through 4.7-22.

b) Mitigation Measures: General Plan policies CAQ-19 through CAQ-25 and MM 4.7.1. *MM 4.7.1 The City shall require that private and public development projects utilize low emission vehicles and equipment as part of project construction and operation, unless determined to be infeasible.* (General Plan Draft EIR pages 4.7-13 and 4.7-22)

c) Finding: Pursuant to Public Resources Code Section 21083.3(b), the City Council finds that the Project is consistent with the General Plan and that the certified General Plan EIR addressed environmental impacts associated with regional air plan impacts, including those associated with the Project. There are no effects on the environment related to the regional air plans that are peculiar to the parcel or Project that were not addressed in the General Plan EIR and there is not substantial new information that shows that impacts to regional air plans will be more significant than described in the General Plan EIR. Pursuant to Public Resources Code Section 21083.3(c), the City Council finds that mitigation measure 3.2-2 (adopted at Section VI.B.1 of these Findings) will be required of the Project and fulfills the requirements of MM 4.7.1 identified in the General Plan EIR for Impact 4.7.4. The City Council further finds that the Project is required to comply with the General Plan, including those policies that were identified to address Impact 4.7.4 and, as such, the policies and actions identified to address Impact 4.7.4 are required of the Project.

10. CUMULATIVE WATER QUALITY IMPACTS - IMPACT 4.8.6:

a) Impact: Implementation of the General Plan along with the potential development of the Urban Study Areas, could contribute to cumulative water quality impacts. This is considered a cumulative significant. Impact analysis and discussion of mitigation is located at General Plan Draft EIR pages 4.8-55 through 4.8-58.

b) Mitigation Measures: Implementation of the above Policies CAQ-5, CAQ-11, CAQ-12, CAQ-14, CAQ-26, PF-5, and PF-11, and their associated action items, as well as

mitigation measure MM 4.8.3. (General Plan Draft EIR pages 4.8-43, 4.8-44, and 4.8-63)

MM 4.8.3 Future land uses that are anticipated to utilize hazardous materials or waste shall be required to provide adequate containment facilities to ensure that surface water and groundwater resources are protected from accidental releases. This shall include double-containment, levees to contain spills, and monitoring wells for underground storage tanks, as required by local, state and federal standards.

c) Finding: Pursuant to Public Resources Code Section 21083.3(b), the City Council finds that the Project is consistent with the General Plan and that the certified General Plan EIR addressed environmental impacts associated with cumulative water quality, including those associated with the Project. There are no effects on the environment related to cumulative water quality that are peculiar to the parcel or Project that were not addressed in the General Plan EIR and there is not substantial new information that shows that impacts to cumulative water quality will be more significant than described in the General Plan EIR. MM 4.8.3 was identified to mitigate this impact and was implemented by the City through revising the General Plan to include Policy CAQ-16. Pursuant to Public Resources Code Section 21083.3(c), the City Council finds that the Project is consistent with MM 4.8.3 and will not use quantities of hazardous materials or waste that would require containment facilities. The City Council further finds that the Project is required to comply with the General Plan, including those policies that were identified to address Impact 4.8.6 and, as such, the policies and actions identified to address Impact 4.8.6 are required of the Project.

11. CUMULATIVE FLOOD HAZARDS - IMPACT 4.8.7:

a) Impact: Implementation of the General Plan along with potential development of the Urban Study Areas would increase impervious surfaces and alter drainage conditions and rates in the Planning Area, which could contribute to cumulative flood conditions in the Sacramento River, Cosumnes River, and inland creeks. This is considered a cumulative significant impact. Impact analysis and discussion of mitigation is located at General Plan Draft EIR pages 4.8-58 through 4.8-61.

b) Mitigation Measures: General Plan policies CAQ-11, CAQ-12, and SA-11 through SA-22 and their associated action items and MM 4.8.4. (General Plan Draft EIR pages 4.8-46 and 4.8-61)

MM 4.8.4: The City shall require that all new projects not result in new or increased flooding impacts on adjoining parcels on upstream and downstream areas.

c) Finding: Pursuant to Public Resources Code Section 21083.3(b), the City Council finds that the Project is consistent with the General Plan and that the certified General Plan EIR addressed environmental impacts associated with cumulative flood hazards, including those associated with the Project. There are no effects on the

environment related to cumulative flood hazards that are peculiar to the parcel or Project that were not addressed in the General Plan EIR and there is not substantial new information that shows that impacts to cumulative flood hazards will be more significant than described in the General Plan EIR. MM 4.8.4 was identified to mitigate this impact and was implemented by the City through revising the General Plan to include Policy SA-13. Pursuant to Public Resources Code Section 21083.3(c), the City Council finds that the Project is consistent with MM 4.8.4 and would not result in new or increased flooding impacts as described in Section 3.8, Impacts 3.8-4 and 3.8-6, of the Draft EIR). The City Council further finds that the Project is required to comply with the General Plan, including those policies that were identified to address Impact 4.8.7 and, as such, the policies and actions identified to address Impact 4.8.7 are required of the Project.

12. CUMULATIVE WATER SUPPLY IMPACTS - IMPACT 4.8.8:

a) Impact: Implementation of the General Plan along with potential development of the Urban Study Areas, would contribute to an increased demand for water supply requiring increased groundwater production and the use of surface water supplies that could result in significant environmental impacts. This is considered a cumulative significant and unavoidable impact. Impact analysis and discussion of mitigation is located at General Plan Draft EIR pages 4.8-61 through 4.8-63.

b) Mitigation Measures: General Plan policies CAQ-1 and PF-3 with their associated action items, and PF-4 and PF-5 and MM 4.8.5. (General Plan Draft EIR pages 4.8-46 and 4.8-63)

MM 4.8.5: The City shall encourage water supply service providers and County Sanitation District 1 to design water supply and recycled water supply facilities in a manner that avoids and/or minimizes significant environmental effects. The City shall specifically encourage the Sacramento County Water Agency to design well facilities and operation to minimize surface flow effects to the Cosumnes River..

c) Finding: Pursuant to Public Resources Code Section 21083.3(b), the City Council finds that the Project is consistent with the General Plan and that the certified General Plan EIR addressed environmental impacts associated with cumulative water supply, including those associated with the Project. There are no effects on the environment related to cumulative water supply that are peculiar to the parcel or Project that were not addressed in the General Plan EIR and there is not substantial new information that shows that impacts to cumulative water supply will be more significant than described in the General Plan EIR. MM 4.8.4 was identified to mitigate this impact and was implemented by the City through revising the General Plan to include Policy CAQ-15. Pursuant to Public Resources Code Section 21083.3(c), the City Council finds that the MM 4.8.4 does not apply to the Project as the Project is not a water supply provider nor the sanitation district. The City Council further finds that the Project is required to comply with the General

Plan, including those policies that were identified to address Impact 4.8.8 and, as such, the policies and actions identified to address Impact 4.8.8 are required of the Project.

13. SOIL EROSION - IMPACT 4.9.4:

a) Impact: Implementation of the General Plan along with potential development of the Urban Study Areas could contribute to cumulative soil erosion impacts. This is considered a less than significant cumulative impact. Impact analysis and discussion of mitigation is located at General Plan Draft EIR page 4.9-11.

b) Mitigation Measures: None required.

c) Finding: Pursuant to Public Resources Code Section 21083.3(b), the City Council finds that the Project is consistent with the General Plan and that the certified General Plan EIR addressed environmental impacts associated with cumulative soil erosion, including those associated with the Project. There are no effects on the environment related to cumulative soil erosion that are peculiar to the parcel or Project that were not addressed in the General Plan EIR and there is not substantial new information that shows that impacts to cumulative soil erosion will be more significant than described in the General Plan EIR. Pursuant to Public Resources Code Section 21083.3(c), the City Council finds that no mitigation measures were identified in the General Plan EIR for Impact 4.9.4 and, therefore, no mitigation is required of the Project in association with Impact 4.9.4.

14. EXPANSIVE SOILS AND SEISMIC HAZARDS - IMPACT 4.9.5:

a) Impact: Implementation of the General Plan along with potential development of the Urban Study Areas could result in cumulative impacts to expansive soils and seismic hazards. This is considered a less than significant cumulative impact. Impact analysis and discussion of mitigation is located at General Plan Draft EIR page 4.9-12.

b) Mitigation Measures: General Plan Policy SA-23 and MM 4.9.2 (General Plan Draft EIR pages 4.9-10 and 4.9-12)

MM 4.9.2 Require a geotechnical report or other appropriate analysis be conducted that determines the shrink/swell potential and stability of the soil for public and private construction projects and identifies measures necessary to ensure stable soil conditions.

c) Finding: Pursuant to Public Resources Code Section 21083.3(b), the City Council finds that the Project is consistent with the General Plan and that the certified General Plan EIR addressed cumulative environmental impacts associated with expansive soils and seismic hazards, including those associated with the Project. There are no effects on the environment related to cumulative impacts to expansive

soils and seismic hazards that are peculiar to the parcel or Project that were not addressed in the General Plan EIR and there is not substantial new information that shows that cumulative impacts to expansive soils and seismic hazards will be more significant than described in the General Plan EIR. Pursuant to Public Resources Code Section 21083.3(c), the City Council finds that mitigation measure 3.5-3 (adopted at Section VI.E.2 of these Findings) will be required of the Project and fulfills the requirements of MM 4.9.2 identified in the General Plan EIR for Impact 4.9.5. The City Council further finds that the Project is required to comply with the General Plan, including those policies that were identified to address Impact 4.9.5 and, as such, the policies and actions identified to address Impact 4.9.5 are required of the Project.

15. CUMULATIVE BIOLOGICAL RESOURCE IMPACTS - IMPACT 4.10.4:

a) Impact: Implementation of the General Plan along with potential development of the Urban Study Areas would contribute to cumulative impacts associated with significant effects to special-status plant and wildlife species and habitat loss. This would be a cumulative significant impact. Impact analysis and discussion of mitigation is located at General Plan Draft EIR pages 4.10-51 through 4.10-56.

b) Mitigation Measures: MM 4.10.1a , MM 4.10.1b, and MM 4.10.3.

MM 4.10.1a: The City shall seek to preserve areas, where feasible, where special-status plant and animal species and critical habitat areas are known to be present or potentially occurring based on City biological resource mapping and data provided in the General Plan EIR or other technical material that may be adversely affected by public or private development projects. "Special-status" species are generally defined as species considered to be rare, threatened, endangered, or otherwise protected under local, state and/or federal policies, regulations or laws.

MM 4.10.1b: The City shall require a biological resources evaluation for private and public development projects in areas identified to contain or possibly contain special-status plant and animal species based on City biological resource mapping and data provided in the General Plan EIR or other technical material. The biological resources evaluation shall determine the presence/absence of these special-status plant and animal species on the site. The surveys associated with the evaluation shall be conducted during the appropriate seasons for proper identification of the species. Such evaluation will consider the potential for significant impact on special-status plant and animal species, and will identify feasible mitigation measures to mitigate such impacts to the satisfaction of the City and appropriate governmental agencies (e.g., U.S. Fish and Wildlife Service, California Department of Fish and Game and U.S. Army Corps of Engineers) where necessary (e.g., species listed under the State and/or Federal Endangered Species Act). Mitigation measures may include, but are not limited to, the following:

· For special-status plant species: On- or off-site preservation of existing populations from direct and indirect impacts, seed and soil collection or plant transplant that ensures that the plant population is maintained.

· For special-status animal species: avoidance of the species and its habitat as well as the potential provision of habitat buffers, avoidance of the species during nesting or breeding seasons, replacement or restoration of habitat on- or off-site, relocation of the species to another suitable habitat area, payment of mitigation credit fees.

· Participation in a habitat conservation plan.

MM 4.10.3: The City shall require that impacts to riparian areas be mitigated to ensure that no net loss occurs, which may be accomplished by avoidance, revegetation and restoration onsite or creation of riparian habitat offsite.

c) Finding: Pursuant to Public Resources Code Section 21083.3(b), the City Council finds that the Project is consistent with the General Plan and that the certified General Plan EIR addressed environmental impacts associated with population and housing increases, including those associated with the Project. There are no effects on the environment related to population and housing that are peculiar to the parcel or Project that were not addressed in the General Plan EIR and there is not substantial new information that shows that impacts to population and housing increases will be more significant than described in the General Plan EIR. Pursuant to Public Resources Code Section 21083.3(c), the City Council finds that that biological resources evaluations have been performed to identify potential impacts to special-status species and sensitive natural habitats and that mitigation has been required of the Project to protect special-status species and sensitive natural habitats and communities to the extent feasible(see mitigation measures adopted at Section VI.B of these Findings). The Council further finds that the mitigation measures adopted at Section VI.B of these Findings will be required of the Project and fulfills the requirements of MM 4.10.1a, 4.10.1b, and 4.10.3 identified in the General Plan EIR for Impact 4.10.4.

16. CUMULATIVE IMPACTS TO PREHISTORIC AND HISTORIC RESOURCES - IMPACT 4.11.3:

a) Impact: Implementation of the General Plan along with potential development in the Urban Study Areas could contribute to the disturbance of known and undiscovered prehistoric and historic resources in the Elk Grove area. This is considered a less than significant cumulative impact. Impact analysis and discussion of mitigation is located at General Plan Draft EIR pages 4.11-14 through 4.11-15.

b) Mitigation Measures: None required.

c) Finding: Pursuant to Public Resources Code Section 21083.3(b), the City Council finds that the Project is consistent with the General Plan and that the certified General Plan EIR addressed cumulative environmental impacts associated with

historic and prehistoric resources, including those associated with the Project. There are no cumulative effects on the environment related to historic and prehistoric resources that are peculiar to the parcel or Project that were not addressed in the General Plan EIR and there is not substantial new information that shows that impacts to historic and prehistoric resources will be more significant than described in the General Plan EIR. Pursuant to Public Resources Code Section 21083.3(c), the City Council finds that no mitigation measures were identified in the General Plan EIR for Impact 4.11.3 and, therefore, no mitigation is required of the Project in association with Impact 4.11.3.

17. CUMULATIVE IMPACTS TO PALEONTOLOGICAL RESOURCES - IMPACT 4.11.4:

a) *Impact:* Implementation of the General Plan along with potential development of the Urban Study Areas could contribute to the loss of paleontological resources in the Elk Grove area. This is considered a less than significant cumulative impact. Impact analysis and discussion of mitigation is located at General Plan Draft EIR page 4.11-16.

b) *Mitigation Measures:* None required.

c) *Finding:* Pursuant to Public Resources Code Section 21083.3(b), the City Council finds that the Project is consistent with the General Plan and that the certified General Plan EIR addressed cumulative environmental impacts associated with paleontological resources, including those associated with the Project. There are no effects on the environment related to paleontologic resources that are peculiar to the parcel or Project that were not addressed in the General Plan EIR and there is not substantial new information that shows that impacts to paleontologic resources will be more significant than described in the General Plan EIR. Pursuant to Public Resources Code Section 21083.3(c), the City Council finds that no mitigation measures were identified in the General Plan EIR for Impact 4.11.4 and, therefore, no mitigation is required of the Project in association with Impact 4.11.4.

18. CUMULATIVE FIRE PROTECTION AND EMERGENCY MEDICAL SERVICES - IMPACT 4.12.1.2:

a) *Impact:* Implementation of the General Plan along with potential development of the Urban Study Areas would contribute to the cumulative demand for fire protection and emergency medical services. This is considered a less than significant cumulative impact. Impact analysis and discussion of mitigation is located at General Plan Draft EIR pages 4.12-10. through 4.12-12.

b) *Mitigation Measures:* None required.

c) *Finding:* Pursuant to Public Resources Code Section 21083.3(b), the City Council finds that the Project is consistent with the General Plan and that the certified General Plan EIR addressed environmental impacts associated with cumulative demand for fire protection and emergency medical services, including those

associated with the Project. There are no effects on the environment related to cumulative demand for fire protection and emergency medical services that are peculiar to the parcel or Project that were not addressed in the General Plan EIR and there is not substantial new information that shows that cumulative impacts to cumulative demand for fire protection and emergency medical services will be more significant than described in the General Plan EIR. Pursuant to Public Resources Code Section 21083.3(c), the City Council finds that no mitigation measures were identified in the General Plan EIR for Impact 4.12.1.2 and, therefore, no mitigation is required of the Project in association with Impact 4.12.1.2.

19. CUMULATIVE LAW ENFORCEMENT IMPACTS - IMPACT 4.12.2.2:

a) Impact: Implementation of the General Plan along with potential development of the Urban Study Areas would result in the increase of the demand for cumulative law enforcement services. This is considered a less than significant impact. Impact analysis and discussion of mitigation is located at General Plan Draft EIR pages 4.12-16 through 4.12-18.

b) Mitigation Measures: None required.

c) Finding: Pursuant to Public Resources Code Section 21083.3(b), the City Council finds that the Project is consistent with the General Plan and that the certified General Plan EIR addressed cumulative environmental impacts associated with law enforcement, including those associated with the Project. There are no cumulative effects on the environment related to law enforcement that are peculiar to the parcel or Project that were not addressed in the General Plan EIR and there is not substantial new information that shows that impacts to law enforcement increases will be more significant than described in the General Plan EIR. Pursuant to Public Resources Code Section 21083.3(c), the City Council finds that no mitigation measures were identified in the General Plan EIR for Impact 4.12.2.23.1 and, therefore, no mitigation is required of the Project in association with Impact 4.12.2.2.

20. CUMULATIVE PUBLIC SCHOOL IMPACTS - IMPACT 4.12.3.2:

Implementation of the General Plan as well as potential development of the Urban Study Areas, would result in cumulative public school impacts. These cumulative public school impacts are considered less than significant.

a) Impact: Implementation of the General Plan could result in population and housing projections that may exceed the SACOG projections. This is a less than significant impact. Impact analysis and discussion of mitigation is located at General Plan Draft EIR pages 4.12-28 through 4.12-30.

b) Mitigation Measures: None required.

c) *Finding*: Pursuant to Public Resources Code Section 21083.3(b), the City Council finds that the Project is consistent with the General Plan and that the certified General Plan EIR addressed cumulative environmental impacts associated with public schools, including those associated with the Project. There are no effects on the environment related to public schools that are peculiar to the parcel or Project that were not addressed in the General Plan EIR and there is not substantial new information that shows that impacts to public schools will be more significant than described in the General Plan EIR. Pursuant to Public Resources Code Section 21083.3(c), the City Council finds that no mitigation measures were identified in the General Plan EIR for Impact 4.12.3.2 and, therefore, no mitigation is required of the Project in association with Impact 4.12.3.2.

21. CUMULATIVE WASTEWATER DEMANDS - IMPACT 4.12.4.4:

Implementation of the General Plan along with potential development of the Urban Study Areas and growth in the SRCSA service area would result in cumulative wastewater impacts. This is considered a cumulative significant impact.

a) *Impact*: Implementation of the General Plan could result in population and housing projections that may exceed the SACOG projections. This is a less than significant impact. Impact analysis and discussion of mitigation is located at General Plan Draft EIR pages 4.12-45 through 4.12-47.

b) *Mitigation Measures*: General Plan Policies PF-7 through PF-13; no specific mitigation measures identified.

c) *Finding*: Pursuant to Public Resources Code Section 21083.3(b), the City Council finds that the Project is consistent with the General Plan and that the certified General Plan EIR addressed environmental impacts associated with cumulative wastewater demands, including those associated with the Project. There are no effects on the environment related to cumulative wastewater demands that are peculiar to the parcel or Project that were not addressed in the General Plan EIR and there is not substantial new information that shows that impacts to cumulative wastewater demands will be more significant than described in the General Plan EIR. Pursuant to Public Resources Code Section 21083.3(c), the City Council finds that the Project is required to comply with all applicable General Plan policies and actions and that no mitigation measures were identified in the General Plan EIR for Impact 4.12.4.4 and, therefore, no mitigation is required of the Project in association with Impact 4.12.4.4.

22. CUMULATIVE SOLID WASTE IMPACTS - IMPACT 4.12.5.2:

a) *Impact*: Implementation of the General Plan along with potential development of the Urban Study Areas would result in cumulative solid waste impacts. This is considered a less than significant cumulative impact. Impact analysis and discussion of mitigation is located at General Plan Draft EIR pages 4.12-53 through 4.12-54.

b) Mitigation Measures: None required.

c) Finding: Pursuant to Public Resources Code Section 21083.3(b), the City Council finds that the Project is consistent with the General Plan and that the certified General Plan EIR addressed environmental impacts associated with cumulative solid waste, including those associated with the Project. There are no effects on the environment related to cumulative solid waste that are peculiar to the parcel or Project that were not addressed in the General Plan EIR and there is not substantial new information that shows that impacts to solid waste will be more significant than described in the General Plan EIR. Pursuant to Public Resources Code Section 21083.3(c), the City Council finds that no mitigation measures were identified in the General Plan EIR for Impact 4.12.5.2 and, therefore, no mitigation is required of the Project in association with Impact 4.12.5.2.

23. CUMULATIVE PARK AND RECREATION DEMANDS - IMPACT 4.12.6.2:

a) Impact: Implementation of the General Plan along with potential development of the Urban Study Areas would result in cumulative park and recreation impacts. These cumulative impacts are considered less the significant. Impact analysis and discussion of mitigation is located at General Plan Draft EIR pages 4.12-63 through 4.12-66.

b) Mitigation Measures: None required.

c) Finding: Pursuant to Public Resources Code Section 21083.3(b), the City Council finds that the Project is consistent with the General Plan and that the certified General Plan EIR addressed cumulative environmental impacts associated with parks and recreation, including those associated with the Project. There are no cumulative effects on the environment related to parks and recreation that are peculiar to the parcel or Project that were not addressed in the General Plan EIR and there is not substantial new information that shows that impacts to parks and recreation will be more significant than described in the General Plan EIR. Pursuant to Public Resources Code Section 21083.3(c), the City Council finds that no mitigation measures were identified in the General Plan EIR for Impact 4.12.6.2 and, therefore, no mitigation is required of the Project in association with Impact 4.12.6.2.

24. CUMULATIVE ELECTRICAL, TELEPHONE AND NATURAL GAS IMPACTS - IMPACT 4.12.7.3:

a) Impact: Implementation of the General Plan along with potential development in the Urban Study Areas would result in cumulative electric, telephone and natural gas service impacts. These are considered less than significant cumulative impacts. Impact analysis and discussion of mitigation is located at General Plan Draft EIR pages 4.12-74 through 4.12-75.

b) Mitigation Measures: None required.

c) Finding: Pursuant to Public Resources Code Section 21083.3(b), the City Council finds that the Project is consistent with the General Plan and that the certified General Plan EIR addressed cumulative environmental impacts associated with electrical, telephone, and natural gas services and facilities, including those associated with the Project. There are no cumulative effects on the environment related to electrical, telephone, and natural gas services and facilities that are peculiar to the parcel or Project that were not addressed in the General Plan EIR and there is not substantial new information that shows that cumulative impacts to electrical, telephone, and natural gas services and facilities will be more significant than described in the General Plan EIR. Pursuant to Public Resources Code Section 21083.3(c), the City Council finds that no mitigation measures were identified in the General Plan EIR for Impact 4.12.7.3 and, therefore, no mitigation is required of the Project in association with Impact 4.12.7.3.

25. CUMULATIVE IMPACTS TO VISUAL RESOURCES - IMPACT 4.13.4:

a) Impact: Implementation of the General Plan along with potential development of the Urban Study Areas would result in the further conversion of the region's rural landscape to residential, commercial, and other land uses. This would contribute to the alteration of the visual resources in the region. This is considered a cumulative significant impact. Impact analysis and discussion of mitigation is located at General Plan Draft EIR pages 4.13-8 through 4.13-10.

b) Mitigation Measures: General Plan Policies CAQ-8 and LU-34 and associated action items and MM 4.13.2 and MM 4.13.3.

MM 4.13.2 The Design Guidelines shall include a provision to minimize the use of reflective materials in building design in order to reduce the potential impacts of daytime glare. (General Plan Draft EIR 4.13-7)

MM 4.13.3 The Citywide Design Guidelines shall include provisions for the design of outdoor light fixtures to be directed/shielded downward and screened to avoid adverse nighttime lighting spillover effects on adjacent land uses and nighttime sky glow conditions. (General Plan Draft EIR 4.13-8)

c) Finding: Pursuant to Public Resources Code Section 21083.3(b), the City Council finds that the Project is consistent with the General Plan and that the certified General Plan EIR addressed environmental impacts associated with population and housing increases, including those associated with the Project. There are no effects on the environment related to population and housing that are peculiar to the parcel or Project that were not addressed in the General Plan EIR and there is not substantial new information that shows that impacts to population and housing increases will be more significant than described in the General Plan EIR. Pursuant to Public Resources Code Section 21083.3(c), the City Council finds that mitigation measures 3.1-1, 3.1-2, and 3.1-3 (adopted at Section VI.A.12 of these Findings) will

be required of the Project and fulfill the requirements of MM 4.13.2 and 4.13.3 identified in the General Plan EIR for Impact 4.13.4. The City Council further finds that the Project is required to comply with the General Plan, including those policies that were identified to address Impact 4.13.4 and, as such, the policies and actions identified to address Impact 4.13.4 are required of the Project.

IMPACTS PECULIAR TO THE PROJECT OR PROJECT SITE

The City finds that the policies and actions referenced in the General Plan EIR in Sections 4.1 through 4.13 were incorporated into the General Plan or were included in a subsequent policy document, such as the Design Guidelines, and as such are applied to and required of the Project. These are applied to the Project as uniform standards applicable to all projects in the City. Application of these adopted General Plan policies and actions as discussed in Sections 3.1 through 4.0 of the Silverado Village Draft EIR serve to substantially mitigate effects peculiar to the Project, including those impacts described above in Section VIII, based upon the substantial evidence provided by the General Plan EIR, and those impacts described in Sections V, VI, and VII of these findings based on the substantial evidence provided for the discussion and analysis of each impact in the Draft EIR as referenced in Sections V, VI, and VII.

IX. PROJECT ALTERNATIVES

The State CEQA Guidelines Section 15126.6 mandates that every EIR evaluate a no-project alternative, plus a feasible and reasonable range of alternatives to the Project or its location. The alternatives were formulated considering the project objectives outlined on page 5.0-1 of the Draft EIR. The alternatives analysis in Chapter 5.0 of the Draft EIR provides a comparative analysis of the alternatives to the Project, including comparison of potential to result in significant impacts and significant and unavoidable impacts, for the consideration of reasonable feasible options for minimizing environmental consequences of a project.

As explained below, these findings describe and reject, for reasons documented in the EIR and summarized below, each one of the Project alternatives, and the City finds that approval and implementation of the Silverado Village Project is appropriate. The evidence supporting these findings is presented in Chapter 5.0 of the Draft EIR.

Public Resources Code §21002 provides that “public agencies should not approve projects as proposed if there are feasible alternatives or feasible mitigation measures available which would substantially lessen the significant environmental effects of such projects[.]” Where a lead agency has determined that, even after the adoption of all feasible mitigation measures, a project as proposed will still cause one or more significant environmental effect that cannot be substantially lessened or avoided, the agency, prior to approving the project as mitigated, must first determine whether, with respect to such impacts, there are any feasible project alternatives that are both environmentally superior and feasible within the meaning of CEQA. Although an EIR must evaluate this range of potentially feasible alternatives, an agency decision-making body may ultimately conclude that a potentially feasible alternative is actually infeasible. (*City of Santa Cruz, supra*, 177 Cal.App.4th at p. 981, 999.) The failure of an alternative to fully satisfy project objectives determined to be important by decision-makers, or the fact that an alternative fails to promote

policy objectives of concern to such decision-makers, are grounds for finding an alternative to be infeasible. (*Id.* at pp. 992, 1000-1003.) Thus, even if a Project alternative will avoid or substantially lessen any of the significant environmental effects of the Project as mitigated, the decision-makers may reject the alternative for such reasons.

Under CEQA, where a significant impact can be substantially lessened (i.e., mitigated to an "acceptable level") solely by the adoption of mitigation measures, the agency, in drafting its findings, has no obligation to consider the feasibility of alternatives with respect to that impact, even if an alternative would mitigate the impact to a greater degree than the proposed project. (Pub. Resources Code, § 21002; *Laurel Hills Homeowners Association v. City Council* (1978) 83 Cal.App.3d 515, 521 (*Laurel Hills*); see also *Kings County Farm Bureau v. City of Hanford* (1990) 221 Cal.App.3d 692, 730-731; and *Laurel Heights Improvement Association v. Regents of the University of California* (1988) 47 Cal.3d 376, 400-403.) Specifically, the CEQA Guidelines provide that "[t]he discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly." (CEQA Guidelines, § 15126.6(a).) When a lead agency has determined that certain effects on the environment of a project are not significant, the lead agency does not need to discuss those impacts in detail within the *environmental impact report*. (Pub. Resources Code, § 21100.) Therefore, like mitigation measures, a lead agency is not required to consider the feasibility of implementing an alternative to a project unless the alternative will avoid or substantially lessen a significant impact. (CEQA Guidelines, § 15126.4(a)(3) [mitigation measures are not required for effects which are not found to be significant]; CEQA Guidelines, § 15126.6(a) [alternatives must focus on significant impacts of the Project and the ability of the alternative to avoid or substantially lessen such impacts].)

Under CEQA Guidelines §15126.6(a), the alternatives to be discussed in detail in an EIR should be able to "feasibly attain most of the basic objectives of the project[.]" For this reason, the objectives described above in subsection A below *provide the framework for defining possible alternatives*. The selection of alternatives analyzed in the EIR took into account the Project objectives, and primary consideration was given to alternatives that would reduce the Project's significant impacts that could not be mitigated to a level of less than significant while still meeting most of the basic Project objectives. Based on these objectives, the City developed three alternatives that it addressed in detail in the EIR, and another two alternatives that were considered but were not addressed in further detail.

Pursuant to the requirements of CEQA Guidelines §15126.6, and in light of the Project objectives, the following alternatives to the Project were identified:

- Alternative 1 - No Project Alternative,
- Alternative 2 - Reduced Density and Reconfigured Project Alternative, and
- Alternative 3 - Reconfigured Project Alternative.

The City Council finds that that a good faith effort was made to evaluate a range of potentially feasible alternatives in the EIR that are reasonable alternatives to the Project and could feasibly obtain most of the basic objectives, even when the alternatives might impede the attainment of some of the Project objectives and might be more costly. (CEQA Guidelines §15126.6(b).) As a result, the scope of alternatives analyzed in the EIR is reasonable. (See, e.g., Draft EIR, pp. 5.0-1 to 5.0-12)

A. IDENTIFICATION OF PROJECT OBJECTIVES

As described above, an EIR is required to identify a “range of potential alternatives to the project shall include those that could feasibly accomplish most of the basic purposes of the project and could avoid or substantially lessen one of more of the significant effects.” The alternatives to the Project selected for analysis in the EIR were developed to minimize significant environmental impacts while fulfilling the basic objectives of the Project. As described in Chapter 2, Project Description, the City has identified the following objectives for the Project:

- Create a high-quality residential development that is consistent with the General Plan;
- Provide a residential development that would assist the City in meeting its housing needs, including a range of housing types to serve the senior population;
- Emphasize preservation of open space and sensitive habitats;
- Implement the City’s Trail System Master Plan through providing an on-site trails network that is accessible by the general public and provides opportunities for connectivity with future trails on adjacent property; and
- Create a dual purpose stormwater/open space area.

The Project applicant, Vintara Holdings LLC/Silverado Homes, has submitted the following project objectives for the Silverado Village project.

- Consistency with the General Plan;
- Compatibility with adjacent neighborhoods;
- Respect the Project site’s existing natural features; and
- Creation of a unique age-restricted community that provides a mix of housing types and amenities, including the village core, club house, and swim facility.

B. ALTERNATIVES ANALYSIS IN EIR

1. NO PROJECT ALTERNATIVE:

The No Project Alternative is discussed on pages 5.0-3, 5.0-5, 5.0-6, and 5.0-7 of the Draft EIR. The No Project Alternative is the continuation of the existing current condition, which is an undeveloped site that has grassland vegetation and wetland, vernal pool, and riparian habitat areas, on the

Project site. Under this alternative, no Project entitlements would be granted and the Project would not be constructed and operated. The environmental impacts associated with the Project described in Sections 3.1 through 4.0 of the EIR would not occur. As a result, the No Project Alternative would be environmentally superior to the Project.

Findings: The No Project Alternative is rejected as an alternative because it would not achieve the Project's objectives.

Explanation: This alternative would not realize the benefits of the Project nor achieve the Project objectives. The General Plan and Trail System Master Plan would not be implemented. The City has identified the Project site for rural residential, low density residential, and commercial/office/multi-family uses and the residential development that would assist the City in meeting its housing needs would not be constructed. The 68.1-acre wetland preserve would not be created and there would be no permanent protection of open space and habitats. The No Project Alternative would result in fewer significant environmental impacts than the Project, but would fail to meet any of the identified Project objectives.

2. REDUCED DENSITY AND RECONFIGURED PROJECT ALTERNATIVE:

The Reduced Density and Reconfigured Project Alternative is discussed on pages 5.0-3, 5.0-4, and 5.0-7 through 5.0-9 of the Draft EIR. This alternative includes the construction and operation of 111 single-family lots, 100 patio homes, and the Village 3 independent, assisted, and/or memory-care multifamily lodge and clubhouse, as described in greater detail in Chapter 5.0. Under this alternative, the residential lots would not be clustered and the wetland preserve would be removed; wetland, riparian, creek, vernal pool, and drainage features would be preserved through permanent preservation easements on the individual lots created under this Alternative. The residential lots would be larger to accommodate the easements.

As described in Chapter 5.0 of the Draft EIR, this alternative would reduce environmental impacts associated with aesthetics, biological resources, air quality, biological resources, cultural resources, geology and soils, greenhouse gas emissions and climate change, hazards and hazardous materials, hydrology and water quality, noise, and transportation and circulation in comparison to the Project.

Findings: The Reduced Density and Reconfigured Project Alternative is rejected as an alternative because it fails to meet several of the Project's objectives.

Explanation: This alternative would not provide a high-quality residential development consistent with the General Plan. The General Plan designated the Project site for Rural Residential, Low Density Residential, and Commercial/Office/Multifamily uses would be far less than what was planned for the site in the General Plan, which plans for a minimum of 606 units (80 acres x 0.1 dwelling units per acre plus 146 acres x 4.1 dwelling units per acre plus 4 acres x 0 dwelling units per acre) and a maximum of xx units (80 units x 0.5 dwelling units per acre plus 146 units x 7 dwelling units per acre plus 4 acres x 30 dwelling units per acre). While this alternative would result in a reduction in environmental impacts as described in Chapter 5.0 of the Draft EIR, it would not implement the vision of the General Plan for the Project site.

While this Project would provide a mix of housing types, due to the reduction in the number of residential units, this alternative is significantly inferior to the Project in regards to the objective associated with creating a high-quality residential development would assist the City in meeting its housing needs. While this alternative would provide for housing, it would provide significantly less housing than the Project and would not provide as much of a benefit as the Project in meeting the projected housing needs of the City. The City has been assigned a regional housing needs allocation (RHNA) of 7,402 units by the Sacramento Area Council of Governments for the 2013-2021 planning period. The Project would significantly assist the City in meeting its housing needs while this alternative would meet fewer housing needs. However, if fewer housing units were constructed in association with this alternative, the City's remaining housing needs would need to be accommodated elsewhere in the City. As such, this alternative could divert projected growth to another location in the region or away from the City's planned urban footprint, which could create inefficiencies and additional environmental impacts.

While this alternative would result in the preservation of the sensitive natural community (Northern Hardpan Valley Hardpan Vernal Pool) that is associated with the wetland, vernal pool, and riparian features spread throughout the Project site and would avoid the significant and unavoidable impact that the Project would have on this natural community, this alternative would not achieve the Project objective of implementing the Trail System Master Plan as the north-south trail location, and potentially the east-west trail, identified in the Trail System Master Plan would require disturbance of wetland, vernal pool, drainage, and/or riparian features on the Project site.

Therefore, while this alternative would result in reduced environmental impacts, it would not achieve primary Project objectives that include implementing two of the City's long-term planning documents, the General Plan and the Trail System Master Plan.

CEQA requires that an environmentally superior alternative be identified among the alternatives that are analyzed in the EIR. If the No Project Alternative is the environmentally superior alternative, an EIR must also identify an environmentally superior alternative among the other alternatives (CEQA Guidelines Section 15126.6(e)(2)). The environmentally superior alternative is that alternative with the least adverse environmental impacts when compared to the proposed project.

As discussed in Chapter 5.0 of the Draft EIR and summarized in Table 5.0-1 of the Draft EIR, the No Project Alternative is the environmentally superior alternative. However, as required by CEQA, when the No Project Alternative is the environmentally superior alternative, the environmentally superior alternative among the others must be identified. Therefore, the Reduced Density and Reconfigured Project Alternative is the next environmentally superior alternative to the proposed Project.

As discussed above, the Reconfigured Project and Reduced Density Alternative would fail to meet three of the City's five objectives for this Project. The Project is superior to this

alternative in terms of assisting the City in meeting its housing needs. The Project would be consistent with and implement the General Plan and Trails System Master Plan while this alternative would not implement either of these long-term planning documents. The range of housing types associated with the Project will serve a broader range of the public. The trail system proposed by the Project provides a public benefit in terms of recreation opportunities for the public. For these social and other benefits, the Project is deemed superior to the Reconfigured Project and Reduced Density Alternative.

3. RECONFIGURED PROJECT ALTERNATIVE:

The Reconfigured Project Alternative is discussed on pages 5.0-4 and 5.0-9 through 5.0-11 of the Draft EIR. The Reconfigured Project Alternative has the same unit count and proposed uses as the Project, but would reconfigure residential uses in the southwestern area of the Project site to reduce potential impacts to trees of local importance. Under this alternative, seven of the lots adjacent Quail Ranch Estates would be relocated to Lot F in order to provide an easement for the protection of existing trees along the western boundary of the Project site from Bond Road to Lot I.

Findings: The Reconfigured Project Alternative is rejected because it will not result in significant benefits in comparison to the Project and could introduce nuisances.

Explanation: This alternative would meet the objectives for the Project. As described in Chapter 5.0 of the Draft EIR, this alternative would not avoid or reduce either of the significant and unavoidable impacts associated with the Project. This alternative would reduce potential impacts to trees protected by the Tree Preservation and Protection Chapter of the Municipal Code. However, in avoiding impacts to trees, this alternative would introduce a potential nuisance by placing a public access corridor behind the Quail Ranch Estate lots that border the Project and behind the residential uses in Village 1-A. There would not be any residential lots fronting this corridor and it would have minimal visibility from public viewpoints. This alternative has minimal environmental benefits in comparison to the Project as discussed in Chapter 5.0 of the Draft EIR and the environmental benefit associated with this alternative is not offset by the potential nuisance that could be created by the public access corridor.

For these economic, social, and other considerations, the Project is deemed superior to the Reconfigured Project Alternative.

X. STATEMENTS OF OVERRIDING CONSIDERATIONS RELATED TO THE PROJECT FINDINGS

As described in Section III of these Findings, the following significant and unavoidable impacts could occur with implementation of the Project:

- **Impact 3.3-8:** Potential to have a substantial adverse effect on riparian habitat or other sensitive natural community, specifically Northern Hardpan Valley Hardpan Vernal Pool, identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.

- Impact 3.12-2: Potential to conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system: State highway facilities.

The City Council has balanced the benefits of the Project against its unavoidable environmental risks in determining whether to approve the Project, and has determined that the benefits of the Project outweigh the unavoidable adverse environmental effects. The reasons set forth below are based on the EIR and other information in the record. As set forth in the preceding sections, approving the Project will result in several significant adverse environmental effects that cannot be reduced to a less-than-significant level, even with the adoption of all feasible mitigation measures. As determined above, however, there are no additional feasible mitigation measures, nor are there feasible alternatives, that would mitigate or substantially lessen the impacts to a less-than-significant level. Therefore, despite these significant environmental effects, the City Council, in accordance with Public Resources Code Sections 21001, 21002.1(c), 21081(b) and CEQA Guidelines Section 15093, chooses to approve the Project because, in its judgment, the following economic, social, and other benefits that the Project will produce will render the significant effects acceptable.

Substantial evidence supporting the benefits cited in this Statement of Overriding Considerations can be found in the preceding findings, which are incorporated by reference into this section, and in the documents found in the record of proceedings, as defined in Section IV, above. Any one of the following reasons is sufficient to demonstrate that the benefits of the Project outweigh its unavoidable adverse environmental effects, thereby justifying approval of the Project.

- A. **Housing Needs and RHNA Obligations.** The Silverado Village Project serves the objective to assist in meeting the City's housing needs allocated by SACOG and providing a variety of housing types, by providing a range of housing types (single family, small lot single family patio homes, and multi-family uses) and serving both general and senior populations.
- B. **Multi-generational Community.** Silverado Village will provide an inclusive multigenerational approach to residential development by including neighborhoods oriented toward families and the general public and a community oriented toward seniors. The senior community will be provided for with a range of options from patio housing for mobile, active seniors to a multi-family lodge that will provide on-site services for seniors that may require assistance with living, whether it be some type of health care, assistance with transportation to shopping, or other needs.
- C. **Adequate Recreation Facilities.** The Project would provide expanded opportunities for parks and recreation activities in the City by providing two park sites (6.1 acres) and a 3.1-acre multi-use trail system that provides for connectivity to planned trails on adjacent lands. These facilities would assist in meeting the parks and recreation needs of the City and the proposed multi-use trails would serve the surrounding community as well as the Project. The Project would provide parks and recreation facilities to residents of the City and the surrounding areas free of charge. Development of the Project would expand the availability of free and low-cost recreational activities within the community.

- D. **Road and Pedestrian/Bicycle Connectivity.** Silverado Village will include pedestrian and bicycle facilities, including sidewalks, bicycle lanes, and a multi-use trail system, that implement the City's Trails Master Plan and Bicycle and Pedestrian Master Plan.
- E. **Opportunities for Improved Public Health.** The Project would allow for the expansion of parks and recreation uses and would include a multi-use trail that would encourage pedestrian and bicycle activities. Participation in outdoor recreation provides opportunities of improved health, welfare, happiness and overall well-being. It may also result in long-term savings related to health care costs related to obesity.
- F. **Environmental Benefits.** By clustering residential development to avoid sensitive natural resources and open space, the Project would permanently preserve 93.7 acres of open space, including the 68.1-acre wetland preservation area. The wetland preservation area will provide opportunities for community education regarding the importance of wetland resources.

Based on the entire record and the EIR, the social and other benefits of the Project outweigh and override any significant unavoidable environmental effects that would result from future Project implementation. The City Council has determined that any environmental detriment caused by the Project has been minimized to the extent feasible through the mitigation measures identified herein, and, where mitigation is not feasible, has been outweighed and counterbalanced by the significant social, environmental, and other benefits of the Project to the City.

XI. SUMMARY

A. Based on the foregoing Findings and the information contained in the record, the City Council has made one or more of the following Findings with respect to each of the significant environmental effects of the Project:

1. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant environmental effects identified in the EIR.
2. To the extent that such changes or alterations are within the responsibility and jurisdiction of another public agency and not the City, those changes or alterations have been, or can and should be, adopted by that other agency.
3. Specific economic, legal, social, technological, or other considerations, including considerations for the provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or alternatives identified in the environmental impact report.

B. Based on the foregoing Findings and the information contained in the record, it is determined that:

1. All significant effects on the environment due to the approval of the Project have been eliminated or substantially lessened where feasible; and

2. Any remaining significant effects on the environment found to be unavoidable are acceptable due to the factors described in the Statement of Overriding Considerations in Section X, above.

EXHIBIT D

MITIGATION MONITORING AND REPORTING PROGRAM

INTRODUCTION

The California Environmental Quality Act (CEQA) Guidelines, Section 15091(d), requires public agencies, as part of the certification of an environmental impact report, to adopt a reporting and monitoring program to ensure that changes made to the project as conditions of project approval to mitigate or avoid significant environmental effects are implemented. The Mitigation Monitoring and Reporting Program (MMRP) contained herein are intended to satisfy the requirements of CEQA as they relate to the Silverado Village Project (Project) in the City of Elk Grove (City). The MMRP is intended to be used by City staff, Project applicant, Project contractors, and mitigation monitoring personnel during implementation of the Project.

The MMRP will provide for monitoring of construction activities as necessary in-the-field identification and resolution of environmental concerns, and reporting to City staff. The MMRP will consist of the components described below.

COMPLIANCE CHECKLIST

Table 1 contains a compliance-monitoring checklist that identifies all adopted mitigation measures, identification of agencies responsible for enforcement and monitoring, and timing of implementation.

FIELD MONITORING OF MITIGATION MEASURE IMPLEMENTATION

During construction of the Project, the City of Elk Grove's designated construction inspector will be responsible for monitoring the implementation of mitigation measures. The inspector will report to the City of Elk Grove Department of Public Works, and will be thoroughly familiar with all plans and requirements of the project. In addition, the inspector will be familiar with construction contract requirements, construction schedules, standard construction practices, and mitigation techniques. Aided by Table 1, the inspector will typically be responsible for the following activities:

1. On-site, day to day monitoring of construction activities;
2. Reviewing construction plans to ensure conformance with adopted mitigation measures;
3. Ensuring contractor knowledge of and compliance with all appropriate conditions of project approval;
4. Evaluating the adequacy of construction impact mitigation measures, and proposing improvements to the contractors and City staff;
5. Requiring correction of activities that violate project mitigation measures, or that represent unsafe or dangerous conditions. The inspector shall have the ability and authority to secure compliance with the conditions or standards through the City of Elk Grove Public Works Department, if necessary;
6. Acting in the role of contact for property owners or any other affected persons who wish to register observations of violations of project mitigation measures, or unsafe or dangerous conditions. Upon

MITIGATION MONITORING AND REPORTING PROGRAM

receiving any complaints, the inspector shall immediately contact the construction representative. The inspector shall be responsible for verifying any such observations and for developing any necessary corrective actions in consultation with the construction representative and the City of Elk Grove Public Works Department;

7. Maintaining prompt and regular communication with City staff;
8. Obtaining assistance as necessary from technical experts, such as archaeologists and wildlife biologists, to develop site-specific procedures for implementing the mitigation measures adopted by the City for the project. For example, it may be necessary at times for a wildlife biologist to work in the field with the inspector and construction contractor to explicitly identify and mark areas to be avoided during construction; and
9. Maintaining a log of all significant interactions, violations of permit conditions or mitigation measures, and necessary corrective measures.

PLAN CHECK

Many mitigation measures will be monitored via plan check during Project implementation. City staff will be responsible for monitoring plan check mitigation measures.

TABLE 1: MITIGATION MONITORING AND REPORTING PROGRAM

MITIGATION MEASURE	TIMING/IMPLEMENTATION	ENFORCEMENT/ MONITORING	VERIFICATION OF COMPLIANCE
<p><i>Mitigation Measure 3.1-1 Outdoor lighting shall be designed so that light is not directed off the site and the light source is shielded downward from overhead viewing and from direct off-site viewing. Light spill and glare shall not exceed 0.1 foot-candle on adjacent properties. These requirements shall be shown on the master home plans for the single family units and the project improvement plans for the multifamily, clubhouse, and parks facilities.</i></p>	<p>Prior to issuance of building permits</p>	<p>City of Elk Grove Planning Department</p>	
<p><i>Mitigation Measure 3.1-2 Street light fixtures shall use low-pressure sodium lamps or other similar lighting fixture and shall be installed and shielded in such a manner that no light rays are emitted from the fixture at angles above the horizontal plane. High-intensity discharge lamps shall be prohibited. Offsite illumination shall not exceed two-foot candles. Street lighting plans shall be submitted with project improvement plans for City review and approval.</i></p>	<p>Prior to approval of facility improvement plans for project roadways</p>	<p>City of Elk Grove Planning Department</p>	
<p><i>Mitigation Measure 3.1-3 Exterior building materials on multifamily and nonresidential structures shall be composed of at least 50 percent low-reflectance non-polished surfaces. All bare metallic surfaces shall be painted with flat finishes to reduce reflected glare.</i></p>	<p>Prior to issuance of building permits</p>	<p>City of Elk Grove Planning Department</p>	
<p><i>Mitigation Measure 3.2-1: To reduce construction-related emissions, the Project Applicant shall implement the following SMAQMD Basic Construction Emissions Control Measures:</i></p> <ul style="list-style-type: none"> • <i>The following practices are required to control fugitive dust from a construction site. Control of fugitive dust is required by SMAQMD Rule 403 and enforced by SMAQMD staff.</i> <ul style="list-style-type: none"> ○ <i>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.</i> ○ <i>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</i> 	<p>Throughout all grading and construction activities</p>	<p>City of Elk Grove Planning Department/Sacramento Metropolitan Air Quality Management District</p>	

MITIGATION MONITORING AND REPORTING PROGRAM

MITIGATION MEASURE	TIMING/IMPLEMENTATION	ENFORCEMENT/ MONITORING	VERIFICATION OF COMPLIANCE
<p><i>major roadways should be covered.</i></p> <ul style="list-style-type: none"> ○ <i>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.</i> ○ <i>Limit vehicle speeds on unpaved roads to 15 miles per hour (mph).</i> ○ <i>All roadways, driveways, sidewalks, and 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.</i> ● <i>The following practices are required for exhaust emission control for 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.</i> <ul style="list-style-type: none"> ○ <i>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.</i> ● <i>Inspect and maintain equipment to ensure work and fuel efficiencies.</i> <ul style="list-style-type: none"> ○ <i>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.</i> 			
<p><i>Mitigation Measure 3.2-2: To reduce construction-related emissions, the Project Applicant shall implement the following SMAQMD Enhanced Emission Control Measures:</i></p> <ul style="list-style-type: none"> ● <i>The Project Applicant shall provide a plan for approval by the City of Elk Grove and SMAQMD demonstrating that the heavy-duty (50</i> 	<p>Submittal of plan and inventory prior to issuance of grading permits and/or approval of improvement plans. Adherence to measures throughout all grading and</p>	<p>City of Elk Grove Planning Department/Sacramento Metropolitan Air</p>	

MITIGATION MEASURE	TIMING/IMPLEMENTATION	ENFORCEMENT/ MONITORING	VERIFICATION OF COMPLIANCE
<p><i>horsepower [hp] or more) off-road vehicles to be used in the construction project, including owned, leased, and subcontractor vehicles, will achieve a project wide fleet-average 20% NOX reduction and 45% particulate reduction compared to the most recent California Air Resources Board (ARB) fleet average. Acceptable options for reducing emissions may include use of late model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, and/or other options as they become available. The SMAQMD's Construction Mitigation Calculator can be used to identify an equipment fleet that achieves this reduction.</i></p> <ul style="list-style-type: none"> • <i>The Project Applicant shall submit to the City of Elk Grove and SMAQMD a comprehensive inventory of all off-road construction equipment, equal to or greater than 50 horsepower, that will be used an aggregate of 40 or more hours during any portion of the construction project. The inventory shall include the horsepower rating, engine model year, and projected hours of use for each piece of equipment. The inventory shall be updated and submitted monthly throughout the duration of the project, except that an inventory shall not be required for any 30-day period in which no construction activity occurs. At least 48 hours prior to the use of subject heavy-duty off-road equipment, the project representative shall provide the SMAQMD with the anticipated construction timeline including start date, and name and phone number of the project manager and on-site foreman. The SMAQMD's Model Equipment List can be used to submit this information.</i> • <i>The Project Applicant shall ensure that emissions from all off-road diesel powered equipment used on the project site do not exceed 40% opacity for more than three minutes in any one hour. Any equipment found to exceed 40 percent opacity (or Ringelmann 2.0) shall be repaired immediately. Non-compliant equipment will be documented and a summary provided to the lead agency and SMAQMD monthly. A visual survey of all in-operation equipment shall be made at least weekly, and a monthly summary of the</i> 	<p>construction activities</p>	<p>Quality Management District</p>	

MITIGATION MONITORING AND REPORTING PROGRAM

MITIGATION MEASURE	TIMING/IMPLEMENTATION	ENFORCEMENT/ MONITORING	VERIFICATION OF COMPLIANCE
<p><i>visual survey results shall be submitted throughout the duration of the project, except that the monthly summary shall not be required for any 30-day period in which no construction activity occurs. The monthly summary shall include the quantity and type of vehicles surveyed as well as the dates of each survey. The SMAQMD and/or other officials may conduct periodic site inspections to determine compliance. Nothing in this section shall supersede other SMAQMD, state or federal rules or regulations.</i></p> <ul style="list-style-type: none"> <i>If at the time of construction, the SMAQMD has adopted a regulation applicable to construction emissions, compliance with the regulation may completely or partially replace this mitigation. Consultation with the SMAQMD prior to construction will be necessary to make this determination.</i> 			
<p><i>Mitigation Measure 3.3-1: The Project Applicant shall comply with the Terms and Conditions, Reporting Requirements, and Conservation Recommendations in accordance with the USFWS Incidental Take Statement issued for the Project.</i></p>	<p>As specified in the permit and throughout all earthmoving and construction activities</p>	<p>City of Elk Grove Planning Department</p>	
<p><i>Mitigation Measure 3.3-2: Within 30 days prior to the start of any construction activity, a qualified biologist shall conduct a burrow survey to determine if burrowing owls are present within the Project site. If burrowing owls are observed on the site, measures such as flagging the burrow and avoiding disturbance, passive relocation, or active relocation to move owls from the site, shall be implemented to ensure that no owls or active burrows are inadvertently buried during construction. All measures shall be determined by a qualified biologist and approved by the CDFW.</i></p> <p><i>All burrowing owl surveys shall be conducted according to CDFW protocol. The protocol requires, at a minimum, four field surveys of the entire site and areas within 500 feet of the site by walking transects close enough that the entire site is visible. The survey should be at least three hours in length, either from one hour before sunrise to two hours after or two hours before sunset to one hour after. Surveys shall not be conducted during inclement weather, when burrowing owls are</i></p>	<p>Prior to issuance of grading permits or approval of improvement plans, whichever occurs first</p>	<p>City of Elk Grove Planning Department</p>	

MITIGATION MEASURE	TIMING/IMPLEMENTATION	ENFORCEMENT/ MONITORING	VERIFICATION OF COMPLIANCE
<p><i>typically less active and visible.</i></p>			
<p><i>Mitigation Measure 3.3-3: If Project construction activities, including vegetation clearing, are to occur during the nesting season for birds protected under the California Fish and Game Code and Migratory Bird Treaty Act (approximately March 1-August 31) the Project Applicant shall retain a qualified biologist to perform preconstruction surveys for protected birds, including nesting raptors, on the Project site and in the immediate vicinity. At least two surveys shall be conducted no more than 15 days prior to the initiation of construction activities, including vegetation clearing. In the event that protected birds, including nesting raptors, are found on the Project site, offsite improvement corridors, or the immediate vicinity, the Project applicant shall:</i></p> <ul style="list-style-type: none"> • <i>Locate and map the location of the nest site. Within 2 working days of the surveys prepare a report and submit to the City and CDFW;</i> • <i>A no-disturbance buffer of 250 feet shall be established;</i> • <i>On-going weekly surveys shall be conducted to ensure that the no disturbance buffer is maintained. Construction can resume when a qualified biologist has confirmed that the birds have fledged.</i> <p><i>In the event of destruction of a nest with eggs, or if a juvenile or adult raptor should become stranded from the nest, injured or killed, the qualified biologist shall immediately notify the CDFW. The qualified biologist shall coordinate with the CDFW to have the injured raptor either transferred to a raptor recovery center or, in the case of mortality, transfer it to the CDFW within 48 hours of notification. If directed/authorized by the CDFW during the notification, the qualified biologist may transfer the injured raptors to a raptor recovery center.</i></p>	<p>Prior to issuance of grading permits or approval of improvement plans, whichever occurs first</p>	<p>City of Elk Grove Planning Department</p>	
<p><i>Mitigation Measure 3.3-4: Prior to the commencement of construction activities, the Project Applicant shall provide the City of Elk Grove with evidence that the Project is in compliance with the requirements of the City of Elk Grove Swainson's Hawk Chapter 16.130 of the Elk Grove Municipal Code. Compliance will require the Project Applicant to preserve 126.39 acres of suitable habitat. The suitability of the habitat</i></p>	<p>Prior to issuance of grading permits or approval of improvement plans, whichever occurs first</p>	<p>City of Elk Grove Planning Department</p>	

MITIGATION MONITORING AND REPORTING PROGRAM

MITIGATION MEASURE	TIMING/IMPLEMENTATION	ENFORCEMENT/ MONITORING	VERIFICATION OF COMPLIANCE
<p><i>for preservation purposes shall be determined by the CDFW in coordination with the City of Elk Grove. The proposed open space and nature preservation area located within the Project site may be utilized for a portion of the 126.39 acres if approved by the CDFW.</i></p>			
<p><i>Mitigation Measure 3.3-5: If construction activities are planned to begin during the Swainson's hawk nesting period (March 1 to September 15), a preconstruction survey and nesting season surveys for nesting Swainson's hawks shall be conducted throughout areas of suitable nesting habitat on the parcel and adjacent areas within 500 feet of the Project site. The pre-construction surveys shall be completed prior to the start of construction activities. The nesting season surveys shall be conducted once in April and once in May. If an active Swainson's hawk nest is observed, the biologist shall notify the City of Elk Grove and consult with the CDFW to determine whether project-related activities are likely to impact the nesting pair and to determine the appropriate protection measures to implement, which may include halting or postponing land clearing and construction activities until all young have fledged and additional nesting attempts no longer occur. If a nest tree is found on the Project site prior to construction and is proposed for removal, then appropriate permits from CDFW shall be obtained and mitigation implemented pursuant to CDFW guidelines.</i></p> <ul style="list-style-type: none"> • <i>Prior to issuance of building or grading permits, the Project Applicant shall provide Development Services, Planning Department written verification that a qualified biologist has been retained by the Project Applicant to perform the preconstruction survey. This action may be waived if the biologist will be contracted by the City at the Project Applicant's expense.</i> • <i>No earlier than 30 days before commencement of construction activities, including land clearing, the qualified biologist shall submit and certify to the Planning Director the results of the pre-construction survey. Failure to submit the required survey results will delay the approval to initiate construction activities, including land clearing.</i> 	<p>Prior to issuance of grading permits or approval of improvement plans, whichever occurs first</p>	<p>City of Elk Grove Planning Department</p>	

MITIGATION MEASURE	TIMING/IMPLEMENTATION	ENFORCEMENT/ MONITORING	VERIFICATION OF COMPLIANCE
<ul style="list-style-type: none"> No later than April 30, the qualified biologist shall submit and certify to the Planning Director the results of the 500-foot site perimeter survey conducted in April. Failure to submit the required survey results will cause any construction activity to be halted until such results are submitted and approved by the Planning Director. If no construction activities have taken place, failure to submit the required survey results will delay the approval to initiate construction activities, including land clearing. <p>No later than May 31, the qualified biologist shall submit and certify to the Planning Director the results of the 500-foot site perimeter survey conducted in May. Failure to submit the required survey results will cause any construction activity to be halted until such results are submitted and approved by the Planning Director. If no construction activities have taken place, failure to submit the required survey results will delay the approval to initiate construction activities, including land clearing.</p>			
<p>Mitigation Measure 3.3-6: Up to thirty days prior to the any disturbance activities, including but not limited to the commencement of construction and/or removal of trees on or adjacent to the Project site, the Project Applicant shall retain a qualified biologist to conduct pre-construction bat survey(s) of potential diurnal roosting trees (e.g. trees 24" DBH and greater, snags, hollow trees). During the survey(s) the qualified biologist will inspect all potential diurnal roosting trees within the entire area(s) where construction will and within a surrounding 100 foot-buffer area using the appropriate and most effective methodology (e.g. camera inspection, exit survey with night optics, acoustic survey) in determining presence or absence of bat species.</p> <p>If active roosts are found, no construction activities shall take place within 250 feet of the nest until the young have fledged. On-going weekly surveys shall be conducted to ensure that the no disturbance buffer is maintained. Construction can resume when a qualified biologist has confirmed that the young bats have fledged.</p>	<p>Prior to issuance of grading permits or approval of improvement plans, whichever occurs first</p>	<p>City of Elk Grove Planning Department</p>	

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<i>MITIGATION MEASURE</i>	<i>TIMING/IMPLEMENTATION</i>	<i>ENFORCEMENT/ MONITORING</i>	<i>VERIFICATION OF COMPLIANCE</i>
<p><i>Mitigation Measure 3.3-7. Prior to the commencement of grading, the Project Applicant shall coordinate with the CNPS to ensure efforts are made to salvage portions of the habitat or plant populations of Dwarf downingia and Legenere that will be lost as a result of implementation of the Project. This shall include relocation/transplanting the plants and/or seed bank that would be affected by the Project to areas proposed for wetland creation or another appropriate area for either re-establishment after construction is complete or for planting.</i></p>	<p>Prior to issuance of grading permits or approval of improvement plans, whichever occurs first</p>	<p>City of Elk Grove Planning Department</p>	
<p><i>Mitigation Measure 3.3-8: Up to thirty days prior to any ground disturbance activities, the Project Applicant shall retain a qualified botanist to conduct confirmation plant survey(s) for Peruvian dodder, Slender Orcutt grass, and Sanford's arrowhead. These plants have not been observed on the Project site through previous surveys; however, appropriate habitat for these species is present. If the confirmation survey(s) reveal the presence of these plants, then the qualified botanist shall notify the City of Elk Grove and the appropriate regulatory agency with jurisdiction over the plant. If the confirmation survey(s) reveal the presence of these plants, mitigation measures shall be implemented to reduce potential impacts to the extent feasible. Mitigation shall include relocation/transplanting the plants and/or seed bank that would be affected by the Project to areas proposed for wetland creation or another appropriate area for either re-establishment after construction is complete or for planting. If the confirmation survey(s) do not reveal the presence of these plants, then the Project Applicant is free to move forward with ground disturbance activities, subject to all permits and other Project mitigation requirements.</i></p>	<p>Prior to issuance of grading permits or approval of improvement plans, whichever occurs first</p>		
<p><i>Mitigation Measure 3.3-9 Prior to any construction activities, the Project Applicant shall ensure that the Section 404 permit issued by the USACE, Section 401 Water Quality Certification issued by the RWQCB, and the Section 1602 Streambed Alteration Agreement issued by the CDFW are valid and active. If any of the above mentioned regulatory permits are deemed invalid or inactive by the issuing regulatory agency then the</i></p>	<p>Prior to issuance of grading permits or approval of improvement plans, whichever occurs first</p>	<p>City of Elk Grove Planning Department</p>	

MITIGATION MEASURE	TIMING/IMPLEMENTATION	ENFORCEMENT/ MONITORING	VERIFICATION OF COMPLIANCE
<p><i>Project Applicant shall coordinate with the regulatory agency to receive updated permits and approvals to ensure that all Project activities are authorized under their respective regulations.</i></p>			
<p><i>Mitigation Measure 3.3-10 The Project Applicant shall comply with the requirements and recommendations in accordance with the Section 404 Permit issued by the USACE, the Section 401 Water Quality Certification issued by the RWQCB, and the Section 1602 Streambed Alteration Agreement issued by the CDFW for the Project.</i></p>	<p>Prior to issuance of grading permits or approval of improvement plans, whichever occurs first</p>	<p>City of Elk Grove Planning Department</p>	
<p><i>Mitigation Measure 3.3-11 Prior to any construction activities that would result in the removal of a protected tree as defined by the City of Elk Grove Tree Preservation and Protection Chapter, the Project Applicant shall:</i></p> <ul style="list-style-type: none"> • <i>Develop a detailed tree preservation plan for trees to be retained.</i> • <i>For trees to be preserved, the goal of project design should be to avoid grading, compaction, trenching, vehicle traffic, material storage or any other disturbance in the protection zones of the trees.</i> • <i>Under the direct supervision of an ISA Certified Arborist, install the CMU wall on pier footings as opposed to a continuous footing where the construction of the proposed CMU wall will occur within tree protection zones. A steel beam, plate, or equivalent can span over tree roots (Figure 8.6) so that the wall “floats” over the soil. Dig all pier locations by hand to a depth of 3 feet and move piers as necessary to avoid roots larger than one inch in diameter.</i> • <i>Prior to construction, conduct a meeting between the Arborist, all contractors, subcontractors, and project managers to discuss tree preservation guidelines.</i> • <i>Prior to any construction activity on site, identify trees to be preserved and install tree protection fencing in a circle centered at the tree trunk with a radius equal to the maximum drip line radius or as far from the trunk as possible where structures are located.</i> 	<p>Prior to issuance of grading permits or approval of improvement plans, whichever occurs first</p>	<p>City of Elk Grove Planning Department</p>	

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MITIGATION MEASURE	TIMING/IMPLEMENTATION	ENFORCEMENT/ MONITORING	VERIFICATION OF COMPLIANCE
<p><i>This fenced area is defined as the tree protection zone.</i></p> <ul style="list-style-type: none"> • <i>Tree protection fences should be made of chain link with posts sunk into the ground. These fences should not be removed or moved until construction is complete. No soil or above ground disturbance shall occur within the fenced area. No soil, material storage, spoil, waste or washout water shall be deposited within the fenced areas.</i> • <i>Any work that is to occur within the protection zones of the trees should be monitored by the Consulting Arborist.</i> • <i>If injury should occur to any tree during construction, the Consulting Arborist should be consulted as soon as possible so that appropriate treatments can be applied.</i> • <i>Any pruning required for construction or recommended in this report should be performed by an ISA Certified Arborist or Tree Worker.</i> • <i>All trees on the property should be irrigated every other week during the spring, summer, and fall months to a depth of at least two feet under the trees' canopies.</i> 			
<p><i>Mitigation Measure 3.3-12 Prior to the removal of any trees, the Project Applicant shall compensate for the direct loss of protected trees as defined in the City of Elk Grove Tree Preservation and Protection Chapter at a ratio of 1 inch planted for every inch lost, or the equivalent credit obtained from a tree mitigation bank.</i></p>	<p>Prior to issuance of grading permits or approval of improvement plans, whichever occurs first</p>	<p>City of Elk Grove Planning Department</p>	
<p><i>Mitigation Measure 3.4-1: When site grading or earthwork begins, the route of the redwood stave pipe and any related pipeline shall be exposed and mapped. The feature shall be completely photographed and documented with a form filed with the North Central Information Center.</i></p> <p><i>The Elk Grove Historical Society shall be provided with a copy of the photographs and documentation of the pipeline. The Elk Grove Historical Society shall be consulted as to whether it wishes to obtain a</i></p>	<p>As a condition of Project approval and implemented during all ground-disturbing activities</p>	<p>City of Elk Grove Planning Department</p>	

MITIGATION MEASURE	TIMING/IMPLEMENTATION	ENFORCEMENT/ MONITORING	VERIFICATION OF COMPLIANCE
<p><i>pipe segment for display. If the Elk Grove Historical Society identifies that it would like to have a segment of the pipe, the Applicant shall deliver a segment to the Elk Grove Historical Society.</i></p> <p><i>Following completion of consultation with the Elk Grove Historical Society and documentation of the pipeline, the remaining pipeline may be removed from the Project site.</i></p>			
<p><i>Mitigation Measure 3.4-2: If any cultural resources, including prehistoric or historic artifacts, or other indications of archaeological resources, or human remains are found during grading and construction activities, all work shall be halted immediately within a 200-foot radius of the discovery.</i></p> <ul style="list-style-type: none"> <i>- If cultural resources are identified, an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards in prehistoric or historical archaeology, as appropriate, shall be consulted to evaluate the find(s). Work cannot continue at the discovery site until the archaeologist conducts sufficient research and data collection to make a determination that the resource is either 1) not cultural in origin; or 2) not potentially significant or eligible for listing on the NRHP or CRHR.</i> <i>- If a potentially eligible resource is encountered, then the archaeologist shall identify mitigation recommendations. The City and Project Applicant shall consider the recommendations and the Project Applicant shall implement all measures deemed feasible and appropriate. Such measures may include avoidance, preservation in place, excavation, documentation, curation, data recovery, and other appropriate measures. The implementation of mitigation shall be formally documented in writing and submitted to the City Planning Department as verification that the provisions in CEQA for managing unanticipated discoveries have been met.</i> <i>- If Native American resources are identified, a Native American monitor, following the Guidelines for Monitors/Consultants of Native American Cultural, Religious, and Burial Sites established by the Native American Heritage Commission, may also be</i> 	<p>As a condition of Project approval and implemented during all ground-disturbing activities</p>	<p>City of Elk Grove Planning Department</p>	

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MITIGATION MEASURE	TIMING/IMPLEMENTATION	ENFORCEMENT/ MONITORING	VERIFICATION OF COMPLIANCE
<p><i>required and, if required, shall be retained at the Applicant's expense.</i></p> <ul style="list-style-type: none"> - <i>If human remains are discovered, all work shall be halted immediately within 200 feet of the discovery, the County Coroner must be notified, according to Section 5097.98 of the State Public Resources Code and Section 7050.5 of California's Health and Safety Code. If the remains are determined to be Native American, the coroner will notify the Native American Heritage Commission, and the procedures outlined in CEQA Section 15064.5(d) and (e) shall be followed.</i> 			
<p><i>Mitigation Measure 3.5-1: The Project Applicant shall submit a Notice of Intent (NOI) and Storm Water Pollution Prevention Plan (SWPPP) to the RWQCB in accordance with the NPDES General Construction Permit requirements. The SWPPP shall be designed to control pollutant discharges utilizing Best Management Practices (BMPs) and technology to reduce erosion and sediments. BMPs may consist of a wide variety of measures taken to reduce pollutants in stormwater runoff from the Project site. Measures shall include temporary erosion control measures (such as silt fences, staked straw bales/wattles, silt/sediment basins and traps, check dams, geofabric, sandbag dikes, and temporary revegetation or other ground cover) that will be employed to control erosion from disturbed areas. Final selection of BMPs will be subject to approval by the City of Elk Grove and the RWQCB. The SWPPP will be kept on site during construction activity and will be made available upon request to representatives of the RWQCB.</i></p>	<p>Prior to issuance of grading permits.</p>	<p>City of Elk Grove Public Works Department</p>	
<p><i>Mitigation Measure 3.5-2: The Project Applicant shall prepare and submit a Post-Construction Stormwater Quality Control Plan in accordance with the most recent version of the Stormwater Quality Design Manual for the Sacramento Region. Post-construction source and treatment controls shall be designed in accordance with the City of Elk Grove Improvement Standards and the Stormwater Quality Design Manual. The design of post-construction source and treatment controls shall be</i></p>	<p>Prior to issuance of grading permits or approval of improvement plans, whichever occurs first</p>	<p>City of Elk Grove Public Works Department</p>	

MITIGATION MEASURE	TIMING/IMPLEMENTATION	ENFORCEMENT/ MONITORING	VERIFICATION OF COMPLIANCE
<p><i>submitted for approval with the improvement plans regardless of whether they constitute private or public improvements.</i></p> <p><i>Drainage from all paved surfaces, including streets, parking lots, driveways, and roofs shall be routed either through water quality treatment ponds, swales, buffer strips, or sand filters or treated with a filtering system prior to discharge off-site to the storm drain system. Landscaping shall be designed to effect some treatment, along with the use of a Stormwater Management filter to permanently sequester hydrocarbons, if necessary. Permeable pavers and pavement shall be utilized to construct the facilities, where appropriate.</i></p> <p><i>A separate maintenance manual describing proper maintenance practices for the specific treatment controls to be constructed shall also be submitted. If the maintenance manual needs revisions, Applicant shall make the requested revisions in a timely manner.</i></p>			
<p><i>Mitigation Measure 3.5-3: A certified geotechnical engineer shall be retained to perform a geotechnical engineering evaluation of the grading and foundation plans for the Silverado Village Project. The geotechnical report shall identify measures as necessary to address bearing capacity, liquefaction, lateral spreading, expansive soils, and subsidence, and to ensure stable soil conditions. The grading and improvement plans, as well as the building plans shall be designed in accordance with the recommendations provided in the geotechnical evaluation. The Project Applicant shall adhere to the recommendations provided in the geotechnical engineering report.</i></p>	<p>Prior to issuance of grading permits and/or approval of improvement plans, whichever occurs first</p>	<p>City of Elk Grove Public Works Department</p>	
<p><i>Mitigation Measure 3.5-4: If a septic system is planned for installation at the 5.5-acre park site, the ability of the soils to accommodate a septic system shall be evaluated by a licensed engineer. If the soils do not have the capacity to adequately percolate and absorb septic tank waste, any restroom facilities on the park site shall be connected to the public sewer system or restroom facilities shall be prohibited.</i></p>	<p>Prior to issuance of grading permits and/or approval of improvement plans for the park site, whichever occurs first</p>	<p>City of Elk Grove Public Works Department</p>	

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<i>MITIGATION MEASURE</i>	<i>TIMING/IMPLEMENTATION</i>	<i>ENFORCEMENT/ MONITORING</i>	<i>VERIFICATION OF COMPLIANCE</i>
<p><i>Mitigation Measure 3.6-1: Prior to the issuance of building permits, the Project shall demonstrate compliance with the Climate Action Plan, including, but not limited to, mandatory measures BE-6, BE-10, RC-1, RC-2, TACM-5, and TACM-12.</i></p> <p><i>The Project Applicant shall consider incorporating additional recommended GHG Reduction Measures. The Project Applicant shall provide reasons/justification, in the form of a written letter, for any recommended GHG Reduction Measures (BE-7 and BE-9), that are not incorporated into the Project. This does not apply to the mandatory measures, which must be incorporated.</i></p>	<p>Prior to issuance of building permits</p>	<p>City of Elk Grove Planning Department</p>	
<p><i>Mitigation Measure 3.7-1: All abandoned wells on the Project site shall be destroyed in accordance with the requirements of the Sacramento County Environmental Health Division.</i></p>	<p>Prior to issuance of grading permits and/or approval of improvement plans</p>	<p>City of Elk Grove Public Works Department</p>	
<p><i>Mitigation Measure 3.7-2: If at any time during construction an existing septic system is encountered, the system shall be removed and destroyed in accordance with the requirements of the Sacramento County Environmental Health Division.</i></p>	<p>As a condition of Project approval and implemented during all ground-disturbing activities</p>	<p>City of Elk Grove Public Works Department</p>	
<p><i>Mitigation Measure 3.7-3: If at any time during construction, soil staining, soil odors, or potentially hazardous non-soil artifacts are encountered, the Applicant shall cease construction in the vicinity of the discovery. The Applicant shall have a licensed geotechnical engineer evaluate the soil conditions and, if potentially hazardous conditions exist, submit recommendations to the City of Elk Grove Public Works Department to address potentially hazardous conditions. Upon acceptance of recommendations by the City, the Applicant shall implement recommendations.</i></p>	<p>As a condition of Project approval and implemented during all ground-disturbing activities</p>	<p>City of Elk Grove Public Works Department</p>	
<p><i>Mitigation Measure 3.8-1: Prior to approval of grading and improvement plans for the lots in Village 1-A that are served by the Bond Road Trunk Drainage System, the Project Applicant shall enter into an agreement with the City to fund the fair-share cost for the incremental increase in the Bond Road Trunk Drainage system that needed to accommodate</i></p>	<p>Prior to issuance of grading permits and/or approval of improvement plans for the lots in Village 1-A that are served by the Bond Road Trunk</p>	<p>City of Elk Grove Public Works Department</p>	

MITIGATION MEASURE	TIMING/IMPLEMENTATION	ENFORCEMENT/ MONITORING	VERIFICATION OF COMPLIANCE
<p><i>the Project. The incremental increase shall be calculated based on any additional amount above the previously identified upsizing required for the Bond Road Trunk Drainage System in the City's Master Drainage Plan. The agreement shall identify the timing for the drainage system improvements and shall require that no building permits be issued for the Lots in Village 1-A that are served by the Bond Road Trunk Drainage System Improvements until such improvements have been completed.</i></p>	<p>Drainage System</p>		
<p><i>Mitigation Measure 3.10-1: Development plans for the Project shall include the following noise attenuation features:</i></p> <ul style="list-style-type: none"> • <i>A uniform 7-foot tall noise barrier should be constructed along the south property lines of all proposed residential uses adjacent to Bond Road to reduce future traffic noise levels to 60 dB Ldn or less within proposed backyards. The barrier shall have an earthen berm base and the upper portion shall be constructed of solid materials, such as a masonry wall and shall wrap at the ends as indicated in the Project Draft EIR Figure 3.10-1. Landscaping, such as dense hedges or bushes, shall be planted in front of the soundwall to minimize unbroken views of the soundwall. A uniform 6-foot tall noise barrier shall be constructed along the eastern property lines of Waterman Road to reduce future traffic noise levels to 60 dB Ldn or less at proposed backyard areas located adjacent to that roadway. The barrier shall be constructed of solid materials, such as a masonry wall, earthen berm, or combination of the two, and shall wrap at the ends as indicated in Figure 3.10-1.</i> 	<p>Prior to issuance of building permits</p>	<p>City of Elk Grove Planning Department</p>	
<p><i>Mitigation Measure 3.10-2: Development plans for the Project shall include the following noise attenuation features:</i></p> <ul style="list-style-type: none"> • <i>Air conditioning shall be included in all residences constructed in the Silverado Village development to allow occupants to close doors and windows as desired to achieve additional acoustic isolation from traffic noise in the project vicinity.</i> 	<p>Prior to issuance of building permits</p>	<p>City of Elk Grove Planning Department</p>	

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<i>MITIGATION MEASURE</i>	<i>TIMING/IMPLEMENTATION</i>	<i>ENFORCEMENT/ MONITORING</i>	<i>VERIFICATION OF COMPLIANCE</i>
<p><i>All second floor windows within 162 feet of Bond Road shall have a minimum STC rating of 30.</i></p>			
<p><i>Mitigation Measure 3.10-3: The following measures shall be followed throughout all phases of construction that are within 250 feet of existing residences:</i></p> <p><i>Construction equipment shall be well maintained and used judiciously to be as quiet as practical. Equip all internal combustion engine-driven equipment with mufflers, which are in good condition and appropriate for the equipment.</i></p> <p><i>Use "quiet" models of air compressors and other stationary noise sources where technology exists.</i></p> <p><i>Locate stationary noise-generating equipment and construction staging areas a minimum of 100 feet from sensitive receptors, including neighboring residential uses, when sensitive receptors adjoin or are near a construction area.</i></p> <ul style="list-style-type: none"> • <i>Construction activity within 150 feet of residential uses shall be limited to the hours of 7 a.m. to 7 p.m. whenever such activity is adjacent to residential uses.</i> <p><i>Limit idling of internal combustion engines to no more than 5 minutes.</i></p>	<p align="center">Throughout all construction and earthmoving activities</p>	<p align="center">City of Elk Grove Planning Department</p>	

**CERTIFICATION
ELK GROVE CITY COUNCIL RESOLUTION NO. 2014-139**

STATE OF CALIFORNIA)
COUNTY OF SACRAMENTO) **ss**
CITY OF ELK GROVE)


I, Jason Lindgren, City Clerk of the City of Elk Grove, California, do hereby certify that the foregoing resolution was duly introduced, approved, and adopted by the City Council of the City of Elk Grove at a regular meeting of said Council held on June 25, 2014 by the following vote:

AYES : COUNCILMEMBERS: Davis, Cooper, Detrick, Hume, Trigg

NOES: COUNCILMEMBERS: None

ABSTAIN : COUNCILMEMBERS: None

ABSENT: COUNCILMEMBERS: None


**Jason Lindgren, City Clerk
City of Elk Grove, California**