Item 7 attachment 2
ISMND

INITIAL STUDY/
MITIGATED NEGATIVE DECLARATION FOR:

THE GROVE
A PROPOSED RESIDENTIAL SUBDIVISION

DECEMBER 22, 2016

Prepared for Submittal to:

Town of Loomis
3665 Taylor Road
Loomis, CA 95650

Prepared by:

De Novo Planning Group
1020 Suncast Lane, Suite 106
El Dorado Hills, CA 95762

De Novo Planning Group

A Land Use Planning, Design, and Environmental Firm

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INTRODUCTION

PROJECT TITLE

The Grove

LEAD AGENCY NAME AND ADDRESS

Town of Loomis
3665 Taylor Road
P.O. Box 1330
Loomis, CA 95650

CONTACT PERSON AND PHONE NUMBER

Robert King, Town Planner
Town of Loomis Planning Department
(916) 652-1840

PROJECT SPONSOR'S NAME AND ADDRESS

Mandarich Developments
4740 Rocklin Road
Rocklin, CA 95677
(916) 824-0810

PURPOSE OF THE INITIAL STUDY

An Initial Study (IS) is a preliminary analysis which is prepared to determine the relative environmental impacts associated with a proposed project. It is designed as a measuring mechanism to determine if a project will have a significant adverse effect on the environment, thereby triggering the need to prepare an Environmental Impact Report (EIR). It also functions as an evidentiary document containing information which supports conclusions that the project will not have a significant environmental impact or that the impacts can be mitigated to a "Less Than Significant" or "No Impact" level. If there is no substantial evidence, in light of the whole record before the agency, that the project may have a significant effect on the environment, the lead agency shall prepare a Negative Declaration (ND). If the IS identifies potentially significant effects, but: (1) revisions in the project plans or proposals would avoid the effects or mitigate the effects to a point where clearly no significant effects would occur, and (2) there is no substantial evidence, in light of the whole record before the agency, that the project as revised may have a significant effect on the environment, then a Mitigated Negative Declaration (MND) shall be prepared.

This Initial Study has been prepared consistent with CEQA Guidelines Section 15063, to determine if the proposed The Grove subdivision may have a significant effect upon the environment. Based upon the findings and mitigation measures contained within this report, a Mitigated Negative Declaration (MND) will be prepared.

PROJECT DESCRIPTION

PROJECT SUMMARY

The Grove (proposed project) would subdivide a 9.98-acre parcel into 26 lots, including 22 residential lots, one park lot, one stormwater detention basin lot, and two landscaping/entry corridor lots. The Grove is located southwest of the intersection of Humphrey Road and No Name Lane in the Town of Loomis (APN 044-021-008).

BACKGROUND

In 2005, Dunmore Homes originally submitted Tentative Map Application #01-14 to divide the proposed project site into 31 single family lots. An IS/MND was prepared and circulated in 2006 and the application was heard by the Town of Loomis Planning Commission on July 25, 2006, where the Planning Commission continued the project in order for certain issues to be resolved by staff. Subsequently, the application was withdrawn.

On May 20, 2016, Mandarich Developments submitted a new application to the Town to divide the project site into 26 lots, including 22 single family residential lots, a park lot, a stormwater detention basin lot, and two landscaping lots. The project applicant is working with the California State Department of Toxic Substance Control (DTSC) to remediate on-site soil contamination, as described in this Project Description and in Section VIII (Hazards and Hazardous Materials).

Improvements associated with the lots of the Ridgeview Subdivision, Unit 2, located directly south of the project site have encroached onto the project site by several feet. The project applicant has offered to convey the area of conflict to the adjacent property owners to resolve any potential boundary line disputes.

PROJECT LOCATION AND SETTING

PROJECT LOCATION

The project site (Assessor Parcel Number 044-021-008) is located within the boundary of the Town of Loomis, in western Placer County. The project site encompasses approximately 9.98 acres on the southwest corner of the intersection of Humphrey Road and No Name Lane, at 3342 Humphrey Road.

The project's regional location is shown in Figure 1 and the project boundary is shown in Figure 2.

EXISTING SITE CONDITIONS

The project site is an undeveloped lot, located on the eastern boundary of California's Central Valley, in the lower western Sierra Nevada foothills. The project site slopes slightly down to the west, with the site elevation ranging from 374 feet in the eastern area of the site to 358 feet in the western area of the site. The project site is covered by ruderal grasses, and 19 trees are dispersed through the site, primarily within the central and northern portions. The project site supports a seasonal wetland of 0.016 acre in the northwestern corner of the site, two seasonal wetland swales totaling 0.279 acre along the northern and southern property boundaries, and one seasonal pond of 0.054 acre in the northwestern corner of the site. Large portions of the project site are currently fenced off from the adjacent roadways and residences.

While the project site is currently undeveloped, the site historically supported a residence, pear orchards, and limited cattle grazing. The pear orchard was removed in 1961 and all structures on the site were removed in 2003.

A Phase I Environmental Site Assessment (Youngdahl, 2003a) and subsequent investigations (Youngdahl, 2003b, Earthec Ltd, 2004) identified elevated levels of lead, arsenic, and dichlorodiphenyltrichloroethane (DDT), dichlorodiphenyldichloroethylene (DDE), and dichlorodiphenyldichloroethane (DDD), collectively referred to as compounds of concern (COC) on the project site. The COC are likely associated with pesticide use on the property when it was in use as an orchard prior to 1960. A draft Removal Action Workplan (RAW) has been prepared in coordination with the California Department of Toxic Substance Control (DTSC) to address the removal and remediation of contaminated soils.

SURROUNDING LAND USES

The project site is located in an area predominantly made up of other residential land uses. Humphrey Road, a two-lane roadway, borders the project site to the east and No Name Lane, a private gravel road, borders the project site to the north. The lands directly to the south and east of the project site consist of single family residential uses. Rural residential uses are located west of the project site. Public/institutional uses (H. Clarke Powers Elementary School) are located north of the project site. All adjacent land uses are located within the town boundary. The Town of Loomis boundary line is located just to the north of H. Clarke Powers Elementary School.

GENERAL PLAN AND ZONING DESIGNATIONS

The land is designated Residential Medium Density by the Loomis General Plan (Town of Loomis, 2001). This designation allows development of single-family residences in the range of two to six dwelling units per acre, at a height of up to 30 feet, at no more than 2 stories. The minimum parcel size is determined by the Zoning Ordinance.

The General Plan also identifies the project site as an area with special land use concerns. The General Plan identifies a policy that specifically addresses the project site, within Land Use and Community Development, Section G, Policy 6. Policy 6 specifies that any project developed on the project site shall distribute the allowed density of two to six dwelling units per acre with lower density at the edges of the parcel. In addition, the policy states that any proposed subdivision shall demonstrate special attention to potential flooding and drainage issues, and shall be designed to create no greater volume of stormwater runoff to downstream properties after development.

Parcels adjacent to the project site on the south and east share the same Residential Medium Density designation. The property to the north is designated as Public-Quasi Public and the properties to the west are designated Residential Agricultural (maximum density of 1 dwelling unit per 4.6 acres).

The project site is zoned RS-10a (Single-Family Residential - 10,000 square feet (sf) minimum) which allows single family residential uses with a maximum density of 4.3 lots per acre and an average minimum lot size of 10,000 sf. The RS-10a district allows lots less than 10,000 sf, provided that the average lot size for all the parcels in the subdivision is at least 10,000 sf. The minimum lot width is 60 feet and the minimum lot depth is 100 feet. Maximum site coverage is 30%. As stated in the Zoning Ordinance (Town of Loomis, 2016), the RS zone district is applied to areas appropriate for neighborhoods of single-family homes. Other allowable uses include mobile homes and second units.

The Town of Loomis zoning designations for adjacent properties to the south and east is RS-10 (Single Family Residential with a minimum lot size of 10,000 sf), to the west is RA (Residential Agricultural), and to the north is PI (Public/Institutional).

PROJECT CHARACTERISTICS

The proposed project would convert the existing undeveloped site to a residential subdivision. The Project Applicant proposes to develop the 9.98-acre parcel located with The Grove, a single family subdivision. The proposed project includes 22 single family lots with a 12,444 sf average lot size.

The Vesting Tentative Subdivision Map would divide the project site into 26 lots:

- 22 single family residential lots with a minimum lot of size of 11,871 sf, a maximum lot size of 15,066 sf, an average lot size of 12,444 sf, and an average gross density of 2.2 dwelling units per acre;
- Two landscaping lots (Lots A and B), 5,720 sf and 6,896 sf, respectively;
- A 12,171 sf park lot located within the central portion of the site (Lot C); and
- A 22,206 sf storm water detention basin lot (Lot D).

Figure 3 shows the proposed project site plan, as shown on the Lotting Plan of the Tentative Subdivision Map. Six lots, including the park lot, are proposed to be clustered within the interior of the site, with the remaining lots occurring around the perimeter of the project site.

FENCING

A minimum of six-foot high fencing is proposed around the periphery of the project site. A six-foot stucco wall with veneer and stone accents would separate the northern portion of the project site from No Name Lane and would also separate the eastern residential lots from the landscaping and sidewalk along Humphrey Road. Lot D will be fenced with a six-foot steel tubular fence. The residential lots along the southern and western boundaries of the project site, except for Lot D, will have a six-foot high wood fence, which will be on top of a masonry retaining wall in some areas.

SITE ACCESS

There are no existing roads onsite. Access to the project site would be provided by Humphrey Road, which runs along the eastern edge of the site. Humphrey Road intersects King Road with a stop-sign approximately 1,500 feet south of the project site. King Road is a major east-west roadway through the northern portion of the Town of Loomis.

The proposed project would access Humphrey Road via Grove Circle, a 50-foot wide access road, located across from the existing Mimosa Court. Grove Circle will be a two-way looped public road, with widths of 18 feet per lane, 3 feet of curb and gutter, and sidewalk on each side of the roadway, providing for total street section width of 50 feet. The project may include a detached sidewalk with a planter separating the sidewalk from the curb and gutter in some areas of Grove Circle. The proposed project would include the provision of curb, gutter, and sidewalk along the western side of Humphrey Road adjacent to the project site. Additionally, 20 feet of ROW dedication would be provided along No Name Road.

PUBLIC SERVICES AND UTILITIES

Public services and utilities (water, sewer, storm drainage, natural gas, and electric) and telecommunication infrastructure would be extended to serve the proposed project.

Water and Sewer

Water Supply would be provided by Placer County Water Agency (PCWA) and sewer service would be provided by South Placer Municipal Utility District (SPMUD). The existing water supply infrastructure is an eight-inch water main, and the existing sewer infrastructure is a six-inch main, both located in the Humphrey Road right-of-way (ROW). The project would connect to existing utilities and services located in the Humphrey Road ROW. Connecting to the water and wastewater infrastructure along Humphrey Road would require removing existing pavement on Humphrey Road, trenching to and through the project site, installing the pipelines, and restoring ground conditions (i.e., repaving and revegetating).

Storm Drainage

Lots will be graded to drain toward Grove Circle. Twelve-inch storm drains are proposed to collect and route stormwater from the northern, northwest, southwest, and southern portions Grove Circle to Lot D, a stormwater detention basin located in the northwest corner of the project site. In the event of a 100-year storm even, the drainage will overland flow in Grove Circle to Lot D. The stormwater detention basin will discharge to No Name Lane in generally the same location as an existing discharge point. The stormwater detention basin will be sized and metered to accommodate 10- and 100-year storm events, as discussed in Section IX, Hydrology and Water Quality. Figure 4 show the proposed project grading and drainage plan.

Other Utilities and Services

Electricity and natural gas service would be provided by Pacific Gas & Electric. Police services are provided in the town by contract with the Placer County Sheriff's Department. Fire services would be provided by the Loomis Fire Protection District.

BOUNDARY

Improvements associated with the lots of the Ridgeview Subdivision, Unit 2, located directly south of the project site have encroached onto the project site by several feet. The project applicant has offered to convey the area of conflict to the adjacent property owners to resolve any potential boundary line disputes.

SITE PREPARATION AND GRADING

Site preparation activities for project construction would include soil remediation and grading. The soil remediation phase of the proposed project would include the removal of up to 4,580 cubic yards of on-site soil. There would be approximately 183 truck trips associated with soil removal. While the majority of these truck trips would go to the Recology Hay Road landfill in Vacaville, some would go to the US Ecology landfill in Nevada.

The project site is anticipated to have a balanced cut and fill (approximately 20,000 cubic yards of excavated cut and 20,000 cubic yards of fill). Project site grading would result in generally level conditions, with elevations ranging from a low of 361 feet at the base of the detention basin to finished residential pad elevations from 366 to 373 feet.

REQUESTED ENTITLEMENTS AND OTHER APPROVALS

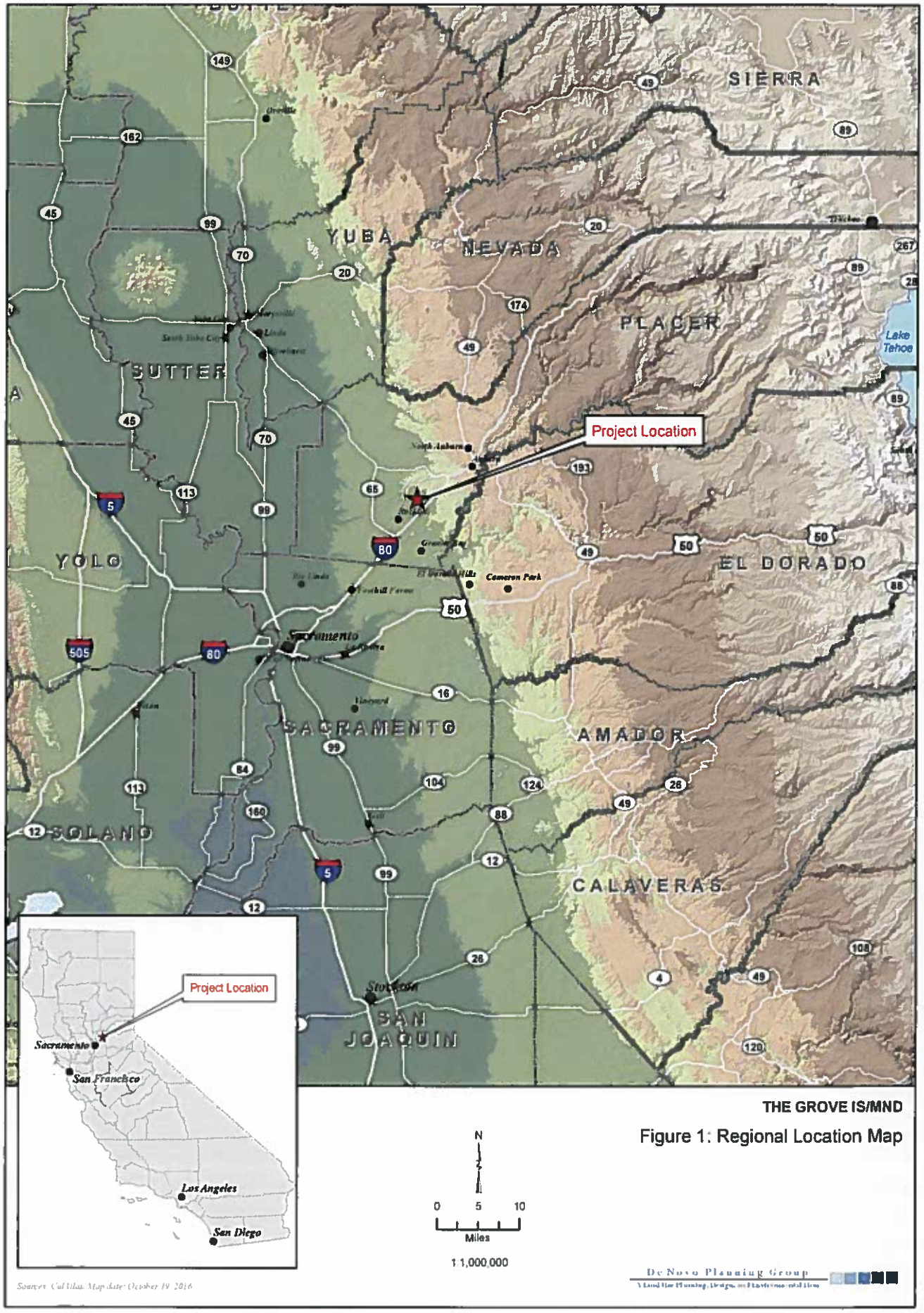
The Town of Loomis is the Lead Agency for the proposed project, pursuant to the State Guidelines for Implementation of the California Environmental Quality Act (CEQA), Section 15050.

Implementation of The Grove requires approvals from the Town of Loomis, including but not limited to:

- Adoption of the Mitigated Negative Declaration (MND);
- Adoption of the Mitigation Monitoring and Reporting Program (MMRP);
- The Vesting Tentative Subdivision Map to subdivide the project site to accommodate:
    - 22 single family residential lots on 6.40 acres,
    - A stormwater detention lot of approximately 0.51 acres,
    - 0.29 acres of landscaped entry/corridors,
    - A park located on 0.28 acres, and
    - Approximately 2.5 acres of roads, including Grove Circle, right-of-way for Humphrey Road, and right-of-way for No Name Lane;
- Design Review for the site improvements and new buildings; and
- Encroachment permit, improvement plans, sediment plan, grading permit, and building permits.

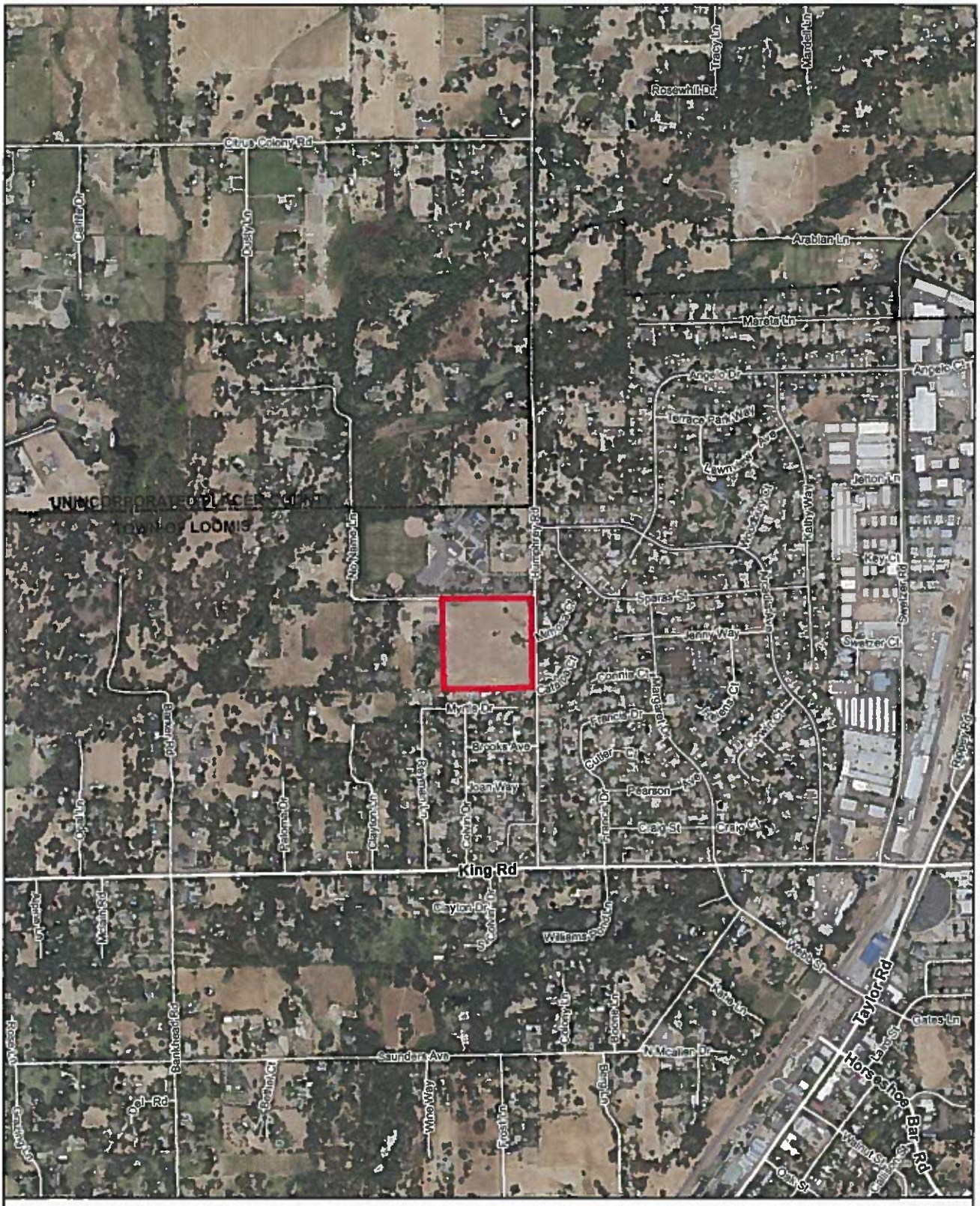
The following agencies may be required to issue permits or approve certain aspects of the proposed project:

- 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
- California Department of Toxic Substances Control (DTSC) – Removal Action Workplan (RAW)
- Central Valley Regional Water Quality Control Board – Section 401 Permit under the Clean Water Act and a General Permit for Discharges of Storm Water Associated with Construction Activity and Storm Water Pollution Prevention Plan approval prior to construction activities.
- California Department of Fish & Wildlife - 1602 Lake and Streambed Alteration Agreement. Agreement.



THE GROVE IS/MND

Figure 1: Regional Location Map



Legend

- Project Location
- Town of Loomis Boundary

N

0 250 500

Feet

1:12,000

Source: Placer County GIS. Map date: October 25, 2016

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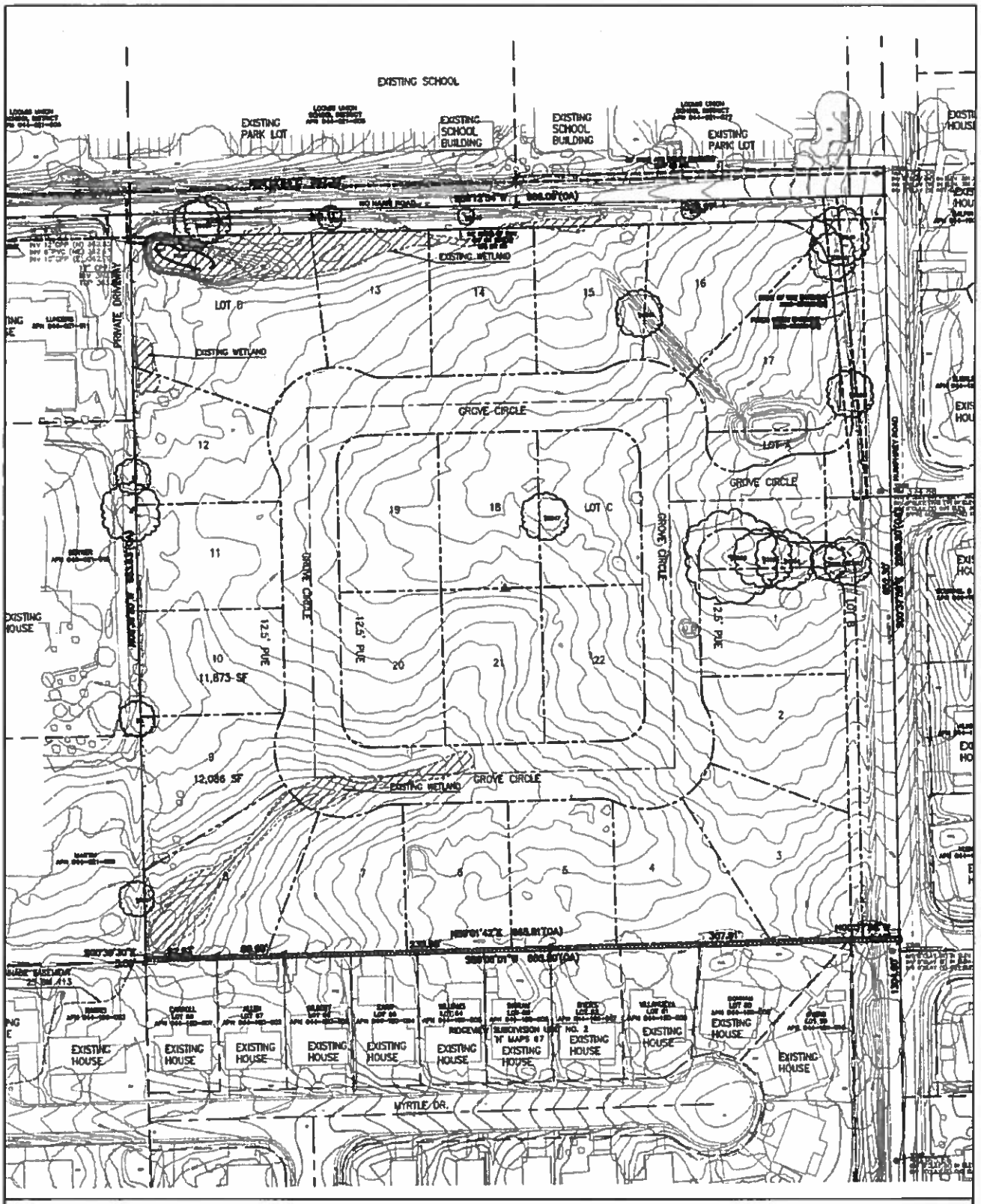
THE GROVE IS/MND

Figure 2. Project Site Boundary



THE GROVE IS/MND

Figure 3. Project Site Plan

N

0 50 100

Feet

1:1,500

Source: Meredith Engineering, Vesting Tentative Map for The Grove, Conceptual Map, August 9, 2016
Map date: October 25, 2016

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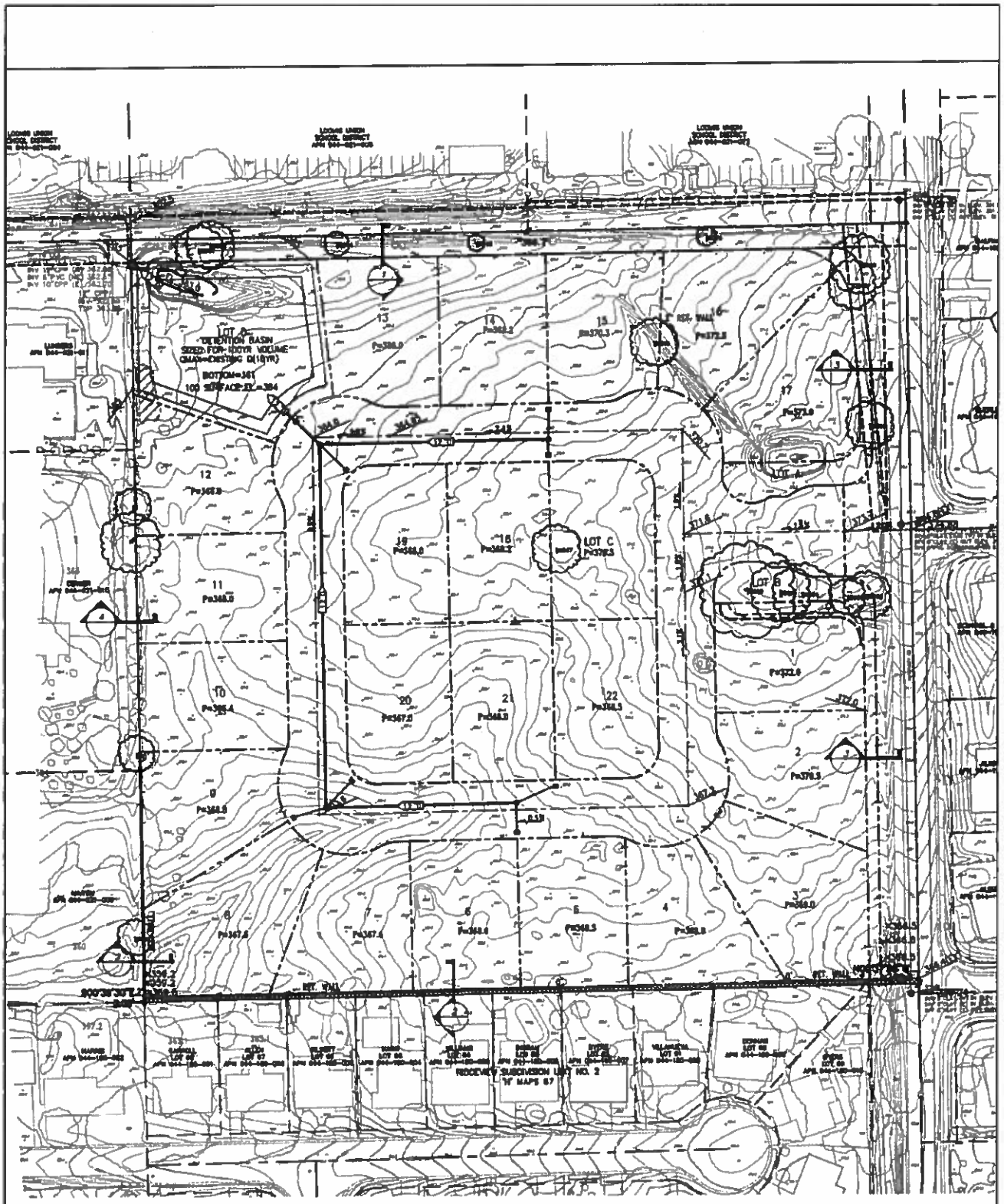

THE GROVE IS/MND

Figure 4. Grading and Drainage Plan

N

0 50 100

Feet

1:1,500

Source: Meredith Engineering, Vesting Tentative Map for The Grove, Conceptual Grading and Drain Plan, August 9, 2016. Map date: October 25, 2016

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A Division of Planning, Design, and Environmental Services

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

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

	Aesthetics		Agriculture and Forest Resources		Air Quality
	Biological Resources		Cultural Resources		Geology/Soils
	Greenhouse Gas Emissions		Hazards and Hazardous Materials		Hydrology/Water Quality
	Land Use/Planning		Mineral Resources		Noise
	Population/Housing		Public Services		Recreation
	Transportation/Traffic		Utilities/Service Systems		Mandatory Findings of Significance

DETERMINATION:

On the basis of this initial evaluation:

	I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
X	I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
	I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
	I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
	I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature

12/20/16
Date

EVALUATION OF ENVIRONMENTAL IMPACTS:

In each area of potential impact listed in this section, there are one or more questions which assess the degree of potential environmental effect. A response is provided to each question using one of the four impact evaluation criteria described below. A discussion of the response is also included.

- Potentially Significant Impact. This response is appropriate when there is substantial evidence that an effect is significant. If there are one or more "Potentially Significant Impact" entries, upon completion of the Initial Study, an EIR is required.
- Less than Significant With Mitigation Incorporated. This response applies when the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact". The Lead Agency must describe the mitigation measures and briefly explain how they reduce the effect to a less than significant level.
- Less than Significant Impact. A less than significant impact is one which is deemed to have little or no adverse effect on the environment. Mitigation measures are, therefore, not necessary, although they may be recommended to further reduce a minor impact.
- No Impact. These issues were either identified as having no impact on the environment, or they are not relevant to the Project.

ENVIRONMENTAL CHECKLIST

This section of the Initial Study incorporates the most current Appendix "G" Environmental Checklist Form, contained in the CEQA Guidelines. Impact questions and responses are included in both tabular and narrative formats for each of the 18 environmental topic areas.

I. AESTHETICS -- WOULD THE PROJECT:

	Potentially Significant Impact	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
a) Have a substantial adverse effect on a scenic vista?			X	
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?			X	
c) Substantially degrade the existing visual character or quality of the site and its surroundings?			X	
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?			X	

EXISTING SETTING

The project site is located on 9.98 acres of undeveloped land, surrounded by residential and public/institutional properties. Elevations vary from 374 feet in the eastern portion of the site to approximately 358 feet in the western portion of the site. The surrounding landscape generally includes similar gentle grades that slope down to the west.

The site supports non-native annual grassland vegetation, with seasonal wetlands embedded within the landscape. Scattered trees (including oak, olive, and London plane) occur predominantly in the eastern portion and in the northwest corner of the property. Remnants of the former onsite residential driveway are currently visible off of Humphrey Road. The project site is somewhat disturbed as noted by the onsite fencing located within the eastern portion of the project site. Dirt tracks are located alongside the western portion of the project site. From the project site, surrounding views consist of residential land uses to the west and south, residential uses across Humphrey Road to the east, and school and administrative offices across No Name Lane to the north.

The project site is fenced with mostly open chain link or hog wire fencing along Humphrey Road and No Name Lane, providing relatively unobstructed views of the project site.

The project site is partly visible from other residential parcels in the vicinity; however, fences and vegetation shield views of some areas of the site. The residential land uses to the south are one-story single-family residential homes on approximately 7,000 square foot (0.2. acre) lots. The residences to the south are fenced along the project boundary and some lots have open fencing providing varying views of the project site. The residential land uses to the west are on approximately 1.0 acre

lots and views of the project site are largely blocked by trees and other vegetation located on the neighboring parcels. Most of the residential properties across Humphrey Road include approximately six-foot high wooden fences and trees that limit views of the project site. Several homes face the property and have view of the project site that are only partially limited by landscaping. Across No Name Lane, to the north, the elementary school and administrative offices have a partially obstructed view of the project site; wooden-post fencing delineates the proposed project's northern boundary and a vegetation located adjacent to the school property partially obscures the view of the project site from the portion of the school property facing the project site.

RESPONSES TO CHECKLIST QUESTIONS

Responses a): Less than Significant. A scenic vista is an area that is designated for the express purpose of viewing. This includes any such areas designated by a federal, State, or local agency. No scenic vistas have been identified in the Town of Loomis General Plan. Federal and State agencies have not designated any scenic vistas or resources within the Town of Loomis.

Additionally, there are no other identified scenic vistas nearby that would be affected by development of the proposed project. Given that established scenic vistas are not located on or adjacent to the proposed project site, the proposed project would have a **less than significant** impact related to scenic vistas or scenic resources.

Responses b), c): Less than significant. As previously described, the proposed project would subdivide the 9.98-acre parcel into 26 lots, including 22 residential lots, one park lot, one drainage basin lot, and two landscaping/entry corridor lots. A Landscape Plan has been developed that is consistent with current State of California drought requirements (Wilson Design Studios, 2016). The development would require remediation of COCs, demolition of the existing driveway and minor paving (remnants of former residence), construction of roads and buildings, and alteration of the onsite visual conditions. These actions would change views of the site.

The proposed project land use and density is consistent and generally compatible with the visual character of the surrounding development. Residential land uses occur to the west, east, and south of the site. The proposed project has been designed so that all lots exceed the minimum lot size requirement, resulting in a lower density 2.2 units per acre) than is allowed by the General Plan and zoning ordinance. The average lot size is 12,444 sf; the lots clustered in the center of the site are smaller than the average lot size and range from 12,003 sf to 14,221 sf. The lots on the perimeter of the site vary in size from 11,871 sf to 15,066 sf, with the largest lots occurring at the edges of the site. This is compatible with the surrounding residential parcels which support lower density residential lots that occur to the west of the project site and medium density residential lots occur to the south and east of the project site. The configuration of lots on the proposed project site allows for a relatively gradual shift in lot sizes and provides for a visual transition between urban and rural land uses.

The project site includes a drainage pond located in the northwest. The existing pond would be removed and a stormwater drainage basin will be constructed in this area. The other seasonal wetlands that currently occur throughout the property would not be retained. The project proposes to remove approximately seven of the nineteen trees located on the project site; additional tree removal may occur as part of soil remediation activities, but is not anticipated. Twelve trees, located primarily along the western and northern perimeters of the project site, would remain (as provided within the Preliminary Landscape Plan prepared for the proposed project) (Wilson Design Studios,

2016). While the project would remove approximately seven trees, an additional 101 new trees, including street trees and ornamental trees, would be planted as shown on the Preliminary Landscape Plan. The Town has established landscaping standards under Municipal Code Chapter 13.34 and the project is required to comply with these standards. Section 13.34.020 requires that landscape and irrigation improvements be installed prior to final building inspection, with a deferral of up to 90 days allowed for residential projects that have a performance guarantee as allowed by Section 13.64.050. The preliminary Landscaping Plan for the project provides for landscaping along Humphrey Road, including a row of interior live oaks along the project fence line, and includes two landscaped entry lots to transition from Humphrey Road to Grove Circle. The project would include landscaping and tree planting in the front setbacks of each lot and would fully landscape the pocket park, including trees around the north, west, and southern perimeters of the park. The edges of the detention basin lot would be landscaped with a mix of tree types and ground cover.

Prior to any soil remediation, grading, movement of heavy equipment, approval of improvement plans, or the issuance of any permits, tree protection fencing would be installed (consisting of a minimum 4-foot tall high-visibility fence) around the perimeter of the tree protection zone for all trees to be preserved. This fencing would be removed following construction. Furthermore, new trees would be planted throughout the project site (i.e. within Grove Circle and along Humphrey Road) and would serve as a visual buffer between the project site and views from Humphrey Road.

Proposed onsite grading would further level the already relatively flat terrain. In order to provide for on-site drainage flow to the stormwater retention basin, the grading of the site would increase elevations in areas of the site, particularly in the southwest portion of the site. In this area, the retaining wall would be up to 7.5 feet in height. Fencing would be generally be six-feet tall, measured from the lowest ground level, except along the southern and southwestern boundary of the site, where the six-foot wooden fence will be above the retaining wall, with total wall and fence heights ranging from 6 to 13.5 feet. Fence heights located along side and rear setbacks are allowed to exceed 6 feet in height, subject to Design Review approval (Loomis Town Code Section 13.30.040(B) and Section 16.62.040).

The Town of Loomis requires Design Review approval for new subdivisions of five or more parcels (Municipal Code Section 13.62.040). Design Review is intended to ensure that the design of proposed development assists in maintaining and enhancing the small-town, historic, and rural character of the community. Prior to approval of improvement plans, the project would be required to receive Design Review approval.

Development of the proposed project would not substantially degrade the existing visual character or the quality of the site and its surroundings. The project site would be converted to residential uses that are similar in character to the uses to the south and east of the site. Existing vegetation and fencing help shield the project site from the surrounding properties. The proposed landscaping and fencing would visually buffer the developed residential uses from nearby public vantage points, including Humphrey Road.

With implementation of the Town's Municipal Code requirements that pertain to fencing, signage, and design review, impacts to visual character will be **less than significant.**

Response d): Less than Significant. The project site is currently an empty lot, covered by ruderal grasses and scattered trees. As a result, no nighttime light or daytime glare is currently emitted from

the project site. However, development of the proposed project would incorporate new lighting and the potential for significant sources of glare. New sources of light and glare have the potential to affect nearby sensitive receptors, including motorists along Humphrey Road and No Name Lane, and/or disturb nearby pedestrians or residents located to west, south, and/or east. These would be considered sensitive receptors, which could be adversely affected by additional sources of light and glare.

However, proposed project residences would generally be largely shielded from neighboring roadways and residences by trees, such as those planned along Humphrey Road, and by project boundary fencing. Additionally, proposed project buildings would not be constructed of highly reflective materials. Therefore, any glare that could affect nearby motorists would be limited. The project does not propose any uses or materials that would result in a significant amount of daytime glare.

Outdoor lighting would be installed throughout the project site. Section 13.30.080 of the Municipal Code requires outdoor lighting to be shielded or recessed so that the light source is not visible from off the site and so that glare and reflections are confined to the maximum extent feasible within the boundaries of the site. Further, Section 13.30.080(b) requires lighting fixtures to be directed downward and away from adjoining properties and public rights-of-way and requires that off-site illumination does not exceed one foot-candle. Therefore, the project would not create a substantial new source of light that would affect neighboring residents.

Overall, due to the project's design and required consistency with the City's Municipal Code, the proposed project would not be expected to generate light or glare that would adversely affect day or nighttime views in the area. Potential impacts to nighttime lighting and daytime glare generated by the proposed project would be **less than significant**.

II. AGRICULTURE AND FOREST RESOURCES: WOULD THE PROJECT:

	Potentially Significant Impact	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				X
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				X
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 1222(g)) or timberland (as defined in Public Resources Code section 4526)?				X
d) Result in the loss of forest land or conversion of forest land to non-forest use?				X
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?				X

RESPONSES TO CHECKLIST QUESTIONS

Responses a): No Impact. There is no Prime Farmland, Unique Farmland, or Farmland of Statewide Importance on the project site. Although there was a pear orchard on the project site until 1961, the project site is not currently used for agricultural operations, and has not been used for agricultural operations in the past several decades. Although some agricultural uses (such as orchards, nurseries, or vineyards) are allowed within the Residential Agricultural zoned lands located to the west of the project site, the proposed project would not alter any existing or future agricultural operations within these areas. Since the proposed project only includes development of the project site within a residential area of the City designated for residential uses, the project has no potential to convert any off-site Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use. Therefore, there is **no impact**.

Response b): No Impact. The proposed project site is not under Williamson Act contract, nor is the site zoned for agricultural use. Therefore, the project would have no impact with respect to conflicting with agricultural zoning or Williamson Act contracts. There is **no impact.**

Responses c) and d): No Impact. The project site is not considered forest land (as defined in Public Resources Code section 12220[g]), timberland (as defined by Public Resources Code section 4526), and is not zoned Timberland Production (as defined by Government Code section 51104[g]). Therefore, the proposed project would have no impact with regard to conversion of forest land or any potential conflict with forest land, timberland, or Timberland Production zoning. Therefore, there is **no impact**.

Responses e): No Impact. The potential for the project to result in impact to agricultural and forest lands are addressed above under Responses a-d. As described above, there are no agricultural or forest lands located on, or adjacent to, the project site. The proposed project is a residential development on a vacant lot. The proposed project would not result in the off-site development or conversion of existing agricultural or forest lands. The offsite infrastructure needed to serve the project site would not require the expansion of any infrastructure or roadways that could lead to the indirect conversion of agricultural or forest lands to urban uses. Therefore, the proposed project would result in **no impact** to the existing environment that could individually or cumulatively result in loss of farmland to non-agricultural uses or conversion of forest land to non-forest uses.

III. AIR QUALITY -- WOULD THE PROJECT:

	Potentially Significant Impact	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
a) Conflict with or obstruct implementation of the applicable air quality plan?		X		
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?		X		
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?		X		
d) Expose sensitive receptors to substantial pollutant concentrations?		X		
e) Create objectionable odors affecting a substantial number of people?			X	

EXISTING SETTING

The project site is located within the boundaries of the Placer County Air Pollution Control District (PCAPCD). This agency is responsible for monitoring air pollution levels and ensuring compliance with federal and state air quality regulations within the Sacramento Valley Air Basin (SVAB) and has jurisdiction over most air quality matters within its borders. The Sacramento Valley is often described as a bowl-shaped valley, with the SVAB being bounded by the North Coast Ranges on the west, the Northern Sierra Nevada Mountains on the east, and the intervening terrain being flat. The Sacramento Valley has a Mediterranean climate, characterized by hot, dry summers and mild, rainy winters. Average annual rainfall is approximately 20 inches, with snowfall being very rare. According to the Western Regional Climate Center, the prevailing wind direction throughout the year in the project area is from the south[1].

Air quality in the project vicinity is influenced by both local and distant emissions sources. Local sources include the emissions from vehicle traffic on nearby roadways (such as Interstate 80, King Road, and Sierra College Boulevard) and at commercial and retail centers in the project vicinity. Area sources include agriculture and construction-related emissions and stationary sources such as residential woodstoves and barbeques, as well as local industry. Distant emission sources include vehicle traffic and industry in the Sacramento metropolitan area and the San Francisco Bay area. Pollutants from these areas are carried northeast to the Sierra foothills by prevailing winds.

[1] Western Regional Climate Center. Prevailing Wind Direction. Available at: http://www.wrcc.dri.edu/htmlfiles/westwinddir.html. Accessed November 2016

RESPONSES TO CHECKLIST QUESTIONS

Response a), b), c): Less than Significant with Mitigation. Placer County has a state designation of nonattainment for ozone and PM_{10}, and is either attainment or unclassified for all other criteria pollutants. The County has a national designation of nonattainment for ozone and $PM_{2.5}$ in the SVAB, and nonattainment for ozone in area within the Mountain Counties Air Basin (MCAB) (Placer County contains multiple air basins, including the SVAB, MCAB, and the Lake Tahoe Air Basin; as noted previously, the proposed project is located solely within the SVAB). Placer County is designated either attainment or unclassified for the remaining national standards. Table 1 presents the state and national attainment status for Placer County.

Table 1: State and National Attainment Status

CRITERIA POLLUTANTS	STATE DESIGNATIONS	NATIONAL DESIGNATIONS
	SACRAMENTO/MOUNTAIN/TAHOE	SACRAMENTO/MOUNTAIN/TAHOE
Ozone	Nonattainment/Nonattainment/ Nonattainment-Transitional	Nonattainment/Nonattainment/ Unclassified-Attainment
PM_{10}	Nonattainment	Unclassified
$PM_{2.5}$	Attainment/Unclassified/Attainment	Nonattainment/Unclassified-Attainment/ Unclassified-Attainment
Carbon Monoxide	Attainment/Unclassified/Attainment	Unclassified/Attainment
Nitrogen Dioxide	Attainment	Unclassified/Attainment
Sulfur Dioxide	Attainment	Unclassified/Unclassified/Attainment
Sulfates	Attainment	**
Lead	Attainment	Unclassified/Attainment
Hydrogen Sulfide	Unclassified	**
Visibility Reducing Particles	Unclassified	**

SOURCES: CALIFORNIA AIR RESOURCES BOARD, 2015.

**= There was insufficient (or no) data available to determine the status.

Due to the nonattainment designations, the PCAPCD along with the other air districts in the SVAB region, is required to develop plans to attain the federal and state standards for ozone and particulate matter. The air quality plans include emissions inventories to measure the sources of air pollutants, to evaluate how well different control measures have worked, and show how air pollution would be reduced. In addition, the plans include the estimated future levels of pollution to ensure that the area would meet air quality goals.

Air Quality Attainment Plans

Each of the attainment plans currently in effect for the SVAB are discussed in further detail below. The plans include the 2013 Ozone Attainment Plan and the $PM_{2.5}$ Implementation/Maintenance Plan. Adopted PCAPCD rules and regulations, as well as the thresholds of significance, have been developed with the intent to ensure continued attainment of AAQS, or to work towards attainment of AAQS for which the area is currently designated nonattainment, consistent with applicable air quality plans.

<u>2013 Revisions to the Sacramento Regional 8-Hour Ozone Attainment and Reasonable Further Progress Plan</u>[2]

The most recent attainment plan for the ozone NAAQS is the 2013 Revisions to the Sacramento Regional 8-Hour Ozone Attainment and Reasonable Further Progress Plan (2013 Ozone Attainment Plan), which demonstrates how existing and new control strategies would provide the necessary

[2] Sacramento Metropolitan Air Quality Management District. 2013 Revisions to the Sacramento Regional 8-Hour Ozone Attainment and Reasonable Further Progress Plan. September 26, 2013.

future emission reductions to meet the federal NAAQS. The SVAB's attainment deadline is 2027. Because the proposed project is located within the nonattainment area for ozone, the project would be subject to the requirements set forth in the 2013 Ozone Attainment Plan, as enforced by PCAPCD through rules and regulations.

<u>$PM_{2.5}$ Implementation/Maintenance Plan and Re-designation Request for Sacramento $PM_{2.5}$ Nonattainment Area</u>

The Sacramento federal $PM_{2.5}$ Nonattainment Area attained the federal $PM_{2.5}$ health standards on December 31, 2011. The $PM_{2.5}$ Implementation/Maintenance Plan and Re-designation Request for Sacramento $PM_{2.5}$ Nonattainment Area ($PM_{2.5}$ Implementation/Maintenance Plan) was prepared to show that the region has met the requirements and requests that the USEPA re-designate the area to attainment. The USEPA issued a final rule for Determination of Attainment for the Sacramento Nonattainment Area effective August 14, 2013. The $PM_{2.5}$ Implementation/Maintenance Plan would be adopted by the air districts within the nonattainment area, as well as the California Air Resources Board (CARB), as a revision to the State Implementation Plan (SIP). Contents of the $PM_{2.5}$ Implementation/Maintenance Plan include demonstration that the NAAQS was met and that all requirements have been met for a re-designation to attainment, specification of actions to be taken if the standards are violated in the future, and establishment of regional motor vehicle emission budgets.

General Plan Policies

The Town of Loomis General Plan addresses air quality in the *Natural Resources and Open Space Element*. Policy 1 includes the following requirements applicable to The Grove project:

a. Site preparation and development activities shall incorporate effective measures to minimize dust emissions and the emissions of pollutants by motorized construction equipment and vehicles.

b. During the review of development plans, the Town should require that project proponents conduct their own air quality analysis to determine air quality impacts and potential mitigation measures.

d. Recognizing that trees and other vegetation can provide a biological means of reducing air contaminants, existing trees should be retained and incorporated into project design wherever feasible. The additional planting of a large number of trees along roadways and in parking areas shall be encouraged.

h. If an initial air quality screening indicates that emissions of any pollutant could exceed 10 pounds per day, the Town shall require such development projects to submit an air quality analysis to Placer County APCD for review. Based on the analysis, the Town may require appropriate mitigation measures consistent with the latest version of the AQAP or other regional thresholds of significance adopted for the air basin.

PCAPCD CEQA Air Quality Handbook

The PCAPCD's CEQA Air Quality Handbook (2012) describes the District's existing review process related to the processing of CEQA documents when the District acts as a commenting agency for land use projects located within Placer County. The Handbook contains criteria used by the District to recommend when an air quality analysis should be needed, what types of analysis should be performed, and what kinds of mitigation measures should be identified to reduce overall air quality

impacts from proposed land use projects. The Handbook also provides specific criteria pollutant and greenhouse gas emissions thresholds. However, the thresholds included within the Handbook have been superseded by recent updates to these thresholds (as adopted by the PCAPCD in October 2016).

PCAPCD Policy Review of Land Use Projects Under CEQA

On October 13, 2016, the PCAPCD adopted a written policy that includes updates to the thresholds of significance for PCAPCD criteria pollutants, including operational phase cumulative-level thresholds. For criteria pollutants during the construction phase of a project, the thresholds for ROG, NOx, and PM_{10} are 82 pounds/day (lbs/day). For criteria pollutants during the operational phase, thresholds for ROG and NOx are 55 lbs/day, and the threshold for PM_{10} is 82 lbs/day. The updated operational phase cumulative-level thresholds are also 55 lbs/day for ROG and NOx, and 82 lbs/day for PM_{10}. For greenhouse gases, the Handbook provides a Bright-line Threshold of 10,000 MT CO_2e/year, and efficiency matrix for residential and non-residential projects, and a De Minimis Level threshold of 1,100 MT CO_2e/year (PCAPCD, 2016).

Potential Impacts

Air pollutant emissions related to the proposed project would include both construction phase emissions and, upon project buildout, operational emissions. Construction phase emissions would originate from mobile and stationary construction equipment exhaust, employee vehicle exhaust, contaminated soil hauling vehicle exhaust, dust from clearing and grading activities, wind-borne dust generated from exposed soils, and off-gassing from asphalt paving and painting. Construction-related emissions can vary substantially depending on the level of activity, length of the construction period, specific construction operations, types of equipment, number of personnel, wind and precipitation conditions, and soil moisture content. Operational air pollutant emissions of the proposed project would be generated by gas (and potentially wood-fired) appliances, gas-powered landscaping equipment, and resident vehicle exhaust. Both construction and operation of the proposed project would result in the generation of emissions of carbon monoxide (CO), reactive organic gases (ROG), nitrogen oxide (NOx), and particulate matter (PM_{10}). Emissions of ROG and NOx are referred to as "precursors" to ozone formation. These two pollutants, when released into the atmosphere, undergo photochemical reactions in the presence of sunlight to form ozone. These ozone-forming photochemical reactions do not occur as readily in the cooler months of the year, and therefore, emissions of ROG and NOx are of greatest concern during the warmer months of summer.

Proposed Project Construction Emissions

Emissions associated with the proposed project were primarily estimated using CalEEMod (v.2016.3.1), as recommended by the PCAPCD. However, removal of project contaminated soil was calculated using EMFAC2014 emission factors and vehicle trip estimates provided by the project applicant. Table 2, below, shows proposed project criteria pollutant emissions that would generated during project removal of contaminated soil.

Table 2: Unmitigated Maximum Project Emissions from Hauling Contaminated Soil to Landfill

Pollutant	*Contaminated Soil Hauling Emissions*
ROG	1.08 lbs/day
NOx	29.32 lbs/day
PM_{10}	0.37 lbs/day

SOURCE: EMFAC2014

Emissions from soil removal activities were estimated using the following assumptions and applicant-provided information:

- Contaminated soil removed: 4,580 cubic yards
  - Number of vehicle trips required to haul contaminated soil: 183 trips
- Vehicle type used to haul contaminated soil:
  - EMFAC2011 Vehicle Class: "Heavy Duty Diesel Tractor Construction Trucks"
- Landfills to accept contaminated soil:
  - Recology Landfill (6426 Hay Rd., Vacaville, CA 95687)
  - US Ecology Landfill (Highway 95, Beatty, NV 89003)

Table 3, below, shows construction-related ROG, NOx, or PM_{10} emissions for all phase of project construction. Project emissions from the removal of project contaminated soil, and emissions during all other phases of project construction (e.g. site preparation, grading, paving, building construction, and architectural coating phases) are provided in Table 3. As shown, the proposed project would not exceed the significance thresholds for construction-related ROG, NOx, or PM_{10}.

Table 3: Total Maximum Unmitigated Project Construction-Related Emissions

Pollutant	*Contaminated Soil Hauling Emissions*	*Other Construction Phase Emissions*[3]	*Total Construction Phase Emissions*	*PCAPCD Threshold of Significance*
ROG	1.08 lbs/day	54.71 lbs/day	55.79 lbs/day	82 lbs/day
NOx	29.32 lbs/day	52.35 lbs/day	81.67 lbs/day	82 lbs/day
PM_{10}	0.37 lbs/day	21.09 lbs/day	7.80 lbs/day	82 lbs/day

SOURCES: CALEEMOD (V.2016.3.1) AND EMFAC2014

In addition, implementation of PCAPCD-recommended mitigation measures for construction activities (Mitigation Measures AQ-1 through AQ-5) would result in even lower pollutant concentrations during the construction phase of the proposed project as those shown in Table 3.

Proposed Project Operational Emissions

As stated above, emissions associated with the proposed project were estimated using CalEEMod (v.2016.3.1), as recommended by the PCAPCD. As shown in Table 4 below, the proposed project would not exceed the significance thresholds for operation-related ROG, NOx, or PM_{10}.

Table 4: Total Maximum Unmitigated Project Operation-Related Emissions

Pollutant	*Operational Phase Emissions*	*PCAPCD Threshold of Significance*
ROG	11.65 lbs/day	55 lbs/day
NOx	2.16 lbs/day	55 lbs/day
PM_{10}	1.36 lbs/day	82 lbs/day

SOURCE: CALEEMOD (V.2016.3.1), NOVEMBER 2016.

As shown above, the proposed project would not exceed any of the PCAPCD operational phase criteria pollutant thresholds. Therefore, proposed project operational air emissions would be **less than significant**, and are not analyzed further within this document. In addition, the proposed project is required to comply with all applicable PCAPCD rules and regulations, which would further

[3] Includes emissions from all construction-related activities, except for emissions from the hauling of contaminated soil to landfill

minimize potential air quality emissions impacts generated by the proposed project. Mitigation Measures 2 through 5 would also help reduce operational emissions.

Cumulative Impacts

Buildout of the proposed project would result in an increase in local and regional air pollutant emissions and would contribute minimally to ozone formation in the area. Buildout of the proposed project would also result in an increase in local and regional air pollutant emissions and would contribute to cumulative air quality impacts in Placer County. The PCAPCD's *CEQA Air Quality Handbook*, identifies a criteria pollutant cumulative threshold of significance for land use projects of 10 lbs/day for ROG and NOx for the operational phase of a project (PCAPCD, 2012). However, District staff has recently adopted updated cumulative level thresholds of significance for the operational phase of the project that replace the previous thresholds. The updated cumulative level thresholds for the operational phase are 55 lbs/day for ROG and NOx, and 82 lbs/day for PM_{10} (PCAPCD, 2016).

The proposed project's construction and operation-related criteria pollutant emissions would not exceed the applicable PCAPCD thresholds. Additionally, as shown in the tables provided above, the proposed project would not exceed the revised project operational phase cumulative-level thresholds (55 lbs/day for ROG and NOx, and 82 lbs/day for PM_{10}). Furthermore, the proposed project's contribution to cumulative air pollution concentrations in the region would be further reduced by Mitigation Measures AQ-1 through AQ-5.

Conclusion

The unmitigated proposed project would not exceed PCAPCD's emissions thresholds. In compliance with Policy 1 of the General Plan Natural Resources and Open Space Element and with PCAPCD CEQA Guidelines, the proposed project would implement Mitigation Measures AQ-1 through AQ-6 to further reduce air pollutants generated by the proposed project. Mitigation Measure AQ-6 requires compliance with the site air monitoring and dust control measures described in the RAW, which include collection of real-time air data to ensure that airborne contaminants do no exceed acceptable levels. The proposed project would not conflict with and/or obstruct implementation of the PCAPCD's air quality planning efforts, violate any applicable standard, or contribute substantially to an existing or projected air quality violation. Therefore, with the following mitigation incorporated, the proposed project would have an impact related to this topic that is **less than significant**.

Response d): Less than Significant with Mitigation. Land uses that are typically considered to be sensitive receptors include residences, schools, childcare centers, playgrounds, retirement homes, convalescent homes, hospitals, and medical clinics due to the expected presence of individuals that are especially vulnerable to the effects of air pollution (i.e., children, pregnant women, the elderly, and those with existing health problems). The primary uses proposed for the project would include residences. Potential sensitive receptors in the vicinity of the proposed project include residents of the surrounding neighborhoods and children attending H. Clarke Powers Elementary School, located across No Name Lane north of the project site at 3296 Humphrey Road.

Health risks from toxic air contaminants (TACs) are typically associated with long-term exposure to high concentrations. Accordingly, methodologies for conducting health risk assessments are associated with long-term exposure periods (e.g., 24 hours per day over a 70-year lifetime). I-80, the nearest high traffic freeway, is located approximately one mile southeast of the project site. The

major pollutants of concern to nearby existing sensitive receptors are localized CO emissions and TAC emissions, which are addressed in further detail below.

Localized CO Emissions

Localized concentrations of CO are related to the levels of traffic and congestion along streets and at intersections. Implementation of the proposed project would increase traffic volumes on streets near the project site; therefore, the project would be expected to increase local CO concentrations. Concentrations of CO approaching the ambient air quality standards are only expected where background levels are high, and traffic volumes and congestion levels are high.

The PCAPCD requires a CALINE4 CO "hotspot" computer analysis for any project that would result in the degradation of LOS at a signalized intersection to LOS E or worse. Because implementation of the project would not result in degradation of LOS at any signalized intersections in the vicinity of the project site to LOS E or worse, a CALINE analysis is not required to be performed for the proposed project. Daily traffic volumes at nearby roadways would remain at LOS A, even after development of the proposed project (KD Anderson & Associates, 2016).

TACs

Construction-related activities, including soil remediation and grading, have the potential to generate concentrations of TACs, specifically diesel particulate matter (DPM), from on-road haul trucks and off-road equipment exhaust emissions. However, construction is temporary and occurs over a relatively short duration in comparison to the operational lifetime of the proposed project. Additionally, given the size of the proposed project, the number of construction vehicles would be limited at any one time. Therefore, construction-related emissions would not expose sensitive receptors to substantial pollutant concentrations.

Conclusion

Given that the exposure to TACs generated by the proposed project would be not be sufficient to expose sensitive receptors to substantial pollutant concentrations or generate a localized CO hotspot, and with implementation of the previously identified air quality mitigation measures, including Mitigation Measure AQ-6 which requires compliance with the site air monitoring and dust control measures described in the RAW, which include collection of real-time air data to ensure that airborne contaminants do no exceed acceptable levels, the impact would be **less than significant**.

Response e): Less than Significant. According to the CARB's Handbook, some of the most common sources of odor complaints received by local air districts are sewage treatment plants, landfills, recycling facilities, waste transfer stations, petroleum refineries, biomass operations, autobody shops, coating operations, fiberglass manufacturing, foundries, rendering plants, and livestock operations. The proposed project site is located in a developed area and is surrounded by existing residential land uses to east, west, and south. Public/Institutional uses are located to the north. Accordingly, the proposed project is not located in the vicinity of any substantial objectionable odor sources such as those mentioned above.

The proposed project, a residential subdivision, is not anticipated to produce any objectionable odors at buildout that would affect a substantial number of people. Construction activities associated with the proposed subdivision, such as paving and painting, are likely to temporarily generate

objectionable odors. Since odor-generating construction activities would be temporary, and are only likely to be detected by residents closest to the project site, impacts from temporary project-related odors are expected to remain **less than significant** and no mitigation is required.

Mitigation Measures

***Mitigation Measure AQ-1**: The applicant shall submit to the District and receive approval of a Construction Emission/Dust Control Plan prior to approval of grading and improvement plans. The Construction Emission and Dust Control Plan shall include the following measures and these measures shall be included as a standard note on all grading and improvement plans:*

- *Construction equipment exhaust emissions shall not exceed PCAPCD Rule 202 Visible Emission limitations.*
- *The prime contractor shall submit to the Air District a comprehensive inventory (i.e. make, model, year, emission rating) of all the heavy-duty off-road equipment (50 horsepower or greater) that will be used an aggregate of 40 or more hours for the construction project. The inventory shall demonstrate that the off-road vehicles to be used during excavation, construction, and grading activities, including owned, leased, and subcontractor vehicles, will achieve a project-wide fleet average 20 percent NOx reduction and 45 percent particulate matter reduction compared to the most recent CARB average and shall include enforcement measures to ensure that the reductions are achieved. The PCAPCD shall be contacted for average fleet emission data. 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 District with the anticipated construction timeline including start date, and name and phone number of the project manager and on-site foreman.*
- *An enforcement plan shall be established to weekly evaluate project-related on-and-off-road heavy-duty vehicle engine emission opacities, using standards as defined in California Code of Regulations, Title 13, Sections 2180-2194. An Environmental Coordinator, CARB-certified to perform Visible Emissions Evaluations (VEE), shall routinely evaluate project related off-road and heavy-duty on-road equipment emissions for compliance with this requirement. Operators of vehicles and equipment found to exceed opacity limits will be notified and the equipment must be repaired within 72 hours.*
- *No open burning of removed vegetation shall be conducted during infrastructure improvements. Vegetative material shall be chipped or delivered to waste to energy facilities.*
- *During construction the contractor shall utilize existing power sources (e.g., power poles) or clean fuel (e.g., gasoline, biodiesel, natural gas) generators rather than temporary diesel power generators.*
- *Diesel-power equipment shall not be allowed to idle within 1,000 feet of any sensitive receptors (adjacent residences and school).*
- *Diesel-power equipment shall not be allowed to idle for more than 5 minutes at any time.*
- *Earth moving construction equipment shall be cleaned with water once per day.*
- *An operational water truck shall be onsite at all times. Water to control dust shall be applied as needed to prevent dust impacts offsite for active and inactive construction areas.*

- *Pursuant to District Rule 228, Section 304, streets shall be wet broomed or washed of any silt carried over to adjacent public thoroughfares during construction activities.*
- *The applicant shall include in contract language that earth-moving contractors shall not operate pre-1996 heavy-duty diesel equipment on forecast Spare the Air Days.*
- *To the extent feasible, construction activities shall utilize existing power sources (e.g., power poles) or clean fuel generators rather than temporary diesel power generators.*
- *Traffic speeds on all unpaved surfaces shall be limited to a maximum speed of 15 miles per hour or less.*
- *Construction activity management techniques shall be employed, such as: extending the construction period outside the ozone season of May through October; reducing the number of pieces of equipment used simultaneously; increasing the distance between emission sources; reducing or changing the hours of construction; and scheduling activity during off-peak hours.*
- *Contractors shall use low VOC architectural coatings per PCAPCD Rule 218.*

Mitigation Measure AQ-2: *Open burning shall be prohibited on all lots through Creeds, Covenants, and Restrictions (CC&Rs) enforced by The Grove Subdivision Homeowners Association (HOA) or Maintenance/Assessment District.*

Mitigation Measure AQ-3: *All future home builders shall install a natural gas outlet for use with outdoor cooking appliances, such as a gas barbecue. Any outdoor firepits constructed shall be supplied with natural gas and utilize ceramic logs. The Town of Loomis shall ensure compliance with this measure through the building permit review process.*

Mitigation Measure AQ-4: *Only U.S. EPA Phase II certified wood-burning devices shall be installed in single-family residences (as applicable). Masonry fireplaces must have UL listed natural gas fireboxes installed or meet EPA Phase II emission standards. The emission potential from each residence shall not exceed 7.5 grams per hour.*

Mitigation Measure AQ-5: *Electrical outlets shall be installed on the exterior walls of both the front and back of each residence to promote the use of electric landscape maintenance equipment. The Town of Loomis shall ensure compliance with this measure through the building permit review process.*

Mitigation Measure AQ-6: *All soil remediation activities shall comply with the the Removal Action Work Plan, including provisions for air quality monitoring and requirements for air pollution and dust control measures.*

IV. BIOLOGICAL RESOURCES -- WOULD THE PROJECT:

	Potentially Significant Impact	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?		X		
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or US Fish and Wildlife Service?		X		
c) 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?		X		
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?			X	
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?		X		
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				X

EXISTING SETTING

This section is based primarily on biological technical reports that have been conducted for the 9.98-acre project site, including the Pre-Construction Notification Request for Authorization under Nationwide Permit No. 29 (Residential Development) prepared by ECORP Consulting in 2016 (404 Pre-Construction Report), The Grove Project Site Initial Arborist Report and Inventory Summary (Sierra Nevada Arborists, 2005), the Biological Evaluation Letter Report (Sycamore Consultants, 2005) for the project site, and a 2005 peer review by North Fork Associates of the Arborist Report and Biological Evaluation Letter Report. A site review and updated California Natural Diversity Database (CNDDB) search were performed by De Novo Planning Group in November 2016. The site review found that site conditions are consistent with those reported in the Pre-Construction Notification Request for Authorization under Nationwide Permit No. 29 (Residential Development)

Natural Communities

The 404 Pre-Construction Report determined that the dominant onsite biological community is non-native annual grasslands with seasonal wetlands imbedded within the landscape. Common vegetation in the grassland includes ripgut brome (*Bromus diandrus*), soft brome (*Bromus hordeaceus*), wild oat (*Avena fatua*), white clover (*Trifoliium repens*), hairy vetch (*Vicia villosa ssp. Villosa*), Bermuda grass (*Cynodon dactylon*), quking grass (*Briza minor*), and cranesbill (*Geranium dissectum*). A small grove of western sycamore (*Platanus racemose*) and olive (*olea europaea*), trees occur near the dirt access road on the east side of the project side, and valley oak (*Quercus lobate*), interior live oak (*Quercus wislizenii var. wislizenii*), and *Prunus sp.* trees are scattered throughout the site (ECORP Consulting, 2016b).

There are two seasonal wetland swales encompassing 0.279 acres on the northern and southern property boundaries. The seasonal wetland swales are dominated by willow-herb (*Epilobium bracycarpum*) and annual rabbit-foot grass and also support curly dock and tall flatsedge (*Cyperus eragrostis*).

There is one seasonal pond encompassing 0.054 acres in the northwestern corner of the property. The pond is dominated by open water and was mapped at the ordinary high water mark. Plant species observed growing along the margins of the pond included annual rabbit-foot grass, northern water plantain (*Alisma triviale*), and Goodding's black willow (*Salix gooddingii*).

Trees

"Protected trees" are defined by the Town of Loomis Tree Preservation and Protection Ordinance (Chapter 13.54 of the Town's Municipal Code) as any native oak tree with a trunk that is a minimum of six inches in diameter as measured at breast height (DBH) for Interior Live Oak, Valley Oak, and Oracle Oak and four inches DBH for Blue Oak; any oak tree with multiple trunks that have an aggregate DBH of at least ten inches, or any heritage tree. This also includes any trees preserved or replanted pursuant to Section 13.54.090, except for exempt trees and those classified as invasive species by the California Invasive Pest Council, Cal-IPC (cal.ipc.org) and non-native trees listed as not to be planted on Town-owned property in the Master Tree List.

There are 14 protected trees are located on the project site, including the boundary lines, based on review of the 2016 Vesting Tentative Map and the *Arborist Report and Inventory Summary* (Sierra Nevada Arborists, 2005). Protected trees include eight valley oaks and six interior live oaks.

Waters of the United States

ECORP has developed a revised wetlands map for the site delineated onsite wetlands (ECORP Consulting, 2016b). The seasonal wetlands are located along the northwestern and southwestern portions of the property. The ephemeral stream is located in the southwestern portion of the property and drains into the onsite seasonal wetland in the southwest corner of the property. These waters are shown in Figure 3 (Site Plan).

In a letter dated August 31, 2016, the U.S. Army Corps of Engineers (Corps) concurred with the amount and location of wetlands and other water bodies on the site as depicted by the wetland delineation prepared by ECORP Consulting.

Fill and/or disturbance of the wetlands on the project site is regulated under Section 404 of the Clean Water Act and Section 401 of the federal Clean Water Act and is anticipated to require permits under Section 1602 of the California Fish and Game Code.

Special Status Species

Figure 5 provides a Wildlife Habitat Relationship Map for the project site and surrounding area. As shown, the project site itself is classified as containing annual grassland habitat, and the area surrounding the project site is classifieds as urban habitat.

Potential habitat for the following special status species occurs on the proposed project site: northwestern pond turtle, loggerhead shrike, and white-tailed kite. The November 2016 California Natural Diversity Database (CNDDB) search provided no occurrences of special status species within one mile of the project site. The result of the CNDDB search is provided by Figure 6. There are several records of federally listed species within an approximate five-mile radius of the site, including the Valley elderberry longhorn beetle ([VELB], Desmocerus californicus dimorphus); vernal pool fairy shrimp (Branchinecta lynchi); and vernal pool tadpole shrimp (Lepidurus packardi) (ECORP, 2016).

Of the special-status species that may potentially occur on the project site, vernal pool fairy shrimp and vernal pool tadpole shrimp are not anticipated to occur as there are no vernal pools on the project site. The presence of vernal pool fairy shrimp or vernal pool tadpole shrimp in any of the onsite wetland features is not likely given the site's history of disturbance from agricultural uses and existing soil contamination from pesticide application from previous orchard operations (Hurvitz, 2016 and ECORP, 2016).

While no special-status species have been documented on the site or within one mile of the site, given that potential habitat occurs on-site for several special-status species, a discussion of these species is provided below.

The **northwestern pond turtle**, a species of special concern for the California Department of Fish and Wildlife (CDFW) and a species of concern for the Sacramento Office of the U.S. Fish and Wildlife Service (USFWS), prefers aquatic habitats with abundant vegetative cover and exposed basking sites. They are associated with permanent or nearly permanent water in a wide variety of habitat types, normally in ponds, lakes, streams, irrigation ditches, or permanent pools along intermittent streams. The seasonal wetland in the northwestern corner of the property provides marginal habitat for the pond turtle. Since it is possible for the northwestern pond turtle to travel over dry land, the presence of pond turtle on the property cannot be precluded based on the fact that the onsite wetlands are hydrologically isolated. No northwestern pond turtles were observed in the site visits performed for the various biological surveys and none were identified on the site or in the vicinity in the CNDDB search.

Loggerhead shrike, a CDFW species of special concern and USFWS species of concern, prefers open grasslands or scrub with shrubs or trees and low, sparse herbaceous vegetation cover with perches available (e.g., fences, posts, utility lines). It nests in densely-foliated shrubs or trees from March to August. Trees on the project site provide potential nesting habitat and the non-native grassland provides potential foraging habitat for the loggerhead shrike. A loggerhead shrike was observed on the property during May 2005 field surveys; however, no loggerhead shrike nests have been observed on the property, and no other recorded occurrences of the species were identified within a one-mile radius of the project site (CNDDB, 2016).

White-tailed kite is a CDFW fully protected species and a USFWS species of concern. It nests in riparian and oak woodlands and forages in open grassland and savannas. There are several large trees on the project site that provide potential nesting habitat and the non-native grassland provides potential foraging habitat for the white-tailed kite. No white-tailed kites were observed during the biological surveys and site reviews, and no other occurrences of the species have been recorded within a one-mile radius of the project site (CNDDB, 2016).

Raptors and Migratory Birds: 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." While not documented in the CNDDB within the vicinity of the project site, there are numerous protected raptors and migratory birds that are not mapped, but may be present in the vicinity at times.

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 **Valley Elderberry Longhorn Beetle** is listed as threatened pursuant to the federal Endangered Species Act. VELB is completely dependent on its host plant, the elderberry (Sambucus sp.), which occurs in riparian and other woodland communities in California's Central Valley and the associated foothills (USFWS 1999). While conditions on-site are appropriate for the establishment of elderberry shrubs, none were observed during site visits conducted by ECORP biologist Dustin Brown on 6 June 2016.

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. While this species has not been documented on the project, suitable habitat is present in wetland communities throughout the project site.

There are no critical habitats for special-status species designated on or adjacent to the project site (CNDDB, 2016; USFWS, 2016).

RESPONSES TO CHECKLIST QUESTIONS

Response a), b), c), and e): Less than Significant With Mitigation.

Natural communities

The proposed project would impact the entire onsite annual grassland habitat. This non-native habitat is not considered a sensitive natural community. Impacts to the onsite wetlands and other waters are discussed below under Waters of the United States.

Trees

According to the Arborist Report and Inventory Summary, the 9.98-acre Grove Subdivision project site supports 14 trees that are considered protected trees under the Town's Tree Preservation and Protection Ordinance. These include six interior live oaks and eight valley oaks. The onsite oak trees range in size between 6- and 37-inches dbh. The following trees are expected to be removed upon development the proposed project, as provided within the Vesting Tentative Map (Meredith Engineering, 2016): two interior live oaks, one valley oaks, two olive trees, and two London plane trees. The olive and London plane trees are not protected under the Town's ordinance.

Mitigation Measure Bio-1 requires the applicant apply for a tree permit through the Town of Loomis for onsite and offsite tree impacts with implementation of tree planting and replacement measures such as replacement of trees in kind, relocation of trees, revegetation and/ or payment of in-lieu mitigation fees. Mitigation Measure Bio-2 requires tree monitoring and protection measures during project construction. Completion of these mitigation measures is anticipated to reduce impacts to protected tree resources to **less than significant** levels.

Waters of the United States

The proposed project is anticipated to impact waters of the U.S. onsite. All waters of the United States within the project site would be directly impacted (filled) by the proposed project. A total of 0.348 acres of direct impact is anticipated (ECORP Consulting, 2016). However, the 0.349 acres of waters of the United States that would be impacted is below the 0.5-acre threshold provided by the Nationwide Permit. D

The amount of fill requiring compensatory mitigation by the proposed project would be 0.349 acres of seasonal wetland or other comparable wetland type. As described in the Pre-construction Notification Request, the proposed project could provide mitigation for the impacts through the purchase of off-site credits at a U.S. Army Corps of Engineers (USACE)-approved mitigation bank or payment to the Sacramento District In-Lieu Fee program (ECORP Consulting, 2016).The project proponent would be required to attain the appropriate permits for any impacts to any offsite wetlands and other waters and would include a waste discharge permit from the Regional Water Quality Control Board and Nationwide Permit(s) from the Army Corps of Engineers (USACE, 2016).

The Town of Loomis requires new development to mitigate wetland impacts for both regulated and non-regulated wetlands to achieve a "no net loss" through avoidance, minimization, compensation, and/ or replacement (Section 13.58.040 of the Municipal Code). This policy would apply to the onsite impacts as well as the offsite impacts.

With the implementation of Mitigation Measures Bio-3 through Bio-4, the project would be required to obtain a Section 404 permit from the USACE for fill of the wetlands and would be required to mitigate for impacts to wetlands through the purchase of off-site credits at an USACE-approved mitigation bank. Mitigation Measure Bio-5 requires the applicant to obtain the appropriate Section 401 permit. Mitigation Measure Bio-6 requires the applicant to obtain a Lake and Streambed Alteration Agreement from the CDFW, if required. Implementation of Mitigation Measures Bio-3 through Bio-6 would ensure that appropriate compensation is provided for the fill of the wetlands on the project site in accordance with the USACE and Town of Loomis requirements and also require the appropriate permits are obtained to address the fill of the wetlands.

Special Status Species

According to a records search of the California Natural Diversity Database (CNDDB, 2016), the California Native Plant Society's Electronic Inventory, the California Wildlife-Habitat Relationships database, and the U.S. Fish and Wildlife Service's special-status species data, no special-status species have been identified within the project site. However, as previously described, there is habitat on the project site for the northwestern pond turtle, loggerhead shrike, white-tailed kite, raptors and migratory birds, VELB, and Boggs Lake hedge hyssop.

Implementation of the project would result in disturbance of the entire project site. 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. The loggerhead shrike, white-tailed kit, and other 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) could disturb nesting sites for birds protected by the State and Federal laws.

The grassland and wetlands provide potential habitat for the northwestern pond turtle and the northwestern pond turtle may travel on the annual grasslands present on the project site to reach habitat. The disturbance of the grasslands and wetlands during construction activities could impact the northwestern pond turtle.

The project site provides habitat for Boggs Lake hedge hyssop. While Boggs Lake hedge hyssop was not identified during previous surveys of the project site, the project site provides suitable habitat and there is the potential for the Boggs Lake hedge hyssop to have been established subsequent to prior surveys.

As described, implementation of the project would result in site-disturbing activities that could result in impacts to special-status species.

Mitigation Measures Bio-7 through Bio-9 require that the project applicant conduct focused surveys for northwestern pond turtle, pre-construction surveys for loggerhead shrike and nesting raptors/migratory birds, and pre-construction surveys for Boggs Lake hedge hyssop. If special-status wildlife or plant species are present on the project site, Measures Bio-7 through Bio-9 require actions to be taken to ensure that there are no significant adverse impacts to the species.

With implementation of the previously described mitigation measures, the proposed project impacts to special-status species would be reduced to **less than significant**.

Response d): Less than Significant. As stated previously, the proposed project would impact the entire onsite annual grassland habitat. This non-native habitat is not considered a sensitive natural community. The CNDDB record search did not reveal any documented wildlife corridors or wildlife nursery sites on or adjacent to the project site. The project site is surrounded by urban uses as shown on Figure 5, Wildlife Habitat Relationship Map. The proposed project would not interfere substantially with the movement of any native resident or migratory fish or wildlife species, wildlife corridors, or native wildlife nursery sites. Therefore, the proposed project would a **less than**

significant impact related to interfering with the movement of native resident or migratory fish or wildlife species, wildlife corridors, or native wildlife nursery sites.

Response f): No Impact. The project site is not covered by an adopted Habitat Conservation Plan (HCP) or Natural Community Conservation Plan (NCCP). The Placer County Conservation Plan (PCCP) does not cover the Town of Loomis. There is **no impact.**

Mitigation Measures

Mitigation Measure Bio-1: *The applicant shall prepare and submit a tree permit to the Town for review and approval during the discretionary approval of the tentative subdivision map for removal or impacts to protected trees that will not be avoided (pursuant to Chapter 13.54 of the Town Municipal Code). The tree permit shall apply to impacts associated with construction of the proposed subdivision roads, infrastructure improvements, and houses shall be submitted and approved prior to issuance of any grading permits. As outlined in Section 13.54.060, Tree Planting and Replacement, the review authority shall condition any tree permit for the removal of a protected tree upon the replacement of trees in kind, relocation of trees, revegetation, and/ or payment of in-lieu mitigation fees. The tree permit shall be reviewed and approved by the Town prior to any development activity onsite or offsite, including preliminary clearing or grading. Tree planting and replacement mitigation shall be fully implemented prior to issuance of any certificates of occupancy.*

Mitigation Measure Bio-2: *The project applicant shall implement the following guidelines before and during development and construction activities both onsite and offsite:*

1) The applicant shall hire an International Society of Arboriculture (ISA) certified arborist to be present onsite during all grading, construction, and tree removal activities both onsite and offsite areas. The arborist shall make sure that the appropriate trees are removed or preserved, shall evaluate all proposed improvements that may affect each protected tree to be preserved, shall make appropriate recommendations on these proposed improvements, and shall oversee construction of these improvements during site development.

2) The applicant shall implement the standard policies and procedures for approved tree work as outlined in Section 13.52.050 of the Tree Preservation and Protection Ordinance. The purpose of this Section is to define procedures necessary to protect the health of affected protected trees. These policies and procedures address, but are not limited to, trenching procedures, cutting roots, ground surface fabric, plant materials under oaks, protective fencing, grading, and utility trenching. All tree permits incorporate these policies and procedures except as the tree permit may otherwise specifically provide.

Mitigation Measure Bio-3: *The project applicant shall obtain the appropriate Clean Water Act Section 404 permit(s) from the Army Corps of Engineers for wetland and other waters impacts. Once acquired, the permit(s) shall be submitted to the Town prior to any clearing, grading, or excavation work.*

Mitigation Measure Bio-4: *According to Section 13.58.040 of the Town of Loomis' Wetland Protection and Restoration Ordinance, the applicant shall implement the following as part of the project's wetland mitigation for impacts to wetlands:*

- *Prior to approval of any grading or improvement plans, the project applicant shall provide evidence of purchase of replacement wetlands habitat of equal or better quality than the wetlands on the project site. The wetlands replacement habitat shall be purchased from a USACE-approved mitigation bank or other compensatory site that has*

been approved by the USACE. The mitigation of wetlands shall be provided at a replacement ratio of 2:1 to ensure that there is no net loss of wetland functions and values. However, if the replacement wetlands are located within the Town or within a one-mile radius of the project site, the replacement ratio may be reduced to 1:1.

Mitigation Measure Bio-5: *The project applicant shall obtain the appropriate Clean Water Act Section 401 permit from the Regional Water Quality Control Board for discharge into wetlands. Once acquired, the permit(s) shall be submitted to the Town prior to approval of improvement plans and any clearing, grading, or excavation work on the project site.*

Mitigation Measure Bio-6: *The project applicant shall submit a Notification of Lake or Streambed Alteration to the CDFW. If CDFW determines that a Lake and Streambed Alteration Agreement is required, the project applicant shall obtain the appropriate Lake and Streambed Alteration Agreement from the CDFW. Once acquired, the agreement shall be submitted to the Town prior to approval of improvement plans and any clearing, grading, or excavation work on the project site. If a Lake and Streambed Alteration Agreement is not required by CDFW, the applicant shall provide documentation of the decision by CDFW that the Agreement is not required.*

Mitigation Measure Bio-7: *If construction is to occur during the nesting raptor/migratory bird and nesting loggerhead shrike period (February 1 through October 31), the applicant shall have a qualified biologist conduct pre-construction nesting raptor/migratory bird and nesting loggerhead shrike surveys within 30 days prior to the commencement of site preparation activities in the development area to confirm the presence/ absence of nesting raptors/ migratory birds or nesting loggerhead shrikes. If an active nest(s) is located, the biologist in consultation with California Department of Fish and Wildlife (CDFW) shall recommend a buffer area around the nest(s). The buffer area shall be delineated with orange construction fencing and no construction should take place within the buffer zone until the biologist has determined that all young have fledged and are capable of foraging independently. The Town shall be notified as soon as the surveys have been completed.*

Mitigation Measure Bio-8: *Within 24 hours prior to construction, the applicant shall have a qualified biologist conduct focused surveys for the northwestern pond turtle in the project site. The presence or absence of the species shall be determined. If individuals are discovered on the project site or in immediately adjacent areas, consultation shall be initiated with California Department of Fish and Wildlife (CDFW) to formulate and implement minimization measures, which would include capture and relocation measures if the species is found on site. The Town shall be notified as soon as the surveys have been completed.*

Mitigation Measure Bio-9: *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 Boggs Lake hedge hyssop. 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 Town and the appropriate regulatory agency and develop appropriate mitigation measures, which may include relocation and transplanting of the plant population and/or off-site replacement planting at a 2:1 or higher ratio. If the confirmation survey(s) do not reveal the presence of these plants, then no further action is required.*

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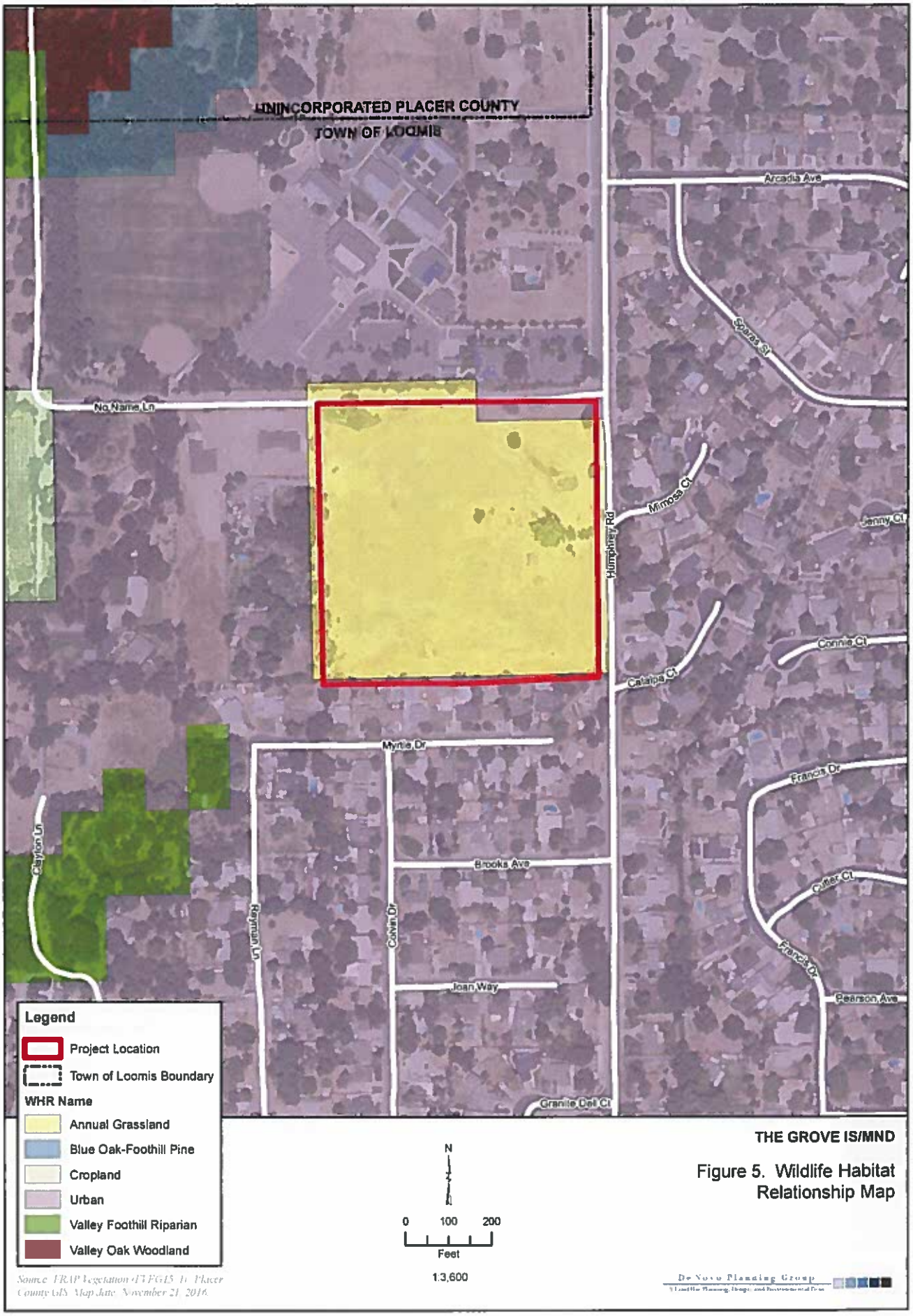
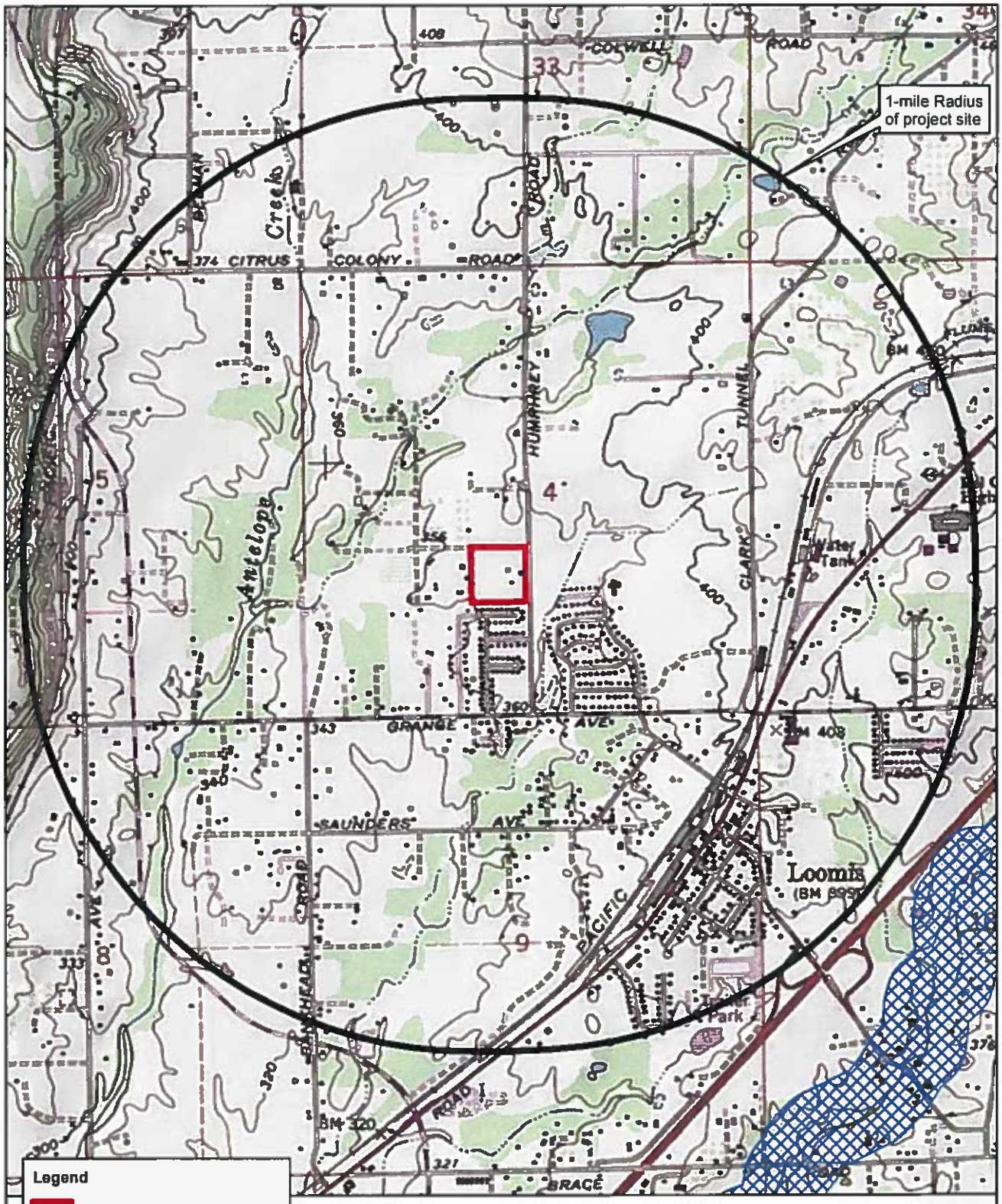


THE GROVE IS/MND

Figure 5. Wildlife Habitat Relationship Map



Legend

- Project Location
- Town of Loomis Boundary

CNDDB Species Occurrences

- Steelhead - Central Valley DPS*

*Occurs outside of 1-mile radius search. There are no CNDDB occurrences within 1-mile of the project site.

N

0 500 1,000

Feet

1:20,000

THE GROVE IS/MND

Figure 6. California Natural Diversity Database

1-mile Radius Search

Source: California Natural Diversity Database, November 1, 2016
Placer County GIS, ArcGIS Online USGS Topographic Map Service
Map date: November 21, 2016

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A Quality Planning, Design, and Environmental Firm

V. CULTURAL RESOURCES -- WOULD THE PROJECT:

	Potentially Significant Impact	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
a) Cause a substantial adverse change in the significance of a historical resource as defined in '15064.5?		X		
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to '15064.5?		X		
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?		X		
d) Disturb any human remains, including those interred outside of formal cemeteries?		X		

EXISTING SETTING

There are no known cultural resources on the project site. In 2016, ECORP Consulting, Inc. prepared a Cultural Resources Inventory Report for the proposed project. These surveys did not reveal the presence of any cultural, historical, or paleontological resources on the project site.

The Cultural Resources Inventory Report prepared by ECORP in 2016 included a records search, literature review, and field survey.

The records search results indicated that four previous cultural resources studies have been conducted within 0.5 mile of the Area of Potential Effects (APE). These studies included an Archaeological Survey of the Proposed 16-acre K-8 School Site by Quad Consultants in 1994, the Cultural Resources Assessment of the Proposed Loomis Ranchettes by Peak Associates, Inc. in 1996, the Phase I Cultural Resources Inventory by Ric Windmiller in 2001, and the Cultural Resources Survey prepared by PAR Environmental Services, Inc. in 2005. As a result of the previous studies, two historic-aged resources were previously recorded within the project's area of potential effect: P-31-1208 and P-31-1209, a single-story residence and associated outbuilding both with an estimated construction date in the 1940s. These two buildings were previously evaluated by Dan Osanna in 2001 as not eligible for the California Register of Historic Resources and subsequently demolished. No other cultural or historic resources were identified on the project site as a result of these previous studies.

The field survey performed by ECORP Consulting in 2016 used 15 meter transects to provide complete coverage of the project site. The ground surface was examined for indications of surface of subsurface resources. The 2016 field survey did not identify any cultural resources, including archaeological, prehistoric, or historic resources on the site.

RESPONSES TO CHECKLIST QUESTIONS

Response a), b), c), d): Less than Significant with Mitigation. There are no known archaeological or paleontological resources or human remains located on the project site. The project site is not located in an area that is likely to contain human remains. Given that the site has been previously

disturbed and developed, there is not a high potential for a previously undiscovered archaeological or paleontological resource to be located on the site.

According to the Cultural Resources Inventory Report prepared by ECORP in October 2016, previously-recorded sites P-31-1208 and P-31-1209 (historic-aged single-story residence and outbuilding), were previously found not eligible for the CRHR and demolished and removed from the property prior to June 2002. The surrounding landscape has been graded with little to no evidence remaining of the site; therefore, the site no longer retains integrity. The proposed project will not have an effect on historical resources or historic properties (ECORP, 2016a).

There always exists the potential for buried prehistoric archaeological sites. As such, there remains a possibility that unrecorded cultural resources are present beneath the ground surface and that such resources could be exposed during project construction. Both CEQA and Section 106 of the National Historic Preservation Act of 1966 (NHPA) require the Lead Agency to address any unanticipated cultural resource discoveries during project construction.

CEQA requires the Lead Agency to provide tribes that have requested to be placed on a lead agency's consultation list notification of projects and a tribe's opportunity to request consultation. Two Native American tribes, the United Auburn Indian Community of the Auburn Rancheria and the Ione Band of Miwok Indians, have requested to be placed on the Town of Loomis' consultation list. Both tribes were contacted and provided an opportunity to comment on the project and request consultation. This section will be updated with additional details if either tribe comments or requests project-specific consultation.

Although there are no known Native American archaeological resources at or near the project site, ground-disturbing activities may have the potential to uncover buried cultural deposits that were previously unknown and undiscovered, as is the case with most all ground disturbing activities throughout California. As a result, during construction and excavation activities, previously unknown archaeological resources, including human bone, may be uncovered, resulting in a potentially significant impact.

Implementation of the Mitigation Measures Cult-1 and Cult-2 would ensure that any potentially significant resources uncovered during construction are appropriately identified and mitigated and will reduce potential construction-related impacts to a **less than significant** level.

Mitigation Measures

Mitigation Measure Cult-1: If *any prehistoric or historic artifacts, or other indications of archaeological resources are found during grading and construction activities, 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 finds and recommend appropriate mitigation measures.*

- *If cultural resources or Native American resources are identified, every effort shall be made to avoid significant cultural resources, with in-place preservation an important goal.*
- *If resources are Native American in origin, the Ione Band of Miwok Indians and United Auburn Indian Community of the Auburn Rancheria shall be contacted and provided an opportunity to document and, if desired, recover the resources. The tribes shall have a 30-day period to review and recover any resources.*

- *Following this 30-day period, the Town will review any preservation and mitigation measures recommended by the consulting archaeologist and the Ione Band of Miwok Indians and United Auburn Indian Community of the Auburn Rancheria and shall provide direction regarding the preservation and/or mitigation that shall occur. If significant sites cannot feasibly be avoided, appropriate mitigation measures, such as data recovery excavations or photographic documentation of buildings, shall be undertaken consistent with applicable state and federal regulations. This requirement shall be included on any grading or building permits issued for the proposed project.*
- *If human remains are discovered, all work shall be halted immediately within 50 meters (165 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.*
- *If any fossils are encountered, there shall be no further disturbance of the area surrounding this find until the materials have been evaluated by a qualified paleontologist, and appropriate treatment measures have been identified.*

Mitigation Measure Cult-2: *The project applicant and developers of individual lots, as monitored by the Town of Loomis, shall provide for the protection of future cultural resource discoveries by incorporating the following requirement into any future grading, improvement and construction plans, and CC&Rs:*

> *"All construction plans shall advise contractors and construction personnel involved in any form of ground disturbance, i.e. grading or utility placement or maintenance, of the remote possibility of encountering subsurface cultural resources. If such resources are encountered or suspected, work shall be halted immediately and a qualified archeologist shall be consulted to access any discoveries and develop appropriate management recommendations for archaeological resource treatment. If bones are encountered and appear to be human, California Law requires that the County Coroner and the Native American Heritage commission be contacted and, if Native American resources are involved, Native American Organizations and locally recognized individuals shall be notified and consulted about any plans for treatment."*

VI. GEOLOGY AND SOILS -- WOULD THE PROJECT:

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

EXISTING SETTING

According to the USDA NRCS Web Soil Survey (NRCS, 2016), the project site supports Andregg coarse sandy loam, 2 to 9 percent slopes. This soil type is a moderately deep, rolling, well-drained soil underlain by weathered granitic bedrock. This soil type consists of narrow stringers of somewhat poorly drained recent alluvium adjacent to stream channels. As indicated on the Geologic Survey of California, Sacramento Sheet (CDC, 1971), the project site is underlain by plutonic dioritic rock of the Mesozoic era, which is not a parent material for serpentine soil.

According to the Sacramento Sheet, no faults are depicted in the proposed project site region; the nearest depicted fault is the Bear Mountain Fault Zone running north-south through the Auburn area. Consistent with the provisions of the Alquist-Priolo Act, which address the hazards of surface fault ruptures, the project site vicinity has not been designated as an Earthquake Fault Zone. Moreover,

according to the Town of Loomis General Plan, the region is underlain by a relatively unbroken granitic batholith that, during seismic events, tends to react as a uniform block which has the effect of reducing ground movement, acceleration, and the likelihood of ground rupture (Town of Loomis, 2001). Consequently, the California Division of Mines and Geology classifies the region as a low severity earthquake area.

The Geotechnical Investigation (Soil Search Engineering, 2005) previously prepared for the project site determined that there is no evidence of shallow groundwater. The surface soils at the project site have a low plasticity and expansion potential when subjected to fluctuations in moisture. Additionally, there is no indication for the potential for shallow ground rupture or high liquefaction potential during the event of seismic shaking.

RESPONSES TO CHECKLIST QUESTIONS

Responses a.i), a.ii): Less than Significant with Mitigation. The site is not located within a currently designated Alquist-Priolo Earthquake Fault Zone and known surface expression of active faults does not exist within the site. Additionally, the site is not located within a highly seismically active region. According to the USGS Fault and Fold Database, the nearest active faults are the Vaca Fault, the Cordelia fault, the Bear Mountain Fault Zone, and the Hunting Creek-Berryessa fault zone.

Geologic Hazards

Potential seismic hazards resulting from a nearby moderate to major earthquake could generally be classified as primary and secondary. The primary seismic hazard is ground rupture, also called surface faulting. The common secondary seismic hazards include ground shaking and ground lurching.

Because the property does not have known active faults crossing the site, and the site is not located within an Earthquake Fault Special Study Zone, ground rupture is unlikely at the subject property.

An earthquake of moderate to high magnitude generated by a nearby fault could cause considerable ground shaking at the site, similar to that which has occurred in the past. The project would be built using standard engineering and seismic safety design techniques. Building design at the project site would be completed in conformance with the building standards contained within the Town of Loomis Municipal Code. The structures would also meet the requirements of applicable building and fire codes, including the 2013 California Building Standards Code (CBSC). Seismic design provisions of current building codes generally prescribe minimum lateral forces, applied statically to the structure, combined with the gravity forces of dead-and-live loads. The code-prescribed lateral forces are generally considered to be substantially smaller than the comparable forces that would be associated with a major earthquake. Therefore, structures would be able to: (1) resist minor earthquakes without damage, (2) resist moderate earthquakes without structural damage but with some nonstructural damage, and (3) resist major earthquakes without collapse but with some structural as well as nonstructural damage.

As noted previously, a previously approved geotechnical report for the site was performed in 2005 (Soil Search Engineering, 2005). The report indicated the potential for strong seismic shaking.

Ground Lurching

Ground lurching is a result of the rolling motion imparted to the ground surface during energy released by an earthquake. Such rolling motion could cause ground cracks to form in weaker soils.

The potential for the formation of these cracks is considered greater at contacts between deep alluvium and bedrock.

Conclusion

The project site is not within an Alquist-Priolo Special Studies Zone nor a highly seismically active zone. However, several faults are located within an approximately 50-mile radius of the project site. Therefore, development of the proposed project could expose people or structures to substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault and/or strong seismic ground shaking. Section 12.04.310 of the Town Code requires a soil or geologic investigation to be conducted for areas of known or suspected geological hazards, including hazards of ground failure stemming from seismically induced ground shaking. Mitigation Measure Geo-1 requires the completion of a geotechnical evaluation prior to implementation of building permits and requires the project to comply with all recommendations of the geotechnical evaluation. Compliance with the California Building Standards Code requirements and Mitigation Measure Geo-1 would ensure the potential impacts are **less than significant.**

Responses a.iii), c): Less than Significant with Mitigation. 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. There are no creeks or open bodies of water within an appropriate distance from the project site for lateral spreading to occur on the project site. For this reason, the probability of lateral spreading occurring on the project site is low.

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 at or near to the project site to the lack of significant slopes. For this reason, the probability of landslides occurring on the project site is low.

Soil liquefaction results from loss of strength during cyclic loading, such as that which is imposed by earthquakes. Soils most susceptible to liquefaction are clean, loose, saturated, uniformly graded, and fine-grained sands. The surface soils at the project site have low plasticity and expansion potential and are not anticipated to be unstable or become unstable as a result of the project. From a soil and engineering standpoint, the project site is suitable for the proposed project, provided that the recommendations presented in the previously prepared Geotechnical Investigation are incorporated into the design considerations, project plans, and specifications (Soil Search Engineering, 2005). The report recommends, among other things, that the onsite organically contaminated surface soils are not suitable for engineered fill and should not be used for the proposed project. The onsite contaminated soils are discussed further in the Hazards & Hazardous Materials section below (the contaminated soil would be removed from the project site prior to grading and other construction activities). The Town of Loomis Municipal Code (Section 12.04.350) states that the Director of Public Works may require a Geotechnical Report, which must include a complete record of all field and laboratory tests, a professional opinion regarding slope stability and soil bearing capacity, recommendations regarding foundation design, and a declaration by the geotechnical engineer/geologist.

Mitigation Measures Geo-1 and Geo-2 are provided to ensure soil preparation and grading are conducted to Town standards with implementation of the recommendations in the Geotechnical Investigation, as updated to address the proposed project. With implementation of Mitigation Measures Geo-1 and Geo-2, potential impacts associated with liquefaction would be a **less than significant** level.

Responses a, iv): Less than Significant. The proposed project site is not susceptible to landslides because the area is essentially flat. This is a **less than significant** impact.

Response b): Less than Significant with Mitigation. The proposed project anticipates that on-site grading would result in balanced cut and fill. The remediation phase of the proposed project would require the removal of approximately 4,580 cy of contaminated soil, causing ground disturbance of top soil to prepare the site for construction of the proposed project. The area of ground disturbance consist primarily of the southern half of the project site, with an excavation area also located in the central portion of the northern half of the project site. Following soil remediation, construction activities would include grading of the site, including excavation of the detention basin and balancing cut and fill throughout the site. The site would be relatively flat after grading. Grading would also occur along the Humphrey Road frontage of the project site for provision of curb, gutter, and sidewalks and to connect to infrastructure. Soil remediation and grading activities have the potential to result in increased soil erosion and sedimentation. Moreover, the increase in impervious surfaces with buildout of the subdivision would increase the amount and rate of runoff, leading to potential increase in soil erosion. This impact is also discussed in Section IX, Hydrology and Water Quality.

Mitigation Measures HWQ-1 and HWQ-2 (see Section IX, Hydrology and Water Quality) have been developed to ensure that appropriate Best Management Practices (BMPs) related to prevention of soil erosion during site disturbance and construction activities are implemented. While development of the project may result in a potentially significant impact with respect to removal of topsoil and soil erosion, implementation of Mitigation Measure HWQ-1 would ensure the impact is **less than significant**.

Response d): Less than Significant. Expansive soils shrink/swell when subjected to moisture fluctuations, which could cause heaving and cracking of slabs-on-grade, pavements, and structures founded on shallow foundations. Building damage due to moisture changes in expansive soils could be reduced by appropriate grading practices and using post-tensioned slab foundations or similarly stiffened foundation systems which are designed to resist the deflections associated with soil expansion. Soils on the project site are primarily Andregg coarse sandy loam, 2% to 9% slopes. This soil type does not exhibit expansive characteristics. A review of the USDA Web Soil Survey results for the project site indicates that this soil type does not exhibit expansive characteristics (USDA, 2016). Further, the Geotechnical Investigation (Soil Search Engineering, 2005) indicates that the surface soils at the project site have a low plasticity and expansion potential when subjected to fluctuations in moisture (Soil Search Engineering, 2005). Impacts associated with expansive soils are **less than significant**.

Response e): No Impact. The project would connect to the existing City sewer system. Septic systems will not be used. Therefore, **no impact** would occur related to soils incapable of adequately supporting the use of septic tanks.

Mitigation Measures

***Mitigation Measure Geo-1**: The project applicant shall update the previous geotechnical investigation or have a new geotechnical investigation prepared to meet the requirements of Section 12.04.340 of the Town Municipal Code. The geotechnical investigation shall be submitted to the Loomis Public Works and Engineering Department for review and approval prior to approval of any grading permit or improvement plans. The project applicant must comply with all recommendations of that report and shall include all of the report recommendations in the grading and improvement plans for the project. It is the responsibility of the applicant and developer to provide for engineering inspection and certification that earthwork has been performed in conformity with recommendations contained in the report.*

***Mitigation Measure Geo-2**: Where soil or geologic conditions encountered in grading operations are different from that anticipated in the geotechnical report, or where such conditions warrant changes to the recommendations contained in the geotechnical report, a revised geotechnical report shall be submitted by the applicant or individual lot developer, for approval by the Town Engineer. It shall be accompanied by an engineering and geological opinion as to the safety of the site from hazards of erosion, settlement, and seismic activity.*

VII. GREENHOUSE GAS EMISSIONS – WOULD THE PROJECT:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			X	
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gasses?			X	

Greenhouse Gases

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.

Naturally occurring greenhouse gases include water vapor (H_2O), carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), and ozone (O_3). 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 CO_2, CH_4, and N_2O 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)[4].

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 (CO_2), methane (CH_4), ozone (O_3), water vapor, nitrous oxide (N_2O), and chlorofluorocarbons (CFCs).

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 proposed 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*

[4] 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

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.

Energy Efficiency

Appendix F of the State CEQA Guidelines requires consideration of the potentially significant energy implications of a project. CEQA requires mitigation measures to reduce "wasteful, inefficient and unnecessary" energy usage (Public Resources Code Section 21100, subdivision [b][3]). According to Appendix F of the CEQA Guidelines, the means to achieve the goal of conserving energy include decreasing overall energy consumption, decreasing reliance on natural gas and oil, and increasing reliance on renewable energy sources. In particular, the proposed project would be considered "wasteful, inefficient, and unnecessary" if it were to violate state and federal energy standards and/or result in significant adverse impacts related to project energy requirements, energy inefficiencies, energy intensiveness of materials, cause significant impacts on local and regional energy supplies or generate requirements for additional capacity, fail to comply with existing energy standards, otherwise result in significant adverse impacts on energy resources, or conflict or create an inconsistency with applicable plan, policy, or regulation.

The proposed project is a residential development, and as such, there are no large commercial or industrial buildings proposed that would have a high or wasteful demand for energy. The amount of energy used at the project site would directly correlate to the number and size of apartment units, the energy consumption of associated unit appliances, garage usage, and outdoor lighting, and energy use associated with other on-site buildings and activities. Other proposed project energy uses include fuel used by vehicle trips generated during project construction and operation, and fuel used by off-road construction vehicles during construction. The following discussion provides calculated levels of energy use expected for the proposed project, based on commonly used modelling software (i.e. CalEEMod v2016.3.1 and the California Air Resource Board's EMFAC2014). It should be noted that many of the assumptions provided by CalEEMod are conservative relative to the proposed project. Therefore, this discussion provides conservative estimate of proposed project emissions.

RESPONSES TO CHECKLIST QUESTIONS

Responses a), b): Less than Significant.

Greenhouse Gases

Implementation of the proposed project would cumulatively contribute to increases of GHG emissions that are associated with global climate change. Estimated GHG emissions attributable to future development would be primarily associated with increases of carbon dioxide (CO_2) and, to a lesser extent, other GHG pollutants, such as methane (CH_4) and nitrous oxide (N_2O). Sources of GHG

emissions include area sources, mobile sources or vehicles, utilities (electricity and natural gas), water usage, wastewater generation, and the generation of solid waste. The common unit of measurement for GHGs is expressed in terms of annual metric tons of CO_2 equivalents (MT CO_2e/year).

The PCAPCD has established greenhouse gas thresholds for new projects occurring within Placer County. PCAPCD has established a *Bright-line* threshold of 10,000 MT CO_2e/year for combined construction and operational GHG emissions, and a *De Minimis* threshold of 1,100 MT CO_2e/year for operational emissions (PCAPCD, 2016). In developing these thresholds, the PCAPCD took into account statewide regulations to achieve emission reduction targets for GHGs, and special geographic and land use features in Placer County. Table 5 shows project GHG emissions.

Table 5: Unmitigated Maximum Annual Project Greenhouse Gas Emissions (MT CO2e)

Project Phase	*Project Emissions*	*PCAPCD GHG Thresholds*
Remediation/ Construction	247.18	--
Operational	388.89	1,100
Total	**636.07**	**10,000**

SOURCE: CALEEMOD (V.2016.3.1), NOVEMBER 2016.

As shown above, the proposed project, including soil remediation, construction, and long-term operation, would not exceed the District operational *De Minimis* threshold or the total project *Bright-line* Threshold for GHGs. As such, the proposed project would comply with all GHG requirements as set forth by the PCAPCD, and no mitigation is required. This is a **less than significant** impact.

Energy Efficiency

Electricity & Natural Gas (Operation)

Electricity and natural gas used by the proposed project would be used primarily to power on-site buildings. Total annual unmitigated electricity (kWh) and natural gas (kBTU) usage associated with the operation of the proposed project are shown in Table 6, below.

Table 6: Project Operational Natural Gas and Electricity Usage (Unmitigated Scenario)

EMISSIONS[A]	*NATURAL GAS (KBTU/YEAR)*	*ELECTRICITY (KWH/YEAR)*
Single Family Housing	703,733	199,280
Total	**703,733**	**199,280**

NOTE: [A] NUMBERS PROVIDED HERE MAY NOT ADD UP EXACTLY TO TOTAL DUE TO ROUNDING.

SOURCE: CALEEMOD (V.2016.3.1)

According to CalEEMod's *Appendix A: Calculation Details for CalEEMod*, CalEEMod uses the California Commercial End Use Survey (CEUS) database to develop energy intensity value for non-residential buildings. The energy use from residential land uses is calculated based on the Residential Appliance Saturation Survey (RASS). Similar to CEUS, this is a comprehensive energy use assessment that includes the end use for various climate zones in California.

On-road Vehicles (Operation)

The proposed project would generate vehicle trips during its operational phase. According to the Traffic Study prepared for the proposed project (KD Anderson, 2016), the project would generate approximately 215 total daily trips. In order to calculate operational on-road vehicle energy usage and emissions, default trip lengths generated by CalEEMod were used, which are based on the project

location and urbanization level parameters selected within CalEEMod (i.e. "Placer County" and "Urban", respectively). These values are provided by the individual districts or use a default average for the state, depending on the location of the proposed project (ENVIRON, 2016). Based on default factors provided by CalEEMod, the average distance per trip is assumed to be approximately 8.9 miles. Therefore, the proposed project would generate at total of approximately 1,914 average daily vehicle miles travelled (Average Daily VMT). Using fleet mix data provide by CalEEMod (v2016.3.1), and Year 2019 gasoline and diesel MPG (miles per gallon) factors for individual vehicle classes as provided by EMFAC2014, De Novo derived weighted MPG factors of approximately 23.1 for gasoline and 11.3 for diesel. With this information, De Novo calculated that the unmitigated proposed project would generate vehicle trips that would use a total of approximately 83 gallons of gasoline and 26 gallons of diesel fuel per day, on average.

On-road and Off-Road Vehicles (Construction)

The proposed project would also generate on-road and off-road vehicle trips during project construction (from construction workers and vendors). Energy consumed by proposed project on-road construction would be similar to other projects of a similar size. Given the small scale of the proposed project, energy used to power on-road and off-road construction vehicles would be minimal. Additionally, energy used by on-road and off-road vehicles during the construction phase of the proposed project would be temporary, only occurring during the construction phase of the proposed project. The significance of on-road construction vehicle impacts are discussed further under Traffic and Transportation of this IS/MND.

Other

The proposed project could also use other sources of energy not identified here. Examples of other energy sources include alternative and/or renewable energy (such as solar PV) and/or on-site stationary sources (such as on-site diesel generators) for electricity generation. However, these sources of energy are not currently planned to be a significant energy source for the proposed project.

Conclusion

The proposed project would use energy resources for the operation of project buildings (electricity and natural gas), for on-road vehicle trips (e.g. gasoline and diesel fuel) generated by the proposed project, and from off-road construction activities associated with the proposed project (e.g. diesel fuel). Each of these activities would require the use of energy resources. The proposed project would be responsible for conserving energy, to the extent feasible, and relies heavily on reducing per capita energy consumption to achieve this goal, including through Statewide and local measures.

The proposed project would be in compliance with all applicable Federal, State, and local regulations regulating energy usage. For example, PG&E is responsible for the mix of energy resources used to provide electricity for its customers, and it is in the process of implementing the Statewide Renewable Portfolio Standard (RPS) to increase the proportion of renewable energy (e.g. solar and wind) within its energy portfolio. PG&E is expected to achieve at least a 33% mix of renewable energy resources by 2020, and 50% by 2030. Additionally, energy-saving regulations, including the latest State Title 24 building energy efficiency standards ("part 6"), would be applicable to the proposed project. Other Statewide measures, including those intended to improve the energy efficiency of the statewide passenger and heavy-duty truck vehicle fleet (e.g. the Pavley Bill and the Low Carbon Fuel Standard), would improve vehicle fuel economies, thereby conserving gasoline and diesel fuel. These energy savings would continue to accrue over time. Furthermore, as described previously, the incorporation of the mitigation measures described previously in this section would further reduce

project energy. The proposed project would also be in compliance with the planning documents described previously within this section.

As a result, the proposed project would not result in any significant adverse impacts related to project energy requirements, energy use inefficiencies, and/or the energy intensiveness of materials by amount and fuel type for each stage of the project including construction, operations, maintenance, and/or removal. PG&E, the electricity and natural gas provider to the site, maintains sufficient capacity to serve the proposed project. The proposed project would comply with all existing energy standards. For these reasons, the proposed project would not be expected cause an inefficient, wasteful, or unnecessary use of energy resources nor cause a significant impact on any of the threshold as described by Appendix F of the CEQA Guidelines. This is a **less than significant** impact.

VIII. HAZARDS AND HAZARDOUS MATERIALS -- WOULD THE PROJECT:

	Potentially Significant Impact	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?		X		
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?		X		
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?		X		
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				X
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?				X
f) 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?				X
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?			X	
h) 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?			X	

EXISTING SETTING

The project site is currently vacant and unoccupied. There is a minimal amount of debris on the project site, and there are no known wells or septic systems.

Although currently undeveloped, the 9.98-acre project site historically supported a residence, pear orchards, and limited cattle grazing. The pear orchard was removed in 1961. All structures were removed by February 2003.

Phase I Environmental Site Assessment and Associated Reports

A Phase I Environmental Site Assessment (Youngdahl, 2003) and subsequent investigations, Humphrey Road Pesticide Assessment Soil Investigation and Establishment of Clean-Up Goals (Clean Up Goals Report) (Youngdahl, 2003), Environmental Soil Sampling Report (Earthec Ltd, 2004), Report of Findings (Earthtec Ltd., 2005) identified elevated levels of lead, arsenic, and dichlorodiphenyltrichloroethane (DDT), dichlorodiphenyldichloroethylene (DDE), and dichlorodiphenyldichloroethane (DDD), collectively referred to as compounds of concern (COC) on the project site. No other potential hazards, such as asbestos-containing materials or underground storage tanks, are known to occur on the property.

The COCs are located primarily in the southern half of the site, with Area A consisting of approximately 70,000 sf and located in the southeastern quadrant and Area B consisting of approximately 50,000 sf and located in the southwestern quadrant. Area C is located in the central portion of the northern half of the site and consists of approximately 5,000 sf. See Figure 7 for identification of Areas A, B, and C.

Removal Action Work Plan

A draft Removal Action Work Plan (RAW) has been prepared by Hurvitz Environmental Services Inc (Hurvitz, 2016) in coordination with the California Department of Toxic Substance Control (DTSC) to address the removal and remediation of contaminated soils.

Hazardous Databases

The project site has not been identified in any of the reviewed hazardous databases (i.e. DTSC Envirostor, State Water Resources Control Board GeoTracker), nor is the site on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. However, the site itself is listed as an active cleanup site (voluntary) by DTSC.

Other Conditions

The proposed project site is not located within an airport land use plan, within the vicinity of a private airstrip, or adjacent to wildlands with a significant risk of wildland fires. The site is not included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5.

Oversight Agencies

Multiple federal agencies regulate the use, storage, transport, and disposal of hazardous materials, including the U.S. Environmental Protection Agency, the Occupational Safety and Health Administration (OSHA), the U.S. Department of Energy, and the U.S. Department of Transportation. Applicable federal regulations are contained primarily in Title 40 (Chapter I – U.S. Environmental Protection Agency), Title 29 (Chapter XVII – OSHA), Title 10 (Chapter X – U.S. Department of Energy), and Title 49 (Chapter I – U.S. Department of Transportation) of the Code of Federal Regulations. Title 40, Chapter 1, regulates water and air contamination, pesticide use, toxic substances, emergency planning, and solid and liquid wastes. Title 29, Chapter 17, regulates worker safety and health concerning environmental hazards, and Title 10, Chapter 10, regulates petroleum-based products. Title 49, Chapter 1, regulates the transportation of hazardous materials, and details hazardous material spill/release prevention and response plans.

The California Hazardous Waste Control Law is administered by the California Environmental Protection Agency to regulate hazardous wastes. Although the Hazardous Waste Control Law is

generally more stringent than Resource Conservation and Recovery Act, until the U.S. Environmental Protection Agency approves the California program, both the state and federal laws apply in California. The Hazardous Waste Control Law lists 791 chemicals and approximately 300 common materials that may be hazardous; establishes criteria for identifying, packaging, and labeling hazardous wastes; prescribes management controls; establishes permit requirements for treatment, storage, disposal and transportation; and identifies some wastes that cannot be disposed of in landfills.

The California Department of Toxic Substances Control (DTSC) enforces hazardous waste laws and regulations. DTSC takes enforcement action against violators; oversees cleanup of hazardous wastes on contaminated properties; makes decisions on permit applications from companies that want to store, treat or dispose of hazardous waste; and protects consumers against toxic ingredients in everyday products.

The Placer County Office of Emergency Services (OES) is the emergency management agency for Placer County. OES coordinates the County government's response to disaster or other large scale emergency. The Placer County and Placer Operational Area EOP establishes an emergency management organization and assigns functions and tasks consistent with the National Incident Management System (NIMS) and California's Standardized Emergency Management System (SEMS). This Plan, reviewed by local emergency services agencies as well as county staff, provides policies, organization, and responsibilities of all County departments and agencies for planning for, responding to, recovering from and mitigating against natural disasters and manmade emergency incidents.

The Federal Emergency Management Agency (FEMA) has targeted natural disaster loss reduction as one of its primary goals. Pursuant to the Disaster Mitigation Act of 2000, local jurisdictions are required to have a FEMA-approved Local Hazard Mitigation Plan (LHMP) to better position resources in advance of a disaster and to maintain eligibility for certain disaster assistance and hazard mitigation funding programs. Placer County most recently updated and approved its LHMP in June 2016.

RESPONSES TO CHECKLIST QUESTIONS

Responses a), b), c): Less than Significant with Mitigation.

Soil Remediation

As previously described, evaluations of the project site have identified the presence of COCs, including lead, arsenate, and chlorinated pesticides (DDT, DDE, and DDD), associated with former agricultural uses on the project site. A Removal Action Work Plan has been prepared to establish the methodology and actions necessary to remediate contaminated soils and reduce COCs to an acceptable level. Prior to implementation of the RAW, the document must be approved by DTSC. DTSC is the responsible agency monitoring the soil sampling and cleanup of the 9.98-acre project site. Oversight of hazardous waste contamination that affect public health including authorization for cleanup is provided by DTSC. Following implementation of the RAW, project grading and construction activities would commence.

The concentrations or levels of the COCs encountered were evaluated and the reports prepared by Youngdahl and Earthtec Ltd. recommended project remediation goals (PRGs). The RAW evaluated

the recommended PRGs recommended in the Clean Up Goals Report prepared by Youngdahl in 2003 and the Report of Findings prepared by Earthec Ltd. In 2005. The RAW identified that California Human Health Screening Levels have been revised since the Youngdahl and Earthec Ltd. The RAW identifies project remediation goals shown in Table 7.

Table 7: Project Remediation Goals

CONTAMINANT	2005/2009 REVISED CALIFORNIA HUMAN HEALTH SCREENING LEVELS (MG/KG)	PROJECT REMEDIATION GOALS (MG/KG)
Arsenic	0.07	9.0
Lead	80	80
DDD	2.3	2.3
DDE	1.6	1.6
DDT	1.6	1.6

NOTE: PRGS ARE BASED ON CHHSLS FOR ALL CONTAMINANTS EXCEPT ARSENIC. THE ARSENIC PRG IS BASED ON AVERAGE BACKGROUND ARSENIC CONCENTRATIONS FOUND IN CALIFORNIA AND FROM HISTORICAL NEAR-SITE BACKGROUND SAMPLING.

SOURCE: HURVITZ, 2016

The RAW identifies a process for excavating and removing the contaminated materials and performing sampling to ensure that full remediation of potentially hazardous materials in the project soil has occurred.

Removal activities will be performed by a California licensed contractor, with the supervision of a California licensed professional geologist or engineer. All removal, transportation, and disposal of soil will be performed in accordance with applicable Federal, State, and local laws, regulations, ordinances, and requirements. The RAW includes the following steps for removal action implementation:

1. Field documentation. All on-site personnel, meetings, and field activities, including safety precautions, will be documented in logbooks. Chain-of-custody documentation will be used for all samples collected and transported to a laboratory. Photographs will be taken of the field activities and sample locations.

2. Site Preparation and Security Measures. The areas of concern (Areas A through C) have been generally established based on previous investigations. Prior to the commencement of removal activities, pre-excavation sampling will be conducted to finalize the areas of concern and to ensure that areas not previously sampled are addressed. Analysis of samples will include testing for all COCs. As part of this step, underground utilities and other underground obstacles will be identified to ensure that obstacles are cleared prior to soil excavation. Security fencing will be installed prior to the beginning of site excavation activities. The site will be signed, directing all visitors to the site manager.

3. CEQA Mitigation Measures. The RAW will be updated as necessary to incorporate all applicable mitigation measures identified through the CEQA process once the Mitigated Negative Declaration/Initial Study has been adopted.

4. Noise Control. Noise generating construction operations will be limited to between the hours of 8 am and 5 pm, Monday through Friday, and there will be no start-up of machines or equipment before 7:30 am and there will be no cleaning or servicing equipment past 6 pm. Construction activities will not be performed on Saturdays, Sundays, and State and Federal

holidays. Note: See Section XII, Noise, of this document for additional noise control measures that would apply to the project.

5. Work Zones. The field activities will be divided into an exclusion zone, which contains the excavation areas and soil stockpiling and loading areas, a decontamination zone where soil and debris will be removed from equipment, vehicles, and personnel leaving the exclusion zone, and a support zone/staging area.

6. Excavation. The excavation plan identifies removal of approximately 4,580 cy of soil impacted with COCs. The estimated depth of excavation is approximately 12 to 18 inches. Soil will be stockpiled into two to three locations on-site. Soil stockpiles will be sampled in accordance with the receiving landfill requirements. All equipment, personnel, and vehicles leaving the exclusion zone will be decontaminated and any trucks that have been loaded with soils outsize of the exclusion zone will be decontaminated. Excavation activities will include meteorological, air quality, and dust control monitoring and air quality and dust control measures to ensure airborne contaminants do not exceed acceptable levels.

7. Confirmation Sampling and Analysis Plan. DTSC has established sampling protocol based on the size of a site. Sites greater than four and up to 20 acres are recommended to have eight composite samples from discrete samples taken on half-acre centers. Because the site has already been identified as having COCs, the RAW has identified additional discrete and composite sampling. Following excavation, soils will be sampled at eight locations along the bottoms of Areas A and B. Once sample per quarter acre will be taken from Area C. One excavation sidewall sample will be conducted per 50 linear feet of sidewall. The samples will be tested and analyzed for all COCs. If any results exceed the PRGs, the area will be excavated approximately five feet back and will be resampled until the samples meet the PRGs.

8. Transportation. The excavated soils will be reviewed and analyzed prior to being removed from the site. Based on the contaminants and concentrations present, the receiving landfill will be identified. The stockpiles will then be loaded and transported to the approved landfill for disposal. Trucks entering and existing the site will follow the route identified in the RAW Transportation Plan.

9. Site Restoration. Following completion of excavation activities and confirmation sampling, the site will be graded and restored to accommodate the proposed housing development.

The RAW identifies a comprehensive plan to address COCs on the site and remediate the soil to ensure that all COC levels are within remediation goals. The RAW includes measures to ensure that contaminated soils are contained within the site during sampling and excavation activities and are properly disposed. Once soil remediation has occurred, implementation of the proposed project including grading, construction, and remediation of hazardous material soil contamination would pose a less than significant impact regarding creation or release of significant hazards to the public or environment associated with the soils present on the project site. Mitigation Measure Haz-1 requires that the applicant implement the RAW and receive a certification from DTSC that the remediation activities have been satisfactorily completed prior to any grading or construction on the project site. Mitigation Measure Haz-2 would ensure proper storage of materials, wash-out of concrete trucks, collection of waste, and storage of hazardous materials during construction activities to reduce the potential for a release of hazardous materials. Implementation of Mitigation Measures

Haz-1 and Haz-2 will ensure that impacts associated with the transport, use, and disposal of the potentially hazardous soils, including any accident or upset conditions that could release the soils into the environment, are reduced to a **less than significant** level.

Project Construction

The construction and development of the project will require the storage and handling of hazardous materials during the course of construction. These materials could include gasoline and/or diesel fuels, lubricants, dry construction materials (e.g., plaster, cement, etc.), and certain herbicides, fertilizers, insecticides, etc.

The applicant will be required to comply with the Town's General Plan Safety Element policies that require the implementation of state and local requirements for interim storage of hazardous and flammable materials during all construction activities. 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.

No acutely hazardous materials would be used during construction of the project. In addition, materials handled would not pose a significant risk to off-site residents or construction workers because they would be used and stored in accordance with existing laws and regulations. All construction equipment and materials would be temporarily stored on site during construction. Although not anticipated, if quantities of fuel or oil greater than or equal to 1,320 gallons are stored on the project site during construction, a Spill Prevention Control and Countermeasure Plan must be prepared in accordance with Title 40, Code of Federal Regulations, Section 112.

While federal, state, and local requirements regulate the use, storage, and disposal of hazardous materials, Mitigation Measure Haz-2 has been provided to ensure that proper storage of materials, wash-out of concrete trucks, collection of waste, and storage of hazardous materials during construction activities to reduce the potential for exposure to hazardous materials to **less than significant**.

Project Operations

The operational phase of the Project will occur after construction is completed and residents move in to occupy the residential units on a day-to-day basis. The project is composed of residential dwellings, a stormwater detention basin, a neighborhood park, and two landscaping lots. None of these uses will routinely transport, use, or dispose of significant amounts of hazardous materials, or present a reasonably foreseeable release of hazardous materials, with the exception of common residential and landscaping hazardous materials such as household cleaners, paint, motor fuels, pesticides, etc. that would be used and stored in small quantities.

During the storage and/or use of chemical products, the risk of an accidental release exists. However, based on the types and quantities of hazardous substances anticipated to be used, the risk of a release of a significant quantity of hazardous substances is considered minimal and commensurate with similar land uses. All future residents within the project site and businesses or agencies that serve the project are required by local, state and federal law to comply with applicable regulations regarding use, transport, and storage of hazardous materials. These requirements for the management of hazardous materials ensure that the risk of a release of hazardous substances by

residents and/or commercial businesses is minimized. The proposed project would develop residential, office, and commercial land uses. No industrial land uses are proposed. The project is not expected to introduce any land uses that require the use, transport, or storage of large volumes of hazards materials or the use of acutely hazardous materials. The risk of release of hazardous materials during project operation would be **less than significant.**

Hazardous Materials in the Vicinity of a School

There is a school located within one-quarter mile of the project site (H. Clarke Powers School), located directly to the north. As previously described, contaminated soils will be removed during the remediation phase and small amounts of hazardous materials may be used during the construction and operation phases of the project. Mitigation Measure Haz-1 would ensure that soil remediation activities are conducted in accordance with the RAW and that safety measures are in place to ensure that hazardous materials are removed from the site and transported in a safe manner consistent with applicable laws and regulations. Mitigation Measure Haz-2 would reduce the potential for accidental releases of hazardous materials during construction activities. Compliance with Mitigation Measures Haz-1 and Haz-2, as well as applicable federal, state, and local laws and requirements would ensure that potential impacts associated with hazardous emissions and hazardous materials, substances, and waste within one-quarter mile of the school are reduced to a **less than significant** level.

Response d): No impact. The project site has not been identified in any of the hazardous databases nor is the site on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. However, the site itself is listed as a voluntary active cleanup site (voluntary). As described previously, the proposed project includes full soil contamination cleanup of the project site, in cooperation with the DTSC. Additionally, the school site north of the project site (H. Clarke Elementary) is listed as having prior cleanup action, with no further action required as of August 2000 (DTSC, 2016). There are no other listed cleanup sites located within 1000 feet of the project site.

The project site is not identified on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. As a result, the proposed project would have **no impact** under this criterion.

Responses e), f): No impact. The project site is not located near an existing airport and is not within an existing airport land use plan. The project site is approximately 9 miles from the Lincoln Regional Airport and 10.5 miles from the Auburn Municipal Airport (Google Earth, 2016). The project site is not located within the approach or take-off zones of the Lincoln Regional Airport or the Auburn Municipal Airport, nor is it located within the overflight zones of the airports. Therefore, **no impact** would occur.

Response g): Less than Significant. Implementation of the proposed project would not result in any substantial modifications to the existing roadway system and would not interfere with potential evacuation or response routes used by emergency response teams. The proposed project would also not interfere with any emergency response plan or emergency evaluation plan. The entrance to the project site from Humphrey Road would be sufficiently wide to allow for emergency access in the event of emergency. An expanded discussion of local circulation and traffic volumes is provided in the Transportation and Circulation Section of this report. This is a **less than significant** impact.

Response h): Less than Significant. The project site is surrounded by roadways and developed uses. The risk of wildfire is related to a variety of parameters, including fuel loading (vegetation), fire weather (winds, temperatures, humidity levels and fuel moisture contents) and topography (degree of slope). Steep slopes contribute to fire hazard by intensifying the effects of wind and making fire suppression difficult. Fuels such as grass are highly flammable because they have a high surface area to mass ratio and require less heat to reach the ignition point, while fuels such as trees have a lower surface area to mass ratio and require more heat to reach the ignition point. The site is not located within an area with high wildland fire risks. CalFire has identified the entire Town of Loomis as a Non-Very High Fire Hazard Severity Zone. This is a **less than significant** impact.

Mitigation Measures

Mitigation Measure Haz-1: *Prior to issuance of any grading permits for the project (not including any grading permits needed for the DTSC-approved cleanup), the applicant shall, in cooperation with Department of Toxic Substances Control (DTSC), meet the identified project remediation goals established by DTSC, shall fully implement and complete the Removal Action Work Plan, and shall receive a certification from DTSC stating that the cleanup activities have been satisfactorily completed.*

Mitigation Measure Haz-2: *The following Best Management Practices (BMPs) shall be implemented by the project applicant to control pollutant sources associated with the handling and storage of construction materials/equipment, as well as with waste management and disposal.*

a. Store construction raw materials (e.g., dry materials such as plaster and cement, pesticides and herbicides, paints, petroleum products, treated lumber, etc.) in designated areas that are located away from storm drain inlets, drainageways, and canals and surrounded by earthen berms. Train the construction employees working on the site in proper materials handling practices to ensure that, to the maximum extent practicable, those materials that are spread throughout the site are covered with impervious tarps or stored inside buildings.

b. When trucks are washed on the site, contain the wash water in a temporary pit where waste concrete can harden for later removal. Waste concrete shall be disposed of using concrete recycle bins. Avoid washing fresh concrete from the trucks, unless the runoff is drained to a berm or level area, away from site waterways and storm drain inlets. When trucks are washed out on the site, the runoff shall be contained as previously described and there shall be no runoff from the project site.

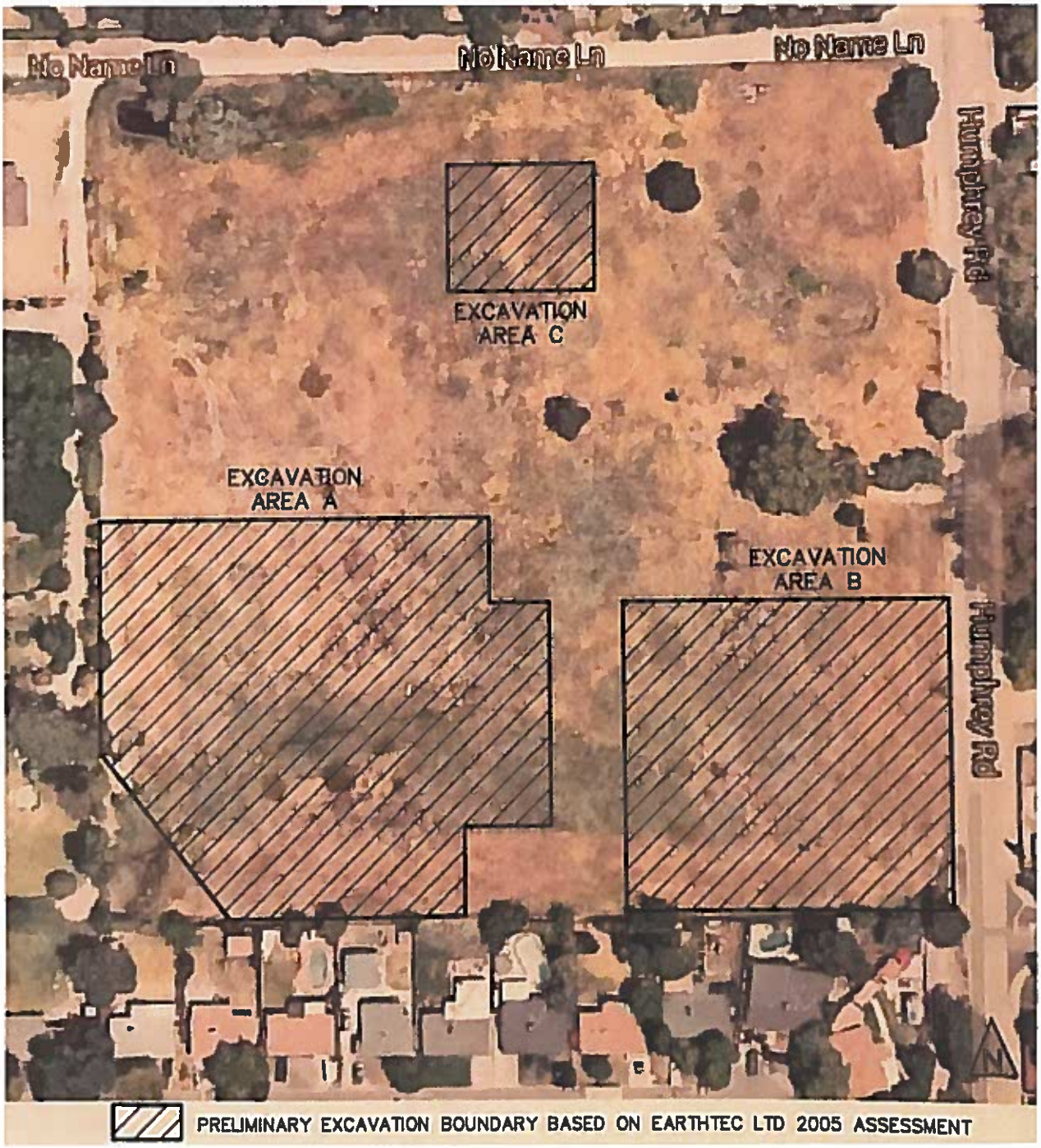
c. Collect non-hazardous waste construction materials (i.e., wood, paper, plastic, cleared trees and shrubs, building rubble, scrap metal, rubber, glass, etc.) and deposit in covered dumpsters at a designated waste storage area on the site. Store recyclable construction materials separately for recycling and transport the remaining solid waste to the appropriate landfill and/or waste transfer station.

d. Store hazardous materials in portable metal sheds with secondary containment. The quantities of these materials stored on the site will reflect the quantities needed for site construction. Avoid over-application of fertilizers through testing soil prior to fertilizer application to identify specific nutrients that should be added. Avoid over-application of fertilizers, herbicides, and pesticides through best management practices (BMPs), including treating specific infested or problem areas rather than broadcasting over large area, spraying

only when wind speeds are less than seven miles per hour, and avoiding application of fertilizers, herbicides, or pesticides when rainfall is expected.

e. Do not mix hazardous waste with other waste produced on the site. Contract with a Certified Waste Collection contractor to collect hazardous wastes for disposal at an approved hazardous waste facility.

f. Dispose of waste oil and other equipment maintenance waste in compliance with federal, State and local laws, regulations and ordinances.



THE GROVE IS/MND
Figure 7. Excavation Areas

Source: Hurvitz Environmental, 2016

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IX. HYDROLOGY AND WATER QUALITY -- WOULD THE PROJECT:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements?		X		
b) 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 pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?			X	
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?		X		
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?		X		
e) 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?		X		
f) Otherwise substantially degrade water quality?		X		
g) 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?			X	
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?			X	
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?			X	
j) Inundation by seiche, tsunami, or mudflow?				X

EXISTING SETTING

The site slopes gently down to the west with on-site elevations ranging from approximately 358 to 374 feet. Hydrological features on the site include one seasonal wetland encompassing 0.016 acre in the northwestern corner of the site, two seasonal wetland swales totaling 0.279 acre on the northern

and southern property boundaries, and one seasonal pond of 0.054 acre in the northwestern corner of the site. The wetlands have been interrupted by residential development and road construction.

Drainage

While the site generally drains toward the west, the existing drainage characteristics of the site include three watershed areas which are identified and described in the Preliminary Storm Drainage Report (Meredith Engineering, 2016). Shed A is approximately 4.17 acres and collects drainage and directs it to a small man-made pond at the northwest corner of the project site. The pond has an existing 12-inch pipe overflow structure that conveys drainage from the pond at the northwest corner of the site to an existing manhole and then across No Name Lane to a roadside ditch, flowing west to Antelope Creek. Shed B is approximately 4.72 acres and collects drainage and directs it southwest overland through the adjacent subdivision. Finally, Shed C is approximately 1.11 acres and collects drainage and directs it to the southeast corner in a roadside ditch along the west side of Humphrey Road. Existing drainage flows from the project site are shown in Table 8 and existing drainage shed locations are shown in Figure 8.

Table 8: Existing Drainage Flows at Shed Discharge Points

LOCATION	*10-YEAR STORM EVENT*	*100-YEAR STORM EVENT*
Shed A	2.7 cfs	6.87 cfs
Shed B	4.47 cfs	11.08 cfs
Shed C	2.05 cfs	2.61 cfs

SOURCE: MEREDITH ENGINEERING, 2016

Flooding

The 100-year floodplain denotes an area that has a one percent chance of being inundated during any particular 12-month period. Floodplain zones (Special Flood Hazard Areas [SFHA]) are determined by the Federal Emergency Management Agency (FEMA) and used to create Flood Insurance Rate Maps (FIRMs). The project site is not located in the 100-year floodplain and is not located in a SFHA. The project site is located in Zone X (unshaded), which represents areas determined to be outside of the 500-year floodplain (FEMA, FIRM Map 06061C0416 F, June 9, 1998) as shown in Figure 9. The project site was also reviewed in the California Best Available Maps, which did not identify the project site within any flood hazard area, including the 100-year, 200-year, or 500-year floodplain (DWR, 2016; FEMA, 2016). Loomis is not located within any dam inundation area (Placer County Local Hazard Mitigation Plan, 2009). The site is not at risk for flooding or other extreme hydrologic events, such as seiche, tsunami, or mudflow.

RESPONSES TO CHECKLIST QUESTIONS

Responses a), f): Less than Significant with Mitigation.

The proposed project would generate an increase in impervious surfaces, resulting in a change in absorption rates and the amount of surface runoff. Grading and construction activities associated with project development could contribute to increased erosion and sedimentation. During construction, accidental releases of fuel, hydraulic fluid, paints, solvents, and similar materials could degrade stormwater quality. In addition, the establishment of residential uses on the currently vacant land could introduce water pollutants such as motor vehicle fluids, pesticides and other landscaping chemicals, and other consumer products (soap, paint, etc.) into the runoff.

Pursuant to the requirements of the Town's Grading Ordinance, Chapter 12.04 of the Municipal Code, prior to obtaining grading permits, the applicant would be required to prepare an erosion and sediment control plan that complies with the Town's stormwater management plan and the California Stormwater Quality Association Stormwater Best Management Practice Handbook. The Town's Grading Ordinance specifies that the erosion and sediment control plan shall prevent discharge through all stages of project development and shall include measures to ensure permanent site stabilization. The Grading Ordinance also requires that all construction equipment and maintenance and construction materials storage areas would be located within designated areas protected with a berm to contain any loose materials, and all disturbed areas would be protected through revegetation or a protective cover. Additionally, prior to issuance of a grading permit, the applicant would be required to submit a Notice of Intent and prepare a Stormwater Pollution Prevention Plan (SWPPP) for review by the Central Valley Regional Water Quality Control Board (CVRWQCB) to receive coverage for project activities under the SWRCB's NPDES General Permit for Storm Water Discharges Associated with Construction Activities. The SWPPP is required to include the following four major elements:

1. Identify pollutant sources, including sources of sediment, which may affect the quality of stormwater discharges from the construction site.

2. Identify non-stormwater discharges.

3. Identify, construct, implement in accordance with a time schedule, and maintain Best Management Practices to reduce or eliminate pollutants in stormwater discharges and authorized non-stormwater discharges from the construction site during construction.

4. Identify, construct, implement in accordance with a time schedule, and assign maintenance responsibilities for post-construction BMPs to be installed during construction that are intended to reduce or eliminate pollutants after construction is completed. In addition, dischargers are also required to inspect construction sites before and after storms to identify stormwater discharge from construction activity, and to identify and implement controls where necessary

Typical BMPs that would be appropriate to implement to address erosion and sedimentation during construction may include scheduling or limiting activities to certain times of year, implementing dust control procedures, stabilizing cut and fill slopes as soon as possible, controlling erosion through measures such as mulch and compost blankets, sediment control with the use of measures such as storm drain inlet protection, vegetated buffers, fiber rolls and berms, sediment fencing, and straw or hay bales.

Other temporary BMPs would address accidental releases during construction. These would include cleaning construction equipment and preventing the leakage of fluids, storing materials away from surface water, protecting sensitive areas with sediment barriers or other containment methods, controlling laying of concrete and washing of related equipment, and collecting debris and gravel associated with paving operations. Adequate temporary storm drainage controls would be provided, including on-site drainage containment, the placement of silt fences around construction areas, and constructing temporary sediment basins (as necessary). Compliance with the Town's Grading Ordinance and implementation of the provisions contained in the SWPPP approved by the RWQCB would reduce potential impacts to water quality due to construction activities to less than significant

by ensuring that all appropriate and necessary BMPs are implemented to avoid or minimize the discharge of pollutants and sediment to surface water.

The Preliminary Storm Drainage Report indicates that the proposed storm drain system will be part of a post construction pollution control plan that will comply with requirements described in section E.12 of the State National Pollution Discharge and Elimination System (NPDES) permit, and identifies that landscaped yards including trees and disconnected roof drains will be also included as site design measures. The storm drain system includes the use of an infiltration basin that will be designed and sized to treat the required water quality flows. The operational BMP plan would be required to be consistent with NPDES requirements. To comply with the NPDES requirements, the project must implement a BMP plan that ensures the project would not cause or contribute to an exceedance of water quality standards contained in any Statewide Water Quality Control Plan, the California Toxics Rule, or the Water Quality Control Plan for the Sacramento River and the San Joaquin River Basins.

Mitigation Measures HWQ-1, HWQ-2, and HWQ-3 would ensure that the project would implement BMPs in accordance with the Town's Grading Ordinance and with NPDES permit requirements and would reduce potential water quality impacts, including erosion and sedimentation, during construction activities to a less than significant level. Mitigation Measures HWQ-1 and HWQ-4 would ensure that operational BMPs, including maintenance measures, are in place to reduce potential water quality impacts during project operation. Implementation of these mitigation measures would ensure that potential water quality impacts resulting from construction and operation would be reduced to **less than significant** levels and that the project would not substantially degrade water quality, including both surface water and groundwater, or violate any water quality standards or waste discharge requirements.

Response b): Less than Significant. All of the water demand generated by the proposed project would be met by the existing potable water supply system. Water supply would be provided by Placer County Water Agency (PCWA) and sewer service would be provided by South Placer Municipal Utility District (SPMUD). As discussed in greater detail in the *Utilities* section of this Initial Study, the Town has adequate water supplies available to serve the proposed project. The additional water demand generated by the proposed project would not cause groundwater levels to decline.

Development of the proposed project would result in a nominal increase in impervious surface area on the project site. Although the proposed project would increase the amount of impervious surfaces after development, stormwater would be routed to the detention basin located at the northwest corner of the project site, which would percolate underground and would also be released to the Town's municipal storm water system.

The Geotechnical Investigation (Soil Search Engineering, 2005) previously prepared for the project site determined that there is no evidence of shallow groundwater. In addition, the project would receive treated water from Placer County Water Agency (PCWA) by connecting to existing water lines along Humphrey Road. Therefore, it is expected that the proposed project would not impact the quantity, quality, or alter direction or rate of flow of groundwater.

Therefore, the project would result in a **less than significant** impact with respect to substantially depleting groundwater supplies or interfering substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level.

Responses c), d), e): Less than Significant with Mitigation. The development of the proposed project, when complete, would result in new impervious surfaces and thus could result in an incremental reduction in the amount of natural soil surfaces available for the infiltration of rainfall and runoff, thereby generating additional runoff during storm events. Additional runoff could contribute to the flood potential of natural stream channels or contribute runoff that could exceed the capacity of the City's drainage system. The grading and development of the project site would change the existing drainage patterns.

The Preliminary Storm Drain Report, prepared by Meredith Engineering in 2016, describes the existing drainage conditions and proposed storm drain system. The proposed storm drain system for the project would divide the site into four drainage sheds, as shown in Figure 8. Drainage from these shed areas would be conveyed into a storm drain system, to address 10-year and 100-year storm events.

Under 10-year storm conditions, stormwater on the project site would flow from the residential, landscaping, and park lots toward Grove Circle. Stormwater would be collected and conveyed by 12-inch storm drain pipes within Grove Circle, which would be sufficient to convey a 10-year event. This stormwater would flow by gravity through these pipes to the stormwater detention basin located in the northwest portion of the site.

During a 100-year storm event, stormwater would be collected within the piped storm drain system as described for the 10-year storm event. If the piped capacity is exceeded, the site and system have been designed so that stormwater will flow into Grove Circle and then flow overland to the stormwater detention basin.

Under both 10- and 100-year storm conditions, the stormwater detention basin would release stormwaters at a maximum discharge rate of 2.0 cfs, which is regulated by the capacity of the drainage outlet. The stormwater detention basin has been designed to accommodate a 100-year storm.

The stormwater detention basin will treat water quality through infiltration. The stormwater detention basin is designed to treat 27,756 cubic feet of stormwater through infiltration over a 49.5 hour period. The basin area is 14,000 square feet with an outfall pipe that is elevated two feet above the basin bottom to provide adequate ponding volume sufficient for the required water quality infiltration treatment.

Meredith Engineering completed hydrologic calculations for the stormwater conditions for the undeveloped and developed conditions for the project site. The detention basin located in the northwest corner of the project site is sized adequately to detain the 10-year and 100-year storm events, and reduce the post-development flow for both the 10-year and 100-year storm events to less than existing conditions at the discharge point (Meredith Engineering, 2016). As shown in Table 9, discharges from Shed A and Shed B would be eliminated with implementation of the project. Stormwater from Shed A and Shed B as well as Shed C would be conveyed into the storm drain system and discharge near the existing discharge location for Shed C. Discharges from Shed C would be reduced from 2.7 cfs to 2.0 cfs during the 10-year condition and from 6.87 cfs to 2.0 cfs during the 100-year condition. Under developed conditions, storm water discharge from the site would be reduced for all shed areas due to infiltration over time at the stormwater detention basin and the 2.0 cfs discharge capacity of the stormwater detention basin.

Table 9: Drainage Flows at Shed Discharge Points

LOCATION	EXISTING CONDITIONS (PRE-DEVELOPMENT)		POST-DEVELOPMENT CONDITIONS	
	10-YEAR STORM EVENT	100-YEAR STORM EVENT	10-YEAR STORM EVENT	100-YEAR STORM EVENT
Shed A	2.7 cfs	6.87 cfs	2.0 cfs	2.0 cfs
Shed B	4.47 cfs	11.08 cfs	0 cfs	0 cfs
Shed C	2.05 cfs	2.61 cfs	0 cfs	0 cfs

SOURCE: MEREDITH ENGINEERING, 2016

Incorporation of the aforementioned proposed project drainage system and the implementation of Mitigation Measures HWQ-1 through HWQ-4 would ensure that the proposed project would not substantially alter the existing drainage pattern of the site or area, in a manner that would result in substantial erosion or siltation, result in flooding, or exceed the capacity of the existing or planned stormwater drainage systems. In addition, Mitigation Measure HWQ5 would ensure that the applicant would pay all applicable drainage impact fees. Therefore, this is a **less than significant** impact.

Responses g), h), i): Less than Significant. The risks of flooding hazards in the Town of Loomis and immediate surroundings are primarily related to large, infrequent storm events. These risks of flooding are greatest during the rainy season between November and March. Flooding events can result in damage to structures, injury or loss of human and animal life, exposure to waterborne diseases, and damage to infrastructure. In addition, standing floodwater can destroy agricultural crops, undermine infrastructure and structural foundations, and contaminate groundwater.

According to the Preliminary Hydrology Report (Civil Solutions, 2001) and confirmed by a review of the FIRM panel that includes the project site, the project site is located outside of the 100-year and 500-year floodplains. The site is not at risk for flooding or other extreme hydrologic events, such as seiche, tsunami, or mudflow. As such, this impact is **less than significant**.

Response j): No Impact. Tsunamis are defined as sea waves created by undersea fault movement. A tsunami poses little danger away from shorelines; however, when a tsunami reaches the shoreline, a high swell of water breaks and washes inland with great force. Waves may reach 50 feet in height on unprotected coasts. Historic records of the Bay Area used by one study indicate that nineteen tsunamis were recorded in San Francisco Bay during the period of 1868-1968. Since Loomis is many miles inland from the San Francisco Bay Area and associated water bodies, the project site is not exposed to flooding risks from tsunamis and adverse impacts would not result. This is **no impact**.

Mitigation Measures

Mitigation Measure HWQ-1: *The project applicant shall incorporate Best Management Practices (BMPs) to control erosion and sedimentation during grading and installation of infrastructure, during all construction activities, and during project operation. The final drainage report (prepared consistent with Town requirements, including Chapter 12.04 of the Municipal Code, and the Placer County Storm Drainage Manual) shall include descriptions and/or plan drawings demonstrating the use of BMPs. BMPs for this project shall include the following measures, but may also include additional or alternative measures as determined appropriate and as approved by the Town of Loomis:*

a. *An Erosion and Sediment Control Plan shall be submitted for review and approval to the Town of Loomis prior to the issuance of any grading permits. The plan shall comply with*

Town standards and must be implemented for any construction to take place between October 15 and May 15 of any 12-month period. This plan may be included as a subsection of the Construction Emission/Dust Control Plan which is required by PCAPCD.

b. *Grading activities shall be timed to minimize the amount of exposed areas during the wet season. By mid-October, all areas that have been graded and that will remain undeveloped during the rainy season shall be revegetated with compatible native vegetation and secured from the possibility of erosion.*
c. *Streets adjacent to each construction and demolition site shall be kept clean of project dirt, mud, materials, and debris during the construction and demolition periods.*
d. *The final landscaping and irrigation plans shall include landscaping treatment for any cut and fill banks to minimize soil erosion in these areas. Landscaping materials shall include drought-tolerant ground cover as well as a variety of trees and shrubs.*
e. *Infrastructure shall be designed to minimize drainage concentration from impervious surfaces.*
f. *Storm drainage from onsite impervious surfaces shall be collected and routed through specifically designed vaults and filters for entrapment of sediment, debris, and oils/greases as approved by the Town of Loomis. Maintenance of these facilities shall be provided by The Grove Subdivision Homeowners Association or Maintenance/Assessment District, unless and until the facilities are accepted by the Town for maintenance. Contractual evidence of a monthly maintenance program shall be provided to the Town upon request.*

Mitigation Measure HWQ-2: *Prior to initiating the grading and/ or construction of the site improvements, the developer shall initiate the following:*

a. *A minimum of forty-eight (48) hours prior to commencement of grading activities, the developer's contractor shall notify both the Town Public Works/Engineering Department staff of the intent to begin grading operations. Prior to notification, all grade stakes shall be in place identifying limits of all cut and fill activities. After notification, both Town Public Works/Engineering staff shall be provided the opportunity to field review the grading limits to ensure conformity with the Improvement Plans, Tentative Map, and Grading Plan approved by the Town of Loomis. If differences are noted in the field, grading activities shall be delayed until the issues are resolved.*
b. *Placement of construction fencing around all trees designated to be preserved.*

Mitigation Measure HWQ-3: *This project is subject to construction-related storm water permit requirements of the Federal Clean Water Act National Pollutant Discharge Elimination System (NPDES) program. The project applicant shall obtain coverage under the NPDES program through the Central Valley Regional Water Quality Control Board. To obtain coverage under the permit, the applicant shall prepare a project-specific Storm Water Pollution Prevention Plan (SWPPP). The SWPPP shall include the following:*

1. Identification of pollutant sources, including sources of sediment, that may affect the quality of storm water discharges from the construction site;

2. Identification of any non-storm water discharges;

3. Best Management Practices to reduce or eliminate pollutants in storm water discharges and authorized non-storm water discharges from the construction site during construction;

4. Best Management Practices to be employed before each storm event;

5. Post-construction Best Management Practices, which are those measures to be installed during construction that are intended to reduce or eliminate pollutants after construction is completed;

6. A program for inspection and maintenance of the Best Management Practices; and

7. A program for monitoring of runoff water quality.

Upon review of the SWPPP, the Regional Water Quality Control Board will issue Waste Discharge Requirements which set forth conditions, discharge limitations, and monitoring and inspection requirements with which the project applicant shall comply.

The California Stormwater BMP Handbook for Construction (California Stormwater Quality Association 2003a) also provides examples of Best Management Practices that could be used. Additional measures that may be included in the SWPPP are:

a) Scheduling materials deliveries to provide for minimal onsite storage and/ or providing covered storage for materials wherever practical;

b) Designating specific areas for overnight equipment storage and maintenance and providing runoff control around those areas to minimize the potential for runoff to contact spilled materials;

c) Establishing procedures for daily work-site cleanup and prepare and implement a Spill Mitigation Plan for construction-related activities;

d) Developing a program of site inspections to ensure that BMPs are consistently implemented and effective;

e) Conducting visual monitoring of runoff quality at selected monitoring points;

f) Placing fiber rolls (wattles) around drain inlets to prevent sediment and construction-related debris from entering the inlets;

g) Placing fiber rolls (wattles) along the perimeter of the site to reduce runoff flow velocities and prevent sediment from leaving the site;

h) Placing silt fences downgradient of disturbed areas to slow down runoff and retain sediment;

i) Placing sandbags around potentially affected off-site inlets to prevent sediments from entering the inlets; and

j) Specifying that all disturbed soil will be seeded, mulched, or otherwise protected by October 15.

Mitigation Measure HWQ-4: *The project applicant/ developer shall prepare and implement a post-development Stormwater Management Plan (SWMP) in accordance with the NPDES requirements and the most recent version of the West Placer Storm Water Quality Design Manual. The components of the*

SWMP shall include protection from flooding, protection and enhancement of the stream environment, prevention of erosion and adverse effects on water quality, incorporation of regional stormwater management goals, and minimization of the project's potential adverse impacts. BMPs shall be included in the plan, as well as a mitigation monitoring program to ensure long-term success of the BMPs. The purpose of this mitigation measure is to provide a plan for ensuring that structural BMPs constructed as part of the proposed project are maintained appropriately such that they continue to perform their intended function as long as the project site is occupied.

The SWMP shall address site-specific drainage characteristics, stormwater conveyance systems, discharge points, potential sources of runoff quality impacts, specific structural BMPs that have been constructed as part of the project, recommended operational BMPs, a maintenance program for structural BMPs, a monitoring program designed to evaluate the need for BMP modifications or additional BMPs, and identification of specific parties responsible for implementing each part of the plan. Specific BMPs shall be developed in consultation with the Town of Loomis and based upon the State Water Resources Control Board general guidelines for development of BMPs.

Best Management Practices that could be incorporated into the SWMP include the following:

1. *Direct roof runoff to grassy areas and away from paved areas or storm drains to promote overland flow of stormwater runoff and reduce velocities and peak flow rates;*

2. *Provide vegetative swale or buffer areas, which could be incorporated into landscaped areas, to slow down runoff velocities and allow sediments and other pollutants to settle;*

3. *Install hydrodynamic separators or filter-type inserts in storm drain inlets or catchbasins to remove pollutants from stormwater;*

4. *Provide in-line storage of stormwater to reduce peak discharge, allow settling of pollutants, and reduce potential for downstream erosion;*

5. *Provide enclosed trash areas;*

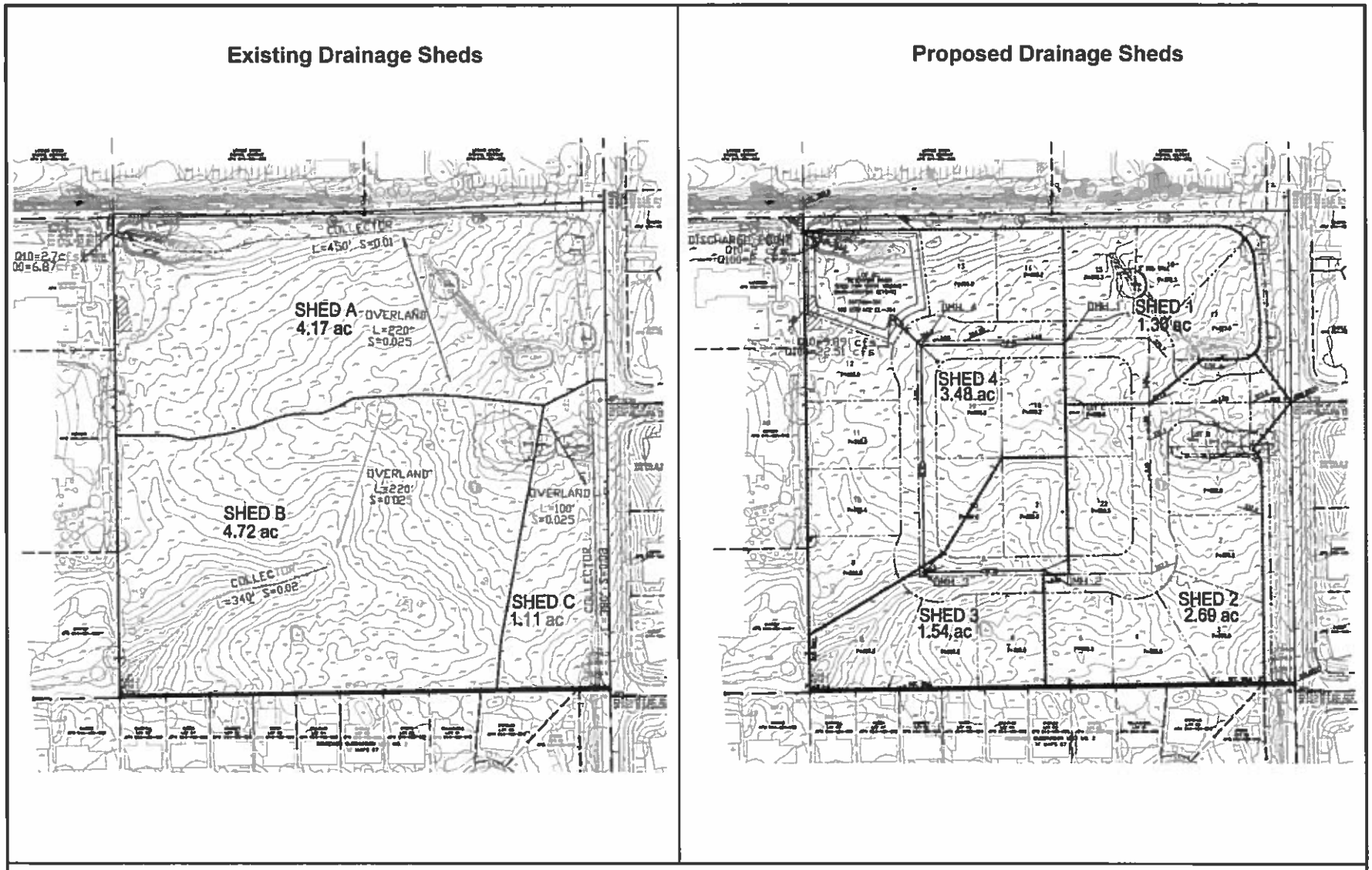
6. *Perform street cleaning to remove potential debris and pollutants that could be picked up and conveyed by stormwater;*

7. *Incorporate landscaping into the design;*

8. *Prevent contact of stormwater with potentially contaminated facilities either by redirecting flows or providing other protection; and*

9. *Develop and implement a maintenance program for the storm drain system and stormwater detention basins.*

***Mitigation Measure HWQ-5**: Prior to issuance of building permits, the applicant shall pay all applicable Town of Loomis drainage impact fees.*



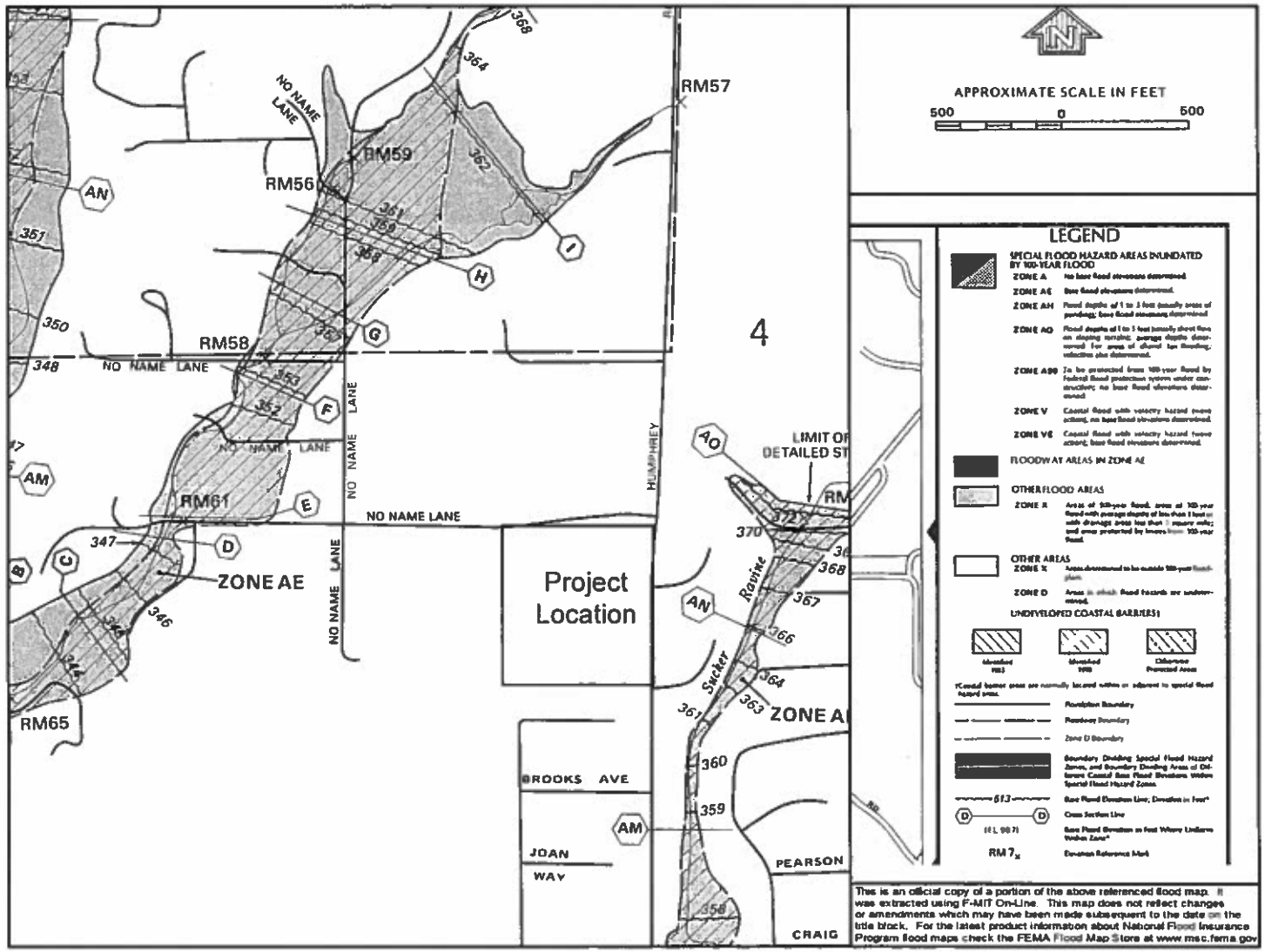
THE GROVE IS/MND

Figure 8. Existing Drainage Sheds and Proposed Drainage Sheds

Source: Meredith Engineering, 2016

DE NOVO PLANNING GROUP

A LAND USE PLANNING, DESIGN, AND ENVIRONMENTAL FIRM



THE GROVE IS/MND

Figure 9. Flood Hazard Areas

Source: FEMA, 2016.

DE NOVO PLANNING GROUP

A LAND USE PLANNING, DESIGN, AND ENVIRONMENTAL FIRM

X. LAND USE AND PLANNING - Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Physically divide an established community?				X
b) 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?			X	
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?				X

EXISTING SETTING

The 9.98-acre project site is an undeveloped lot, located on the eastern boundary of California's Central Valley, in the lower western Sierra Nevada foothills. The project site slopes slightly down to the west, with the site elevation ranging from 374 feet in the eastern area of the site to 358 feet in the western area of the site. The project site is covered by ruderal grasses, and 19 trees are dispersed through the site, primarily within the central and northern portions. The project site supports 0.35 acres of seasonal wetland, swales, and a pond. Large portions of the project site are currently fenced off from the adjacent roadways and residences.

SURROUNDING LAND USES

The project site is located in an area predominantly made up of other residential land uses. Humphrey Road, a two-lane roadway, borders the project site to the east and No Name Lane, a private gravel road, borders the project site to the north. The lands directly to the south and east of the project site consist of single family residential uses. Rural residential uses are located west of the project site. Public/institutional uses (H. Clarke Powers Elementary School) are located north of the project site. All adjacent land uses are located within the town boundary. The Town of Loomis boundary line is located just to the north of H. Clarke Powers Elementary School.

General Plan

Project Site

The project site is designated in the Loomis General Plan as Residential Medium Density. This designation allows development of single family homes with a density range of 2 to 6 dwelling units per acre. Policy G.6 of the Community Development – Land Use Element of the General Plan identifies specific requirements for The Grove project site. Policy G.6. states the following:

> *"**Residential Medium-Density site on the west side of Humphrey Road immediately south of the H. Powers Clark School.** The allowable density of two to six dwelling units per acre shall be distributed on the site with lower density on the edges of the parcel. An application for the proposed subdivision of the property shall demonstrate special attention to potential flooding and drainage issues, and any proposed project shall be designed to create no greater volume of storm water runoff to downstream properties after development."*

Policy E.7 requires the parcels within a new subdivision, when smaller than parcels existing around the site, to be increased in size consistent with the nearby residential lots fronting the same street.

Policy E. 8 identifies that Town approval of parcels proposed in any new subdivision will be based on all appropriate environmental and compatibility factors and applicable Town policies and regulations and that the maximum densities may be decreased through the subdivision review process. Policy E.9 indicates that the Town will promote a rural residential environment consisting primarily of single family homes outside of the core area. Policy E.12 requires proposed development to be planned and designed to preserve and enhance significant natural features and retain existing topography, to the greatest extent possible. Policy E.13 provides for evaluation of new residential subdivisions for consistency with the Town's design standards, with the objectives of maintaining a small, neighborly, rural community reflective of the Town's heritage. Policy E.18 requires all new development to conform to the land use map, land use categories, and development intensities established by the General Plan.

The Loomis General Plan includes other policies adopted to reduce or avoid environmental impacts. These policies are referenced and addressed in the applicable sections (I. Aesthetics through XIII. Utilities) of this document.

Surrounding Uses

Parcels adjacent to the project site on the south and east are also designated Residential Medium Density by the General Plan. The property to the north is designated as Public-Quasi Public and the properties to the west are designated Residential Agricultural.

Zoning

The Town of Loomis Zoning Ordinance is intended to implement the goals, policies, and objectives of the Loomis General Plan. The Zoning Ordinance regulates all development within the Town by requiring proposed development projects to comply with the regulations set forth for each zoning district. The site is designated by the Zoning Ordinance as RS-10a, Single-Family Residential with 10,000 square foot average minimum lot size. As stated in the Zoning Ordinance, the RS zone district is applied to areas appropriate for neighborhoods of single-family homes (Town of Loomis, 2016).

The Town of Loomis zoning designation for adjacent property to the south and east is RS-10 (Single Family Residential with a minimum lot size of 10,000 square feet), to the west is RA (Residential Agricultural), and to the north is PI (Public/Institutional). All adjacent parcels are located within the Loomis Town Boundary.

RESPONSES TO CHECKLIST QUESTIONS

Response a): No Impact. The project is proposed on an undeveloped lot that is surrounded by urban uses. Development of the project site would not result in the physical division of an established community. The project would have **no impact** related to this topic.

Response b): Less than Significant with Mitigation. As shown in the Vesting Tentative Map Site Plan (Figure 3), the proposed project would subdivide 9.98 acres into 26 lots, including 22 residential lots with an average size of approximately 12,440 square feet (sf), one park lot, one drainage basin lot, and two landscaping/entry corridor lots. Six lots are proposed to be clustered at the center of the site with the remaining 20 lots occurring around the perimeter of the property. The largest proposed residential parcels occur generally along the edges of the property boundary, in compliance with Town of Loomis General Plan Policy G.6, which identifies specific uses and characteristics of project proposed to be developed at the project site. While the General Plan allow for smaller lot sizes and higher densities (up to six units per acre), all of the lots provided by the project exceed the minimum

lot size requirements and are at the lower end of the allowed density range. This approach has resulted in an overall increase in lot sizes throughout the project site and reduces the need to cluster smaller lots at the center of the site.

As required by Policy G.6, The Grove proposes a storm drain system that would not increase off-site storm water volumes. The proposed storm drain system would reduce stormwater runoff from the site below pre-project levels (see Table 9). A further discussion of stormwater and the proposed storm drain system provided under the Hydrology & Water Quality and Utilities & Service Systems sections of this Initial Study.

Consistent with Policy E.7, the parcel sizes of the proposed project are larger than the parcel sizes in the subdivision that borders The Grove to the south and also exceed the sizes of the parcels across Humphrey Road. Consistent with Policy E.8, the Town is reviewing the project application for environmental impacts through this Initial Study and will incorporate appropriate measures to address environmental and compatibility issues. Consistent with Policy E.9, the project proposes single family homes that are consistent with the rural residential environment envisioned by the General Plan. Policy E.12 requires proposed development to be planned and designed to preserve and enhance significant natural features and retain existing topography, to the greatest extent possible. While the project site would remove the wetlands from the project site, the project site e has been designed to retain existing trees, address drainage issues, and to remove contaminated soils. The Grove is consistent with the land use map, land use categories, and development intensities established by the General Plan, as required by Policy E.18.

The project meets the density requirements of the General Plan and the proposed lot sizes exceed the minimum lot sizes established by the Zoning Code. As individual home plans are submitted to the Town, the plans will be reviewed for consistency with zoning requirements, including setbacks and building heights. The project has been reviewed for consistency with Town Municipal Code and zoning requirements that relate to avoiding or mitigating an environmental effect. The majority of the Municipal Code requirements that relate to environmental issues are associated with geology and soils, hazards, hydrology and water quality, traffic, noise, and the provision of public services and utilities. The project's consistency with these requirements is discussed in the relevant sections of this document.

The proposed project would not conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect and impacts associated with this topic would be **less than significant**.

Response c): No impact. There is no Habitat Conservation Plan (HCP) and/or Natural Community Conservation Plan (NCCP) applicable to the project site. Therefore, the proposed project would have no impact with the potential to conflict with an applicable habitat conservation plan or natural community conservation plan. The proposed project would cause **no impact** to this topic.

XI. MINERAL RESOURCES -- WOULD THE PROJECT:

	Potentially Significant Impact	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				X
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				X

RESPONSES TO CHECKLIST QUESTIONS

Responses a), b): No Impact. No important mineral resources are identified within the Loomis General Plan. There are no sites designated for mineral resource recovery in the Town of Loomis General Plan or any other land use plans (SMARA Mineral Land Classification Map). Additionally, there are no current known sources of valuable minerals located within the Town according to the General Plan EIR. Since no resources are within the Town of Loomis, there would be **no impact** resulting in the potential loss of availability of a known mineral resource that would be of value to the region or a locally-important mineral resource.

XII. NOISE -- WOULD THE PROJECT RESULT IN:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) 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?		X		
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?			X	
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?		X		
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?		X		
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				X
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?				X

EXISTING SETTING

The proposed project site is located adjacent to medium density single family homes to the south and rural residential development to the west. Medium density single family development also occurs across Humphrey Road to the east. An elementary school and administrative offices (H. Clarke Elementary School) are north of the project site across No Name Lane.

According to the General Plan, significant noise sources in the Loomis area include traffic and railroad operations. These noise sources occur along Interstate 80, Taylor Road, Sierra College Boulevard, and the Union Pacific Railroad. The proposed project site is not located within the 65 dBA or 60 dBA noise contours along these roadways and railroads under existing and estimated future conditions (buildout of the town).

There are no airports in the Loomis area that could be a source of noise. The project site is not within the vicinity of a private airstrip or within the jurisdiction of an airport land use plan.

The project area noise environment is a typical suburban/rural environment with the primary noise sources being roadway traffic, distant construction and typical neighborhood activities, including playground activities. A Noise Report was prepared by j.c. brennan & associates in 2016 to evaluate existing conditions and potential noise impacts associated with the project.

Measured Ambient Noise Levels

To quantify existing ambient noise levels in the vicinity of the project site, j.c. brennan & associates, Inc., conducted two sets of continuous 24-hour noise measurements on the project site. See Table 10 for the general location of noise measurement locations. The noise level measurements were conducted on October 4th - 5th, 2016. The noise level measurements were conducted to determine typical existing background noise levels and used equipment that meets the specifications of the American National Standards Institute for Type 1 sound level meters (ANSI S1.4). Ambient noise levels in the vicinity of the project site are shown in Table 10.

Table 10: Measured Ambient Noise Levels

Site	Location	Date - Time	Average Measured Hourly Noise Levels, dBA						
			Ldn (dBA)	Daytime (7:00 AM - 10:00 PM)			Nighttime (10:00 PM – 7:00 AM)		
				Leq	L50	Lmax	Leq	L50	Lmax
Continuous 24-hour Noise Measurement Site									
A	Northeast portion of the project site	N/A	50	48	43	65	43	39	57
B	Southwest portion of the project site	N/A	47	44	40	63	40	35	53

Source: j.c. brennan & associates, Inc., 2016

Existing Traffic Noise

Existing roadway noise levels were measured by j.c. brennan & associates, Inc. using the Federal Highway Administration Highway Traffic Noise Prediction Model (FHWA RD-77-108). The model is based on Calveno reference noise emission factors for automobiles, medium trucks, and heavy trucks, with consideration given to vehicle volume, speed, roadway configuration, distance to receiver, and the acoustical characteristics of the site. The FHWA model was developed to predict hourly Leq values for free-flowing traffic conditions.

Table 11 shows the existing traffic noise levels in terms of Ldn along each roadway segment. This table also shows the distances to existing traffic noise contours.

Table 11: Predicted Existing Traffic Noise Levels and Distances to Contours

Roadway	Segment - Location	Exterior Noise Level, dBA Ldn	Distance to Ldn Noise Contours (feet) Existing (Ldn)		
			70 dB	65 dB	60 dB
Humphrey	Project Site to King Road	58	8	18	38
King Road	Humphrey Road to	62	14	31	66
Taylor Road	King Road to Horseshoe	64	20	44	94
Horseshoe Bar	Taylor Road to I-80	64	18	40	86

1 Distances are measured in feet from the centerlines of the Roadways.

2 FHWA-RD-77-108, inputs from KD Anderson, Loomis Circulation Element and j.c. brennan & associates, Inc. 2016

Source: j.c. brennan & associates, Inc., 2016

Town of Loomis Noise Standards

The Public Health and Safety Element of the General Plan establishes the Town's exterior standard for noise-sensitive land uses as 65 dBA Ldn. The interior standard is 45 dBA Ldn. Table 8-3 of the Noise Element shows the standards for noise-sensitive land uses. The noise element stresses that - "The standards are most appropriately applied to land uses adjacent to continuous noise sources, such as roadway traffic noise. However, standards based on 24-hour weighting are not adequate to address certain noise sources, particularly industrial noise sources, which occur infrequently but at potentially higher intensity."

In addition, the Noise section of the Public Health and Safety Element of the General Plan establishes a policy framework related to noise. Policy 2 encourages the mitigation of noise impacts in all new developments as necessary to maintain the quiet, rural ambiance of the Town. Policy 3 requires an acoustical analysis for new residential structures located within the projected noise contour of 65 dBA Ldn, showing that the structures have been designed to limit intruding noise in interior rooms to an annual level of 45 dBA Ldn. Policy 4 requires individual noise exposure analysis for proposed development projects as part of the environmental review process, to ensure that the Town's noise standards are meet and indicates that the use of mitigation measures (noise buffers, sound insulation) may be required to reduce noise impacts to acceptable levels. Policy 6 identifies the following order of preference among mitigation options: distance from the noise source; muffling of the noise source; design and orientation of the receptor; landscaped berms; landscaped berms in combination with walls. Policy 7 requires the use of the land use/noise compatibility matrix shown on Figure 8-4 to determine the appropriate ness of land uses relative to roadway noise. With respect to construction noise, Policy 19 states: "Require that construction activities adjacent to residential units be limited as necessary to prevent adverse noise impacts."

The Noise section also identifies Implementation Measures to address noise. The following measures are applicable to this project:

Implementation Measure 8 - *The Town shall consider the use of temporary noise barriers, limited hours of operation, limiting times of year for construction near schools to reduce construction-related noise;*

Implementation Measure 12 - *To reduce noise associated with truck traffic, the Town shall implement the following noise reduction strategies:*

a. *The Town and Caltrans should consider limitations on hours of operation and other truck operations that could be limited to reduce noise impacts.*

b. *The Town should encourage the use of established designated truck routes that avoid residential areas and confine truck traffic to major thoroughfares. Designated truck routes must be followed.*

c. *The Town shall post designated areas and times to prohibit the use of jake brakes along established truck routes adjacent to sensitive uses.*

RESPONSES TO CHECKLIST QUESTIONS

Responses a), c), d): Less than Significant with Mitigation.

Remediation and Construction Activities

Prior to construction of the project, the project proposes to excavate and haul up to 4,580 cubic yards of contaminated soil from the site. The material will be excavated and stockpiled on the site. A front end loader will load the stockpiled soil into 40 cubic yard drop boxes, and loaded onto small haul trucks (similar to a flat-bed truck). The project excavation and hauling will be confined to the daytime hours between 8:00 a.m. and 5:00 p.m. It is estimated that there will be up to 19 haul trucks per day which will arrive and depart the site.

Construction of the proposed project would temporarily increase noise levels during construction. Construction activities will include grading and site preparation, maintenance of roadways, installation of public utilities, infrastructure improvements, and construction of the residential uses associated with the project. These activities include the use of heavy equipment and impact tools.

Table 12 provides a list of the types of equipment which may be associated with construction activities and the associated noise levels.

Table 12: Construction Equipment Noise

TYPE OF EQUIPMENT	PREDICTED NOISE LEVELS, LMAX DB				DISTANCES TO NOISE CONTOURS (FEET)	
	NOISE LEVEL AT 50'	NOISE LEVEL AT 100'	NOISE LEVEL AT 200'	NOISE LEVEL AT 400'	70 DB LMAX CONTOUR	65 DB LMAX CONTOUR
Backhoe	78	72	66	60	126	223
Compactor	83	77	71	65	223	397
Compressor (air)	78	72	66	60	126	223
Concrete Saw	90	84	78	72	500	889
Dozer	82	76	70	64	199	354
Dump Truck	76	70	64	58	100	177
Excavator	81	75	69	63	177	315
Generator	81	75	69	63	177	315
Jackhammer	89	83	77	71	446	792
Pneumatic Tools	85	79	73	67	281	500

SOURCE: ROADWAY CONSTRUCTION NOISE MODEL USER'S GUIDE. FEDERAL HIGHWAY ADMINISTRATION. FHWA-HEP-05-054. JANUARY 2006. J.C. BRENNAN & ASSOCIATES, INC. 2012.

As shown in Table 12, construction activities on the project site would result in temporary increases in noise levels that exceed the Town's standards for residential uses.

j.c. brennan and associates modeled the change in roadway noise levels associated with truck traffic from the use of haul trucks to remove contaminated soil from the site. Truck noise traffic would result in temporary increases in roadway noise levels of 1 dBA on the roadway segments identified in Table 11.

The Noise section of the Public Health and Safety Element indicates that truck traffic associated with construction should include mitigation to limit annoyance. The Town of Loomis Municipal Code (13.30.070 Noise Standards) establishes limitations on hours of operation for construction activities. These standards provide allowable hours for construction activities of 7:00 am to 7:00 pm M-F, 8:00 am to 7:00 pm Saturday, and construction activities on Sunday and National Holidays are only allowed by the Commission or Council.

The Town of Loomis Municipal Code (13.30.070 Noise Standards) establishes limitations on hours of operation for construction activities. These standards provide allowable hours for construction activities of 7:00 am to 7:00 pm M-F, 8:00 am to 7:00 pm Saturday, and construction activities on Sunday and National Holidays only allowed by the Commission or Council.

Existing residences that are closest to the project site would experience the greatest noise levels during the times when construction occurs at the perimeter of the site. The noise levels provided in Table 12 reflect the maximum noise level generated by the equipment when operating at full power. During construction, the use of equipment varies such that equipment is typically not operated continuously at full power. Therefore, existing residences and noise-sensitive uses would not be continually exposed to the maximum construction noise levels. With implementation of the noise management practices included in Mitigation Measure N-1, noise impacts from project construction, including roadway noise impacts from truck traffic, would be reduced to a **less than significant** level.

Project Operations

The operational phase of the proposed project would generate typical suburban residential noises such as vehicle traffic, children playing, and dogs barking. Six-foot high wooden fencing would delineate the residential parcels. Fencing and landscaping (for both onsite and nearby residential parcels) would act as barriers to noise and help attenuate noise to/from adjacent parcels. The proposed project is not anticipated to expose people to or generate permanent noise levels in excess of standards established in the General Plan or result in a substantial permanent increase in ambient noise levels in the project vicinity. The proposed project is not expected to expose people to or generate permanent noise levels in excess of standards established in the General Plan or result in a substantial permanent increase in ambient noise levels in the project vicinity (J.C. Brennan, 2016). Noise impacts associated with project operations would be **less than significant.**

Traffic Noise Impacts on Proposed Residential Uses

Traffic noise could potentially affect the project design. Future traffic volumes along Humphrey Road were provided by the project traffic consultant. Based upon a future volume of 4,780 vehicles per day, the FHWA traffic noise prediction model predicts that the future traffic noise levels will be 61 dBA Ldn, at a distance of 50-feet from the Humphrey Road centerline. Therefore, the project will comply with the exterior noise level standard of 65 dBA Ldn.

Typical facade construction will provide a minimum of a 20 dBA exterior to interior noise level reduction, while assuming that residents close their windows for acoustical isolation. Residential units would be constructed with air conditioning or mechanical ventilation consistent with CBSC requirements. This would ensure that interior noise levels meet the Town's requirements and traffic noise impacts on future project residents would be **less than significant.**

Response b): Less than Significant. The proposed project has the potential to expose sensitive receptors to substantial vibration associated with construction activities. The primary vibration-

generating activities associated with the proposed project would occur during soil remediation and construction when activities such as grading and utilities placement occur. Sensitive receptors which could be impacted by soil remediation- and construction-related vibrations, especially vibratory compactors/rollers, are located neighboring the project site. However, at distances over 100 feet, construction vibrations are not predicted to exceed acceptable levels. Additionally, construction activities would be temporary in nature and would likely occur during normal daytime working hours.

Construction vibration impacts include human annoyance and building structural damage. Human annoyance occurs when construction vibration rises significantly above the threshold of perception. Building damage can take the form of cosmetic or structural. Table 9 shows the typical vibration levels produced by construction equipment.

Table 13: Vibration Levels for Various Construction Equipment

TYPE OF EQUIPMENT	PEAK PARTICLE VELOCITY @ 25 FEET (INCHES/SECOND)	PEAK PARTICLE VELOCITY @ 100 FEET (INCHES/SECOND)
Large Bulldozer	0.089	0.011
Loaded Trucks	0.076	0.010
Small Bulldozer	0.003	0.000
Auger/drill Rigs	0.089	0.011
Jackhammer	0.035	0.004
Vibratory Hammer	0.070	0.009
Vibratory Compactor/roller	0.210	0.026

Source: j.c. brennan & associates, 2016

As shown in Table 13, construction vibration levels anticipated for the project are less than 0.2 in/sec p.p.v. threshold of damage to buildings and less than 0.1 in/sec threshold of annoyance criteria at distances of 100 feet. Therefore, construction vibrations are not predicted to cause damage to existing buildings or cause annoyance to sensitive receptors provided that the vibratory compactor/roller is located a minimum distance of 100 feet from other structures.

Additionally, according to the Noise Study developed by j.c. brennan & associates, based on distances to nearby sensitive receptors, it is not expected that vibration due to excavation or stockpiling would result in human annoyance or architectural damage (j.c. brennan & associates, 2016). Therefore, the impact would be considered **less than significant** and no mitigation would be required.

Responses e), f): No Impact. There are no airports in the Loomis area that could be a source of noise and the project is not within two miles of any airport. The project site is not within the vicinity of a private airstrip or within the jurisdiction of an airport land use plan. Therefore, there would be a **no impact.**

Mitigation Measure

Mitigation Measure N-1: *The following measures shall be included as standard notes on all improvement plans and shall be implemented during all phases of soil remediation, grading and site preparation, and construction of the proposed project:*

- *Construction vehicles shall be restricted from using jake brakes along the truck route.*

- *Although the posted speed limit along Humphrey Road is 35 mph, trucks associated with the transport of materials shall be limited to a speed of 25 mph along Humphrey Road, which will reduce overall traffic noise by a minimum of 1 dBA.*
- *Construction activity on the site shall be limited to weekday daytime hours (7:00 a.m. to 7:00 p.m.) and Saturdays between 8:00 a.m. and 5:00 p.m. No construction activity is allowed on Sundays and National Holidays.*
- *All noise-producing project equipment and vehicles using internal-combustion engines shall be equipped with mufflers, air-inlet silencers where appropriate, and any other shrouds, shields, or other noise-reducing features in good operating condition that meet or exceed original factory specifications. Mobile or fixed "package" equipment (e.g., air compressors) shall be equipped with shrouds and noise-control features that are readily available for that type of equipment.*
- *All mobile or fixed noise-producing equipment used on the project site that are regulated for noise output by a federal, state, or local agency shall comply with such regulations while in the course of project activity.*
- *Material stockpiles and mobile equipment staging, parking, and maintenance areas shall be located centrally or in the northeastern portion of the site and be as far as practicable from noise-sensitive receptors (adjacent residential uses). Material stockpiles and staging areas shall be indicated on project plans prior to issuance of grading and building permits.*
- *Construction site and access road speed limits shall be established and enforced during the construction period. Speed limits shall be noted on project plans prior to issuance of grading and building permits. Although the posted speed limit along Humphrey Road is 35 mph, trucks associated with the transport of materials shall be limited to a speed of 25 mph along Humphrey Road, which will reduce overall traffic noise by a minimum of 1 dBA.*
- *The use of noise-producing signals, including horns, whistles, alarms, and bells, shall be for safety warning purposes only.*
- *When excavating shall occur near the property lines, the contractor will notify adjacent residents.*

XIII. POPULATION AND HOUSING -- WOULD THE PROJECT:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?			X	
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				X
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				X

RESPONSES TO CHECKLIST QUESTIONS

Response a): Less than Significant. The proposed project would convert the existing undeveloped site to a residential subdivision. The Project Applicant proposes to develop the 9.98-acre parcel located with The Grove, a single family subdivision. The proposed project includes 22 single family lots with a 12,444 sf average lot size. Assuming an average occupancy of three people per household, this project would provide housing for 66 people, which is approximately one percent of the population of 6,692 (DOF, 2016).

As discussed below, the utility systems (e.g., water and sewer) serving the project could accommodate the additional demands created by the project and the project includes infrastructure improvements needed to connect the project to these existing utility systems. In addition, public service providers, such as police and fire, could accommodate the additional demands for service created by the project. The proposed project site is located at an infill location, which has nearby access to public utilities and infrastructure. Approval and development of the proposed project would not indirectly induce new population growth in areas not currently served by utility infrastructure.

Residential development of the proposed density on the project site was anticipated for and evaluated in the General Plan (Town of Loomis, 2001). Additionally, the Town of Loomis adopted an updated Housing Element on February 11, 2014 (Town of Loomis, 2014). As the proposed project is consistent with the General Plan land use and zoning designations and does not involve additional development in the community beyond that established in the General Plan (including the recently adopted Housing Element), the project would not cumulatively exceed official regional or local population projections. Moreover, the proposed project would provide only 22 new single-family homes, housing for approximately one percent of the total population of the Town. Therefore, the project would have a **less than significant** impact on population growth in the Town and region.

Responses b), c): No Impact. There are no occupied housing units currently located on the project site. Construction and operation of the proposed project would not remove any existing housing units within the Town of Loomis, and would not displace any residents. There is **no impact**.

XIV. PUBLIC SERVICES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, 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 public services:				
a) Fire protection?		X		
b) Police protection?		X		
c) Schools?		X		
d) Parks?		X		

EXISTING SETTING

Loomis Fire Protection District (LFPD) provides fire protection services for the proposed project site. LFPD provides a variety of services including fire protection, fire suppression, emergency medical service, and assistance to appropriate agencies with site control during removal of hazardous materials. The nearest firehouse to the proposed project site is the headquarters station, located less than one mile south of the project site on Horseshoe Bar Road. Current response time to the site is less than five minutes.

The Placer County Sheriff's Department currently provides law enforcement services to the project site. Placer County Sheriff's main office is located at 11500 A Avenue, Auburn, which is within the DeWitt Center, approximately 14 miles northeast of the project site. The nearest substation is located in Loomis, just north of Interstate 80 on Horseshoe Bar Road, approximately one mile southeast of the project site. Current response times to the site are generally less than five minutes, depending on priority of the call and availability of personnel.

The project site is located within the Loomis Union School District (LUSD) and Placer Union School District (PUSD). The nearest elementary school is the H. Clarke Powers Elementary School, located across No Name Lane to the north of the project site. H. Clarke Powers serves students in kindergarten through eighth grade. The nearest high school, Del Oro High School, is located on Taylor Road approximately one mile east of the project site. Sierra College is the Community College that serves Placer, Nevada, and portions of El Dorado and Sacramento Counties. The primary campus is located in Rocklin, approximately three miles south of the site.

The nearest recreational facilities are located at H. Clarke Powers Elementary School. The nearest neighborhood park, Sunrise-Loomis Park, is located one-quarter (¼) mile east of the project site. The nearest regional parks are Traylor Ranch Nature Reserve and Bird Sanctuary and the Loomis-Basin Regional Park, both of which are within two miles of the project site. The nearest existing designated bikeway is located along King Road, south of the project site.

RESPONSES TO CHECKLIST QUESTIONS

Responses a), b), c), d): Less than Significant with Mitigation. The proposed project would allow for the development of 22 single family residential lots within the Town of Loomis. The proposed Grove Circle is the sole ingress and egress for The Grove subdivision. With an average occupancy for single family homes of approximately 3 people per home, the proposed project is expected to generate approximately 66 new residents which is approximately one percent of the Town's population of 6,692 (Department of Finance, 2016).

Fire Protection

As noted above, the nearest firehouse is less than one mile from the project site with a response time of less than five minutes. Development of the proposed project is not anticipated to change alter this response time. Emergency vehicle access is anticipated to be sufficient since the onsite road would be a loop and emergency vehicles would not need to turn around on site. All new construction would meet all applicable building and safety codes. The project would not require the development of new LFPD fire protection facilities that would have an impact on the environment.

With implementation of Mitigation Measure PS-1, which requires the applicant to pay the appropriate residential development impact fees to LFPD and to submit to the Town a LFPD will serve letter, impacts to fire protection services would be less than significant. Implementation of this mitigation measure would ensure that the proposed project would not result in a substantial adverse physical impact associated with the provision of fire protection services.

Police Protection

The nearest Placer County Sheriff's Department substation is located approximately one mile from the project site. Due to the proximity of the project site to the substation, there is optimal access to staff and resources and the project is not anticipated to impact current response times. The project would not require the development of new police or sheriff facilities that would have an impact on the environment.

Implementation of Mitigation Measure PS-2, which requires the applicant to submit to the Town a will serve letter from the Sheriff's Office, would ensure impacts to police protection services to be less than significant. Implementation of this mitigation measure would ensure that the proposed project would not result in a substantial adverse physical impact associated with the provision of police protection services.

Schools

Based on student yield factors developed by the school districts, residential development generates, on average, 0.2362 high school students per residence. This would result in approximately five new high school students being generated by the proposed project. Elementary school student generation rates are 0.5 students per residence, resulting in 11 new elementary school students at the proposed project. Placer Union School District (PUSD) is operating above capacity and Loomis Union School District (LUSD) has limited capacity district wide. California State law requires establishment of a nexus between the projected development impacts of a project and the public facilities for which impact fees are imposed [Government Code Section 66001(a) of the Mitigation Fee (Act) (Section 66000 – 66025)]. Mitigation Measure PS-3 is provided to ensure that the appropriate school impact fees are assessed on each residential lot to minimize the impact on the school districts.

Implementation of this mitigation measure would ensure that the proposed project would not result in a substantial adverse physical impact associated with the provision of school services.

Parks

Impacts associated with parks and recreation facilities are discussed under Section XV, Recreation. The project includes an on-site park area to provide recreation and open space uses for the project. The project applicant would also be required to pay Town of Loomis community facility and park-related impact fees, as described under Mitigation Measure PS-4.

With implementation of the following mitigation measures, the project would have a **less than significant** impact related to environmental effects, including levels of service, associated with fire protection, police protection, schools, and parks.

Mitigation Measures

Mitigation Measure PS-1: *Prior to Improvement Plan approval, the applicant shall pay the appropriate residential development impact fees to Loomis Fire Protection District (LFPD) and to submit to the Town a will serve letter from the LFPD.*

Mitigation Measure PS-2: *Prior to Improvement Plan approval, the applicant shall submit to the Town a will serve letter from the Placer County Sheriff's Office.*

Mitigation Measure PS-3: *Prior to issuance of Building Permits, the applicant shall pay all applicable school impact fees to Placer Union School District (PUSD).*

Mitigation Measure PS-4: *Prior to issuance of buildings Permits, the applicant shall pay all applicable Town of Loomis community facility and park-related fees.*

XV. RECREATION

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?			X	
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?			X	

RESPONSES TO CHECKLIST QUESTIONS

Responses a), b): Less than Significant. The project will add residents to the area that would be expected to increase use of the local park system and recreational facilities. The nearest recreational facilities are at H. Clarke Powers Elementary School, located just north of the proposed project site. The nearest neighborhood park, Sunrise-Loomis Park, is located on-quarter miles east of the project site. The nearest regional parks are Traylor Ranch Nature Reserve and Bird Sanctuary and the Loomis-Basin Regional Park, both are located in Placer County and are within two miles of the project site. In addition, the proposed project also includes dedication for a pocket park of approximately 12,174 square feet ("Lot C"). The proposed project will be required to contribute in-lieu fee payments to meet the City's park land requirements (Mitigation Measure PS-4). Through the provision of an on-site park and payment of fees to provide adequate parks to serve the project residents, the proposed project would not cause a physical deterioration of existing recreational facilities. In addition, while the proposed project includes a vest-pocket park within Lot C of the project site, environmental effects associated with construction of this park are addressed as part of the analysis of impacts of the proposed project in this document. The proposed park would not have an adverse physical effect on the environment not addressed elsewhere within this document. Therefore, the proposed project's impact related to the provision of adequate recreational facilities would be **less than significant**.

XVI. TRANSPORTATION/TRAFFIC -- WOULD THE PROJECT:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?		X		
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?		X		
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?				X
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?		X		
e) Result in inadequate emergency access?			X	
f) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?		X		

EXISTING SETTING

The project site is located on the southwest corner of Humphrey Road and No Name Lane. Humphrey Road has a travel lane in each direction and to the south of the site intersects King Road with a stop-sign. King Road is a major east-west roadway through the northern portion of the Town of Loomis. A Traffic Impact Assessment was prepared for the proposed project by KD Anderson Transportation Engineers (KD Anderson, 2016). The review summarized the current and future traffic volumes on Humphrey Road, documented expected morning and evening peak commute hour trips, and addressed design issues.

The General Plan identifies traffic volumes on Humphrey Road at 2,000 average daily trips (ADT) with a level of service (LOS) at A, representing good traffic conditions.

Transit services and bicycle facilities occur within the project area. The nearest existing designated bikeway is located along King Road, south of the project site. Both off-street Class I bicycle paths and on-street Class II bicycle lanes occur along King Road. Humphrey Road fronting the project site currently provides a wide shoulder able to support bicycle transportation. Sidewalks are currently located on the east side of Humphrey Road and on the west side of Humphrey Road south of the project site. Public transportation service is provided to the Loomis area by Placer County Transit. The nearest bus stop is located at the intersection of King and Taylor Roads, about one-half mile east of the project site.

LEVEL OF SERVICE ANALYSIS

"Level of Service" analysis has been employed to provide a basis for describing existing traffic conditions and for evaluating the significance of project traffic impacts. Level of Service measures the quality of traffic flow and is represented by letter designations from "A" to "F", with a grade of "A" referring to the best conditions, and "F" representing the worst conditions.

The Town's Circulation Element establishes the following Level of Service policy:

In order to minimize congestion, maintain Level of Service C on all roads and intersections within the Town of Loomis. Level of Service D may be allowed in conjunction with development approved within the Town as an exception to this standard, at the intersections of King and Taylor, Horseshoe Bar Road and Taylor, Horseshoe Bar Road and I-80, Sierra College and Brace Road, and Webb and Taylor, when:

1. *The deficiency is substantially caused by "through" traffic, which neither begins nor ends in Loomis, and is primarily generated by non-residents; or*

2. *The deficiency will be temporary (less than three years), and a fully-funded plan is in place to provide the improvements needed to remedy the substandard condition.*

Based on these criteria LOS C is the minimum standard for Humphrey Road. The Town of Loomis assumes that a significant traffic impact occurs when the minimum segment Level of Service is exceeded and the project increases the daily volume by more than 5%.

Table 14 identifies the current daily traffic volumes at two locations on Humphrey Road. As shown, the roadway carries an Average Daily Traffic (ADT) volume of 2,707 vehicles per day in the area of the project between King Road and Arcadia Avenue, while north of Arcadia Avenue the count drops to 1,226 ADT. These volumes represent 18% and 8% of the capacity of the road, respectively, and the Level of Service in both locations is LOS A. LOS A would also remain under cumulative conditions (KD Anderson, 2016).

Table 14: Daily Traffic Volumes - Existing

STREET - LOCATION	EXISTING CONDITIONS	
	VOLUME	LOS
1. Humphrey Road – King Road to Arcadia Avenue	2,707	A
2. Humphrey Road – Arcadia Avenue to North Town Limit	1,226	A

SOURCE: KD ANDERSON, 2016

The volume of traffic on Humphrey Road varies throughout the day, and the highest volumes typically occur during the ten to fifteen minutes before and after the school day at H. Clark Powers School (i.e., 8:05 to 8:20 a.m. and 2:15 to 2:30 p.m.). While some degree of congestion occurs at those times near all of Loomis' schools, because background traffic volumes are low, traffic conditions near H. Clark Powers are relatively good, and compared to other schools, minimal congestion occurs at the school's entrance.

Trip Generation for the proposed project during project operations would total 210 daily trips, as described in Table 15 below.

Table 15: Project Trip Generation

DESCRIPTION	QUANTITY	DAILY	A.M PEAK HOUR			P.M. PEAK HOUR		
			IN	OUT	TOTAL	IN	OUT	TOTAL
Single-Family Detached	1	9.52	25%	75%	0.75	63%	37%	1.00
The Grove Subdivision	22	210	4	13	17	15	7	22

SOURCE: KD ANDERSON, 2016

Regular Trip Generation. Traffic engineers describe travel to and from a development in terms of vehicle "trip ends". The number of automobile trips that may be generated by the project has been estimated through application of trip generation rates presented in the Institute of Transportation Engineers (ITE) publication Trip Generation Manual, 9th Edition. A single family resident typically generates roughly 10 vehicle trips per day, with 8% to 10% of that traffic occurring in peak commute hours. As noted in Table 15, when the proposed project is fully built out, The Grove could generate 210 daily trips, with 17 trips occurring in the a.m. peak hour (i.e., 7:00 to 9:00 a.m.), and 22 trips generated in the p.m. peak hour (i.e., 4:00 to 6:00 p.m.).

Construction Traffic. While the project is being constructed, the project will generate trips by construction employees and by trucks delivering materials and equipment to the site. Typically, the amount of traffic associated with residential construction is less than that created by the project's residents after the project is fully occupied.

In this case, The Grove site has material which will need to be removed from the site and hauled away for disposal. A Final Draft Removal Action Workplan (RAW) has been submitted to the Department of Toxic Substances Control (DTSC) and has been conditionally approved. The RAW identifies the amount of truck traffic that will be associated with this work.

The volume of material to be removed is estimated to be a maximum of 4,580 cubic yards. The material will be loaded into 40 cubic yard drop boxes. Each drop box will take between 20 and 30 cubic yards of soil. Assuming an average of 25 cubic yards of soil per drop box the total haul would equal 184 truckloads. The excavation is expected to take two weeks (i.e., 10 working days) and on a typical day there would be 18 to 19 inbound truck trips per day and a similar number of outbound truck trips.

The materials transported to the site would be destined for processing at a site in Vacaville and to a lesser extent a site in Nevada. The trucks traveling to and from the site would use Loomis' arterials street to reach Interstate 80.

RESPONSES TO CHECKLIST QUESTIONS

Responses a), b): Less than Significant with Mitigation.

Project Construction

Construction of the proposed project would result in truck traffic on Humphrey Road during soil remediation, site grading, infrastructure construction, and development of the proposed residential, landscaping, park, and detention basin. The largest number of trucks is expected during the two-week period when material is transported from the site to disposal sites outside of the community. The volume of truck traffic occurring at that time is estimated to be 36 to 38 trips (i.e., ½ inbound

and ½ outbound). Over the course of a day this might represent 4 or 5 truck trips per hour. While each truck is functionally the equivalent of 2 to 3 passenger automobiles, this additional traffic would not have an appreciable effect on the quality of traffic flow on Humphrey Road.

Truck traffic accessing Humphrey Road during the periods when school children are walking to and from the school could appear to be a safety issue, although the trucks themselves would be bound for King Road and would not travel in front of the school. When material is being exported from the site 4 or 5 trucks could be coming to or from the site in a typical hour.

Because of their weight, trucks contribute incrementally to the deterioration of pavement on Town streets. As noted earlier, the Circulation Element notes that the condition of pavement on Humphrey Road is "Very Good" and it is unlikely that the limited number of trucks associated with construction of The Grove will create appreciable damage to the road. Trucks can, however, create focused damage at locations where they take access to or from the local street system. The Town of Loomis, as do most communities, typically monitors the condition of pavement near construction driveways and requires developers to restore pavement to its "pre-project" condition (KD Anderson, 2016).

Project Operation

The proposed Grove Subdivision would create 22 single-family residences, one park lot, two landscaping lots, and one stormwater retention basin lot, on the project site. An approximately 50-foot-wide access to the project site would be constructed off of Humphrey Road. One onsite road, Grove Circle, would provide access to each of the 26 lots in the subdivision. Grove Circle would be 50-feet wide including curb, gutter, and sidewalks. The project applicant also proposes to improve the west side of Humphrey Road to the Town of Loomis 60-foot right-of-way standards. This would require provision of curbs, gutters, and sidewalks along the Humphrey Road frontage of the project site.

For future conditions (year 2020), which represents buildout of the General Plan (Town of Loomis 2001), the General Plan identifies 6,800 ADT on Humphrey Road, which is still LOS A. The Town of Loomis standard is to maintain Humphrey Road at LOS C or better. Since the land use assumptions used to generate the future traffic volumes include development of the proposed project site and since the proposed project is consistent with these land use assumptions, the trips generated by the project are included in the General Plan's year 2020 traffic projection. Therefore, with the proposed project, the level of service on Humphrey Road is anticipated to be acceptable at LOS A.

Table 16: Daily Traffic Volumes – Existing, Existing Plus Project, and Cumulative Plus Project

STREET - LOCATION	EXISTING		EXISTING PLUS PROJECT		CUMULATIVE PLUS PROJECT	
	VOLUME	LOS	VOLUME	LOS	VOLUME	LOS
1. Humphrey Road – King Road to Arcadia Avenue	2,707	A	2,897	A	4,780	A
2. Humphrey Road – Arcadia Avenue to North Town Limit	1,226	A	1,241	A	4,825	A

SOURCE: KD ANDERSON, 2016

As shown in Table 16, the Traffic Impact Assessment found that proposed project trips would use only 1.3% of the roadway capacity identified in the General Plan Circulation Element, and the roadway would continue to operate at LOS A. Thus, the project's impact based on Level of Service is not significant.

The Traffic Impact Assessment calculated that the morning and evening peak hour commute trips generated by the proposed project would be 17 trips during the morning and 22 trips during the evening peak hours. Given the existing and projected conditions on Humphrey Road, the traffic review concluded that these peak hour commute volumes would not have a significant impact on the adjacent roads and intersections. As previously described, the project was included in the General Plan's 2020 traffic projections. While the project's contribution to the existing and cumulative conditions is not significant or considerable, Mitigation Measure T-1 has been provided to ensure that the applicant pays the Town traffic and circulation impact fees needed to to accommodate cumulative traffic conditions consistent with the requirements of Chapter 12.24 of the Loomis Municipal Code, which requires new development to pay development impact fee to offset the impact of future development and maintain current levels of service and corresponding infrastructure. Therefore, potential impacts related to increased vehicle trips or traffic congestion are anticipated to be **less than significant** with mitigation incorporated.

Response c): No impact. The project site is not located within the vicinity of a private airstrip and would not result in a change in air traffic patterns. There is **no impact.**

Response d): Less than Significant with Mitigation. Access to the project site is provided from Humphrey Road. An internal circulation system (Grove Circle) provides internal access for residents. The intersection at Humphrey Road and Grove Circle is sized to have a minimum (roadway/curb/gutter) width of 50 feet, which is maintained throughout the entirety of Grove Circle. Given the limited level of traffic expected to occur along Humphrey Road upon development of the proposed project, and the lack of dangerous design features, the proposed project would not substantially increase hazards due to a design feature. The proposed project would also not include any incompatible uses that could substantially increase hazards. In addition, Mitigation Measure TT-2 would further reduce the potential for design feature hazards by requiring the installation of a stop sign at the intersection of Grove Circle and Humphrey Road. This is **less than significant with mitigation** incorporated.

Response e): Less than Significant. The proposed project would include a 50-foot entryway from the project site to Humphrey road. There would be sufficient emergency access to the project site. This is a **less than significant** impact.

Response f): Less than Significant with Mitigation. The proposed project would include sidewalks fronting the project site along Humphrey Road. Along with the proposed sidewalks fronting the project site along Humphrey Road, Mitigation Measure TT-3 would require improvements to Humphrey Road to incorporate a Class II bicycle lane or Class III bicycle route. These facilities would connect residents to the bicycle lanes along King Road and ultimately to the transit services and bicycle facilities provided throughout the Town of Loomis and Placer County. With mitigation, the project does not contain any hazards or barriers for pedestrians or bicyclists. The project would not conflict with adopted policies, plans, or programs supporting alternative transportation. This is a **less than significant impact with mitigation** incorporated.

Mitigation Measures

Mitigation Measure T-1: *Prior to issuance of Building Permits, the project applicant shall pay all applicable Town of Loomis traffic and circulation fees.*

Mitigation Measure TT-2: *The project applicant shall construct and install a stop sign at the intersection of Grove Circle and Humphrey Road, at the Humphrey Road approach. The stop sign shall be shown on all project improvement plans and shall be installed according to Town of Loomis standards and prior to issuance of certificates of occupancy.*

Mitigation Measure TT-3: *The project applicant shall incorporate a Class II bicycle lane or Class III bicycle route along the project's Humphrey Road frontage. These bicycle facilities shall be shown on all project improvement plans and shall be constructed prior to issuance of certificates of occupancy.*

XVII. UTILITIES AND SERVICE SYSTEMS -- WOULD THE PROJECT:

	Potentially Significant Impact	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?			X	
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?		X		
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?			X	
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?		X		
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the projects projected demand in addition to the providers existing commitments?		X		
f) Be served by a landfill with sufficient permitted capacity to accommodate the projects solid waste disposal needs?		X		
g) Comply with federal, state, and local statutes and regulations related to solid waste?		X		

EXISTING SETTING

Water

Public water utilities are not currently present on the project site; the nearest lines are located within Humphrey Road. Treated water for the proposed project would be provided by Placer County Water Agency (PCWA) and eight-inch water lines currently run along Humphrey Road. The project site is located within PCWA "Lower Zone 1", which includes the lower portion of the watershed below Auburn (including the Town of Loomis). The primary water supply for lower Zone 1 is PG&E water from the Drum-Spaulding hydroelectric system. PCWA also uses water from the North Fork American River pursuant to its own water rights.

The Foothill Water Treatment Plant (near Newcastle) and the Sunset Plant provide the required water treatment for the domestic water supplied to residents of Zone 1 communities, which have capacities of 58 million gallons per day (mgd) and 8 mgd, respectively (PCWA, 2015).

Wastewater

Public wastewater utilities are not currently present on the project site; the nearest lines are located within Humphrey Road.

The South Placer Wastewater Authority (SPWA) operates under a Joint Powers Agreement between the City of Roseville, SPMUD, and Placer County. The SPWA is primarily a funding authority overseeing capital improvements for its member agencies and providing service to the members inside the 2005 Service Area Boundary. The regional facilities funded by the SPWA far include recycled water facilities, trunk sewer lines, and two wastewater treatment plants (WWTPs). All three member agencies transmit wastewater to these WWTPs.

The South Placer Regional Wastewater and Recycled Water Systems Evaluation (Regional Systems Evaluation) prepared by RMC in 2009 delineates the 2005 regional wastewater service area boundary and provides baseline and projected capacity of the regional wastewater (and associated recycled water) system. The projected capacity takes into account the development allowed under the Loomis General Plan. The proposed project site is included in the service area and the buildout calculations.

The Regional Systems Evaluation identified system conditions as of June 2004 and analyzed capacity to accommodate buildout conditions within the 2005 service area, which includes the project, as well as buildout of an expanded service area that would accommodate additional growth areas. The following information summarizes the findings of the Regional Systems Evaluation.

Buildout within the 2005 service area would result in an average dry weather flow (ADWF) of 16.34 mgd at the Dry Creek WWTP and 16.52 mgd at the Pleasant Grove WWTP, totaling 32.86 mgd. Buildout of the ultimate service area, including future urban growth areas, would result in an ADWF of 25.67 mgd at the Pleasant Grove WWTP and 19.98 mgd at the Dry Creek WWTP, totaling 45.65 mgd.

Wastewater from the project site would be treated at the Dry Creek WWTP, located on Booth Road along Dry Creek in the southwest portion of the City of Roseville. The Dry Creek WWTP provides tertiary-level wastewater treatment through the process of screening, grit removal, primary clarification, aeration, secondary clarification, filtration and ultraviolet disinfection; in addition, the Dry Creek WWTP provides full nitrification and de-nitrification. The current ADWF is approximately 10 mgd. The plant can discharge up to 18 mgd ADWF into Dry Creek under an existing National Pollutant Discharge Elimination System Permit No. CA0079502 adopted on June 12, 2008.

Wastewater collection and conveyance for the proposed project would be provided by the South SPMUD. Six-inch sewer lines currently run along Humphrey Road. SPMUD's wastewater collection and treatment system meets all standards of the Regional Water Quality Control Board. The nearest sewer treatment plant is located approximately 6 miles from the project site on Booth Road in Roseville.

Stormwater

Stormwater drainage facilities do not currently occur onsite; the nearest existing storm drains occur along Humphrey Road. On the project site, overland drainage currently flows to the west. The General Plan identifies the Grove project site as an area with special drainage concerns and states that an application for a proposed subdivision of the property shall demonstrate special attention to

potential flooding and drainage issues, and any proposed project shall be designed to create no greater volume of storm water runoff to downstream properties after development (Town of Loomis, 2001).

Solid Waste

Solid waste is collected within the Town of Loomis by Recology Auburn Placer. Solid waste is taken to the Western Regional Sanitary Landfill (WRSL) in western Placer County at the intersections of Athens Avenue and Fiddyment Road. Under current land use and development conditions, the landfill has a projected lifespan extending to the year 2042.

RESPONSES TO CHECKLIST QUESTIONS

Responses a), b), d), e): Less than Significant with Mitigation. The proposed project would allow for the development of 22 single-family residential lots. Development of this type and density on the proposed project site is anticipated by the General Plan.

Water Supply

The PCWA 2015 Urban Water Management Plan (UWMP) plans for development of an additional 1,290 single-family units upon buildout of the General Plan (UWMP, 2015). The project is consistent with the General Plan land use designation and development of the project site was included in buildout calculations. The project proposes to tie in to the 8-inch water main and 6-inch sewer collector lines along Humphrey Road that, once onsite, the water and sewer lines would follow the proposed Grove Circle.

PCWA is anticipated to be able to have sufficient water to serve the proposed project. The PCWA UWMP provides for strong supply reliability; in addition, any potential supply shortfall that may occur in Zone 1 under buildout conditions in a dry year or during multiple dry years would be addressed through groundwater production (UWMP, 2015).

According to the PCWA 2015 UWMP, the Foothill Water Treatment Plant has a capacity of treating approximately 58 million gpd. As of 2016, approximately 49 mgd of capacity is currently used at the Foothill Water Treatment, leaving the remaining capacity to treat approximately an additional 9 million gpd (UWMP, 2015). Therefore, there would be sufficient water treatment capacity to serve the proposed project.

Water availability is on a first-come first-serve basis and is not guaranteed until the applicant applies for service and pays fees. However, as previously stated, the 2015 UWM provides for development PCWA does not issue will serve letters. In order to ensure water availability,

PCWA reserves capacity for new customer upon payment of the agency's water connection charge. The water connection charge is due upon approval of the project and prior to issuance of buildings permits. Typically, there is a lag time of approximately 18 months between the payment of the water connection charge and full development of demand from the occupied units. Mitigation Measure Util-1 requires the project applicant to pay the appropriate fees to PCWA for water service prior to improvement plan approval.

Wastewater

On September 14, 2016, SPMUD issued a letter indicating that all work must conform to the Standard Specifications of SPMUD and provided specific requirements for the placement of sewer lines,

including minimum separation between utilities and prohibitions on location underneath structures and trees. SPMUD's September 14, 2016 letter indicated that a will-serve letter was issued for the project in May 2016 and the owner would need to meet with the District in order to determine specific requirements.

The Dry Creek WWTP has capacity to serve the project; the plant currently has a ADWF of 10 mgd with permitted capacity to discharge up to 18 mgd. The SPMUD System Evaluation and Capacity Assurance Plan (Waterworks Engineers, 2015) addresses improvements necessary to accommodate flows in the Lower Loomis Trunk line, which serves the project area. A Loomis Diversion Line is in the planning and permitting process and will provide capacity for planned development in the area. Therefore, there would be sufficient wastewater treatment capacity to serve the proposed project. Mitigation Measure Util-2 requires the applicant to submit to the Town a will serve letter from SPMUD and pay the appropriate fees to SPMUD prior to improvement plan approval.

Implementation of Mitigation Measures Util-1 and Util-2 will ensure that there is adequate water and sewer service capacity for the project, including adequate treatment capacity at the water treatment plant and Dry Creek WWTP. With implementation of these mitigation measures, the impact will be **less than significant**.

Response c): Less than Significant. As described in Section IX, Hydrology and Water Quality, since the Town's General Plan identifies the project site as an area with special drainage concerns, the proposed project would include a stormwater detention basin in the northwest corner, with adequate capacity to accommodate the 10-year and 100-year storm events. 12-inch storm drains would be installed along the proposed project internal ROWs, which would route stormwater to the drainage basin located in the northwest corner of the project site.

As shown in Table 9, the on-site stormwater system proposed by the project would reduce Shed A stormwater flows from 2.7 cfs (10-year) and 6.87 cfs (100-year) to 2.0 cfs for both the 10- and 100-year storm events. Discharge from Sheds B and C would be eliminated under developed conditions as stormwater would drain to Grove Circle, be collected in the storm drain pipe, and be conveyed to the stormwater detention basin. Stormwater would exit the detention basin lot in a 12-inch drain at the northwest corner. The onsite stormwater system would reduce discharge volumes below existing conditions and would not require the construction of any new offsite stormwater drainage infrastructure. Therefore, impacts related to storm water drainage facilities would be **less than significant**.

Response c): Less than Significant with Mitigation.

Responses f), g): Mixed solid waste services (collection and recycling) are provided by Auburn Placer Disposal Service (APDS), which takes solid waste to Western Regional Sanitary Landfill. With an effective lifespan of approximately 50 to 75 years, the landfill is anticipated to be able to provide sufficient capacity for the proposed project. Given that the proposed project would include 22 single-family homes, the total population is expected to increase the town population by approximately 66 people, which is approximately 1% of the current town population. Since the Western Regional Sanitary landfill is operating at substantially below capacity, as described above, the proposed project's impact would be **less than significant**. In addition, Mitigation Measure UTIL-3 requires the applicant to submit a will serve letter from APDS to the Town prior to approval of improvement plans.

Mitigation Measures

***Mitigation Measure Util-1**: Prior to the approval of improvement plans, the applicant shall submit to the Town of Loomis a will serve letter from Placer County Water Agency (PCWA) indicating that the agency can and will provide water service to the project and a letter, invoice, or other evidence indicating that the applicant has paid the appropriate fees to PCWA for water service.*

***Mitigation Measure UTIL-2**: Prior to the approval of improvement plans, the applicant shall submit to the Town of Loomis a will serve letter from South Placer Municipal Utility District (SPMUD) identifying any specific requirements for the project site and that the district can and would provide sewerage service to the project. At this time, the applicant shall also submit a letter, invoice, or other evidence indicating that the applicant has paid the appropriate fees to SPMUD for wastewater service.*

***Mitigation Measure Util-3**: Prior to the approval of Improvement Plans, the applicant shall submit to the Town of Loomis a will serve letter from Auburn Placer Disposal Service for weekly or more frequent refuse collection service.*

XVIII. MANDATORY FINDINGS OF SIGNIFICANCE --

	Potentially Significant Impact	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?		X		
b) Does the project have the potential to achieve short-term, to the disadvantage of long-term, environmental goals?		X		
c) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?		X		
d) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?		X		

RESPONSES TO CHECKLIST QUESTIONS

Response a): Less than Significant. As described in Section IV, Biological Resources, protected wetlands are present on the project site. There is also the potential for special-status wildlife species, federally- or state-protected birds, and special-status plant species to be occupying the site. In addition, although unlikely, the possibility exists for subsurface excavation of the site during grading and other construction activities to unearth deposits of cultural significance. However, this IS/MND includes mitigation measures that would reduce any potential impacts to less than significant levels as described in Sections IV, Biological Resources, and V, Cultural Resources. Therefore, the proposed project would have **less than significant** impacts related to degradation of the quality of the environment, reduction of habitat, threatened species, and/or California's history or prehistory.

Response b): Less than Significant. Development that converts rural areas to urban/suburban uses may be regarded as achieving short-term goals to the disadvantage of long-term environmental goals. However, the inevitable impacts resulting from population and economic growth are mitigated by long-range planning to establish policies, programs, and measures for the efficient and economical use of resources. Long-term environmental goals, both broad and specific, have been addressed previously in several environmental documents, the most comprehensive being the Town of Loomis General Plan, adopted on July 31, 2001 with updates to the Housing Element and Circulation Element in 2014 and 2016, respectively. As discussed throughout this IS/MND, the proposed project would comply with all relevant policies set forth in the General Plan and would implement the mitigation

measures identified in this IS/MND to to reduce near- and long-term impacts to less than significant levels. Therefore, the impact is **less than significant** with mitigation.

Response c): Less than Significant. The proposed project in conjunction with other development within the could incrementally contribute to cumulative impacts in the area. However, mitigation measures for all potentially significant project-level impacts identified for the proposed project in this IS/MND have been included that would reduce impacts to less than-significant levels and would reduce the project's contribution to cumulative impacts to a less than considerable level. As such, the project's incremental contribution towards cumulative impacts would not be considered significant or considerable. In addition, all future discretionary development projects in the area would be required to undergo the same environmental analysis and mitigate any potential impacts, as necessary. Therefore, the proposed project would not have any impacts that would be cumulatively considerable, and impacts would be **less than significant**.

Response d): Less than Significant. The proposed project site is surrounded by existing development and is consistent with the land use designation for the site. Due to the consistency of the proposed land use, substantial adverse effects on human beings are not anticipated with implementation of the proposed project. It should be noted that during construction activities, the project could result in potential impacts associated with soil contamination, erosion and surface water quality impacts, air quality, traffic, and noise. However, this IS/MND includes mitigation measures that would reduce any potential impacts to a less-than-significant level. In addition, the proposed project would be designed in accordance with all applicable building standards and codes to ensure adequate safety is provided for the future residents of the proposed project. Therefore, impacts related to environmental effects that could cause adverse effects on human beings would be **less than significant**.

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