

Initial Study/Mitigated Negative Declaration

KENNING PROPERTIES

Ordinance for Zone Change RZ19-014

Tentative Subdivision Map TSM19-049

Planned Unit Development PUD19-001



Lead Agency:

Tuolumne County
Community Development Department
48 Yaney Street
Sonora, California 95370
209-533-5633
www.tuolumnecounty.ca.gov

INTRODUCTION AND REGULATORY GUIDANCE

This Initial Study/Proposed Mitigated Negative Declaration (IS/Proposed MND) has been prepared by Tuolumne County to evaluate potential environmental effects resulting the creation of a subdivision in the community of Sonora, in Tuolumne County, California.

This document has been prepared in accordance with the California Environmental Quality Act (CEQA) (Public Resources Code Section 21000 et seq.) and the State CEQA Guidelines (California Code of Regulations Section 15000 et seq.). An initial study is prepared by a lead agency to determine if a project may have a significant effect on the environment (State CEQA Guidelines Section 15063[a]), and thus to determine the appropriate environmental document. In accordance with State CEQA Guidelines Section 15070, a “public agency shall prepare...a proposed negative declaration or mitigated negative declaration...when: (a) The Initial Study shows that there is no substantial evidence...that the project may have a significant impact on the environment, or (b) The Initial Study identifies potentially significant effects but revisions to the project plans or proposal are agreed to by the applicant and such revisions would reduce potentially significant effects to a less-than-significant level.” In this circumstance, the lead agency prepares a written statement describing its reasons for concluding that the project would not have a significant effect on the environment and, therefore, does not require the preparation of an Environmental Impact Report (EIR). By contrast, an EIR is required when the project may have a significant environmental impact that cannot clearly be reduced to a less-than-significant effect by adoption of mitigation or by revisions in the project design.

As described in the environmental checklist (Section 2), the project would not result in any unmitigated significant environmental impacts. Therefore, an IS/Proposed MND is the appropriate document for compliance with the requirements of CEQA. This IS/Proposed MND conforms to these requirements and to the content requirements of State CEQA Guidelines Section 15071.

PUBLIC REVIEW REQUIREMENTS

Under CEQA, the lead agency is the public agency with primary responsibility over approval of the project. Tuolumne County is the CEQA lead agency. The purpose of this document is to present to decision-makers and the public, information about the environmental consequences of implementing the project. This disclosure document is being made available to the public for review and comment. This IS/Proposed MND will be available for a 30-day public review period from October 2, 2020 to November 2, 2020.

Supporting documentation referenced in this document is available for review at:
Tuolumne County Community Development Department
48 Yaney, Sonora, CA 95370

Comments should be addressed to and must be postmarked by November 2, 2020:
Natalie Rizzi, Land Use Coordinator
Tuolumne County Community Development Department
2 South Green Street
Sonora, CA 95370
nrizzi@co.tuolumne.ca.us

After comments are received from the public and reviewing agencies, the Tuolumne County Board of Supervisors may (1) adopt the MND and approve the project; (2) undertake additional environmental studies; or (3) abandon the project. If the project is approved, the applicant may proceed with the project.

PROJECT INFORMATION

DATE: September 30, 2020

**SURFACE/MINERAL
RIGHTS OWNERS** Kenning Properties

APPLICANT: Kurt Springer

PROJECT

- DESCRIPTION:**
1. Zone Change RZ19-014 to rezone a 6.1± acre parcel from RE-2 (Residential Estate, Two Acre Minimum) and O-1 (Open Space-1) to R-1:PD (Single-Family Residential:Planned Unit Development Combining) and O-1:PD (Open Space-1:Planned Unit Development Combining) under Title 17 of the Tuolumne County Ordinance Code.
 2. Tentative Subdivision Map TSM19-049 to divide a 6.1± acre parcel into 25 residential parcels and 3 common area parcels.
 3. Planned Unit Development PUD19-001 to allow the following:
 - a. Reduction in the minimum lot size
 - b. Reduction in the minimum width at the front setback line
 - c. Reduction in the required building setbacks
 - d. Reduction in the number and location of public utility easements
 - e. Increase in the maximum floor area ratio

LOCATION: The project site is located at 20313 Soulsbyville Road, approximately 2,000± feet southeast of the intersection of State Highway 108 and Soulsbyville Road. The project site is within a portion of Section 30, Township 2 North, Range 16 East, Mount Diablo Baseline and Meridian, and within Supervisorial District 2. Assessor's Parcel Number 067-010-16.

SITE

DESCRIPTION: The project site is located on Soulsbyville Road, 2,000± feet southeast of the intersection of State Highway 108 and Soulsbyville Road. The project site is located south of the Willow Springs Subdivision and northeast of Soulsbyville Elementary School. The project site is 6.1± acres in size. The project site is located within the water and sewer service area of the Tuolumne Utilities District (TUD).

Curtis Creek is located on the site and flows north to south through the middle of the project site. There is approximately 1.7 acres of existing Open Space-1 on the site protecting the riparian corridor along Curtis Creek. Vegetation on site includes black oaks, blue oaks, annual grasses, ponderosa pines, gray pines, and riparian vegetation including blackberry and willows.

Elevations on the site range from approximately 2,930± feet above mean sea level in the middle of the project site surrounding the Curtis Creek to approximately 2,960 feet above mean sea level along the eastern and western property boundaries. Slopes range from approximately 1% to approximately 25% in the area adjacent to Curtis Creek.

**DETAILED
PROJECT
DESCRIPTION:**

On December 16, 2019, an application was received for the following:

1. Zone Change RZ19-014 to rezone a 6.1± acre parcel from RE-2 (Residential Estate, Two Acre Minimum) and O-1 (Open Space-1) to R-1:PD (Single-Family Residential:Planned Unit Development Combining) and O-1:PD (Open Space-1:Planned Unit Development Combining) under Title 17 of the Tuolumne County Ordinance Code.
2. Tentative Subdivision Map TSM19-049 to divide a 6.1± acre parcel into 25 residential parcels and 3 common area parcels.
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 - a. Reduction in the minimum lot size
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 - d. Reduction in the number and location of public utility easements
 - e. Increase in the maximum floor area ratio

Zone Change RZ19-014 would rezone the parcel from RE-2 and O-1 to R-1:PD and O-1:PD. The R-1 zoning allows for smaller, single family residential lots. The R-1 zoning is consistent with the existing LDR (Low Density Residential) General Plan land use designation. The :PD combining district is required to allow flexibility in the application of ordinance code requirements and to allow exceptions listed above under a Planned Unit Development. The existing O-1 zoning will be retained and will not be impacted by the zone change application. Tentative Subdivision Map TSM19-049 would divide the project site into 25 residential parcels and 3 common area parcels. This would allow the dwelling units to be developed on separate legal parcels and allow for separate ownership of each unit.

The R-1 residential lots are proposed to range in size from 1,640 square feet to 2,900 square feet. The width at the front setback line would be reduced to as much as 23 feet. The side setback would be reduced to a 0 foot setback between dwelling units, and the front and rear setbacks would be reduced to as much as 3 feet from the property boundary on some lots. The floor area ratio, which is defined as the maximum ratio of coverage of all buildings on the lot, would be increased to up to 1.5 from 0.75. Planned Unit Development PUD19-001 would allow exceptions to these development standards and requires approval from the Board of Supervisors.

The units will consist of duplexes and triplexes built on individual residential lots. Single-story and two-story units are proposed. There are six different design options proposed with varying layouts, floor plans, orientation, and square footages. The homes will range in size from 1,225± square feet to 2,570± square feet.

Common lots A and B will consist of the internal road system and retention/detention basins, and common lot C will consist of the area zoned Open Space-1. The internal privately maintained road will cross Curtis Creek, through Open Space-1, to provide access to proposed Lots 17 through 25. The internal private roads and driveways will be designed and constructed in accordance with Title 11 of the Tuolumne County Ordinance Code and will meet Fire Code requirements for turnarounds. The roads will not connect to other roads or provide through access to the Willow Springs Subdivision. Driveways off the internal private roads will provide access to each of the single family dwellings.

The project will be accessed off Soulsbyville Road and will include a gated entrance. Driveways off the internal privately maintained roads and will provide access to each of the residential units. The project includes fire hydrants in several locations, and sidewalks will connect the residences through the project site.

The project was circulated to Advisory Agencies and adjoining property owners on January 30, 2019 for comments.

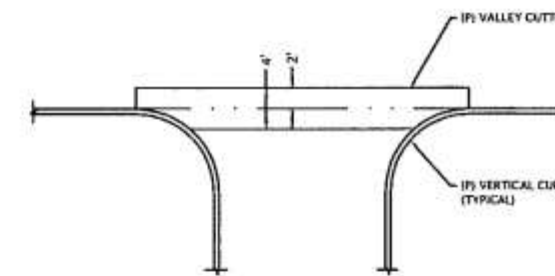
Other Agency Approvals:

In addition to County review and approval, the project would require permit issuance approvals from other agencies. These agencies would serve as responsible and trustee agencies pursuant to CEQA Guidelines Section 15381 and Section 15386, respectively. This document provides the necessary environmental information for discretionary actions by these agencies.

- California Department of Fish and Wildlife (CDFW) –Reviews/approves project for compliance with applicable rules and regulation, specifically impacts to sensitive plant, animal, and wetland/riparian habitat. Collects CDFW filing fee for review of project environmental document.
- US Fish and Wildlife Service – Reviews/approves applicable rules and regulation, specifically impacts to sensitive plant, animal, and wetland/riparian habitat. The authority to contact regarding buffer protection zones for elderberry shrubs.
- Native American Heritage Commission State Water Resources Control Board
- Tuolumne County—for encroachment permits, grading permits, and building permits.

Consultation Pursuant to Public Resources Code Section 21080.3.1:

In accordance with Senate Bill 52, formal consultation letters were sent to the contacts for the Chicken Ranch Rancheria of Me-Wuk Indians and Tuolumne Band of Me-Wuk Indians Tribes. AB 52 consultation letters we sent via certified mail on April 13, 2020. The Tuolumne Band of Me-Wuk Indians requested formal consultation on this project. Community Development staff met onsite with tribal members to review the project and site conditions. Their comments and requested protective measures are discussed in the *Tribal Cultural Resources* section of this document.



TYPICAL VALLEY GUTTER DRIVEWAY CROSSING
HIS SCALE

NOTES:

- ◇ PROPOSED PARKING SPACE TOTAL
- A PROPOSED 24' PRIVATE ROAD
- B PROPOSED 24' DRIVE AISLE WITH PARKING
- C PROPOSED 24' DRIVE AISLE, (AT RETAINING WALL)
- D PROPOSED 14' DRIVE AISLE, (AT SS EASEMENT)
- E PROPOSED 24' PRIVATE DRIVE AISLE

REVISIONS	DATE	BY	CHKD
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VESTING TENTATIVE SUBDIVISION MAP
KENNING TOWNHOMES
OVERALL SITE PLAN
APN: 067-010-016-00
TUOLUMNE COUNTY
CALIFORNIA



WSA **WEBER, GHIO**
& ASSOCIATES
civil engineering consultant
394 E. SAINT CHARLES ST. | PO BOX 261 | SAN ANGELES, CA 76907
(202) 754-1024

PRJ. No.: 2689
PRJ. DATE: 12.04.2019
SCALE: AS SHOWN
DRAWN BY: DMV
CHECKED BY:
SHEET:
TM-1
SHT. 2 of 8

ENVIRONMENTAL EVALUATION

TERMINOLOGY DEFINITIONS: The following terminology is used in this environmental analysis to describe the level of significance of potential impacts to each resource area:

- **Potentially Significant Impact.** This term applies to adverse environmental consequences that have the potential to be significant according to the threshold criteria identified for the resource, even after mitigation strategies are applied and/or an adverse effect that could be significant and for which no mitigation has been identified. If any potentially significant impacts are identified, an EIR must be prepared consistent with CEQA.
- **Less-than-Significant Impact with Mitigation.** This item applies to adverse environmental consequences that have the potential to be significant, but can be reduced to less-than-significant levels through the application of identified mitigation strategies that have not already been incorporated into the proposed project.
- **Less-than-Significant Impact.** This term applies to potentially adverse environmental consequences that do not meet the significance threshold criteria for that resource. Therefore, no mitigation measures are required.
- **No Impact.** This term means no adverse environmental consequences have been identified for the resource or the consequences are negligible or undetectable. Therefore, no mitigation measures are required.

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.

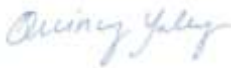
<input type="checkbox"/> Aesthetics
<input type="checkbox"/> Biological Resources
<input type="checkbox"/> Greenhouse Gas Emissions
<input type="checkbox"/> Land Use/Planning
<input type="checkbox"/> Population/Housing
<input type="checkbox"/> Transportation
<input type="checkbox"/> Wildfire
<input type="checkbox"/> Mandatory Findings of Significance

<input type="checkbox"/> Agriculture and Forestry Resources
<input type="checkbox"/> Cultural Resources
<input type="checkbox"/> Hazards & Hazardous Materials
<input type="checkbox"/> Mineral Resources
<input type="checkbox"/> Public Services
<input type="checkbox"/> Tribal Cultural Resources

<input type="checkbox"/> Air Quality
<input type="checkbox"/> Geology/Soils
<input type="checkbox"/> Hydrology/Water Quality
<input type="checkbox"/> Noise
<input type="checkbox"/> Recreation
<input type="checkbox"/> Utilities/Service Systems
<input checked="" type="checkbox"/> None with Mitigation Implemented

DETERMINATION (To be completed by the Lead Agency) on the basis on the initial evaluation:

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



Quincy Yaley, AICP
Environmental Coordinator

September 29, 2020
Date

EVALUATION OF ENVIRONMENTAL IMPACTS

- 1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
- 2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
- 3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.
- 4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from "Earlier Analyses," as described in (5) below, may be cross-referenced).
- 5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
 - a) Earlier Analysis Used. Identify and state where they are available for review.
 - b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
 - c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
- 6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
- 7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

I. AESTHETICS:

Issues and Supporting Information Sources	Potentially Significant Impact	Less-than- Significant With Mitigation Incorporation	Less-than- Significant Impact	No Impact
Would the Proposed Project/Action:				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experiences from publicly assessable vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Environmental Setting:

Visual or aesthetic resources are generally defined as the natural and built features of the landscape that can be seen. The combination of landform, water, and vegetation patterns represents the natural landscape that defines an area's visual character, whereas built features such as buildings, roads, and other structures reflect human or cultural modifications to the landscape. These natural and built landscape features or visual resources contribute to the public's experience and appreciation of the environment. Depending on the extent to which a project's presence would alter the perceived visual character and quality of the environment, visual or aesthetic impact may occur. It should be noted that visual change in and of itself does not necessarily represent an adverse impact, and in some cases may result in a beneficial visual effect.

The aesthetic analysis is based on field observations and the review of information including site maps, drawings, technical data, and aerial and ground level photographs of the area. In addition, as part of this study, planning documents pertinent to visual quality including the Tuolumne County General Plan were reviewed. The analysis also responds to the California Environmental Quality Act (CEQA) guidelines for visual impact analysis as well as the goals, programs, and implementation programs outlined in the Tuolumne County General Plan and the Tuolumne County Ordinance Code.

The Tuolumne County General Plan recognizes agricultural and timberlands as having historically defined the rural character and scenic beauty of the County. There are no scenic vistas within the project vicinity and no existing light sources at the project site.

Potentially affected viewers in the subject area include roadway motorists and other views along Soulsbyville Road. Motorists represent the largest of the affected viewer groups and would include the public views of the project site. Other viewers include residents in the area and private views from surrounding residences and properties. Parcels to the north of the project site are located within the Willow Springs Subdivision and are developed with single-family dwellings and accessory structures. Parcels to the south and east are developed with scattered rural residences. The parcel to the southwest is developed with Soulsbyville Elementary School.

The project site is located in an urban area and has no physical buildings on the site. Vegetation on the site includes annual grassland, riparian habitat along the on-site drainage, and a combination of scattered hardwoods (oak trees) and conifers. The site is typical of vacant lots located in the project vicinity that

contain a mix of oak woodlands, conifer trees, and grasslands.

Analysis:

- a) A scenic vista is considered a view of an area that has remarkable scenery or a natural or cultural resource that is indigenous to the area. There are three vista points within Tuolumne County that have been officially designated by the California Department of Transportation (Caltrans) as a scenic vista point. Two of these are found at Lake Don Pedro and the third one is the "Rim of the World" which is along State Highway 120 east of the community of Groveland. The project site is currently a vacant property with unmaintained vegetation that includes oak woodlands, conifer trees, and grasslands and does not offer long-distance or unique scenic views. As previously described, scenic beauty within the county is characterized by areas containing agricultural lands or timberland. Project implementation would result in removal of vegetation, however, views from the project site are limited and project implementation would not hinder views to an existing scenic resource. Therefore, the project would result in less than-significant impacts to a scenic vista.
- b) Tuolumne County does not currently have any officially designated state scenic highways, although portions of State highways 49, 108, 120 are eligible for designation. These portions have been identified as locally designated scenic routes. State Highway 49 has been recognized as a locally designated scenic route from the Mariposa County Line to Route 120 near Moccasin Creek and from Route 120 at Chinese Camp to the Calaveras County line, exclusive of the City of Sonora. State Highway 108 from the intersection with State Highway 49 easterly to the Mono County line has also been recognized as a locally designated scenic highway. The project site is located approximately 2,000 feet from State Route 108 and is not visible from any officially designated or locally designated state scenic highway. Therefore, there is no impact.
- c) The visual character of a project can result in potential impacts from project construction and operation. Impacts are discussed for construction and operation separately, below.

Construction

Construction activities are anticipated to begin in 2021 and end in 2022. Construction impacts associated with the project would be temporary and short-term. The project would include construction-related activities involving construction workers and the use of construction equipment, vehicles, and building materials. Temporary construction activities would be consistent in visual character with small-scale building and landscaping projects.

Operation

The project site is located within an urbanized area as it is served with public water and sewer. The project is proposing to create 25 residential lots zoned R-1:PD. Each lot will be developed with one single-family dwelling. Landscaping will be provided to provide screening around the internal roadways and residences.

Although the project site falls outside the boundary subject to the East Sonora Design Guidelines, the project will incorporate many of these design features. The following design features from the East Sonora Design Guidelines will be incorporated into the project design:

- Overhang porches to mark the entries
- Incorporation of stone façade and horizontal siding
- Incorporation of column details
- Use of composite shingles on the roof

Policy 16.A.3 of the Natural Resources Element of the 2018 Tuolumne County General Plan directs the County to conserve the natural scenic quality of hillsides and hilltops throughout Tuolumne County. Implementation Program 16.A.e encourages hillside development to be designed and located to be compatible with, rather than imposed on, the landscape and environment by minimizing the amount of grading and topographical alteration it necessitates. Implementation Program 16.A.f directs the County to maintain hillside development guidelines which provide recommendations for integrating new construction with hillsides and hilltops. The *Hillside and Hilltop Development Guidelines* were created to assist property owners with development of hillside and hilltop areas, consistent with the Policy and Implementation Programs listed above. When the following apply, the *Hillside and Hilltop Development Guidelines* are required to be utilized:

1. The project is subject to the California Environmental Quality Act, and
2. The site, or a portion of the site, is located within a hillside or hilltop area, which is characterized by average slopes of 20% or greater, or the crest of a ridge or hilltop, and
3. The hillside and/or hilltop is visible from a State highway, arterial or a major collector road; or
4. Within the Columbia area, the hillside and/or hilltop is visible from Sawmill Flat Road or Yankee Hill Road.

The project would not be required to implement the *Hillside and Hilltop Development Guidelines* because the average slopes on the site are less than 20% and the project site is not located on the crest of a ridge or hilltop. The applicant is proposing approximately 20± acres of Open Space zoning to be located off-site on APNs 089-030-06 and 088-180-03, which are under the same ownership as the project site. This mitigation was proposed to mitigate impacts to oak woodland (see the Biological Resources Section below). However, this 20± acres is located near the top of the hillside and will help mitigate impacts to aesthetics. The 20± acres of Open Space would remain undeveloped and would allow for additional area in the project vicinity for a naturally vegetated buffer and to retain its visual quality.

The project site has very limited frontage along Soulsbyville Road, and essentially is located behind another parcel that has frontage along the roadway. Because of the parcel configuration, views from Soulsbyville Road will be limited. The project site will mostly screen the structures from views seen by travelers on Soulsbyville Road; however, gaps in the tree line would allow momentary views of the proposed project. However, these brief views of the residential structures, would not result an adverse change to the project site character.

Additionally, there are 1.7± acres of existing O-1 zoning surrounding the riparian area on site. This area will remain undisturbed, except for the private road crossing and TUD sewer lift station, and will act as a naturally vegetated visual buffer for views of the project site from the east. Due to the development restrictions in the O-1 zoning district, this area will remain undisturbed and will minimize visual impacts.

The project is consistent with the applicable policies governing aesthetics and scenic qualities. Incorporation of the proposed design elements as listed above, the inclusion of landscaping, and the existing natural vegetation buffer within the O-1 and O zoned areas would result in a less than substantial visual change to the site and would not substantially change the quality of the project site or its surroundings. This impact is less than significant.

- d) New sources of light and glare will be introduced as a part of the project. Sources of light and glare would be residential in nature. Exterior lighting would be used around residences, in outside patio areas, and parking areas. Mitigation Measure AES-1 has been incorporated into the project to reduce this impact to a less than significant level by implementing Dark Sky lighting, such fixtures that

minimize glare while reducing light trespass and skyglow. Mitigation Measure AES-1 will require any exterior lighting to incorporate the following: direct the light downward to the area to be illuminated, install shields to direct light and reduce glare, utilize low rise light standards or fixtures attached to the buildings, and utilize low or high pressure sodium lamps instead of halogen type lights. The project proponent will be required to submit a lighting plan to show consistency with the above provisions. Consistency with Mitigation Measure AES-1 will be reviewed by Community Development Department (CDD) staff upon receipt of a building permit for any structure on site. The lighting plan will be required to be reviewed and approved by CDD Staff prior to the issuance of a building permit.

Mitigation Measures:

AES-1: A lighting plan shall be submitted and approved by the Land Use and Natural Resources Division prior to the issuance of a building permit by the Building and Safety Division. Any exterior lighting shall incorporate the following features: direct the light downward to the area to be illuminated, install shields to direct light and reduce glare, utilize low rise light standards or fixtures attached to the buildings, and utilize low or high pressure sodium lamps instead of halogen type lights.

Mitigation Monitoring:

The submittal and approval of a lighting plan will be required prior to the issuance of a Building Permit issued by the Building and Safety Division of the Community Development Department. The lighting plan will be reviewed by the Land Use and Natural Resources Division for consistency with the standards indicated in Mitigation Measure AES-1 prior to approval of the building permit. A Notice of Action will be recorded to advise future owners of the required mitigation measures and the responsibility to comply with said measures.

II. AGRICULTURAL AND FORESTRY RESOURCES:

In determining whether the impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997), prepared by the California Department of Conservation, as an optional model to use in assessing impacts on farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the State's inventory of forest land. This includes: Forest and Range Assessment Project, the Forestry Assessment Project and Forest Carbon Measurement methodology provided in Forest Protocols, adopted by the California Air Resources Board.

	Potentially Significant Impact	Less-than- Significant With Mitigation Incorporation	Less-than- Significant Impact	No Impact
Issues and Supporting Information Sources				
Would the Proposed Project/Action:				
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Result in the loss of forest land, or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Environmental Setting:

Lands of agricultural importance in Tuolumne County are designated AG (Agricultural), TPZ (Timber Production), or O (Open Space) by the General Plan land use diagrams. Exclusive agricultural properties contain the AE-160 (Exclusive Agricultural, One Hundred Sixty Acre Minimum), AE-80 (Exclusive Agricultural, Eighty Acre Minimum), and AE-37 (Exclusive Agricultural, Thirty-Seven Acre Minimum) Zoning. Parcels within the Williamson Act must contain the Agricultural Preserve Combining (:AP) zoning, as required by Tuolumne County Resolution 106-04. Chapter 8 of the 2018 Tuolumne County General Plan contains the Goals, Policies, and Implementation Programs related to agriculture in Tuolumne County. The project was reviewed for consistency with the Agricultural Element of the General Plan.

California Land Conservation Act

The California Land Conservation Act of 1965 (Williamson Act) enables local governments to enter into contracts with private landowners for preserving agricultural land or related open space uses. Land under agricultural production can have its annual assessed valuation for property tax calculation reduced if the owner agrees to place the land under a Williamson Act contract for 10 years, renewable annually. Tuolumne County Resolution 106-04, approved by the Board of Supervisors on June 15, 2004, contains the County's rules and regulations to govern land within Agricultural Preserves and land within the Williamson Act Land Conservation Program.

Z'berg-Nejedly Forest Practice Act of 1973

The project site is located on private property and as such for actions related specifically to potential impacts from forest resources could be subject to the provisions of the Z'berg-Nejedly Forest Practice Act of 1973 (FPA) that have been promulgated as the California Forest Practice Rules. Land within Tuolumne County that is subject to the Z'berg-Nejedly Forest Practice Act of 1973 is demonstrated by the TPZ (Timberland Preserve) zoning district and the TPZ General Plan land use designation.

Analysis:

- a) The project site has not been mapped under the Farmland Mapping and Monitoring Program of the California Resources Agency. However, the project site has been mapped under the United States Department of Agriculture Natural Resources Conservation Service web soil survey maps. The project site contains the Musick-Ultic Haploxeralf, Musick-Hotaw complex, and Urban land-Sierra-Flanly complex soil types. None of these soil types are considered Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. Therefore, there will be no impact.
- b) The project site is zoned RE-2 and O-1 and contains the LDR General Plan land use designation. The project site is not within a Williamson Act Land Conservation contract. There are no parcels within the vicinity of the project site that are zoned Agricultural or within a Williamson Act contract. The nearest parcel with the AG General Plan land use designation or Exclusive Agricultural (AE) zoning is located approximately 2,000± feet southeast of the project site. The nearest property located within a Williamson Act Contract is located approximately 1.25± aerial miles south of the project site. Therefore, there will be no impact as the project would not conflict with existing zoning for agricultural use or a Williamson Act Contract.
- c,d) The TPZ zoning district is utilized for the protection of timberland. The TPZ zoning district is for the protection of timberland and in order to prevent encroachment upon it by incompatible uses of land, and for the general welfare of the County as a whole. This zone is intended to qualify its land pursuant to Z'bergWarren-Keene-Collier Forest Taxation Reform Act of 1976 or such other legislative statutes or constitutional authorization as may be developed for defining a timberland preserve. The TPZ land use designation provides for the growing and harvesting of timber and other forest products in concert with limited, low-intensity public and private commercial recreational uses. Typical land uses allowed in the TPZ designation include all commercial timber production operations and facilities, agricultural operations, mineral and other resource extraction operations, recreation uses such as public utility and safety facilities.

The project site does not contain the TPZ zoning district or the TPZ General Plan land use designation. There are no parcels within the vicinity of the project site that contain the TPZ zoning district or the TPZ land use designation. The nearest parcel with the TPZ zoning is located approximately 3.2± miles northeast of the project site.

The California Department of Forestry and Fire Protection (CalFire) regulates timber harvesting and logging on privately owned lands in California. Prior to the conversion of land to a land use other than growing timber, a Timberland Conversion permit must be reviewed and approved by CalFire. The project site is currently vacant and contains commercial tree species, as defined by CalFire, consisting of Ponderosa Pine. If the project will require the cutting or removal of commercial tree species, the project proponent is required to submit a timber harvest plan to CalFire for their review and approval. If the area of timber harvest is less than three acres in size, a Less Than Three Acre Conversion Exemption may be obtained from CalFire. The project will be conditioned to require a timber harvest plan or application for Less Than Three Acre Conversion Exemption to be submitted to CalFire for review and approval prior to the cutting or removal of commercial tree species. The approved harvest plan or exemption from CalFire will be required to be submitted to the Land Use

and Natural Resources Division. Compliance with this requirement would result in a less than significant impact on timberland.

- e) The project site is not located near agricultural land. The nearest parcel with the Agricultural General Plan land use designation is located approximately 2,000 feet to the southeast of the project site. The project will utilize existing infrastructure and project development will be limited to the boundaries of the project site. Therefore, it is unlikely that the project would have impacts that would result in the conversion of agricultural land to a non-agricultural use. There is a less than significant impact.

Mitigation Measures: None Required

Mitigation Monitoring: Not Applicable

III. AIR QUALITY:

Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations:

Issues and Supporting Information Sources	Potentially Significant Impact	Less-than- Significant With Mitigation Incorporation	Less-than- Significant Impact	No Impact
Where available, the significance criteria established by the Tuolumne County Air Pollution Control District has been relied upon to make the following determinations. Would the Proposed Project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) 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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Environmental Setting:

This section describes the impacts of the proposed project on local and regional air quality. It describes existing air quality in the foothills; project related direct and indirect emissions; health effects; and the impacts of these emissions on both the project and cumulative/regional scale.

The U.S. Environmental Protection Agency (EPA) designated Tuolumne County as “attainment/unclassified” for the 2008 8-hour federal ozone standard on July 20, 2012. On April 6, 2015 the EPA revoked the 1997 8-hour ozone standard for all purposes (80 FR 12264). Tuolumne County is “attainment/unclassified” for all other federal ambient air quality standards. With respect to State ambient air quality standards, Tuolumne County is classified as “nonattainment” for ozone and “attainment/unclassified” for all other State standards. The State ozone “nonattainment” status is due to overwhelming transport of ozone precursors from upwind, urban areas.

Air pollution is directly related to a region’s topographic features, and the California Air Resources Board (CARB) has divided California into regional air basins according to topographic air drainage features. The Mountain Counties Air Basin (MCAB) includes Plumas, Sierra, Nevada, Placer (middle portion), El Dorado (western portion), Amador, Calaveras, Tuolumne, and Mariposa Counties. While the MCAB encompasses such an expansive territory, the population of the entire air basin is less than 500,000 (472,991 in 2010). The basin lies along the northern Sierra Nevada Mountain Range, close to or contiguous with the Nevada border, and covers an area of roughly 11,000 square miles.

Elevations range from over 10,000 feet at the Sierra crest down to several hundred feet above sea level at the Stanislaus County boundary. Throughout the MCAB basin, the topography is highly variable, and includes rugged mountain peaks and valleys with extreme slopes and differences in elevation in the Sierras, as well as rolling foothills to the west.

The general climate of the MCAB varies considerably with elevation and proximity to the Sierra ridge. The terrain features of the basin make it possible for various climates to exist in a relatively close proximity. The Sierra Nevada receives large amounts of precipitation in the winter, with lighter amounts in the summer. Precipitation levels are high in the highest mountain elevations but decline rapidly toward the western portion

of the basin. Winter temperatures in the mountains can be below freezing for weeks at a time, and substantial depths of snow can accumulate, but in the western foothills, winter temperatures usually dip below freezing only at night and precipitation is mixed as rain or light snow. In the summer, temperatures in the mountains are mild, with daytime peaks in the 70s to low 80s, but the western end of the basin can routinely exceed 100 degrees.

Local Climate and Sources of Air Pollution

The climate in Tuolumne County can be considered Mediterranean with moist and cold winters and warm and dry summers. The mean annual precipitation is 33 to 49 inches (838 to 1,245 millimeters). Mean annual temperature is 41 to 53 degrees F (5.0 to 11.7 degrees C). The frost-free period is 100 to 150 days.

Table 1. Tuolumne County Designations and Classifications		
Pollutant	Designation/Classification	
	Federal Standard	State Standard
Ozone - One hour	No Federal Standard	Nonattainment
Ozone - Eight hour	Attainment/Unclassified	Unclassified
PM 10	Unclassified	Unclassified
PM 2.5	Attainment/Unclassified	Unclassified
Carbon Monoxide	Attainment/Unclassified	Attainment
Nitrogen Dioxide	Attainment/Unclassified	Attainment
Sulfur Dioxide	Unclassified	Attainment
Lead (Particulate)	Attainment/Unclassified	Attainment
Hydrogen Sulfide	No Federal Standard	Unclassified
Sulfates	No Federal Standard	Attainment
Visibility Reducing Particles	No Federal Standard	Unclassified
Source: CARB "Inhalable coarse particles (PM _{2.5-10})," such as those found near roadways and dusty industries, are between 2.5 and 10 micrometers in diameter. PM _{2.5-10} is deposited in the thoracic region of the lungs. "Fine particles (PM _{2.5})," such as those found in smoke and haze, are 2.5 micrometers in diameter and smaller. These particles can be directly emitted from sources such as forest fires, or they can form when gases emitted from power plants, industries and automobiles react in the air. They penetrate deeply into the thoracic and alveolar regions of the lungs.		

The Tuolumne County Air Pollution Control District (TCAPCD) does not meet the state 1-hour standard for ozone or for PM 2.5. The TCAPCD is designated as unclassified for the State PM10 standards, since no PM10 data is available for this area. The District is either in attainment or in an unclassified area for the remainder of the pollutants in Table 1, due to the lack of availability of data. The Mountain Counties Air Basin typically experiences good air quality, however pollution from the Central Valley

Local jurisdictions have the authority and responsibility to reduce air pollution through their policies, codes, and land use planning. The project was evaluated under the California Air Resource Board (CARB) air quality standards and area designations, and the Tuolumne County Air Pollution Control District's thresholds of significance, and the Tuolumne County Ordinance Code and Tuolumne County General Plan.

TCAPCD is the primary agency responsible for planning to meet National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) in the County and is responsible for implementing emissions standards and other requirements of federal and state laws regarding most types of stationary emission sources. In addition, TCAPCD has also set emissions thresholds for certain pollutants for the purposes CEQA. Pursuant to the State CEQA Guidelines, air quality impacts from project implementation would be significant if the project would:

- violate any air quality standard or contribute substantially to an existing or project air quality violation—for the purposes of the project locations, result in construction or operations of a project that generated emissions in excess of the following thresholds, except CO, used by TCAPCD (2017):
- reactive organic gases (ROG) – 1,000 pounds per day (lb/day) or 100 tons per year (tpy)
- oxides of nitrogen (NO_x) – 1,000 lb/day or 100 tpy
- PM₁₀ – 1,000 lb/day or 100 tpy
- CO – 1,000 lb/day or 100 tpy
- expose sensitive receptors to a substantial incremental increase in toxic air contaminant (TAC) emissions; or create objectionable odors affecting a substantial number of people

Primary criteria pollutants are emitted directly from a source (e.g., vehicle tailpipe, an exhaust stack of a factory) into the atmosphere. Primary criteria pollutants include carbon monoxide (CO), reactive organic gases (ROG), oxides of nitrogen (NO_x), respirable and fine particulate matter (PM₁₀ and PM_{2.5}), sulfur dioxide (SO₂), and lead. Secondary criteria pollutants are created by atmospheric chemical and photochemical

reactions; ROG together with NO_x form the building blocks for the creation of photochemical (secondary) pollutants. Secondary criteria pollutants include oxidants, ozone, and sulfate and nitrate particulates (smog). The characteristics, sources, and effects of the criteria air pollutants of most concern are described below.

Carbon Monoxide, CO , is a local pollutant that is found in high concentrations only near the source. The major source of CO , a colorless, odorless, poisonous gas, is automobile traffic. Elevated concentrations, therefore, are usually found only near areas of high traffic volumes. CO 's health effects are related to its affinity for hemoglobin in the blood. At high concentrations, CO reduces the amount of oxygen in the blood, causing heart difficulties in people with chronic diseases, reduced lung capacity, and impaired mental abilities.

Ozone is produced by a photochemical reaction (triggered by sunlight) between NO_x and ROG. NO_x is formed during the combustion of fuels, while ROG is formed during combustion and evaporation of fossil fuels and organic solvents. Because ozone requires sunlight to form, it mostly occurs in concentrations considered serious between the months of April and October. Ozone is a pungent, colorless, toxic gas with direct health effects on humans, including respiratory and eye irritation and possible changes in lung functions. Groups most sensitive to ozone include children, the elderly, people with respiratory disorders, and people who exercise strenuously outdoors.

Nitrogen Dioxide, NO_2 , is a byproduct of fuel combustion, with the primary source being motor vehicles and industrial boilers and furnaces. The principal form of NO_x produced by combustion is NO , but NO reacts rapidly to form NO_2 , creating the mixture of NO and NO_2 commonly called NO_x . NO_2 is an acute irritant. A relationship between NO_2 and chronic pulmonary fibrosis may exist, and an increase in bronchitis in young children at concentrations below 0.3 part per million may occur. NO_2 absorbs blue light and causes a reddish-brown cast to the atmosphere and reduced visibility. It can also contribute to the formation of PM_{10} and acid rain.

PM_{10} is respirable particulate matter (PM) measuring no more than 10 microns in diameter, while $\text{PM}_{2.5}$ is fine PM measuring no more than 2.5 microns in diameter. PM_{10} and $\text{PM}_{2.5}$ are mostly dust particles, nitrates, and sulfates. Both PM_{10} and $\text{PM}_{2.5}$ are byproducts of fuel combustion and wind erosion of soil and unpaved roads and are directly emitted into the atmosphere through these processes. They are also created in the atmosphere through chemical reactions. The characteristics, sources, and potential health effects associated with respirable particulates (those between 2.5 and 10 microns in diameter) and fine particulates ($\text{PM}_{2.5}$) can be very different. Respirable particulates generally come from windblown dust and dust kicked up from mobile sources. Fine particulates are generally associated with combustion processes and are formed in the atmosphere as a secondary pollutant through chemical reactions. $\text{PM}_{2.5}$ is more likely to penetrate deeply into the lungs and poses a health threat to all groups, but particularly to the elderly, children, and those with respiratory problems. More than half of the PM_{10} and $\text{PM}_{2.5}$ that is inhaled into the lungs remains there. These materials can damage health by interfering with the body's mechanisms for clearing the respiratory tract or by acting as carriers of an absorbed toxic substance.

Sulfur Dioxide, SO_2 , is a colorless, pungent, irritating gas formed primarily by the combustion of sulfur-containing fossil fuels. In humid atmospheres, SO_2 can form sulfur trioxide and sulfuric acid mist, with some of the latter eventually reacting to produce sulfate particulates. This contaminant is the natural combustion product of sulfur or sulfur-containing fuels. Fuel combustion is the major source, while chemical plants, sulfur recovery plants, and metal processing are minor contributors. At sufficiently high concentrations, SO_2 irritates the upper respiratory tract. At lower concentrations, when in conjunction with particulates, SO_2 appears able to do still greater harm by injuring lung tissues. Sulfur oxides, in combination with moisture and oxygen, can yellow the leaves of plants, dissolve marble, and eat away iron and steel. Sulfur oxides can also react to form sulfates, which reduce visibility.

Regarding odors, there are no sources of odor adjacent to the project site. There are no major sources of Toxic Air Contaminants on or near the project site

Analysis:

- a) Tuolumne County does not currently have an air quality plan. Tuolumne County's 2018 General Plan contains an Air Quality Element. The project has been reviewed for consistency with the Air Quality Element of the 2018 General Plan. The following goals, policies, and implementation programs of the Air Quality Element apply to the project:

Policy 15.A.1: *Accurately determine and fairly mitigate the local and regional air quality impacts of land development projects proposed in the County.*

The CalEEMod was used to determine the air quality impacts of the project. The estimated emissions are less than the thresholds set by the County, therefore no mitigation measures are needed. See the analysis in section b below for additional information.

Implementation Program 15.A.k directs the County to require dust-control measures during project related activities. Any grading on the site is required to be in conformance with Chapter 12.20 of the TCOC. Section 12.20.370 of the TCOC requires the use of a watering truck or other watering device to suppress dust. Tentative Subdivision Map TSM19-049 will be conditioned to meet these requirements.

The project is consistent with the Air Quality Element of the 2018 General Plan. Therefore, there is a less than significant impact.

- b) The project would result in temporary increases in criteria air pollutants and precursors during construction activities, primarily associated with heavy-duty equipment use, worker commute, and material haul trips. Operation of the project would result in permanent increases in vehicular use, resulting in increases in exhaust emissions. Construction and operations are discussed separately below.

Construction

Construction activities would include grading/excavation, foundation pouring, building construction, and paving, and would occur sequentially (i.e., would not overlap). Typical construction equipment would include dozers, excavators, loaders/backhoes, paving equipment, forklifts, and haul trucks.

Construction-related emissions would be temporary in nature. Emissions of NOX would be primarily associated with offroad (e.g., gas and diesel) construction equipment exhaust; additional sources would include on-road trucks for import and export of materials and worker vehicles for commuting. Worker commute trips in gasoline-fueled vehicles, offgassing from asphalt application, and application of architectural coatings would be the principal sources of ROG. Emissions of fugitive PM or dust (PM10 and PM2.5) are associated primarily with ground disturbance activities during site preparation and grading, and may vary as a function of soil silt content, soil moisture, wind speed, acreage of disturbance area, and vehicle miles traveled on-site and off-site. Exhaust emissions from diesel equipment and worker commute trips also contribute to short-term increases in PM10 and PM2.5 emissions, but to a much lesser extent.

Operation

Regional area- and mobile-source emissions of criteria air pollutants and precursors (i.e., ROG, NOX, CO, PM10, and PM2.5) generated by operation of the project were modeled using CalEEMod. CalEEMod allows land use selections that include location-specific information and trip generation

rates. CalEEMod calculates area-source emissions from the usage of landscape maintenance equipment and consumer products and calculates mobile-source emissions associated with vehicle trip generation.

The CalEEMod version 2016.3.2 was utilized to estimate project construction and operational emissions. CalEEMod default settings were used, unless otherwise adjusted as noted in the summary report. The project construction and operational emissions are summarized in the Table 2 below. Each of the emissions was found to be less than the thresholds established by the Tuolumne County Air Pollution Control District (TCAPCD) for ROG, NO_x, PM₁₀, and CO. Therefore, there is a less than significant impact. See Appendix A for the complete model output.

Table 2: Emissions Model Summary				
	ROG (tons/year)	NO_x (tons/year)	PM₁₀ total (tons/year)	CO (tons/year)
Annual Construction Emission	0.8524	2.2895	0.2906	2.0134
Annual Operational Emission	2.0150	0.6561	0.5932	2.0549
TCAPCD Threshold	100	100	100	100
Exceed Significance Threshold?	No	No	No	No

- c) Sensitive receptors would include children, elderly, and people with cardiovascular and chronic respiratory diseases. Locations and types of land uses that would have sensitive receptors would include hospitals, schools, and care facilities. Soulsbyville Elementary is located adjacent to the project site.

Particulate exhaust emissions from diesel-fueled engines (i.e., diesel PM) was identified as a TAC by CARB in 1998. The potential cancer risk from the inhalation of diesel PM outweighs the potential for all other health impacts (i.e., non-cancer chronic risk, short-term acute risk) and health impacts from other TACs (CARB 2005). No new stationary sources of TACs are proposed, and, therefore, diesel PM associated with construction-related equipment use and operational-related increases in vehicle trips is the focus of this analysis.

Construction

Construction-related activities would result in temporary, short-term project-generated emissions of diesel PM from the exhaust of off-road, heavy-duty diesel equipment for site preparation, paving, application of architectural coatings, on-road truck travel, and other miscellaneous activities. However, construction activities would be relatively minor and short. Construction-related emissions of PM₁₀, used as a surrogate for diesel PM, would be minor and would not exceed applicable thresholds of significance (Table 2). Further, the dose to which receptors are exposed is the primary factor used to determine health risk (i.e., potential exposure to TAC emission levels that exceed applicable standards). Dose is a function of the concentration of a substance or substances in the environment and the duration of exposure to the substance. Dose is positively correlated with time, meaning that a longer exposure period would result in a higher exposure level for any exposed receptor. Thus, the risks estimated for an exposed individual are higher if a fixed exposure occurs

over a longer period of time. According to the Office of Environmental Health Hazard Assessment's (OEHHA) 2015 guidance, exposure of sensitive receptors to TAC emissions should be based on a 30-year exposure period for estimating cancer risk at the Maximum Exposed Individual (MEI), with 9- and 70-year exposure periods at the MEI as supplemental information. Furthermore, a 70- year exposure period is required for estimating cancer burden or providing an estimate of population-wide risk (OEHHA 2015). Thus, considering the relatively low amount of estimated emissions and the short duration of project construction, short-term emissions of diesel PM would not result in substantial pollution concentrations at existing nearby sensitive receptors.

Operation

With respect to long-term operational increases in mobile-source TACs from implementation of the project, operation of project would result in an additional 185 trips per day. As shown in Table 2, operational emissions of PM10, a surrogate for diesel PM, would be substantially below TCAPCD thresholds of significance. In addition, estimated emissions of PM10 would be dispersed over several roadways, resulting in lower levels of diesel PM at any one location in the County. Further, and in accordance with CARB guidance (2005), roadways with average daily traffic (ADT) exceeding 100,000 generally pose the greatest health risks. Thus, considering that the project would not substantial PM10 emissions and project-generated ADT would be minimal in comparison to ADT levels known to generate the highest risk, the project would not result in operational mobilesource emissions that could expose existing sensitive receptors to substantial pollution concentrations or exacerbate existing health risks from TAC emissions.

As discussed above, construction would be short (and would not result in substantial PM10 emissions. Similarly, project operation would not result in substantial increases in mobile-source emissions. This impact would therefore be less than significant.

- d) The occurrence and severity of odor and dust impacts depend on numerous factors, including the nature, frequency, and intensity of the source; wind speed and direction; and the presence of sensitive receptors. Although offensive odors rarely cause physical harm, they may still be very unpleasant, leading to considerable distress and often generating citizen complaints to local governments and regulatory agencies. Dust emissions can result in bad air quality and visibility, as well as airborne particulates that could result in breathing difficulty.

Development of project would not introduce new, permanent sources of objectionable odors. Construction associated with the project could result in temporary odorous emissions from diesel equipment, asphalt paving, and the application of architectural coatings. However, such emissions would be short-term in nature and would dissipate rapidly with increasing distance from the source. Dust emissions (i.e., PM10) would not exceed applicable TCAPCD thresholds of significance such that an air quality standard would be violated.

Implementation of the project would not involve the construction or operation of any major odor sources, and, thus, the project would not result in the exposure of residences or other sensitive receptors to objectionable odors or dust emissions. This impact would be less than significant

Mitigation Measure: None required.

Mitigation Monitoring: Not applicable.

IV. BIOLOGICAL RESOURCES

Issues and Supporting Information Sources	Potentially Significant Impact	Less-than- Significant With Mitigation Incorporation	Less-than- Significant Impact	No Impact
Would the Proposed Project/Action:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or the U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or the U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Have a substantial adverse effect on State or federally protected wetlands (including but not limited to marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Setting:

The Tuolumne County Wildlife Habitat Maps indicate that the montane hardwood (mhw) and residential park (rsp) habitats are on site. Site inspections further determined that riparian habitat, defined as valley riparian woodland (VRI) exists around the Curtis Creek drainage on site. The riparian corridor supports habitat for blackberry, willow, valley oak, and other riparian vegetation. The drainage flows from the northern portion of the project site to the southern portion of the project site. Site inspections also identified that annual grassland (ags) habitat exists on site. Residential Park habitat is a designation for urbanized areas and includes residential, commercial, and industrial developments, as well as landscaped parks and gardens. The annual grassland habitat is open grassland composes primarily of annual grasses and forbs. The montane hardwood habitat are forests consisting of at least one-third hardwoods (not including riparian trees) and one-third conifers, often forming a dense canopy. The valley riparian woodland habitat is defined as riparian deciduous woodland where mature trees are generally taller and may form wider stands along water sources.

The rsp and ags habitats are considered fourth priority habitats, which are common habitats that are of considerably low value to wildlife. The mhw habitat is considered a third priority habitat, which are common habitats that are of considerable value to wildlife. The riparian habitat is considered a second priority habitat, which are target habitat which are essential for maintaining diverse and abundant wildlife in the County. The project site contains black oaks, blue oaks, annual grasses, ponderosa pines, gray pines, and riparian vegetation including blackberry and willows. Approximately 22% of the site consists of the riparian habitat

surrounding Curtis Creek, approximately 36% consists of the montane hardwood habitat including oaks, and the remaining approximately 42% of the site consists of annual grassland.

The project site supports montane hardwood and riparian habitat and includes foothill gray pine (*Pinus sabiniana*), ponderosa pine (*Pinus ponderosa*), blue oaks (*Quercus douglasii*), California black oaks (*Quercus kelloggii*), interior live oaks (*Quercus wislizeni*), willow (*Salix* sp.), and Himalayan blackberry (*Rubus discolor*). Wildlife was not observed by staff during the site visit. However, evidence of mule deer (*Odocoileus hemionus*) and western gray squirrel (*Sciurus griseus*) were present on site. Both of these species are common wildlife species that are expected to occur in urban and semi-rural environments.

The project site contains approximately 1.7± acres of Open Space-1 zoning. The O-1 zoning was approved with the issuance of Grading Permit G2005-54 to protect the riparian habitats. The O-1 zoning was established to mitigate cumulative impacts to wildlife and protects the highest priority habitat on site. The grading approved under G2005-54 was never completed, however the O-1 zoning was approved and is designated on the site.

The California Natural Diversity Database (CNDDDB) includes plants and animal species that are rare, threatened, or endangered within California. The CNDDDB is an inventory of these species and the location of known occurrences of these species. The CNDDDB maps were consulted for this project and they indicate that the special status plant species the yellow-lip pansy monkeyflower (*Diplacus pulchellus*) and the Tuolumne button-celery (*Eryngium pinnatisectum*) have been known to occur within the area of the project site. No other species listed on the CNDDDB have been known to occur within the project site.

The project site provides suitable nesting habitat for ground and shrub/tree nesting birds. No nesting birds were observed during the field surveys. The project site provides suitable nesting habitat for ground nesting birds such as the California quail (*Callipepla californica*), and wild turkey (*Meleagris gallopavo*). The shrubs, pines, and oak trees also provide suitable nesting habitat for shrub/tree nesting birds and raptors.

Although a portion of the project site supports a creek and riparian area, it does not contain an important regional wildlife corridor because the creek connects the various developed areas of Soulsbyville and does not provide connectivity to larger patches of natural habitat on the landscape.

Biological resources are regulated by federal, state, and local laws. In California and specifically in Tuolumne County, the Federal Endangered Species Act, Clean Water Act (CWA), CESA, Tuolumne County General Plan, the Tuolumne County Ordinance Code, and the Tuolumne County Wildlife Handbook are the primary regulations considered in this analysis.

Federal

Pursuant to the ESA, USFWS and the National Marine Fisheries Service (NMFS) have authority over projects that may affect the continued existence of federally listed (threatened or endangered) species. Section 9 of ESA prohibits any person from "taking" an endangered or threatened fish or wildlife species or removing, damaging, or destroying a listed plant species on federal land or where the taking of the plant is prohibited by state law. Take is defined under ESA, in part, as killing, harming, or harassing. Under federal regulations, take is further defined to include habitat modification or degradation where it results in death or injury to wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering. If a proposed project would result in take of a federally listed species, the project applicant must consult with USFWS or NMFS before the take occurs under Section 10(a) of ESA or Section 7 of ESA if another federal agency is involved in the action. Conservation measures to minimize or compensate for the take are typically required.

Section 404 of the CWA requires project proponents to obtain a permit from the U.S. Army Corps of

Engineers (USACE) before performing any activity that involves any discharge of dredged or fill material into waters of the United States, including wetlands. Waters of the United States include navigable waters of the United States, interstate waters, tidally influenced waters, and all other waters where the use, degradation, or destruction of the waters could affect interstate or foreign commerce, tributaries to any of these waters, and wetlands that meet any of these criteria or that are adjacent to any of these waters or their tributaries. Many surface waters and wetlands in California meet the criteria for waters of the United States. In accordance with Section 401 of the CWA, projects that apply for a USACE permit for discharge of dredged or fill material must obtain water quality certification from the appropriate regional water quality control board (RWQCB) indicating that the action would uphold state water quality standards.

State

Pursuant to CESA, a permit from the California Department of Fish and Wildlife (CDFW) is required for projects that could "take" a species state listed as threatened or endangered. Section 2080 of CESA prohibits take of state-listed species. Under CESA, take is defined as any activity that would directly or indirectly kill an individual of a species. The definition does not include "harm" or "harass" like the federal act. As a result, the threshold for take under CESA is higher than under ESA (i.e., habitat modification is not necessarily considered take under CESA). Authorization for take of state-listed species can be obtained through a California Fish and Game Code Section 2081 incidental take permit.

The California Fish and Game Code identifies Fully Protected Species in Sections 3511, 4700, 5050, and 5515 of the California Fish and Game Code. These statutes prohibit take or possession of fully protected species and do not provide for authorization of incidental take. DFW has informed nonfederal agencies and private parties that their actions must avoid take of any fully protected species. In addition, Section 3503 of the California Fish and Game Code states that it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird. Section 3503.5 specifically states that it is unlawful to take, possess, or destroy any raptors (e.g., hawks, owls, eagles, and falcons), including their nests or eggs.

Section 3503 of the Fish and Game Code states that it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird. Section 3503.5 of the California Fish and Game Code states that it is unlawful to take, possess, or destroy any raptors (i.e., species in the orders Falconiformes and Strigiformes), including their nests or eggs. Typical violations include destruction of active nests as a result of tree removal or disturbance caused by project construction or other activities that cause the adults to abandon the nest, resulting in loss of eggs and/or young.

All diversions, obstructions, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake in California that supports wildlife resources are subject to regulation by CDFW under Section 1602 of the California Fish and Game Code. Under Section 1602, it is unlawful for any person, governmental agency, or public utility to do the following without first notifying CDFW:

- substantially divert or obstruct the natural flow of, or substantially change or use any material from, the bed, channel, or bank of any river, stream, or lake; or
- deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake.

The regulatory definition of a stream is a body of water that flows at least periodically or intermittently through a bed or channel that has banks and supports fish or other aquatic life. This definition includes watercourses with a surface or subsurface flow that supports or has supported riparian vegetation. CDFW's jurisdiction within altered or artificial waterways is based on the value of those waterways to fish and wildlife. A CDFW streambed alteration agreement must be obtained for any action that would result in an impact on a river, stream, or lake.

The State Water Resources Control Board (SWRCB) and each of nine local RWQCBs have jurisdiction over “waters of the State” pursuant to the Porter-Cologne Water Quality Control Act, Water Code Section 13000 et seq., which are defined as any surface water or groundwater, including saline waters, within the boundaries of the State. SWRCB has issued general Waste Discharge Requirements regarding discharges to “isolated” waters of the State (Water Quality Order No. 2004-0004-DWQ, Statewide General Waste Discharge Requirements for Dredged or Fill Discharges to Waters Deemed by the U.S. Army Corps of Engineers to be Outside of Federal Jurisdiction). The local RWQCB enforces actions under this general order for isolated waters not subject to federal jurisdiction and is also responsible for the issuance of water quality certifications pursuant to Section 401 of the CWA for waters subject to federal jurisdiction.

Local

The Tuolumne County Wildlife Handbook (TCWH) and its associated maps detail the distribution of various habitat types countywide, evaluate their relative biological value, and establish Tuolumne County’s standards and thresholds for evaluating the potential biological impacts pursuant to CEQA (Tuolumne County 1987). The avoidance and mitigation measures provided in the TCWH are intended to facilitate a consistent, fair, and cost-effective approach to wildlife mitigation that provides the greatest protection for the most sensitive resources. However, if a site-specific biological evaluation is conducted by a qualified biologist, as was conducted to support this Initial Study, the environmental analysis and mitigation measures can rely on the recommendations of the biologist in lieu of the TCWH recommendations.

Implementation Program 16.B.i of the 2018 General Plan requires development that is subject to a discretionary entitlement from the County and to environmental review under the California Environmental Quality Act (CEQA) to evaluate potential impacts to biological resources and mitigate significant impacts for the following or as otherwise required by State or Federal law:

- Species listed or proposed for listing as threatened, rare, or endangered under the federal Endangered Species Act (ESA) or California Endangered Species Act (CESA);
- Species considered as candidates for listing under the ESA or CESA;
- Wildlife species designated by CDFW as Species of Special Concern;
- Animals fully protected under the California Fish and Game Code; and
- Plants considered by CDFW to be “rare, threatened, or endangered in California” (California Rare Plant Ranks [CRPR] of 1A, presumed extinct in California and not known to occur elsewhere; 1B, considered rare or endangered in California and elsewhere; 2A, presumed extinct in California, but more common elsewhere and 2B, considered rare or endangered in California but more common elsewhere).
- Sensitive natural communities, including wetlands under Federal or State jurisdiction, other aquatic resources, riparian habitats, and valley oak (*Quercus lobata*) woodland.
- Important wildlife movement corridors and breeding sites.
- Oak woodlands, as provided in Implementation Program 16.B.j.

Implementation Program 16.B.i of the Natural Resources Element of the 2018 General Plan requires development that is subject to a discretionary entitlement from the County and to environmental review under CEQA to evaluate potential impacts to oak woodlands, as provided in Implementation Program 16.B.j. Implementation Program 16.B.j states as follows:

Establish thresholds of significance under the California Environmental Quality Act (CEQA) for the conversion of oak woodlands in Tuolumne County. The following provides the County’s recommended standard guidelines for determining whether a project may result in a significant impact to oak woodlands, for purposes of review under the California Environmental Quality Act and Public Resources Code Section 21083.4.

- An oak woodland is defined in the General Plan as a woodland stand with 10% or greater native oak canopy cover. Tree removal from parcels with less than 10% native oak canopy cover is not considered a significant conversion or loss of oak woodland.
- For parcels with 10% or greater native oak canopy cover (i.e., parcels with oak woodland, as defined in the General Plan), a significant impact to oak woodland includes tree removal that reduces the total oak canopy cover onsite to below 10% (i.e., conversion to non-oak woodland), or a loss of 10% or greater of oak canopy woodland stand on the parcel, if the conversion or loss is determined by a trained professional to be substantial in consideration of, but not limited to, the following:
 - o Total acres and amount of woodland stand removed or disturbed, and amount retained onsite.
 - o Pattern of development or habitat loss onsite (e.g., clustered vs. dispersed).
 - o Existing habitat functions and quality (e.g., intact/high-quality, moderately degraded, or severely degraded).
 - o Stand age- or size-class structure.
 - o Rarity.
 - o Landscape position in relation to larger wildlife corridors, stream systems, or other important natural features.
 - o Loss of valley oak (*Quercus lobata*) woodland, which is a sensitive habitat.
 - o Proximity to other oak woodland patches and connectivity to large blocks of intact habitat.
 - o Contribution to a cumulative loss, degradation, or fragmentation of oak woodland across the County.
- Removal of valley oaks (*Quercus lobata*), regardless of woodland stand size or canopy cover, shall require evaluation and determination as set forth above, including consideration of any unique habitat value provided by valley oaks.

Analysis:

- a) The California Natural Diversity Database maps were consulted for known locations of special status plant and animal species. The plant species yellow-lip pansy monkeyflower (*Diplacus pulchellus*) and the Tuolumne button-celery (*Eryngium pinnatisectum*) have been known to occur within the area of the project site. Both the yellow-lip pansy monkeyflower and the Tuolumne button-celery are ranked as California Rare Plant Rank 1.B.2, which are considered being rare, threatened, or endangered in California and elsewhere. Habitat for the yellow-lip pansy monkeyflower and the Tuolumne button-celery includes vernal pools, meadows, and other wet, open habitat and grasslands. The project site contains potential habitat for the yellow-lip pansy monkeyflower and Tuolumne button-celery in the area surrounding Curtis Creek on site. The project site contains Open Space-1 zoning surrounding the creek, which protects potential habitat for the yellow-lip pansy monkeyflower and Tuolumne button-celery.

The intent of the O-1 district is to preserve and protect areas of valuable wildlife habitat consistent with the wildlife policies of the general plan or areas with significant cultural resources. Development and potential uses within the O-1 zoning district are regulated and highly restricted. The applicant is proposing a stream crossing and culvert placement within O-1 zoning on the southern portion of the site. Additionally, an approximately 50' by 100' portion of project site would be dedicated to Tuolumne Utilities District (TUD) to be utilized for the development of a sewer lift station (Figure 1). A portion of the dedicated area, 2,500 square feet, would be located within the O-1 zoning. The remaining O-1 zoning will remain undisturbed by project activities. The O-1 zoning was implemented as mitigation for impacts identified under Grading Permit G2005-54. While the O-1 zoning was approved by the Board of Supervisors, Grading Permit G2005-54 was never initiated. Therefore, the existing O-1 zoning can be considered mitigation for cumulative impacts to wildlife for the current project. To ensure the O-1 zoning is not impacted during construction activities, except for the stream crossing

and sewer lift station, mitigation measure BIO-1 has been incorporated to require orange fencing around the areas designated O-1. Further, to ensure that sensitive plants that have potential habitat within the Open Space-1 zoning are not impacted, preconstruction surveys will be required as outlined in mitigation measure BIO-2. With the implementation of mitigation measure BIO-2, impacts to potential habitat for the sensitive plant species would be less than significant with the development of the road crossing and sewer lift station within portions of O-1 zoning.

The project site has the potential to support nesting raptors or migratory birds, which are protected under the Migratory Bird Treaty Act. Direct impacts on nesting raptors or migratory birds or their habitat such as removal of trees could result in substantially lowered reproductive success or habitat loss, thereby potentially adversely affecting local population levels. The raptor or bird species could be adversely affected if active nesting, roosting, or foraging sites are either removed or exposed to a substantial increase in noise or human presence during project activities. The impact would be less than significant if construction activities occur during the non-breeding season, which is defined as September 1 through January 31. However, construction activities conducted during the breeding season between February 1st and August 31st could affect the species adversely and result in a potentially significant impact. Implementation of Mitigation Measure BIO-3, which would require preconstruction surveys for nesting birds, would mitigate the impact to less than significant level.

- b,c) The project site contains wetland and riparian habitat. The riparian and wetland habitat are currently preserved within Open Space-1 zoning. The O-1 zoning was established on October 21, 2008 in conjunction with Grading Permit G2005-54 as mitigation for cumulative impacts to wildlife to protect the most valuable habitat on site. The O-1 zoning was established, but Grading Permit G2005-54 was never initiated. Therefore, the existing O-1 zoning can be considered mitigation for cumulative impacts to wildlife for the current project.

The Tuolumne County Wildlife Handbook indicates mitigation measures that can be utilized to protect highest priority habitats. Typically, this includes incorporating 20% of the project site into Open Space using the habitat priority rankings. When second and third priority habitats are present on a project site, the entirety of the second priority habitat is required to be protected with Open Space zoning. If second priority habitat encompasses less than 20% of the project site, third priority habitat shall be protected with Open Space zoning. The entirety of the VRI habitat was protected with O-1 zoning in accordance with the Wildlife Handbook.

The Tuolumne Utilities District indicated that they need to acquire an approximately 50' by 100' portion of the project site for development of a new sewer lift station, which is directly adjacent to an existing TUD sewer lift station. This new sewer lift station would replace the existing facility and would serve the project site, the Willow Springs Subdivision, and surrounding area. Approximately 2,500 square feet of the new lift station is proposed area within the existing O-1 zoning. Staff completed a site inspection and found that the area proposed for development falls outside of the riparian habitat corridor and would occur within annual grassland habitat. No oak trees larger than 5-inch dbh would need to be removed to construct the lift station. Therefore, the development of the sewer lift station would have a less than significant impact on riparian and wetland habitat and is an allowable use within the Open Space-1 zoning.

Additionally, the project will include a crossing of the stream in the southern portion of the site through the area designated O-1. The stream crossing is subject to approval by the California Department of Fish and Wildlife (CDFW). A Streambed Alteration Agreement is required prior to constructing the streambed crossing. The Streambed Alteration Agreement would include measures which must be implemented by the project proponent. Mitigation Measure BIO-4 has been incorporated to require submittal of the Streambed Alteration Agreement with CDFW to the Land Use and Natural Resources Division prior to the issuance of a Grading Permit.

The US Army Corps of Engineers (USACOE) reviewed the proposed project and indicated that the crossing of the creek may require a permit from their office. The project has been conditioned to require submittal of proof that a permit has been issued by the US Army Corps of Engineers to the Land Use and Natural Resources Division prior to the issuance of a Grading Permit. If a permit is not required from the US Army Corps of Engineers, the project proponent shall submit proof of a waiver or other equivalent evidence. Mitigation Measure BIO-5 has been incorporated to require proof of a permit by the USACOE or waiver to the Land Use and Natural Resources Division prior to the issuance of a grading permit.

The requirement of both of these permits through Mitigation Measures BIO-4 and BIO-5 and review from CDFW and USACOE would result in a less than significant impact to riparian habitat or other sensitive habitats regulated by the California or US Fish and Wildlife or to State or Federally protecting wetlands.

- d) The project site currently contains 1.7± acres of Open Space-1 zoning. The O-1 zoning stretches from the northern property boundary to the southern property boundary. Development proposed within the O-1 zoning includes a stream crossing and culvert on the southern portion of the project site and development of a sewer lift station by TUD within a 50' by 50' area in the northeastern portion of O-1 zoning within the site. These developments would not impede the flow of wildlife through the open space corridor. The O-1 zoning connects to other natural corridors within the Soulsbyville developed community and would allow for the movement of wildlife, to the extent that is possible as the riparian area is not considered a regional wildlife corridor.

Additionally, the applicant is proposing approximately 20.0± acres of off-site Open Space to mitigate impacts to oak woodland, required as Mitigation Measure BIO-6 (see below). The 20.0± acres that are proposed contain black oaks, blue oaks, live oaks, gray pines, and various shrub species. This area would preserve additional wildlife habitat that would be protected from development impacts.

Mitigation Measure AES-1 would require a lighting plan to be submitted and approved which would require the following standards: direct the light downward to the area to be illuminated, install shields to direct light and reduce glare, utilize low rise light standards or fixtures attached to the buildings, and utilize low- or high-pressure sodium lamps instead of halogen type lights.

Both of these mitigation measures coupled with the existing Open Space-1 zoning mitigation would reduce impacts on native wildlife to a less than significant level. Therefore, there would be a less than significant impact.

- e) The project proposes to remove or significantly impact approximately 94 oak trees between 5 inch and 24-inch dbh and approximately 19 oaks greater than 24 inch dbh, which are considered old growth oaks. Staff analyzed this impact under Implementation Program 16.B.j and has determined this to be a potentially significant impact to oak woodland. Therefore, an oak woodland mitigation and monitoring plan is required, pursuant to Implementation Program 16.B.j.1.

To mitigate for this impact, a 20.0± acre area located off the project site will be protected with Open Space zoning. The area proposed for Open Space zoning is shown in Figure 2 below. The Open Space zoning will be located on Assessor's Parcel Numbers 089-030-06 and 088-018-03, which are under the same ownership as the project site. The 20.0± acres contain black oaks, blue oaks, and live oaks. Additionally, the oak trees within the 1.7± acres of O-1 zoning on the site will not be removed or impacted by the project, with the exception of those that need to be removed for the private road crossing. A total of 3 oak trees would be impacted by the road crossing through the O-1 zoning. However, the remaining oaks within the O-1 zoned area would be protected.

Mitigation Measure BIO-6 has been incorporated to require the rezoning of approximately 20.0± acres of off-site oak habitat to Open Space. The incorporation of Mitigation Measure BIO-6 would result in a less than significant impact to oak woodlands and ensure the project is consistent with Implementation Program 16.B.j.

- f) The project site is not located within an area that is subject to an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. Therefore, there would be no impact.

Mitigation Measures:

BIO-1: Prior to initiation of ground disturbing activities, all areas within 50-foot Open Space-1 zoning shall be clearly flagged. Orange fencing shall be placed along the Open Space-1 zoning.

BIO-2: Within 30 days prior to the construction of the crossing of the drainage and within 30 days prior to construction activities related to the sewer lift station, preconstruction surveys shall be completed by a qualified biologist to verify the presence or absence of the yellow-lip pansy monkeyflower and Tuolumne button-celery. If either of the species is identified in the area of impact from construction, the applicant shall notify the Community Development Department. A plan shall be prepared and approved by the California Department of Fish and Wildlife that may include alternative construction methods, relocation of the drainage crossing, relocation or replacement of plant species, or other approved methods for avoid or reduce impacts to the sensitive plant species. If replanting is approved, the plan must include the number of species removed and the number of individuals planned to replace them, the specific location where the new plants would be planted with specific baseline information about that proposed site (e.g., surrounding vegetation or development), specific planting details (e.g., size of sapling, size of containers, irrigation plan), success criteria, an a monitoring and maintenance schedule.

BIO-3: For construction activities expected to occur during the nesting season of raptors (February 1 to August 31) and migratory birds, a pre-construction survey by a qualified biologist shall be conducted to determine if active nests are present on or within 500 feet of the project site where feasible. Areas that are inaccessible due to private property restrictions shall be surveyed using binoculars from the nearest vantage point. The survey shall be conducted by a qualified biologist no more than seven days prior to the onset of construction. If no active nests are identified during the pre-construction survey, no further mitigation is necessary. If construction activities begin prior to February 1, it is assumed that no birds will nest in the project site during active construction activities and no pre-construction surveys are required. If at any time during the nesting season construction stops for a period of two weeks or longer, pre-construction surveys shall be conducted prior to construction resuming.

If active nests are found on or within 500 feet of the project site, the applicant shall notify CDFW and explain any additional measures that a qualified biologist plans to implement to prevent or minimize disturbance to the nest while it is still active. Depending on the conditions specific to each nest, and the relative location and rate of construction activities, it may be feasible for construction to occur as planned within the 500-foot buffer without impacting the breeding effort. Appropriate measures may include restricting construction activities within 500 feet of active raptor nests, and having a qualified biologist with stop work authority monitor the nest for evidence that the behavior of the parents have changed during construction. Nests that are inaccessible due to private property restrictions shall be monitored using binoculars from the nearest vantage point. Appropriate measures would be implemented until the young have fledged or until a qualified biologist determines that the nest is no longer active. Construction activities may be halted at any time if, in the professional opinion of the biologist, construction activities are affecting the breeding effort.

BIO-4: The owner or project proponent shall submit notification for a Streambed Alteration Permit to the California Department of Fish and Wildlife prior to any work involving any waterways or drainages. Proof of that Agreement shall be submitted to the Land Use and Natural Resources Division prior to the issuance of a Grading Permit. If a Streambed Alteration Agreement is not required, submit proof of a waiver from the Department of Fish and Wildlife or other equivalent evidence.

BIO-5: The owner or project proponent shall obtain a permit from the US Army Corps of Engineers for the bridge crossing Curtis Creek. Proof of that permit shall be submitted to the Land Use and Natural Resources Division prior to the issuance of a Grading Permit. If a permit from the US Army Corps of Engineers is not required, submit proof of a waiver from the US Army Corps of Engineers or other equivalent evidence.

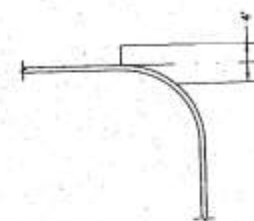
BIO-6: Rezone the 20.0± acres of Assessor's Parcel Numbers 089-030-06 and 088-180-03 into Open Space zoning, as shown in Figure 2 below. Existing roads shall be allowed to remain and be maintained within the Open Space.

Mitigation Monitoring:

Mitigation Measure BIO-1, BIO-2 and BIO-3 are required prior to construction activities on site. Mitigation Measures BIO-4 and BIO-5 are required prior to the issuance of a Grading Permit from the Engineering Division of the Department of Public Works. Mitigation Measure BIO-6 will be required prior to the approval of the final map. The Land Use and Natural Resources Division of the Community Development Department will ensure compliance with these measures prior to the release of a grading permit or building permit and the approval of the final map. A Notice of Action will be recorded to advise future owners of the required mitigation measures and the responsibility to comply with said measures.

[illegible]

Approximate location of
50' x 100' portion of
land to be dedicated.

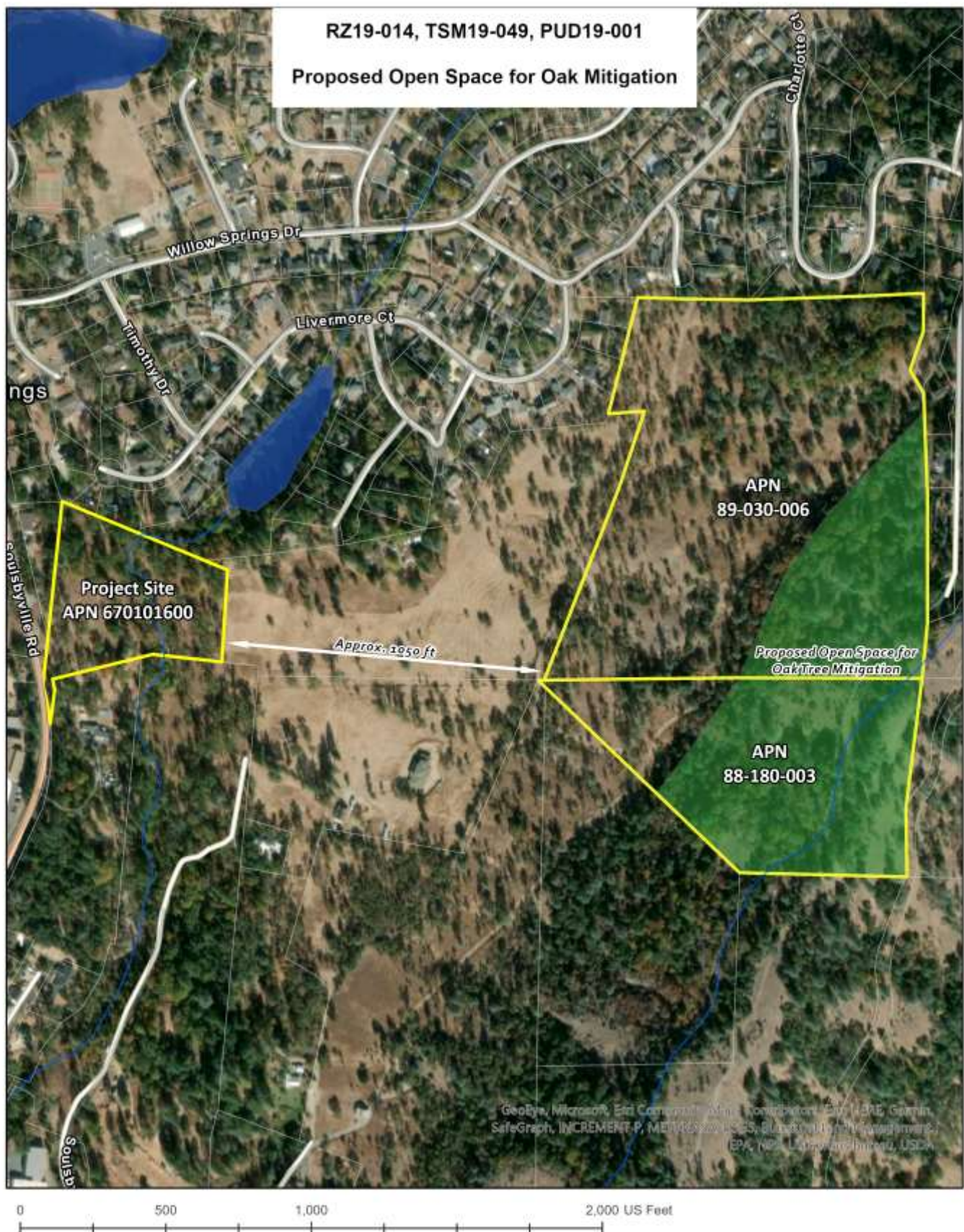


TYPICAL VALLEY GU

NOTES:

- ☐ PROPOSED PARK
☐ PROPOSED 24' F
☐ PROPOSED 24' F
☐ PROPOSED 24' F
☐ PROPOSED 14' F

Figure 2: Proposed Open Space for Oak Tree Mitigation



V. CULTURAL RESOURCES:

Issues and Supporting Information Sources		Potentially Significant Impact	Less-than- Significant With Mitigation Incorporation	Less-than- Significant Impact	No Impact
Would the Proposed Project/Action:					
a)	Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5 of the State CEQA Guidelines?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b)	Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c)	Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Environmental Setting:

State and Federal legislation requires the protection of historical and cultural resources. In 1971, the President's Executive Order No. 11593 required that all Federal agencies initiate procedures to preserve and maintain cultural resources by nomination and inclusion on the National Register of Historic Places.

In 1980, the Governor's Executive Order No. B-64-80 required that State agencies inventory all "significant historic and cultural sites, structures, and objects under their jurisdiction which are over 50 years of age and which may qualify for listing on the National Register of Historic Places." Likewise, Section 15064.5(b) of the CEQA Guidelines specifies that "projects that cause the physical demolition, destruction, relocation, or alteration of a historical resource or its immediate surroundings such that the significance of the historic resource would be materially impaired" shall be found to have a significant impact on the environment.

In September of 2014, the California Legislature passed Assembly Bill (AB) 52, which added provisions to the Public Resources Code (PRC) regarding the evaluation of impacts on tribal cultural resources under CEQA, and consultation requirements with California Native American tribes. In particular, AB 52 now requires lead agencies to analyze project impacts to "tribal cultural resources" separately from archaeological resources (PRC §21074; 21083.09). The Bill defines "tribal cultural resources" in a new section of the PRC §21074. AB 52 also requires lead agencies to engage in additional consultation procedures with respect to California Native American tribes (PRC §21080.3.1, 21080.3.2, 21082.3).

Cultural resources include prehistoric resources, historic resources, and Native American resources. Pre-historic resources include resources that represent the remains of habitation prior to European settlement and historic resources include resources that represent the remains of habitation after European settlement. Native Americans arrived in Tuolumne County approximately 2,000 years ago. Their villages and areas of temporary settlement typically centralized around drainages, springs, and creeks. Historic resources in Tuolumne County mostly consist of uses and sites centered around gold mining, early timber industry, or historic farming and ranching.

Analysis:

- a, b, c) A cultural resource study was prepared by Charla M. Francis of Francis Heritage, LLC with Terry Brejla of Foothill Resources, Ltd. in 2013. The cultural resource study was completed in conjunction with a previously proposed project that included the current project site. A response from the NAHC that was included in that cultural report determined there were no known sacred lands within the APE. That project was never completed, so the proposed mitigation was not incorporated. The Area of Potential Effects (APE) that the cultural study analyzed consisted of seven parcels, including the current project site APN 067-010-016.

Pedestrian surveys were conducted from January to June 2013. The surveys identified a total of 16 cultural resources, mostly historic-era. Of the 16 resources identified in the survey, two of them are located within APN 067-010-016, the current project site. The two cultural sites that are located within the project site are the Wheal Perran Shaft No. 3 and a Native American occupation, including midden, bedrock mortars, and fire-fractured rock.

The Wheal Perran Shaft No. 3 is a historic mining feature. This resource was determined to be not eligible for any register. Therefore, the resource is not considered significant and no further mitigation is needed.

The Native American occupation site, P-55-6677, consists of bedrock mortar outcrops and midden. The area of the bedrock mortars and midden measures approximately 88 feet by 85 feet. This resource was determined to be potentially eligible for listing, and is therefore considered significant. The site was recommended to be included in Open Space zoning with a 10-meter buffer around the site. The study also recommended that mitigation shall include utilizing orange protective fencing to be installed, monitored, and maintained throughout construction activities. If avoidance is not feasible, then archaeological testing is required.

Because the previous project was withdrawn before completion, the Open Space zoning around the cultural resource was not implemented. Portions of the cultural site fall within the existing O-1 zoning. Mitigation Measure CUL-1 has been incorporated to ensure that the entirety of the cultural resource and 10-meter buffer is protected with Open Space zoning, as recommended by the cultural study.

The application materials indicate that the resource and 10 meter buffer would not be disturbed by project development. Mitigation Measure CUL-1 has been incorporated into the project description to require rezoning the area of the resource plus a 10 meter buffer to Open Space-1 zoning. Open Space-1 zoning has been chosen because the O-1 zoning is more restrictive and because the cultural site is adjacent to existing O-1 zoning along the drainage. Mitigation Measure CUL-2 has been incorporated to require orange protective fencing to delineate the Open Space-1 zoning to be utilized during any construction or site disturbing activities.

Mitigation Measures CUL-3 and CUL-4 have been incorporated in order to protect cultural resources that may be unearthed during the construction process, including the discovery of any human remains.

Formal consultation letters were sent via certified mail on April 13, 2020 to the Tuolumne Band of Me-Wuk and Chicken Ranch Rancheria Tribes, in accordance with Assembly Bill 52. The purpose of the letters is to allow the Tribes to request formal consultation on the proposed project to address any impacts to Tribal resources that may be impacted by the project.

The Tuolumne Band of Me-Wuk tribe requested consultation and met with County Staff on site on July 29, 2020. At the consultation meeting, the Tribe and County agreed on additional Mitigation Measures to ensure protection of resources on site. The Tribe requested that a Tribal Monitor be present on-site during construction and earth disturbing activities. Mitigation Measure CUL-5 has been incorporated to require a Tribal Monitor. The Tribe also expressed concern of how to protect the resources in the future once the project is built out. The resources are contained within O-1 zoning, so they are protected from any disturbance due to development, but the Tribe had concerns about future property owners' impact on the resources. The Tribes preferred method of protection would be to incorporate signage that identifies the resources and educates people of the resource and the importance to the Tribe. Mitigation Measure CUL-6 has been incorporated to include this measure.

Incorporation of Mitigation Measures CUL-1 through CUL-6 will result in a less than significant impact to cultural resources.

Mitigation Measures:

CUL-1: Prior to the issuance of a grading permit or building permit, Open Space-1 zoning shall be established by the Tuolumne County Board of Supervisors around the P-55-6677 resource site, including a 10 meter buffer as indicated on the DPR-523 form filed on April 22, 2013.

CUL-2: Orange protective fencing shall be utilized to delineate the area of Open Space-1 zoning on site during any construction or site disturbing activities. The orange fencing shall be installed, monitored, and maintained throughout construction activities on site.

CUL-3: If a cultural resource is discovered during the activities authorized by this Permit, the person in possession of the parcel for which the permit was issued and all persons conducting any activity authorized by this permit shall comply with the following provisions:

- A. The person discovering the cultural resource shall notify the Community Development Department by telephone within 4 hours of the discovery or the next working day if the department is closed.
- B. When the cultural resource is located outside the area of disturbance, the Community Development Department shall be allowed to photodocument and record the resource and construction activities may continue during this process. On parcels of two or more gross acres, the area of disturbance includes building pads, septic areas, driveways or utility lines, grading and vegetation removal, plus 300 feet.
- C. When the cultural resource is located within the area of disturbance, all activities that may impact the resource shall cease immediately upon discovery of the resource. All activity that does not affect the cultural resource as determined by the Community Development Department may continue. A qualified professional, as defined in Section 17.04.657 of the Tuolumne County Ordinance Code, such as an archaeologist or an historian, shall be allowed to conduct an evaluative survey to evaluate the significance of the cultural resource.
- D. When the cultural resource is determined to not be significant, the qualified professional or Community Development Department shall be allowed to photodocument and record the resource. Construction activities may resume after authorization from the Community Development Department.
- E. When a resource is determined to be significant, or is determined to be eligible for listing, the resource shall be avoided with said resource having boundaries established around its perimeter by a qualified professional archaeologist or historian or a cultural resource management plan shall be prepared by a qualified professional to establish measures formulated and implemented in accordance with Sections 21083.2 and 21084.1 of the California Environmental Quality Act (CEQA) to address the effects of construction on the resource. Appropriate measures may include preserving the resource in place with Open Space, conservation easement, or capping the object. If avoidance is not possible, a qualified archaeologist shall prepare and implement a detailed treatment plan, which may consist of excavation of the site. The qualified professional shall be allowed to photodocument and

record the resource. Construction activities may resume after authorization from the Community Development Department. All further activity authorized by this permit shall comply with the cultural resources management plan.

CUL-4: In the event of discovery of human remains during construction activities, all work shall immediately cease within 50 feet of the discovery. The Tuolumne County Coroner's office shall be called within 24 hours of the find to investigate the discovery. If the coroner determines that the remains are of Native American origin, the Native American Heritage Commission and a qualified archaeologist shall be notified within 48 hours. The NAHC will then identify the person or persons it believes to be the most likely descendant from the deceased Native who would make recommendations to the County for the appropriate means of treating the human remains and any associated funerary objects.

CUL-5: The applicant shall be required to retain and compensate for the services of a Tribal monitor/consultant who is approved by the Tuolumne Band of Me-Wuk Tribe. The monitor/consultant will only be present on-site during the construction phases that involve ground disturbing activities. Ground disturbing activities are defined as activities that may include, but are not limited to, pavement removal, pot-holing or auguring, grubbing, tree removals, boring, grading, excavation, drilling, and trenching, within the project area. The Tribal Monitor/consultant will complete daily monitoring logs that will provide descriptions of the day's activities, including construction activities, locations, soil, and any cultural materials identified. The on-site monitoring shall end when the project site grading and excavation activities are completed, or when the Tribal Representatives and monitor/consultant have indicated that the site has a low potential for impacting Tribal Cultural Resources.

CUL-6: Signage shall be incorporated near resource P-55-6677 to identify this resource and its importance to the Tribe. Additional signage shall be incorporated to educate future property owners of the history of the Tribe and the importance of these sites. Signage shall be submitted to the Community Development Department, who shall consult with the Tuolumne Band of Me-Wuk Tribe prior to approval and installation.

Mitigation Monitoring:

Mitigation Measure CUL-1 is required to be met prior the issuance of a grading permit or building permit on site. Mitigation Measure CUL-2 is required to be met prior to construction on site. Mitigation Measures CUL-3 through CUL-5 are required during project construction. CUL-6 shall be implemented prior to issuance of the first Building Permit for the project. A Notice of Action will be recorded to advise future owners of the required mitigation measures and the responsibility to comply with said measures.

VI. ENERGY:

Issues and Supporting Information Sources	Potentially Significant Impact	Less-than- Significant With Mitigation Incorporation	Less-than- Significant Impact	No Impact
Would the Proposed Project:				
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Environmental Setting:

California relies on a regional power system composed of a diverse mix of natural gas, petroleum, renewable, hydroelectric, and nuclear generation resources. Natural gas provides one third of the electricity used in California, coming from both California-based power plants, as well as Pacific Northwest- and Southwest-based power plants outside the state. After natural gas generation, electricity in California is mostly generated by renewables (29 percent), large hydroelectric (15 percent), and nuclear (9 percent) (California Energy Commission [CEC] 2018a). The contribution of in- and out-of-state power plants depends on the precipitation that occurred in the previous year, the corresponding amount of hydroelectric power that is available, and other factors.

Energy consumption on the project site would include energy consumed for the construction of single-family dwellings and accessory structures on site, mainly using electric-powered and gas-powered equipment and vehicle usage. Operational energy consumption would include electricity and propane for heating and cooling systems, interior and exterior lighting, and other residential uses. Operational energy consumption would also be associated with transportation-related uses to power cars and trucks for people living on the site after project build-out.

Electricity in Tuolumne County is provided by Pacific Gas and Electric (PG&E). There is no natural gas consumption in Tuolumne County. However, there is propane consumption for residential uses.

STATE REGULATIONS

Senate Bill 1078: California Renewables Portfolio Standard Program

Senate Bill (SB) 1078 (Chapter 516, Statutes of 2002) establishes a renewables portfolio standard (RPS) for electricity supply. The RPS originally required retail sellers of electricity, including investor-owned utilities and community choice aggregators to provide 20 percent of their supply from renewable sources by 2017, but SB 1078 moved that date forward to require compliance by 2010, although the state did not meet the target. In addition, electricity providers subject to the RPS must increase their renewable share by at least 1 percent each year. As of 2016, the state sourced 34.8 percent of its electricity from certified renewable sources (CPUC 2018). The outcome of this legislation will affect regional transportation powered by electricity. SB X1-2 of 2011 set a three-stage compliance period requiring all California utilities, including independently owned utilities, energy service providers, and community choice aggregators, to generate 20 percent of their electricity from renewables by December 31, 2013; 25 percent by December 31, 2016; and 33 percent by December 31, 2020. The state met the 2016 target and is on track to meet the 2020 target.

California Green Building Standards

California Code of Regulations (CCR), Title 24, Part 6, is California's Energy Efficiency Standards for Residential and Non-Residential Buildings. Title 24 Part 6 was established by CEC in 1978 in response to a legislative mandate to create uniform building codes to reduce California's energy consumption and provide

energy-efficiency standards for residential and nonresidential buildings. The 2019 Title 24 Part 6 Building Energy Efficiency Standards were adopted by CEC on May 9, 2018 and will take effect on January 1, 2020. Nonresidential buildings are anticipated to reduce energy consumption by 30 percent compared to the 2016 standards primarily through prescriptive requirements for high-efficacy lighting (CEC 2018b). The building efficiency standards are enforced through the plan check and building permit process. Local government agencies may adopt and enforce additional energy standards for new buildings as reasonably necessary in response to local climatologic, geologic, or topographic conditions, provided that these standards are demonstrated to be cost effective and exceed the energy performance required by Title 24 Part 6.

Advanced Clean Cars Program

In January 2012, CARB approved the Advanced Clean Cars program, which combines the control of GHG emissions and criteria air pollutants, as well as requirements for greater numbers of zero-emission vehicles, into a single package of standards for vehicle model years 2017 through 2025. The new rules strengthen the GHG standard for 2017 models and beyond. This will be achieved through existing technologies, the use of stronger and lighter materials, and more efficient drivetrains and engines. The program's zero-emission vehicle regulation requires battery, fuel cell, and/or plug-in hybrid electric vehicles to account for up to 15 percent of California's new vehicle sales by 2025. By 2025, when the rules will be fully implemented, the statewide fleet of new cars and light trucks will emit 34 percent fewer global warming gases, reducing overall fossil fuel consumptions, than the statewide fleet in 2016 (CARB 2016).

Analysis:

- a,b) The 2019 Title 24 Part 6 Building Energy Efficiency Standards were adopted by the California Electrical Code (CEC) on May 9, 2018 and took effect on January 1, 2020. The standards are designed to move the state closer to its zero net energy goals for new residential development. It does so by requiring all new residences to install enough renewable energy to offset all the site electricity needs of each residential unit. These standards would be required to be met by any new construction of the single-family dwellings on the site. These standards are enforced by the Building and Safety Division of the CDD through plan check for the Building Permit process. Additionally, Mitigation Measure GHG-1 and GHG-3 have been incorporated into the project. Mitigation Measure GHG-1 prohibits the use of fuel oil as a heating source and GHG-3 states that the project shall be consistent with the 2019 California Green Building Standards Code Tier 1 measure. Compliance with these measures will be reviewed upon receipt of a building permit application to the Building and Safety Division. Compliance with these measures and the Title 24 Part 6 Building Energy Efficiency Standards would result in a less than significant impact.

Mitigation Measure: None required.

Mitigation Monitoring: Not applicable.

VII. GEOLOGY AND SOILS:

Issues and Supporting Information Sources

	Potentially Significant Impact	Less-than- Significant With Mitigation Incorporation	Less-than- Significant Impact	No Impact
Would the Proposed Project:				
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Directly or indirectly destroy a unique paleontological resource or site or unique geological feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Environmental Setting:

The purpose of this section is to disclose and analyze the potential impacts associated with the geology of the project site and regional vicinity, and to analyze issues such as the potential exposure of people and property to geologic hazards, landform alteration, and erosion.

Tuolumne County is located in central California, which is a region known to have limited fault zones and seismic activity. There are four “capable” faults, which are faults with tectonic displacement within the last 35,000 years which could produce a quake, located within Tuolumne County: Negro Jack Point, Bowie Flat, Rawhide Flat West, and Rawhide Flat East. These faults are located primarily in the western and southwestern portion of the County. Historically, earthquake activity in Tuolumne County has been substantially below the California State average.

In addition to the Tuolumne County General Plan and Ordinance Code, the project was evaluated using the Tuolumne County Multi-Jurisdiction Hazard Mitigation Plan, the USDA/CDF Cooperative Soil-Vegetation Survey of Tuolumne County, and the California Geological Survey’s geotechnical maps.

The project site contains the Musick-Ultic Haploxeralf and Musick-Hotaw complex, soil types soils types as mapped on the USDA NRCS web soil surveys. The site comprised of approximately 47.5% of the Musick-

Ultic Haploxeralf soil types and 50.5% of the Musick-Hotaw, with the remaining 2% of the soil type containing the Urban land-Sierra-Flanly soils and designated as water for Curtis Creek. Musick type soils are well-drained, deep soils. These soil types are found on slopes ranging from 1% to 30%. The slopes on site range from 1% to 25%. Development would take place on the areas with more gentle slopes as the steepest slopes are found in the areas surrounding Curtis Creek.

Groundshaking

Earthquake activity within Tuolumne County is significantly below the California state average (Tuolumne County 2018). Over the past century, a total of five historical earthquakes within recorded magnitudes of 3.5 or greater have occurred. Further, there is an approximate 28 percent chance of a major earthquake within 50 kilometers of Tuolumne County within the next 50 years. The probability of a moderate earthquake occurring in the next 30 years is low. Only one major “active fault” is located in Tuolumne County, the New Melones fault, located approximately 5 miles west of the project site (DOC 2018). The fault transects the County, running roughly north to south along the western boundary, and is part of the Foothill fault system which runs along the west base of the Sierra Nevada mountain range. The estimated maximum capability for this fault is Magnitude 6.5 (Tuolumne County 2018).

The Alquist-Priolo Earthquake Fault Zoning Act was signed into California law on December 22, 1972 to mitigate the hazard of surface faulting to structures for human occupancy. The Alquist-Priolo Earthquake Fault Zoning Act’s main purpose is to prevent the construction of buildings used for human occupancy on the surface trace of active faults. The Act only addresses the hazard of surface fault rupture and is not directed toward other earthquake hazards. The Act only applies to structures for human occupancy (houses, apartments, condominiums, etc.)

The California Building Code (CBC) identifies seismic factors that must be considered in structural design. Specific minimum seismic safety and structural design requirements are set forth in Chapter 16 of the CBC. Chapter 18 of the CBC regulates the excavation of foundations and retaining walls, while Chapter 18A regulates construction on unstable soils, such as expansive soils and areas subject to liquefaction. Appendix J of the CBC regulates grading activities, including drainage and erosion control. The CBC also contains a provision that provides for a preliminary soil report or geotechnical report to be prepared to identify “...the presence of critically expansive soils or other soil problems which, if not corrected, would lead to structural defects” (CBC Chapter 18 Section 1803.1.1.1). Additionally, the state earthquake protection law (California Health and Safety Code Section 19100 et seq.) requires that structures be designed to resist stresses produced by lateral forces caused by wind and earthquakes.

Landslides, Subsidence and Liquefaction

Liquefaction is a process whereby soil is temporarily transformed to a fluid form during intense and prolonged groundshaking. Areas most prone to liquefaction are those that are water saturated (e.g., where the water table is less than 30 feet below the surface) and consist of relatively uniform sands that are low to medium density. In addition to necessary soil conditions, the ground acceleration and duration of the earthquake must be of sufficient energy to induce liquefaction. Due to the nature of the soils, groundwater conditions, and low seismicity in the County, the risk and danger of liquefaction and subsidence occurring within the County is considered to be minimal (Tuolumne County 2018).

Naturally occurring landslides do not typically occur in the County. Slopes disturbed by grading or development have failed, especially during periods of heavy rainfall, and have resulted in the destruction of County infrastructure. Within the County, there is a considerable amount of area where the topography can be considered steep to very steep. In the vast majority of this area, the underlying rock formation is very stable, and the soil found on these slopes is shallow and held in place by deep rooted vegetation. These slopes do not typically fail unless disturbed by grading or development (Tuolumne County 2018). Landslides are a primary geologic hazard and are influenced by four factors:

- Strength of rock and resistance to failure, which is a function of rock type (or geologic formation)
- Geologic structure or orientation of a surface along which slippage could occur
- Water (adds weight to a potentially unstable mass or influence strength of a potential failure surface)
- Topography (amount of slope in combination with gravitation forces)

Expansive Soils

Soils have the potential to shrink or swell significantly with changes in moisture content are called expansive soils. These soils can limit the development capacity of an area, and may require significant construction modifications and excavation to replace existing materials with more stable soils. The amount of expansion (or contraction) of a soil is determined by the type and amount of the silt and clay content in the soil. Structural damage to buildings on expansive soils may result over long periods of time, usually from inadequate soils and foundation engineering, or the placement of structures directly on expansive soils.

Paleological Resources

Based on geologic mapping, the majority of the County is not considered sensitive for paleontological resources. Paleozoic marine rocks occur in the western portion of the County and may contain fossils of marine invertebrates. Records of paleontological finds maintained by the University of California Museum of Paleontology state that there are 72 localities at which fossil remains have been found in Tuolumne County. These occur primarily in the Mehrten geologic formations (Tuolumne County 2018).

Analysis:

- a i) The project site is not located within a delineated fault zone or located within a known liquefaction zone or seismic landslide zone as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map. The project site has been located on the Tuolumne County Geotechnical Interpretive Map for the USGS Sonora Minute Quadrangle. This map indicates that there are no faults located on the project site or within the vicinity of the project site. Therefore, there will be no impact.
- a ii-iv) The Environmental Impact Report for the 2018 Tuolumne County General Plan update indicates that there is a low potential for significant seismic activity within the County. There is a low potential for strong seismic ground shaking or seismic related ground failure, including liquefaction. Tuolumne County's Geotechnical Maps show the approximate boundaries of various hazard and resource zones, such as fault rupture zones, erosive soil areas, steep slopes, and limestone deposits. The maps did not indicate any geological hazards located on or in the vicinity of the project site.

The Technical Background Report for the 2018 General Plan indicate that the landslide susceptibility of the County is low. The Natural Resources Conservation Service (NRCS) web soil survey maps indicate that the soil types on site are the Musick-Ultic Haploxeralf, Musick-Hotaw complex, and Urban land-Sierra-Flanly complex soil types. These soils are well drained soils. The slopes on site are moderate, ranging from 1% to 25%. The steeper slopes are found in the area surrounding Curtis Creek, which will not be developed. The well-drained soils and stable slopes indicate that the potential for landslide activity on the project site is low. Therefore, there is a less than significant impact.

- b,c) The project site contains the Musick-Ultic Haploxeralf, Musick-Hotaw complex and Urban land-Sierra-Flanly complex soil types as mapped on the USDA NRCS web soil surveys. Musick type soils are well-drained, deep soils. The likelihood of landslides, lateral spreading, subsidence, liquefaction, or collapse of these soils is fairly low.

Although the erosive and soil failure hazards are fairly low, grading for the development of the single-family dwellings, driveways, and access roads have the potential to result in erosion or loss of the top soil. Any grading on the project site is subject to Chapter 12.20 of the TCOC and the project

proponent would be required to secure a Grading Permit from the Engineering Division of the Department of Public Works. Grading Permit review from the Engineering Division will ensure consistency with Chapter 12.20 of the TCOC and ensure that the appropriate measures are taken to stabilize slope, control erosion, and protect exposed soils. Prior to the issuance of a Grading Permit by the Engineering Division of the Department of Public Works, the project proponent is required to submit an erosion control plan to be reviewed and approved which must be implemented during project construction activities. The project will also be conditioned to require that all soils that are disturbed by clearing or grading shall be reseeded or hydromulched or otherwise stabilized as soon as possible. Emergency erosion control measures shall be utilized as requested by County officials.

Additionally, the project is required to submit a Notice of Intent (NOI) to the State Water Resources Control Board Water Permitting Unit to obtain coverage under the General Construction Activity Stormwater Permit for the disturbance of one acre or more. A Stormwater Pollution Prevention Plan (SWPPP) is required to be developed and submitted with the NOI. The SWPPP must be prepared by a qualified professional and includes Best Management Practices (BMPs) to minimize stormwater runoff, erosion, and sediment movement during construction activities.

Based on the above and the requirement of a preparation of a SWPPP with BMPs, the submittal of a NOI, and the enforcement of the County's Grading Ordinance through the requirement and review of a grading permit, including implementation of an erosion control plan and stabilization of soils that are disturbed by grading, there will be a less than significant impact.

- d) The project site does not contain expansive soils, as defined in Table 18-1-B of the Uniform Building Code. Therefore, there is no impact.
- e) The project will be served by public sewer and will not require the development of on-site septic systems or on-site wastewater disposal systems. Therefore, there will be no impact.
- f) As previously described, paleontological resources within the county are not common. However, if present, these resources occur primarily in the Mehrten geologic formations. The Mehrten formation is a geologic formation dating back to the Neogene period, which is part of the Miocene and later Pliocene geologic epochs (Cenozoic Era). The generalized rock type identified within the project area is metasedimentary rock (Pz) (DOC 2018). This rock type is not associated within the Cenozoic Era, where resources from the Mehrten formation would be present. Construction activities associated with the project would involve site grading and excavation. Operation of the project would not result in any ground disturbance. Because the project site is not located within a geologic area where paleontological resources would likely be present, construction activities resulting from the project would not directly or indirectly result in destruction of a paleontological resource. Impacts would be less than significant.

Mitigation Measures: None required.

Mitigation Monitoring: Not applicable.

VIII. GREENHOUSE GAS EMISSIONS:

Issues and Supporting Information Sources

*Potentially
Significant
Impact* *Less-than-
Significant with
Mitigation
Incorporation* *Less-than-
Significant
Impact* *No
Impact*

Would the Proposed Project/Action:

- | | | | | |
|---|--------------------------|-------------------------------------|--------------------------|--------------------------|
| a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Environmental Setting:

Certain gases in the earth's atmosphere, classified as greenhouse gases (GHGs), play a critical role in determining the earth's surface temperature. GHGs are responsible for "trapping" solar radiation in the earth's atmosphere, a phenomenon known as the greenhouse effect. Prominent GHGs contributing to the greenhouse effect are carbon dioxide (CO₂), methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride.

Human-caused emissions of these GHGs in excess of natural ambient concentrations are believed responsible for intensifying the greenhouse effect and leading to a trend of unnatural warming of the earth's climate, known as global climate change or global warming. It is "extremely likely" that more than half of the observed increase in global average surface temperature from 1951 to 2010 was caused by the anthropogenic increase in GHG concentrations and other anthropogenic factors together (Intergovernmental Panel on Climate Change 2014).

The different types of GHGs have varying global warming potentials (GWPs) (Table 3). The GWP of a GHG is the potential of a gas or aerosol to trap heat in the atmosphere. Because GHGs absorb different amounts of heat, a common reference gas, usually carbon dioxide, is used to relate the amount of heat absorbed to the amount of the gas emissions, referred to as "CO₂ equivalent," and is the amount of a GHG emitted multiplied by its GWP. Carbon dioxide has a GWP of one. By contrast, methane (CH₄) has a GWP of 21, meaning its global warming effect is 21 times greater than carbon dioxide on a molecule per molecule basis.

Table 3	
Global Warming Potentials (GWPs)	
Gas	Global Warming Potential
Carbon Dioxide	1
Methane	21
Nitrous Oxide	310
HFC-23	11,700
HFC-134a	1,300
HFC-152a	140
PFC: Tetrafluoromethane (CF ₄)	6,500
PFC: Hexafluoroethane (C ₂ F ₆)	9,200
Sulfur Hexafluoride (SF ₆)	23,900
Source: http://epa.gov/climatechange/emissions/downloads09/Introduction.pdf	

As noted above, the earth needs a certain amount of greenhouse gases in order to maintain a livable temperature. However, it is believed by many that global climate change may occur as a result of excess amounts of GHG, which, in turn, may result in significant adverse effects to the environment that will be experienced worldwide. The effects may include the melting of polar ice caps and rising sea levels, increased

flooding in wet areas, droughts in arid areas, harsher storms, problems with agriculture, and the extinction of some animal species. Regardless of whether the rise in GHG is caused by natural cyclic events or not, it is widely believed production of additional GHG should be reduced in order to maintain a “healthy” level of GHG in the atmosphere.

State Legislation

GHG emission targets established by the state legislature include reducing statewide GHG emissions to 1990 levels by 2020 (Assembly Bill [AB] 32 of 2006) and reducing them to 40 percent below 1990 levels by 2030 (Senate Bill [SB] 32 of 2016). Executive Order S-3-05 calls for statewide GHG emissions to be reduced to 80 percent below 1990 levels by 2050. Executive Order B-55-18 calls for California to achieve carbon neutrality by 2045 and achieve and maintain net negative GHG emissions thereafter. These targets are in line with the scientifically established levels needed in the United States to limit the rise in global temperature to no more than 2 degrees Celsius, the warming threshold at which major climate disruptions, such as super droughts and rising sea levels, are projected; these targets also pursue efforts to limit the temperature increase even further to 1.5 degrees Celsius (United Nations 2015:3).

California’s 2017 Climate Change Scoping Plan (2017 Scoping Plan), prepared by CARB, outlines the main strategies California will implement to achieve the legislated GHG emission target for 2030 and “substantially advance toward our 2050 climate goals” (CARB 2017:1, 3, 5, 20, 25–26). It identifies the reductions needed by each GHG emission sector (e.g., transportation, industry, electricity generation, agriculture, commercial and residential, pollutants with high global warming potential, and recycling and waste).

Tuolumne County Regional Blueprint Greenhouse Gas Study

In 2012, the Tuolumne County Transportation Council (TCTC) conducted a regional blueprint planning effort, which presented the results of a countywide (including incorporated and unincorporated areas) GHG emissions inventory, which evaluated existing (2010) GHG emissions, and projected (2020, 2030, and 2040) emissions for three growth scenarios. It also identified policies and measures Tuolumne County and land use project applicants can implement to reduce GHG emissions consistent with AB 32 and prepare for the potential impacts of climate change. In 2010, Tuolumne County emitted approximately 782,846 metric tons of CO₂ equivalent GHG emissions (MTCO₂e) as a result of activities and operations that took place within the transportation, residential (energy consumption), nonresidential (energy consumption), off-road vehicles and equipment, agriculture and forestry, wastewater, and solid waste sectors. This equates to 9.8 MTCO₂e per resident and employee in Tuolumne County’s service population (service population is defined as the total County resident population + people employed in the County).

The study identified a countywide target to reduce Tuolumne County’s GHG emissions 15 percent below 2010 levels by 2020 (equivalent to 665,419 MTCO₂e) and policies that can be implemented to meet the target. The policies are organized into six categories: (1) Energy, (2) Transportation, (3) Resource Conservation, (4) Off-Road Vehicles and Equipment, (5) New Development, and (6) Adaptation. The study also identified a project-level threshold of 4.6 MTCO₂e per service population per year that can be applied evenly to future land development applications countywide to ensure that new development reduces its share of emissions consistent with AB 32 and the countywide reduction target (TCTC 2012). The Tuolumne County Regional Blueprint Greenhouse Gas Study and associated project level thresholds were adopted by the County Board of Supervisors in January 2012.

Analysis:

- a,b) To assist project applicants with determining whether a proposed project’s GHG emissions are consistent with AB 32 and the countywide reduction target, the Blueprint study provides two sets of screening criteria. If a project meets either set of screening criteria, then the lead agency or project applicant would not need to perform an assessment of the project’s GHG emissions.

If a proposed project *either* is equal to or less than the project size screening criteria in Table 4 of the GHG study, *or* incorporates *all* of the measures identified in Table 5 (P-1 through P-4) below, then a project specific assessment is not required.

Table 4: Project Screening Criteria by Project Size and Type	
Single Family	4 parcels
Apartment, Condo, Townhouse	8 dwelling units
Commercial/Retail	2,000 square feet
Industrial	5,000 square feet
These screening criteria represent the maximum operational size of a project by land use type. Source: Table 5.8 of the Tuolumne County Greenhouse Gas Study	

Table 5: Project Screening Criteria by Project Features
P-1: Project exceeds the California Energy Code requirements by 15 percent, based on the 2008 Energy Efficiency Standards requirements, through the installation of energy efficient design, lighting, equipment, appliances, or solar photovoltaic panels that provide 15 percent or more of the project's energy needs.
P-2: Project does not include fuel oil as a heating source.
P-3: Project provides dedicated and accessible recycling and green waste bins with instructions/education program explaining how to use the bins, what can go into each bin, and the importance of recycling.
P-4: Project (non-residential only) provides designated parking for any combination of low-emitting, fuel-efficient and carpool/vanpools vehicles at 10 percent of the total spaces, consistent with the 2010 California Green Building Standards Code Tier 1 measure (Table A5.106.5.1.1).
A project using this screening criteria table must incorporate all project features (P-1 through P-3 for residential, and P-1 through P-4 for non-residential) listed above. Source: Table 5.9 of the Tuolumne County Greenhouse Gas Study

The project does not meet the criteria in Table 4. Therefore, the project proponent is required to incorporate Measures P-1 through P-3 from Table 5 above. Incorporation of Mitigation Measures GHG-1 through GHG-3 will result in a less than significant impact.

Mitigation Measures:

GHG-1: The project shall not utilize fuel oil as a heating source.

GHG-2: The project shall provide dedicated and accessible recycling bins with instructions and an education program explaining how to use the bins, what can go into each bin, and the importance of recycling.

GHG-3: The project shall be consistent with the 2019 California Green Building Standards Code Tier 1 measure.

Mitigation Monitoring:

Mitigation Measures GHG-1, GHG-2 and GHG-3 will be required to be implemented prior to issuance of a Building Permit. The Building and Safety Division will ensure compliance with the mitigation measures above prior to issuing a building permit. A Notice of Action shall be recorded for Mitigation Measures 1-3 to advise future owners of the required mitigation measures and the responsibility to comply with said measures.

IX. HAZARDS AND HAZARDOUS MATERIALS:

Issues and Supporting Information Sources	Potentially Significant Impact	Less-than- Significant With Mitigation Incorporation	Less-than- Significant Impact	No Impact
Would the Proposed Project/Action:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) For a project located within an airport land use plan or, where such plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Environmental Setting:

Hazardous substances and wastes that are likely to be generated from the project would include hydraulic fluids and solvents used in the construction and operations of new residences. Hazardous materials and waste would also be generated by household uses after occupancy of the residences, which would include oils, used paint, pesticides, cleaning products and other chemicals that are commonly used. All hazardous substances and wastes are highly regulated by federal, state, and local regulations regarding the use, storage, transportation, handling, processing and disposal. All hazardous substances and waste are required to be stored, transported, handles, processed, and disposed of in accordance with these regulations.

To address compliance of these regulations in the home, Tuolumne County adopted the Household Hazardous Waste Element of the Tuolumne County Integrated Waste Management Plan. This plan aims to reduce the amount of household hazardous waste generated within Tuolumne County through reuse and recycling, to divert household hazardous waste from landfills, to promote alternatives to toxic household products, and to educate the public regarding household hazardous waste management. Household hazardous waste is collected at the Cal Sierra Transfer Station in East Sonora and the Groveland Transfer Station in Groveland. Tuolumne County also holds collection events for household hazardous waste which is organized by the Solid Waste Division of the Department of Public Works.

The project site is located within the Soulsbyville Elementary School district, and within one-quarter mile of Soulsbyville Elementary School. The elementary school is located to the southwest of the project site, on the west side of Soulsbyville Road.

The California Department of Toxic Substance Control (DTSC) maintains a list of cleanup sites and hazardous waste permitted facilities on its EnviroStor database. The State Water Resources Control Board

regulates spills, leaks, investigation, and cleanup sites and maintains an online GeoTracker database. The GeoTracker database tracks regulatory data about leaking underground storage tank (LUST) sites, fuel pipelines, and public drinking water supplies. These databases were consulted for the project site.

There are two airports located within Tuolumne County. One is located within the community of Columbia, approximately 8.5± aerial miles northwest of the project site. The other airport is located in the community of Groveland, approximately 9.9± aerial miles southeast of the project site. Parcels that are subject to the Tuolumne County Airport Compatibility Plan are designated with the Airport Overlay (-AIR) General Plan land use designation the :AIR (Airport Combining) zoning district.

Information on emergency response plan and evacuation plan is contained in the Natural Hazards Element of the 2018 Tuolumne County General Plan and the Tuolumne County Multi-Jurisdiction Hazard Mitigation Plan. Tuolumne County does not have a static emergency plan or evacuation plan due to the dynamic nature of emergencies. In the event of an emergency, the Tuolumne County Sheriff Office is the responsible entity for declaring and directing evacuations in the case of emergencies. The Sheriff's Department will inform members of the public via the Everbridge Emergency Notification System, local media, and door-to-door when feasible.

The project site is located within a State Responsibility Area (SRA) and is rated as high and very high fire hazard severity zone. This rating is based on factors of slope, vegetation and annual summer weather patterns. These zones, referred to as Fire Hazard Severity Zones (FHSZ), provide the basis for application of various mitigation strategies to reduce risks to buildings associated with wildland fires. The zones also relate to the requirements for building codes designed to reduce the ignition potential to buildings in the wildland-urban interface zone.

Analysis:

- a) Construction activities would involve the use of hazardous materials such as fuels, lubricants, and solvents typically associated with construction equipment and vehicles. These materials are commonly used during construction and are not acutely hazardous. The federal Occupational Safety and Health Administration (OSHA) is the agency responsible for assuring worker safety in the handling and use of chemicals identified in the Occupational Safety and Health Act of 1970 (Public Law 91-596, 9 USC 651 et seq.). OSHA has adopted numerous regulations pertaining to worker safety, contained in CFR Title 29. These regulations set standards for safe workplaces and work practices, including standards relating to the handling of hazardous materials and those required for construction activities such as excavation and trenching. Any materials used during construction activities would be handled in accordance with applicable laws, regulations, and protocols related to protect worker, user, and public safety. Operation of the project would involve residential activities, the operation of which would not involve the use, emission, or release of hazardous wastes or materials (beyond small amounts of common household products such as fuels, solvents, and cleaners). Impacts would be less than significant.
- b) Reasonably foreseeable upset and accident conditions could include small spills or leaks associated with the use of construction equipment and vehicles, as described in item (a). Any materials utilized during construction activities would be handled in accordance with applicable laws, regulations, and protocols, and operation of the project would not result in the creation of any hazards to the public. As discussed under item (a), operation of the project would not involve the use of or result in the release of hazardous materials. Impacts would be less than significant
- c) The site is located within a quarter mile of Soulsbyville Elementary School. However, because the project will not emit hazardous emissions, and the use and handling of acutely hazardous materials, substances, or waste is regulated by the above described regulations, impacts would be less than significant.

- d) A review of the Department of Toxic Substances Control (DTSC) database, *EnviroStor*, which includes lists of hazardous materials sites compiled pursuant to California Government Code Section 65962.5, did not identify any sites on or adjacent to the project site that have used, stored, disposed of, or released hazardous materials. Therefore, there will be no impact.
- e) The project site is not located within an area that is subject to the Tuolumne County Airport Land Use Compatibility Plan or within two miles of a public airport or public use airport. The nearest airport is the Columbia Airport, which is located approximately 8.5± aerial miles northwest of the project site. Therefore, there will be no impact.
- f) Tuolumne County does not have a static emergency plan or evacuation plan due to the dynamic nature of emergencies. Tuolumne County does not have any designated evacuation routes because fires can happen anywhere and may block specific roads and certain areas may not be safe for travel. The Tuolumne County Sheriff Office is the responsible entity for declaring and directing evacuations in the case of emergencies. The Sheriff's Department will inform members of the public via the Emergency Notification System, local media, and door-to-door when feasible of where the wildfire is located, which routes are safe to use, and which locations are safe to seek refuge from the fire. Generalized emergency information is also contained within the adopted Multi-Jurisdictional Hazard Mitigation Plan.

In an emergency, the most likely route of travel for residents of the project site would be to utilize Soulsbyville road north toward State Route 108. The addition of 25 dwelling units would not significantly impact the use of this route in the event of an emergency or impair Tuolumne County's current evacuation protocol. Approval of this project would result in a less than significant impact on Tuolumne County's emergency or evacuation plans.

- g) The project site is located within an SRA and is rated as high and very high fire hazard severity zone. The project has been reviewed by the Tuolumne County Fire Prevention Division. The Fire Prevention Division provided conditions for the project to ensure consistency with the Titles 11, 12, 15 and 16 of the Ordinance Code, the California Building Code, and the California Fire Code. Conditions will be added to the project including requirements for fuel reduction and thinning, road construction standards, driveway construction standards, residential gates, fire and life safety requirements. Residential dwelling units are required to provide for defensible space zones around the residence to reduce fire hazards, as regulated by CalFire. The incorporation of these conditions and the project's consistency with Titles 11, 12, 15 and 16 of the Ordinance Code, the Tuolumne County General Plan, the California Building Code, and the California Fire Code would result in a less than significant impact. See the Wildfire Section below for additional information and analysis.

Mitigation Measures: None required.

Mitigation Monitoring: Not applicable.

X. HYDROLOGY AND WATER QUALITY:

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

Environmental Setting:

The project site is located within the Tuolumne River watershed. Tuolumne River is a watershed that runs 149 miles long and runs through the county of Tuolumne. Tuolumne River travels east to west and extends from Modesto, the most western side, to Yosemite National park, the most eastern side. Curtis Creek flows through the project site in a southerly direction.

The project site is within TUD's service area for public water. Groundwater from TUD wells provides approximately 4% of the domestic water supplied annually to TUD customers. The majority of available groundwater in Tuolumne County is transient and found in fractured rock formations instead of continuous aquifers. The remaining 96% of TUD's water supply consists of surface water which originates as rainfall and snowpack runoff that fill TUD's reservoirs.

A Water Quality Plan was prepared for Tuolumne County in 2007 and contains a comprehensive program that addressed a wide range of water quality concerns within the county and emphasizes mechanisms for maintaining and improving surface water quality (Tuolumne County 2007). The project site is located within the jurisdiction of the Central Valley Regional Water Quality Control Board (RWQCB).

The Federal Water Pollution Control Act was adopted to protect the quality of surface waters of the Country and is implemented through the National Pollutant Discharge Elimination System (NPDES). In California, the NPDES is implemented through the Storm Water Permitting Unit of the State Water Resources Control Board. Pursuant to State regulations, land development projects, which disturb one acre or more must submit a Notice of Intent (NOI) to obtain coverage under the General Construction Activity Storm Water Permit. A Stormwater Pollution Prevention Plan (SWPPP) is required to be submitted with the NOI. The SWPP is required to be prepared by a qualified professional and includes Best Management Practices

(BMPs) to be implemented during project construction to minimize stormwater runoff, erosion, and sediment movement.

The Federal Emergency Management Agency (FEMA) provides information on flood hazards for communities based on its Flood Insurance Rate Maps (FIRM). The project site is located with Flood Zone X, which are areas of minimal flood hazards.

Analysis:

- a) Runoff from the project site has the potential to transport silt and other sediments to off-site surface waters if soil surfaces exposed during construction on the project site are not stabilized. However, the requirement of preparation of a SWPPP with BMPs and the submittal of a NOI with the State Water Resources Control Board would ensure compliance with water quality standards and waste discharge requirements and would protect the discharge of pollutants into surface or ground water. The Open Space-1 zoning on site would prohibit development or ground disturbing activities adjacent to the stream on site. The stream crossing is subject to a Streambed Alteration Permit issued by CDFW which would include measures to protect the stream which must be implemented. Compliance with applicable permits and construction measures would ensure that the project would not violate any water quality standards or waste discharge requirements set forth by the Central Valley RWQCB or result in the degradation of surface and groundwater quality. Impacts would be less than significant.
- b) The Tuolumne Utilities District will provide public water to the site. Because groundwater makes up such a small percentage of TUD's water supply, the project would not significantly decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin. Therefore, there would be a less than significant impact.
- ci-civ) There are no existing public storm drainages in the project vicinity. Storm drainage from the project site is via natural channels and drainages that traverse the property. Existing storm drainage features on and in the vicinity of the project site are limited to roadside ditches and culverts which conduct storm drainage across existing roadways. The Engineering Division of the Department of Public Works reviewed the project and indicated that a drainage plan is required to be submitted prior to the issuance of a Grading Permit. The drainage plan is required to address the entire project site drainage, including parking lots and paved areas, and eliminate any increase in run off to downstream drainages, culverts, and adjacent property. The project is required to utilize on site detention/retention features, which shall also be addressed in the drainage plan. The applicant is proposing two on-site detention/retention basins with proposed swales to the creek. The project also includes the development of curbs and gutters to direct storm water.

Chapter 12.20 of the TCOC contains the County's regulations regarding grading activities. The Engineering Division of the Department of Public Works has reviewed the project and responded with conditions in accordance with Chapter 12.20, which will become Conditions of Approval for the project. Prior to the issuance of a Grading Permit by the Engineering Division of the Department of Public Works, the project proponent is required to submit an erosion control plan to be reviewed and approved which must be implemented during project construction activities. The project will also be conditioned to require that all soils that are disturbed by clearing or grading shall be reseeded or hydromulched or otherwise stabilized as soon as possible. Emergency erosion control measures shall be utilized as requested by County officials.

Additionally, the project is required to submit an NOI to the State Water Resources Control Board Water Permitting Unit to obtain coverage under the General Construction Activity Stormwater Permit for the disturbance of more than one acre. A SWPPP is required to be developed and submitted with the NOI. The SWPPP must be prepared by a qualified professional and includes BMPs to be

implemented to minimize stormwater runoff, erosion, and sediment movement during construction activities. Compliance with the above conditions would result in a less than significant impact.

- d) The FEMA Flood Insurance Rate Maps indicate that the project site is located with Flood Zone X, which are areas of minimal flood hazard. The steep topography of the drainage channel makes it unlikely that there will be on site flooding. The Technical Background Report for the 2018 General Plan indicates that there is no risk of tsunamis in Tuolumne County due to its distance from the ocean. There is also no risk of earthquake-induced seiches within Tuolumne County. No impact would occur.
- e) The goal of the Tuolumne County Water Quality Plan is to minimize the risk of pollution into water sources. This can be achieved by the implementation of BMPs during project development.

The Water Quality Plan categorizes BMPs into the following categories: prevention, source control, and treatment control. The project is required to submit an NOI with the State Water Resources Control Board. This submittal requires the preparation of a SWPPP, prepared by qualified professional, which must incorporate BMPs to be implemented during project construction. The SWPPP is required prior to the issuance of a Grading Permit by the Engineering Division of the Department of Public Works. The Engineering Division verifies this requirement prior to the issuance of a permit. Additionally, the project includes the development of two on-site detention/retention basins to help control run-off from the site into the creek.

The following goals, policies, and implementation programs of the Water Element apply to the project:

Policy 14.C.2

Encourage new urban development to locate in areas where public water and sewer services are available or can be developed.

The project site will be served with public water and sewer and is adjacent to other developments.

Implementation Program 14.B.e

Ensure the conservation of water through the implementation of the Tuolumne County Landscaping Requirements, Chapter 15.28 of the Tuolumne County Ordinance Code, which provide for the use of xeriscape landscaping plants and materials to conserve water, the use of water conserving irrigation systems for landscaping, and the use of reclaimed or reused water for irrigation.

A landscaping plan consistent with Chapter 15.28 is required prior to the issuance of a building permit. The Land Use and Natural Resources Division would ensure compliance with Chapter 15.28, including the plant types and water usage, prior to the release of the building permit.

Implementation Program 14.C.b

Implement grading and surface runoff standards, such as retention and detention, permeable surfaces and recharge, necessary to protect water resources in compliance with State and Federal water quality regulations and with the County's water quality plan referenced in Implementation Program 14.C.e.

The requirement of a SWPPP with incorporated BMPs and the development of two retention/detention basis, as described above, would ensure compliance with this implementation program.

As demonstrated above, the project is consistent with the goals, policies, and implementation programs of the Water Element of the General Plan. The requirement of a SWPPP with BMPs and the development of two on-site retention/detention basis would ensure compliance with the Tuolumne

County Water Quality Plan and the Water Element of the 2018 Tuolumne County General Plan. Therefore, there would be a less than significant impact.

Mitigation Measures: None required.

Mitigation Monitoring: Not applicable.

XI. LAND USE AND PLANNING:

Issues and Supporting Information Sources	Potentially Significant Impact	Less-than- Significant With Mitigation Incorporation	Less-than- Significant Impact	No Impact
Would the Proposed Project/Action:				
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a significant environmental impact due to a conflict with any 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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Environmental Setting:

The project site is located along Soulsbyville Road, which is considered a Major Collector Road, as indicated by the 2018 Tuolumne County General Plan. The Willow Springs Subdivision is located north of the project site. Soulsbyville Elementary School is located southwest of the project site, on the opposite side of Soulsbyville Road. Parcels to the south are developed with single family residences, and the area to the immediate east of the site is vacant.

The project site is designated Low Density Residential by the Tuolumne County General Plan land use diagrams and is subject to the 2018 Tuolumne County General Plan. The proposed zoning of the project site is R-1:PD (Single Family Residential:Planned Unit Development Combining) under Title 17 of the Tuolumne County Ordinance Code.

Analysis:

- a) The project site is located adjacent to the Willow Springs Subdivision to the north, Soulsbyville Elementary to the southwest, and single family residences to the south, and vacant land to the east. The project site is accessed via Soulsbyville Road. An internal, privately maintained road will be developed to provide access to each of the residences. The proposed internal road will be used only to provide access to the homes within the project site. The internal road will not provide access to the Willow Springs Subdivision. The proposed project will not divide a community as it will be constructed on a vacant property located within an Identified Community and can be considered infill development. Therefore, there will be no impact.
- b) The LDR General Plan land use designation provides for family-oriented neighborhoods that feature single-family, detached homes on individual parcels.

Table 1.3 of the Community Development and Design Element in the 2018 General Plan indicates that the LDR land use designation is compatible with the R-1 zoning district. All combining zoning districts are compatible with all land use designations; therefore, the :PD combining district is compatible with the LDR designation. Figure 3 below demonstrates the General Plan land use designations and zoning districts of the parcels in the vicinity of the project site. Table 7 below indicates the General Plan and zoning designations. The proposed zoning and residential use of the project site is consistent with other parcels in the vicinity.

The following Goals, Policies and Implementation Programs of the 2018 Tuolumne County General Plan pertain to this project. Consistency with each section will be demonstrated.

Goal 1.A

Protect and enhance the quality of life for all residents of Tuolumne County while facilitating growth and development to meet the present and future needs of the County's residents, visitors and businesses.

Approval of the project would allow the development of 25 residential units to help facilitate growth and allow for additional housing options for residents of Tuolumne County.

Policy 1.A.3

Address the impacts associated with new development on cultural resources and protect such resources.

A Cultural Resource Study was conducted on the property, which identified mitigation measures to adequately protect resources that were identified on the project site. These mitigation measures have been incorporated into the projects' conditions of approval.

Policy 1.A.4

Focus urban growth in identified communities, emphasizing infill development and the intensified use of existing development

Policy 1.A.5

Promote infill and clustered patterns of development that facilitate the efficient and timely provision of infrastructure and services.

The project site is located within the Identified Community of Soulsbyville. The project would allow the development of residential units within an area that has existing infrastructure and services available to serve the project. The project site is located in an area in which public water and sewer facilities are readily available. The project is located adjacent to an existing subdivision, near a public school and in a community of residences on a variety of parcel sizes.

Policy 1.E.1

Encourage and promote the development of housing for all income levels.

Approval of the project would allow the development of 25 residential units. The units are attached but would be located on individual lots. The homes will range in size from 1,225 ± square feet to 2,570± square feet, which would allow flexibility in the price of the homes. The project would allow for additional housing options for the residents of Tuolumne County.

Zoning Ordinance

The project site is proposed to be zoned R-1:PD. The purpose of the R-1 zoning district is to stabilize and protect the residential characteristics of the district and to promote and encourage a suitable environment for family life. The single-family residential (R-1) district is intended for suburban family homes. Development to a density of one unit per one-third acre or less must be served by public sewer and density of less than one-half acre or less must be served by public water. The project is proposing the development of 25 dwelling units located on individual parcels. The project will be served with public water and sewer. The maximum residential density in the R-1 district is six (6) dwelling units per acre. The project is proposing a total of 25 dwelling units on 6.1± acres, which is consistent with the density requirements.

Within any single-family residential (R-1) district, no parcel of real property shall be divided or reconfigured where any parcel so created will be less than 7,500 square feet (net acreage) in area or less than fifty feet in width at the front setback. The applicant has applied for Planned Unit Development PUD19-001 to allow parcels smaller than 7,500 square feet and less than 50 feet in width at the front setback line. The size of the residential lots range in size from 1,640± square feet to 2,900± square feet. The width at the front setback line would be reduced to as low as 23± feet.

The maximum ratio of the coverage of all buildings, referred to as the floor area ratio (FAR), for parcels less than 7,500 square feet (net acreage) in area shall be 0.6 if the parcel is improved with a single-story residence and 0.75 if the parcel is improved with a multiple-story residence. The parcels will be less than 7,500 square feet in area and will be improved with two-story residences; therefore, the maximum floor area ratio would be 0.75 or 75% coverage. Under Planned Unit Development PUD19-001, the maximum floor area ratio would be increased to 1.5 or 150% coverage. This is requested as some of the units will be multi-story.

Section 17.56.020 of the TCOC indicates that the building setbacks for structures in the R-1 district shall be 6 feet from side parcel boundaries and 15 feet from the front and rear parcel boundaries. No structure shall be located closer than 35 feet from the centerline of any street or right of way. Planned Unit Development PUD19-001 is requesting reduced setbacks. Side setbacks would be reduced to as much as 0 feet between units and front and rear setbacks would be reduced to as much as 3 feet from the property boundary.

Securement of Planned Unit Development PUD19-001 would allow the exception to the standards in the R-1 zoning district. The :PD zoning district is created in order to achieve flexibility, to provide a more desirable living environment than would be possible through the strict application of ordinance requirements, to encourage a more creative approach in development of land, to encourage a more efficient and desirable use of land, to encourage conservation of the county's rural heritage, rural landscapes, oak woodlands and the natural environment, and to encourage various types of physical development. The :PD district is intended to allow diversification in the relationship of various uses, structures, open spaces and parcel sizes while insuring consistent application of general plan policies, programs and standards.

The terms, conditions, provisions, limitations and restrictions of a planned unit development permit may be more or less restrictive than those specified elsewhere in this code, including, but not limited to height limitations on buildings and structures, floor area ratio/percentage of coverage of land by structures, parking requirements the arrangement and spacing of buildings, the size and configuration of parcels, and other regulations as outlined in the ordinance code.

Planned Unit Development PUD19-001 would allow a reduction in the minimum lot size, reduction in the minimum width at the front setback line, reduction in the required building setbacks, reduction in the number and location of public utility easements, and an increase in the maximum floor area ratio.

The project site contains approximately 1.7± of Open Space-1 zoning. The purpose of the O-1 zoning is to preserve and protect areas of valuable wildlife habitat consistent with the wildlife policies of the general plan or areas with significant cultural resources. The O-1 zoning was established under Grading Permit G2005-54 to protect the riparian habitats. The O-1 zoning was established to mitigate cumulative impacts to wildlife and protects the highest priority habitat on site. Roads, driveways, trails, bridges, underground public utilities, wells or sewage disposal system permitted in conjunction with another entitlement for which an environmental review under the California Environmental Quality Act (CEQA) has been adopted. Because the proposed stream crossing and TUD sewer lift station have been evaluated in this environmental document and were found to have a less than significant impact on the environment with the implementation of BIO-2, these uses are allowed uses. Vegetation clearing for fire hazard reduction purposes in accordance with defensible space requirements would also be permitted within the O-1 zoning.

Approximately 20.0± acres of Open Space zoning is proposed on APNs 088-180-03 and 089-030-06 to mitigate impacts to oak woodland. The purpose of the O zoning district is to protect the public in areas not suitable for development because of flooding or other natural hazards and to provide areas of open space for the protection of wildlife habitat and scenic quality where vegetation removal may be appropriate in certain instances or for the preservation of cultural resources. Existing roads shall be allowed to remain and be maintained within the Open Space, consistent with Mitigation Measure

BIO-6. Vegetation clearing for fire hazard reduction purposes would also be permitted within the O zoning.

Prior to development of the project site, the following entitlements may be required:

Table 6. Future Entitlements	
Permit	Agency
Grading Permit	Engineering Division of the Department of Public Works
Parking Area Plan	Engineering Division of the Department of Public Works
Road Encroachment Permit	Engineering Division of the Department of Public Works
Streambed Alteration Agreement	California Department of Fish and Wildlife
404 Permit	US Army Corps of Engineers
General Construction Activity Storm Water Permit	Regional Water Quality Control Board
Building Permits	Building Division of the Community Development Department

The project will be conditioned to require securement of the above permits (Table 6) if needed. This will ensure compliance with all applicable policies and regulations of each of the permitting agencies.

As indicated above, the project is consistent with all applicable land use plan, policy, and regulations of agencies with jurisdiction over the project. Therefore, there is a less than significant impact.

Mitigation Measures: None required.

Mitigation Monitoring: Not applicable.

Figure 3: General Plan and Zoning Designation Map

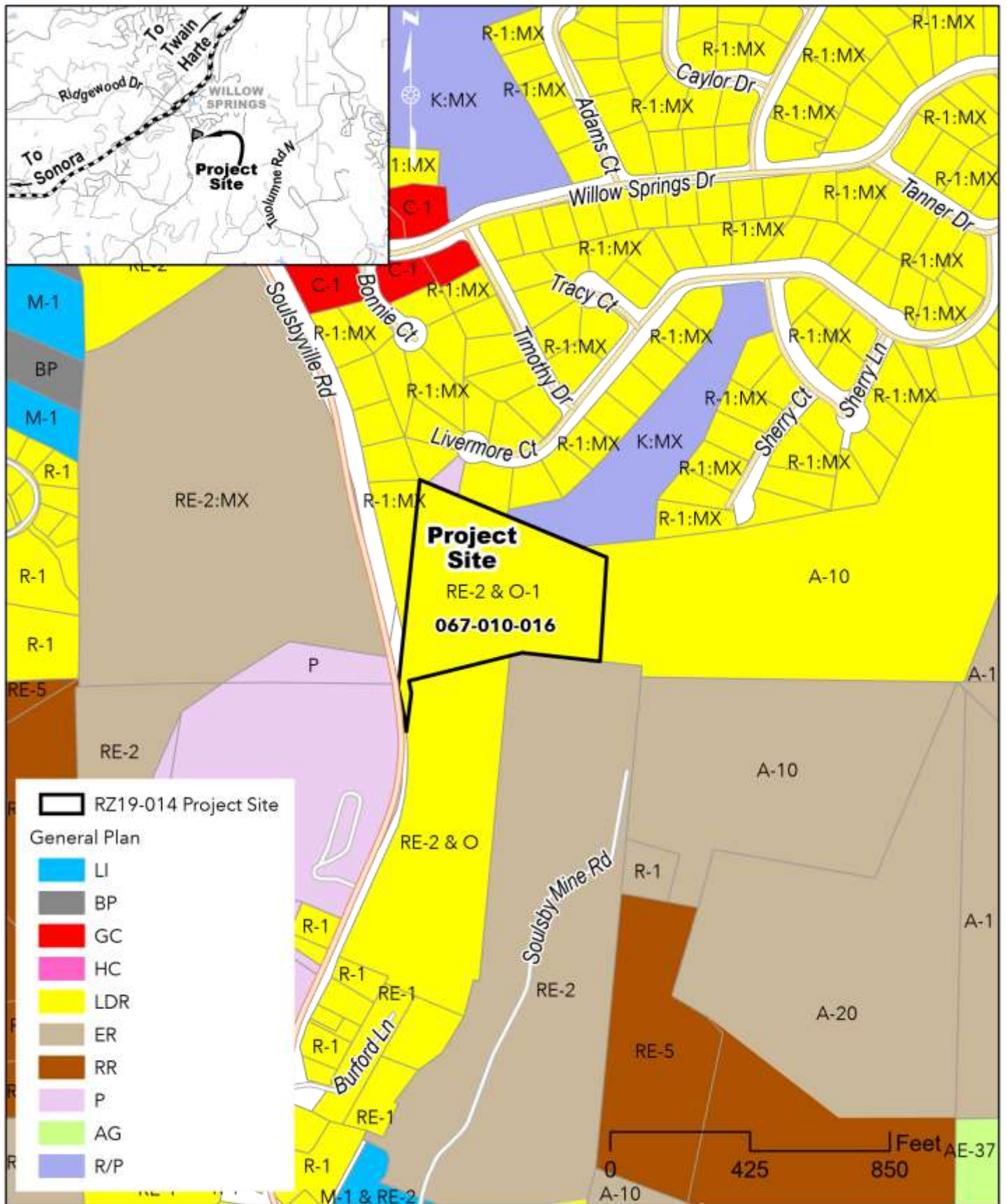


Table 7: General Plan and Zoning Designations	
Zoning District	General Plan
AE-37 = Exclusive Agricultural, Thirty-Seven Acre Minimum	LI = Light Industrial
A-10 = General Agricultural, Ten Acre Minimum	BP = Business Park
A-20 = General Agricultural, Twenty Acre Minimum	GC = General Commercial
R-1 = Single-Family Residential	HC = Heavy Commercial
RE-2 = Residential Estate, Two Acre Minimum	LDR = Low Density Residential
RE-5 = Residential Estate, Five Acre Minimum	ER = Estate Residential
K = General Recreational	RR = Rural Residential
C-1 = General Commercial	P = Public
M-1 = Light Industrial	AG = Agricultural
BP = Business Park	R/P = Parks and Recreation
P = Public	
O = Open Space	
O-1 = Open Space-1	
:MX = Mobile Home Exclusion Combining	

XII. MINERAL RESOURCES:

Issues and Supporting Information Sources		Potentially Significant Impact	Less-than- Significant With Mitigation Incorporation	Less-than- Significant Impact	No Impact
Would the Proposed Project:					
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Environmental Setting:

Tuolumne County has an extensive history as a mining community. Tuolumne County was historically mined for gold during the early 1850s. Current mining operations within Tuolumne County mine for limestone and dolomite, and various crushed rock, gravel, and sand products.

The California Surface Mining and Reclamation Act of 1975 (SMARA) requires classification of land in the state according to the known or inferred mineral resource potential of that land, which is provided direction under the State Geologist. The California Department of Conservation Division of Mines and Geology has developed Mineral Resource Zones (MRZ) to classify the areas where significant mineral resources occur or are likely to occur. Areas classified as MRZ-2a or MRZ-2b have been identified as having demonstrated or inferred significant mineral resources.

The Mineral Preserve Overlay (MPZ) General Plan land use designation is used to identify land that has been classified as either Mineral Resource Zone MRZ-2a or MRZ-2b by the State Mining and Geology Board under the State Classification System and meets criteria for relationship to surrounding land uses, access, and other issues. The MPZ overlay designation is found along the Mother Lode gold ore zone, the carbonate belt from Columbia to Algerine, and the table mountain basalt as an aggregate source. The MPZ Overlay is used to direct the development potential towards the types of development that are compatible with possible mineral resource extraction.

Analysis:

- a,b) The *Mineral Land Classification of a Portion of Tuolumne County, California for Precious Metals, Carbonate Rock and Concrete-Grade Aggregate (1997)*, DMG Open File Report 97-09, was reviewed for the project. For precious metals, the project site is located within Soulsbyville Trend, which is classified as MRZ-2b. MRZ-2b is defined as areas containing inferred mineral resources or containing mineral resources that are sub-economic. MRZ-2b includes areas underlain by mineral deposits where geologic information indicates that significant inferred resources are present. Areas classified MRZ-2b contain discovered deposits that are either inferred reserves or deposits that are presently sub-economic as determined by limited sample analysis, exposure, and past mining history. A typical MRZ-2b area would include sites where there are good geologic reasons to believe that an extension of an operating mine exists or where there is an exposure of mineralization of economic importance.

For carbonate minerals, the project site is located within the Southwestern County Area and is classified as MRZ-4. MRZ-4 is defined as areas of unknown mineral deposits.

The -MPZ overlay designation provides for the extraction and processing of mineral resources. This overlay is used to identify land that has been classified as either Mineral Resource Zone MRZ-2a or MRZ-2b by the State Mining and Geology Board under the State Classification System and meets criteria for relationship to surrounding land uses, access, and other issues. Uses within the -MPZ

overlay designation are those that are compatible with mineral resource extraction and processing.

Implementation 7.B.c of the Managed Resources Element of the 2018 General Plan indicates that the following criteria shall be used to designate areas with the -MPZ overlay General Plan land use designation:

1. The property has been classified by the State Mining and Geology Board as Mineral Resource Zone (MRZ-2a or MRZ-2b) under the State Classification System, as shown in Table 7.1 of the Technical Background Report (Volume II).
2. The property is not within 1,000 feet of the City of Sonora or any of the boundaries of each existing or new identified community.
3. Within 1,000 feet of the property, there is no property zoned as an urban level residential zoning district.
4. Within 1,000 feet of the property there is no property designated as any one or a combination of the following: HDR, MDR, LDR, ER, NC, GC, HC, SC or MU by the General Plan.
5. No reservoirs that are used as drinking water supplies are within 1,000 feet of the property.
6. The property has not been designated as a County landmark in the Tuolumne County General Plan or listed on the Tuolumne County Register of Cultural Resources; with the exception of historic mining resources.
7. There are no known high occupancy structures such as schools, health care facilities, skilled nursing facilities, residential care homes, hotels or motels within 1,000 feet of the property.
8. The property must be within one (1) mile of a State Highway, Federal Aid System (FAS) road, railroad, or arterial or collector road as designated by the Transportation Element of the General Plan.
9. After application of the above criteria, all areas comprised of one or several properties which remain and constitute a total area of less than 37 acres in size, shall be excluded.
10. All operating or permitted mining operations which have approved reclamation plans that have been classified by the State Mining and Geology Board as Mineral Resource Zone (MRZ-2a or MRZ-2b) under the State Classification System shall be designated as Mineral Preserve (-MPZ) overlay on the General Plan Land Use Diagrams, notwithstanding any of the previous criteria which would otherwise exclude the property from that designation.

Although the project site contains mineral deposits classified as MRZ-2b, it does not meet the criteria to be designated -MPZ by the General Plan land use diagrams for inconsistencies with criteria 2, 4, 7, and 9. The project site is located adjacent to Soulsbyville Elementary, is located within an Identified Community, contains and is surrounded by lands with the LDR General plan land use designation, and is less than 37 acres in size. Therefore, the project site would not be an appropriate site for land uses of mineral extraction or processing. The site would not be an economically viable site for mineral resource extraction or processing and would be of minimal value for the region or residents of the state.

Policy 7.C.1 of the Tuolumne County General Plan directs the County to protect lands classified as significant Mineral Resource Zone-2 (MRZ-2) by the State Department of Conservation Division of Mines and Geology, and meeting the criteria established in the General Plan for MPZ overlay, from conflicts, such as incompatible development on surrounding land, which might prevent future mining activities. The project site does not contain the MPZ overlay General Plan land use designation. There are no parcels within the vicinity of the project site that contain the -MPZ overlay designation. Therefore, the project would have a less than significant impact on known mineral resources.

Mitigation Measures: None required.

Mitigation Monitoring: Not applicable.

XIII. NOISE:

Issues and Supporting Information Sources

	<i>Potentially Significant Impact</i>	<i>Less-than- Significant With Mitigation Incorporation</i>	<i>Less-than- Significant Impact</i>	<i>No Impact</i>
Would the Proposed Project Result in:				
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) For a project located with the vicinity of a private airstrip or an airport land use plan or, where such 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Setting:

Noise is commonly defined as undesirable or unwanted sound. Noises vary widely in their scope, source, and volume, ranging from individual occurrences such as leaf blowers, to the intermittent disturbances of overhead aircraft, to the fairly constant noise generated by traffic on freeways. Three aspects of community noise are used in assessing the noise environment:

Level (e.g., magnitude or loudness): Sound levels are measured and expressed in decibels (dB) with 10 dB roughly equal to the threshold of hearing. Transient noise events may be described by their maximum A-weighted noise level (dBA).

Frequency composition or spectrum: Frequency is a measure of the pressure fluctuations per second, measured in units of hertz (Hz). The characterization of sound level magnitude with respect to frequency is the sound spectrum, often described in octave bands, which divide the audible human frequency range (e.g., from 20 to 20,000 Hz) into 10 segments.

Variation in sound level with time, measured as noise exposure: Most community noise is produced by many distant noise sources that change gradually throughout the day and produce a relatively steady background noise having no identifiable source. Identifiable events of brief duration, such as aircraft flyovers, cause the community noise level to vary from instant to instant. A single number called the equivalent sound level, or Leq, describes the average noise exposure level over a period of time. Hourly Leq values are called Hourly Noise Levels.

Discretionary projects are evaluated utilizing Chapter 5 of the Tuolumne County General Plan relating to Noise. The following definitions are from the Glossary of the Tuolumne County General Plan and are used in the Noise Element of the General Plan:

- **CNEL:** Community Noise Equivalent Level means a 24-hour energy equivalent level derived from a variety of single-noise events, with weighing factors of approximately 4.8 and 10 decibels applied to the evening (7:00 PM to 10:00 PM) and nighttime (10:00 PM to 7:00 AM) periods, respectively, to allow or the greater sensitivity to noise during these hours.
- **Ldn:** the day/night average sound level. The Ldn is the average equivalent sound level during a 24-hour day, obtained after addition of ten (10) decibels to sound levels in the night after 10:00 p.m. and before 7:00 a.m.

- dBA: is the "A-weighted" scale for measuring sound in decibels. It weighs or reduces the effects of low and high frequencies in order to simulate human hearing. Every increase of 10 dBA doubles the perceived loudness though the noise is actually ten times more intense.
- A-Weighted Sound Level: All sound levels referred to in this document are in A-weighted decibels. A weighting de-emphasizes the very low and very high frequencies of sound in a manner similar to the human ear. Most community noise standards utilize A weighting, as it provides a high degree of correlation with human annoyance and health effects.

Decibel: means a unit used to express the relative intensity of a sound as it is heard by the human ear. The decibel scale expresses sound level relative to a reference sound pressure of 20 micronewtons per square meter, which is the threshold of human hearing. Sound levels in decibels (dB) are calculated on a logarithmic basis. An increase of 10 decibels represents a 10-fold increase in acoustic energy, and an increase of 20 decibels corresponds to a 100-fold increase in acoustic energy. An increase of 10 dB is usually perceived as a doubling of noise.

Equivalent Sound Level (Leq): The equivalent sound level is the sound level containing the same total energy as a time varying signal over a given sample period. Leq is typically computed over 1, 8 and 24-hour sample periods.

Leq is the energy equivalent level, defined as the average sound level on the basis of sound energy (or sound pressure squared). The Leq is a "dosage" type measure and is the basis for the descriptors used in current standards, such as the 24-hour CNEL used by the State of California. The hourly Leq is measure over a 1 hour sample period.

Lmax: is the highest sound level measured over a given period of time.

The ambient noise environment in Tuolumne County is largely affected by traffic on highways and County roadways, commercial and industrial uses, agricultural uses, railroad operations, and aircraft. The most prominent sources of noise in the project vicinity are motor vehicles (e.g., automobiles, buses, trucks, and motorcycles). Motor vehicle noise is a major influence on noise levels to nearby sensitive receptors (primarily to nearby residences). Motor vehicle noise is of concern because it is characterized by a high number of individual events, which often create a sustained noise level, and because of its proximity to noise sensitive uses. In general, corridors throughout Tuolumne County consist of one or two lanes in each direction with varying speed limits ranging from 35 miles per hour (mph) to 55 mph.

The project site is adjacent to Soulsbyville Road, which is identified as a major collector road by the 2018 Tuolumne County General Plan. The project site is adjacent to the Willow Springs Subdivision and located near Soulsbyville Elementary School. Parcels in the vicinity contain zoning and General Plan land use designations that allow for agricultural uses, which may involve machinery and processing. Sounds generated in the area of the project site consist of vehicular traffic along Soulsbyville Road, sounds of a residential nature, sounds from the Elementary School, and sounds from potential agricultural activities.

The Tuolumne County General Plan has one goal and numerous policies and programs in place intended to preserve the ambient noise environment and reduce impacts on sensitive land uses. Specific programs that have been adopted by the County include requirements for development projects to conduct acoustical noise analyses to ensure compliance with adopted noise standards and avoid conflicts with existing and new land uses. Tuolumne County has adopted specific noise standards for transportation noise sources (Table 8), stationary noise sources (Table 9), and for cumulative increases in noise (Table 10). Adopted noise standards used for significance determination are summarized below.

Table 8 MAXIMUM ALLOWABLE NOISE EXPOSURE-TRANSPORTATION NOISE SOURCES EXCLUDING AVIATION RELATED NOISE¹		
	Outdoor Activity Areas ²	Interior Spaces ³
Land Use	L _{dn} /CNEL, dB	L _{dn} /CNEL, dB
Urban Residential	60	45
Transient Lodging ⁴	60	45
Hospitals, Nursing Homes ⁵	60	45
Churches, Meeting Halls, Office Buildings, Mortuaries	---	45
Schools, ⁵ Libraries, Museums	---	45
¹ This table applies to noise exposure levels that result from a transportation noise source other than aircraft; Table 7 addresses aircraft noise. For existing receiving land uses, consideration shall be given to the noise exposure from new transportation noise sources during the design and approval of the new transportation project. In the case of existing transportation noises sources, projects or consideration of land use changes involving noise-sensitive land uses shall address the noise exposure environment and use these standards as thresholds. ² An outdoor activity area is a location outside of the immediate structure where formal or informal activities are likely to happen. For example, anywhere on an urban residential property could be an outdoor activity area, while the outdoor activity area for a school would be the playground or sporting fields, and for a hospital would be an exterior patio or exercise area. Where the location of outdoor activity areas is unknown, the exterior noise level standard shall be applied to the property line of the receiving land uses. ³ For typical construction methods, the reduction in the noise level from the outside of the structure to the inside is approximately 15dB. In a high noise environment, special construction techniques may be necessary to reduce the interior noise level to the standard. ⁴ Transient lodging are overnight accommodations usually intended for occupancy by tourists or other short-term paying customers, examples include hotels, motels, or homeless shelters. Transient lodging, as used in this case, does not include bed and breakfast establishments which are located in rural areas, campgrounds, or guest ranches. ⁵ These standards only apply to nursing homes or schools that have more than 6 beds or students, respectively.		

Table 9 MAXIMUM ALLOWABLE NOISE EXPOSURE-STATIONARY NOISE SOURCES¹		
	Daytime (7 a.m. to 10 p.m.)	Nighttime (10 p.m. to 7 a.m.)
Hourly L _{eq} , dB ²	50	45
Maximum level, dB ³	70	65
¹ This table applies to noise exposure as a result of stationary noise sources. For a development project or land use change involving a noise-sensitive land use, the noise from nearby noise sources will be considered during design and approval of the project, or in determining whether the land use change is appropriate. For development projects which may produce noise, land use changes and project review will consider the effects of the noise on possible noise-sensitive land uses. When considering modification or expansion at a site that already produces noise levels which exceed these standards at noise-sensitive land uses, the modification or expansion shall be reviewed to consider if the proposed action will further raise the existing noise levels received at the noise-sensitive land use(s). Noise-sensitive land uses include urban residential land uses, libraries, churches, and hospitals, in addition to nursing homes or schools which have over 6 beds or students, respectively. Transient lodging establishments which are considered noise sensitive land uses include hotels, motels, or homeless shelters, but not bed and breakfast establishments located in rural areas, campgrounds, or guest ranches. ² The sound equivalent level as measured or modeled for a one-hour sample period. The daytime or nighttime value should not be exceeded as determined at the property line of the noise-sensitive land use. When determining the effectiveness of noise mitigation measures, the standards may be applied on the receptor side of noise barriers or other property line noise mitigation measures. ³ Similar to the hourly L _{eq} , except this level should not be exceeded for any length of time.		

Table 10 SIGNIFICANCE OF CHANGES IN CUMULATIVE NOISE EXPOSURE¹	
Ambient Noise Level Without Project² (Ldn or CNEL)	Significant Impact if Cumulative Level Increases By:
<60 dB	+ 5.0 dB or more
60-65 dB	+ 3.0 dB or more
>65 dB	+ 1.5 dB or more
¹ These standards shall be applied when considering the noise impacts from projects that could cause a significant increase in the cumulative noise exposure of existing noise-sensitive land uses. If it is likely that existing noise-sensitive land uses could experience these increases in cumulative noise exposure, as measured in CNEL or Ldn, then an acoustical analysis that meets the requirements of Table 7 shall be accomplished and the results considered in project design. ² Ambient Noise is defined as the composite of noise from all sources near and far. In this context, the ambient noise level constitutes the normal or existing level of environmental noise at a given location. Source: Federal Interagency Committee on Noise (FICON), <u>Federal Agency Review of Selected Airport Noise Analysis Issues</u> , August 1992.	

Analysis:

a) Construction

Construction activities would result in short-term noise. Construction activities would consist of grading and site preparation, paving activities, and building construction, all of which require the use of heavy-duty equipment that generate varying noise levels. Construction activities would be limited to the less noise-sensitive hours (e.g., daytime) of 7:00 a.m. to 7:00 p.m., Monday through Saturday, consistent with Tuolumne County General Plan Maximum Allowable Noise Exposure-Stationary Noise Source standards in Table 5.C of Chapter 5: Noise Element of the General Plan (Tuolumne County 2019).

Construction-generated noise levels would fluctuate depending on the type, number, and duration of equipment used. The effects of construction noise largely depend on the type of construction activities occurring on any given day, noise levels generated by those activities, distances to noise-sensitive receptors, and the existing ambient noise environment at nearby receptors. Construction equipment would vary by phase, but the entire construction process would include operation of dozers, excavators, loaders/backhoes, paving equipment, forklifts, and haul trucks. Noise generated from these pieces of equipment would be intermittent and short as typical use is characterized by periods of full-power operation followed by extended periods of operation at lower power, idling, or powered-off conditions.

The grading and site preparation phase typically generates the most substantial noise levels because of the onsite equipment associated with grading, compacting, and excavation are the noisiest. Site preparation equipment and activities include graders, dozers, and excavators. Because this is typically the loudest phase, it was assumed that one grader, one dozer, and one excavator could be operating simultaneously, generating the loudest anticipated noise levels for the overall construction activities. Noise emission levels from these types of construction equipment are shown in Table 11.

Table 11 Noise Levels Generated by Typical Construction Equipment		
Equipment Type	Maximum Noise Level (dB Lmax) at 50 feet ¹	Typical Noise Level (dB Leq) at 50 feet ^{1,2}
Grader	85	81
Dozer	85	81
Loader	80	76
Combined Noise Level at 50 feet	88.6	84.7
Notes: dB= decibels; Lmax = maximum sound level; Leq = equivalent continuous sound level ¹ Assumes all equipment is fitted with a properly maintained and operational noise control device, per manufacturer specifications. Noise levels listed are manufacture-specified noise levels for each piece of heavy construction equipment. ² Assumes typical usage factors. Source: Federal Transit Administration 2006		

Based on the reference noise levels listed in Table 11 and accounting for typical usage factors for each piece of equipment, onsite construction activities could generate a combined average noise level of approximately 86 dB Leq and 85 dB Lmax at 50 feet from the project site boundary.

Tuolumne County does not have adopted daytime construction noise standards. However, when evaluating potential noise impacts, temporary short-term noise occurring during the less sensitive times of the day, when people are active, out of their homes, or otherwise not sleeping, are generally considered less of a nuisance and less likely to disrupt sleep, or otherwise result in significant noise exposure. Thus, considering that construction activities would occur during the daytime hours, in accordance with typical County-required conditions of approval limiting construction activities to Monday through Saturdays from 7:00 a.m. and 7:00 p.m., overall construction activities would be temporary, construction noise would fluctuate, and the loudest levels would occur for a shorter duration than the overall construction duration, existing nearby sensitive receptors would not be substantially affected. To ensure impacts are less than significant, NOI-1 shall be implemented.

Operation

Noise generated by the project operation would be similar to other stationary noise sources in the area which are residential in nature. The proposed project would result in the following sources that may increase the ambient noise level: vehicle traffic on nearby roadways and residential activities associated with residential developments. These sources do not typically result in increased direct or cumulative noise levels above threshold established in the General Plan. However, to ensure that any noise generated by the project is reduced to a less than significant level, NOI-2 should be implemented and will be enforced by Code Compliance.

Incorporation of Mitigation Measures NOI-1 and NOI-2 would reduce potential impacts to a less than significant level.

- b) The project would not include any long-term operational sources of ground vibration, and therefore, this analysis focusses on short-term temporary vibration levels associated with construction activity. Construction activities generate varying degrees of temporary ground vibration, depending on the specific construction equipment used and activities involved. Ground vibration generated by construction equipment spreads through the ground and diminishes in magnitude with increases in distance. The effects of ground vibration may be imperceptible at the lowest levels, result in low rumbling sounds and detectable vibrations at moderate levels, and, at high-levels, can cause annoyance and sleep disturbance. When considering impacts from construction-related vibration, damage to nearby structures and disturbance to sensitive nearby uses are the two factors typically evaluated. However, ground vibration from construction activities do not often reach the levels that

can damage typical structures (Federal Transit Administration [FTA] 2006). Further, pile driving and blasting typically generate the most severe vibration levels.

Construction would include grading, site preparation, building construction, and paving activities. As discussed above, no pile driving or blasting would occur. Typical equipment that would be used includes dozers, loaders, excavators, trucks, and paving equipment. In addition, construction activities would only take place during the daytime hours, when people are less susceptible to noise.

Considering reference vibration levels for large dozers, FTA's vibration standard of 80 vibration-decibels (VdB) would not be exceeded beyond 40 feet and Caltrans's recommended vibration level for fragile buildings of 0.1 in/sec peak particle velocity (PPV) would not be exceeded beyond 25 feet from construction activity. Existing receptors and structures are located beyond these distances. Considering that construction activities would not include major sources of vibration, would occur during the daytime hours, and existing structures are located at adequate distances from proposed construction activity, no existing structures or sensitive land uses would be exposed to excessive vibration levels. This impact would be less than significant.

- c) The project site is not located within the vicinity of a private airstrip or an airport land use plan, or within two miles of public airport or public use airport. The nearest airport to the project site is the Columbia Airport, which is located approximately 8.5± aerial miles northwest of the project site. Therefore, there will be no impact.

Mitigation Measures:

NOI-1: Hours of exterior construction on the project site shall be limited to 7:00 a.m. to 7:00 p.m. Monday through Saturday. Exterior construction shall be prohibited on Sunday and County holidays.

NOI-2: The noise levels generated by the project shall be restricted to the following exterior noise limits as measured at the property line:

Zoning Classification of Receiving Property	Noise Level (dB) of Sound Source	
	Daytime (7 a.m. to 10 p.m.)	Nighttime (10 p.m. to 7 a.m.)
MU, R-3, R-2, R-1, RE-1, RE-2, RE-3, RE-5, RE-10, C-O, C-1, C-S, BP	50 L _{eq} . (1 hour) ¹	45 L _{eq} . (1 hour) ¹

¹L_{eq}. 1 hour refers to the average noise level measured over a one hour period.

Mitigation Monitoring: These conditions will be monitored through citizen complaints. Confirmed violations will be referred to the Code Compliance Officer for processing consistent with established code compliance procedures outlined in Chapter 1.10 of the Ordinance Code. A Notice of Action will be recorded to advise future owners of the required mitigation measures and the responsibility to comply with said measures.

XIV. POPULATION AND HOUSING:

Issues and Supporting Information Sources	Potentially Significant Impact	Less-than- Significant With Mitigation Incorporation	Less-than- Significant Impact	No Impact
Would the Proposed Project/Action:				
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Setting:

The population in Tuolumne County in 2018 was at 55,365 for the entire County including the City of Sonora. Between 2010 and 2018 Tuolumne County's growth rate was less than 1% and was negative for some years, as indicated in Figure 5 in the Housing Element found in the Technical Background Report of the 2018 General Plan. The projected population for Tuolumne County in 2024, including the City of Sonora, is estimated at 54,390, which is a decrease from its current population. The proposed project includes the development of 25 residential units within an area with existing infrastructure to serve the site.

The project site is currently undeveloped and there are no existing dwelling units on site. The project site is located in an area that would be served with existing infrastructure, including water, sewer, publicly-dedicated, County-maintained roads, and electricity. The project site is located adjacent to existing development, with the Willow Springs Subdivision to the north and Soulsbyville Elementary to the southwest.

Analysis:

- a) The project proposes to divide a 6.1± acre parcel into 25 residential lots. Each lot will be developed with one single-family dwelling, for a total of 25 dwelling units. There is existing infrastructure to serve the proposed project. Public water and sewer, electrical service, and telecommunication facilities are readily available to serve the project site. The project site will be accessed via Soulsbyville Road and an internal looped road to access each of the dwelling units. The project site is located adjacent to existing development, with the Willow Springs Subdivision to the north and Soulsbyville Elementary to the southwest. The construction of 25 residential units would not be considered substantial population growth to an area with existing services. Therefore, there is a less than significant impact.
- b) The project site is currently undeveloped. There are not any single-family dwellings on the site. The proposed project would not displace people or housing; therefore, the construction of replacement housing elsewhere would not be required as a result of the project. Therefore, there would be no impact.

Mitigation Measures: None required.

Mitigation Monitoring: Not applicable.

XV. PUBLIC SERVICES:

Issues and Supporting Information Sources	Potentially Significant Impact	Less-than- Significant With Mitigation Incorporation	Less-than- Significant Impact	No Impact
Would the Proposed Project/Action:				
a) 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 these public services:				
Fire Protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Police Protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Parks?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other Public Facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Environmental Setting:

Fire Protection

Fire protection services are provided by the Tuolumne County Fire Department with cooperation from the California Department of Forestry and Fire Protection (CalFire). The nearest Tuolumne County fire station is the Mono Vista Station 56 located at 16925 Mono Vista Road North, which is approximately 0.7± miles from the project site. This location is a volunteer fire station. The nearest CalFire station is the Mono Village Station 51 located at 19500 Hillsdale Drive, approximately 4.2± miles from the project site. This station consists of volunteers and paid staff. In 2006, Tuolumne County Fire Department and other local and State fire protection agencies entered in the Automatic Aid/Mutual Aid Agreement. This is a mutual cooperation agreement to increase fire and other emergency protection by allowing for the closest fire department to be dispatched for emergency calls, even if the emergency is outside of their jurisdictional boundary.

Police Protection

Law enforcement services in the in the unincorporated portion of Tuolumne County is provided by the Tuolumne County Sheriff's office. The nearest station to the project site is located at 28 Lower Sunset Drive in Sonora, which is approximately 8.5± road miles away from the project site. Response times for the entire county averages between 5 minutes to 35 minutes depending on day of the week, time, and the location of the incident. An average of six deputies patrols the county at any given time.

The California Highway Patrol (CHP) provides additional enforcement along State Highways and County roadways. The CHP offers other services as needed to support the safety for residents of the County. The nearest CHP office to the project site is located at 18437 Fifth Avenue in Jamestown, approximately 9.4± road miles away from the project site.

Schools

The project site is within the Soulsbyville Elementary School District and the Sonora Union High School District. Soulsbyville Elementary is located southwest of the project site. Sonora High School is approximately 8.5± miles away from the project site. Soulsbyville Elementary serves students in grades Kindergarten through 8th grade. Enrollment at Soulsbyville Elementary in the 2019/2020 school year was 539 students. Sonora High School serves students in grades 9th through 12th. Enrollment at Sonora High in the 2019/2020 school year was 961 students.

Parks

Tuolumne County has a variety of recreational opportunities for the public, including Yosemite National Park, Stanislaus National Forest, State parks, and other Federal, State and Local government agencies such as the U.S. Bureau of Reclamation and the Bureau of Land Management. Community based recreation and park districts include the Tuolumne County Recreation Department and the City of Sonora Recreation Department. Tuolumne County operates and maintains approximately 341± acres of parks.

The nearest recreational facilities to the project site include Standard Park in Standard, the Heaven for Children playground and skatepark in Sonora, and Tuolumne Memorial Hall Park in Tuolumne. Standard Park offers softball and soccer fields, children's play area, and concession stand. The Heaven for Children playground offers a children's playground, skateboard park, and picnic and barbeque facilities. The Tuolumne Memorial Hall Park offers a bandstand, picnic tables, swimming pool, sports field, and playground.

Analysis:

Fire Protection

The project has been reviewed by the Tuolumne County Fire Prevention Division (FPD) for consistency with the National Fire Code, California Fire Code, California Building Code, the Tuolumne County General Plan and Ordinance Code. Any future development on the project site will be subject to the rules and regulations contained in these documents.

The recommendations and conditions provided by the FPD include road construction standards and turn around areas to support fire apparatus, driveway construction requirements, defensible space requirements, the requirement of a fuel medication program approved by FPD, fire flow requirements, and gateway access requirements found in Titles 11, 12 and 15 of the Tuolumne County Ordinance Code and the California Fire Code.

Additionally, neither the Tuolumne County Fire Prevention Division nor CalFire indicated the need for the development of a new facility based on development of the proposed project.

Application and enforcement of the above-mentioned code requirements would reduce impacts related to fire hazard and fire protection, which would not require the provision of new or physically altered fire protection facilities. Therefore, there would be a less than significant impact.

See the Wildfire Section below for additional analysis.

Police Protection

The Tuolumne County Sheriff's Division and California Highway Patrol were notified of the proposed project via mail on January 30, 2020. The Sheriff's Division and Highway Patrol did not provide a response on the project.

While the project itself will not create a significant impact for the Tuolumne County Sheriff to provide

services, the cumulative impact of this project and others like it throughout the County have the potential to create an impact. The Tuolumne County Board of Supervisors has determined that projects of this type add incrementally to the cumulative impact on County-provided services. New construction for the first single-family dwelling on each parcel is required to pay a County Service Fee. This fee is due prior to the issuance of a Certificate of Occupancy by the Building and Safety Division of the CDD. Additionally, the gated entrance to the proposed subdivision will help deter criminal activity by discouraging trespassing. No new law enforcement facilities would need to be constructed as a result of the project and there are no plans for construction of new police facilities within the County. Therefore, there would be a less than significant impact.

Schools

Prior to the construction of any new single-family dwelling, the developer is required to pay school fees to their district. This fee is based on the square footage of the dwelling and is due prior to the issuance of a Certificate of Occupancy by the Building and Safety Division of the CDD. These fees are used to offset new construction of school facilities that may be required for increased student population. Payment of this required fee would result in a less than significant impact.

Parks

Section 16.26.120 of the Tuolumne County Ordinance Code states that new subdivisions shall either dedicate land for the purposes of providing recreational facilities or pay in an-lieu fee. Mitigation Measure REC-1 has been incorporated to require dedication or payment of an in-lieu fee. See the Recreation section below for analysis.

Other Public Facilities

Other public facilities would include churches or other places of worship, hospitals, and government buildings. The project would allow the development of 25 residential units. The project will not significantly increase the demand to require development of new public facilities. Therefore, there is a less than significant impact.

Mitigation Measures: None Required

Mitigation Monitoring: Not Applicable

XVI. RECREATION:

Issues and Supporting Information Sources	Potentially Significant Impact	Less-than- Significant With Mitigation Incorporation	Less-than- Significant Impact	No Impact
Would the Proposed Project/Action:				
a) 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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Environmental Setting:

Tuolumne County has a variety of recreational opportunities for the public, including Yosemite National Park, Stanislaus National Forest, State parks, and other Federal and State government agencies such as the U.S. Bureau of Reclamation and the Bureau of Land Management. Community based recreation and park districts include the Tuolumne County Recreation Department and the City of Sonora Recreation Department. Tuolumne County operates and maintains approximately 341± acres of parks.

The nearest recreational facilities to the project site include Standard Park in Standard, the Heaven for Children playground and skatepark in Sonora, and Tuolumne Memorial Hall Park in Tuolumne. Standard Park offers softball and soccer fields, children's play area, and concession stand. The Heaven for Children playground offers a children's playground, skateboard park, and picnic and barbeque facilities. The Tuolumne Memorial Hall Park offers a bandstand, picnic tables, swimming pool, sports field, and playground.

Analysis:

a,b) Implementation Program 8.D.b. of the Tuolumne County General Plan requires certain new residential development of five units or more to participate in the provision of recreational facilities for their residents. For residential subdivisions, the subdivider may propose to provide recreational facilities on site, pay an in-lieu recreation fee or dedicate land for public recreational facilities, or a combination of any or all of the three options for consideration by the Board of Supervisors.

Section 16.26.120 of the Tuolumne County Ordinance Code states the following:

The Board of Supervisors will require either the dedication of land or the payment of fees in lieu of such dedication, or a combination of any of the above, for the purpose of providing park and recreational facilities to serve future residents of the subdivision.

Section 16.26.120 of the Ordinance Code states that the total area required to be dedicated for recreational facilities will be computed by multiplying the number of dwelling units to be included in the development by .01 acre, up to the limits set forth in Section 66477 of the Subdivision Map Act. The project is proposing 25 residential units. Therefore, the developer would be required to dedicate 0.25 acre of land for recreational purposes. The applicant is not proposing land to be dedicated for recreational purposes. Therefore, the applicant has the option to pay the in-lieu recreation fee, using the formula below.

Section 16.26.120 also establishes the in-lieu recreation fee using the formula:

Number of units x .01 x average assessed market price per acre based upon the tentative map and the appraisal by the County.

Section 16.26.120(F) of the Ordinance Code states that all park and recreation fees collected pursuant to this title will be placed in a special fund independent of the general fund and expended only for park and recreation acquisition and development. It is further stated that any fees collected under this section will be committed within five years after the payment of such fees or the issuance of building permits on one-half the lots created by a subdivision, whichever occurs first.

Mitigation Measures:

REC-1: The project proponent shall dedicate 0.25± acres of land for recreational purposes. If the project proponent is not dedicating land for recreational purposes, an in-lieu recreation fee shall be paid based on the following formula:

25 units x .01 x average assessed market price per acre based upon the tentative map and the appraisal by the County.

Mitigation Monitoring:

The dedication of land for recreational purposes or the payment of the in-lieu fee is required prior to approval of the final map. This condition will be verified by the Land Use and Natural Resources Division and the County Surveyor prior to approval of the final map.

XVII. TRANSPORTATION:

Issues and Supporting Information Sources	<i>Potentially Significant Impact</i>	<i>Less-than- Significant With Mitigation Incorporation</i>	<i>Less-than- Significant Impact</i>	<i>No Impact</i>
Would the Proposed Project/:				
a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Environmental Setting:

The project will be accessed off Soulsbyville Road via a gated private access road. Internal looped driveways will provide access to each of the residences. There will not be through access on the internal roads. Road plans are reviewed by the Engineering Division of the Department of Public Works in conjunction with the site grading plans. An encroachment permit will be required prior to developing the access onto Soulsbyville Road.

Public transit is provided by Tuolumne County Transit. Services are available in the mornings, afternoons, and evenings and are available five days a week. The nearest transit stop to the project site is located at the Willow Springs Clubhouse. Tuolumne County also has a “dial-a-ride” program available on demand for the route serving the area. There are no sidewalks in the project vicinity, however a crosswalk is located to the south of the site, which accesses a pathway to Soulsbyville Elementary School. There are no bike lanes in the project vicinity.

Goals, policies, and implementation programs regarding Tuolumne County’s circulation system, including transit, roadway, bicycle, and pedestrian facilities, are contained within the Transportation Element in Chapter 4 of the 2018 General Plan. The Regional Transportation Plan (RTP), adopted by the Tuolumne county Transportation Council (TCTC), acts as the planning document to guide transit investments within Tuolumne County for the next 5 years. In addition, the project has been reviewed for consistency with applicable road standards found in Titles 11 and 15 of the Tuolumne County Ordinance Code and the California Fire Code.

Vehicle Miles Traveled

On August 4, 2020, the Board of Supervisors adopted CEQA thresholds regarding vehicle miles traveled (VMT) as required by Senate Bill (SB) 743. As stated in the legislation, upon adoption of the new guidelines, “automobile delay, as described solely by level of service or similar measures of vehicular capacity or traffic congestion shall not be considered a significant impact on the environment pursuant to this division, except in locations specifically identified in the guidelines, if any.”

While this project was deemed complete prior to adoption of the VMT thresholds, this subject is still discussed in this report. The Board of Supervisors adopted screening criteria for projects- if a project meets any of the screening criteria, the project’s impacts on VMT would be less than significant. Included in this screening criteria is residential projects located within a low VMT areas defined by Tuolumne County Transportation Council VMT maps.

In addition to analyzing a project's VMT generation, the County also analyzes projects based on vehicle trips per day or Level of Service, as required in the Tuolumne County General Plan. A site-specific traffic study is required when traffic generation for a project exceeds 500 vehicle trips per day or 50 trips during peak hours.

Analysis:

- a) Goals, policies, and implementation programs regarding Tuolumne County's circulation system, including transit, roadway, bicycle, and pedestrian facilities, and contained within the Transportation Element in Chapter 4 of the 2018 General Plan. Specific road design standards are found in Titles 11 and 15 of the Tuolumne County Ordinance Code. The following goals, policies, and implementation programs of the General Plan apply to the project:

Policy 4.A.2: *Dedicate, widen and construct roads according to design and access standards generally defined in Chapter 4 of the General Plan Technical Background Report and, more specifically, the County Ordinance Code and the Countywide Traffic Circulation Improvement Program. Exceptions to these standards may be necessary and shall be approved by the Community Resources Agency Director, who shall ensure that safe and adequate public access and circulation are preserved by such exceptions.*

Implementation Programs 4.A.e - *Require that roadway rights-of-way be wide enough to accommodate the lanes needed to carry long-range forecasted traffic volumes, as well as planned bikeways, pedestrian and transit facilities and required drainage, utilities, landscaping, cuts and fills, and suitable separations. Minimum right-of-way criteria for each class of roadway are specified in Chapter 4 of the General Plan Technical Background Report and the County Ordinance Code.*

Implementation Program 4.A.i - *Maximize intersection spacing on arterial and collector roadways and thoroughfares and minimize driveway encroachments. Except where specific site conditions warrant, no new intersection of a local road or new driveway with an arterial or collector road shall be closer to an existing local road or driveway than 500 feet in rural areas or 200 feet within urban areas.*

Road construction and design will be reviewed for conformance with applicable road standards, including widths and shoulders, found in Titles 11 and 15 of the Tuolumne County Ordinance Code, Tuolumne County General Plan, and California Fire Code upon submittal of a grading plan and road improvement plan to the Engineering Division of the Public Works. The encroachment plan will also be reviewed by the Engineering Division to ensure appropriate distances and standards are applied. The project includes the provisions for internal sidewalks. The review by the Engineering Division will ensure that the project will be consistent with applicable program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. Therefore, there is a less than significant impact.

Implementation Program 4.A.p - *Evaluate and analyze the traffic impacts of proposed land uses in relation to stated goals and objectives of the General Plan since growth policies regarding land use decisions directly affect the existing and future transportation system.*

Implementation Program 4.A.q - *Evaluate the impacts of new development on the County's transportation system and require such development to provide mitigation for its fair share of the impact.*

The County's threshold for requiring a Traffic Study is 500 vehicle trips per day or 50 trips at peak hours. The estimated traffic generation is 7.4 daily trips for each single-family dwelling. A total of 25 residential dwelling units are proposed. Therefore, the project is estimated at generating 185 vehicle trips per day at full build out. The estimated traffic generation of the project is below the threshold and is therefore considered a less than significant impact.

- b) The site is located in an area where VMT per Capita is 3%-14% below the County Average. Because the project is in an area that is below the County average, it is classified as a "Low VMT" area on the TCTC VMT maps, and the project's impacts on VMT are less than significant.
- c) The project site will be accessed off Soulsbyville Road, a county-maintained, publicly dedicated road. There will be one point of access onto Soulsbyville Road. Access to each of the residences will be provided via internal, privately maintained roads and driveways. The internal roads will be required to comply with all applicable standards for road design, including minimum width requirements, requirements for turnarounds, and curve radii. The project proponent must submit road plans to the Engineering Division of the Department of Public Works in conjunction with the site grading plans to review the road designs and ensure consistency with all applicable standards. The project proponent will be required to secure an Encroachment Permit prior to work within or access onto the Soulsbyville Road right-of-way. The purpose of the Encroachment Permit is to ensure that all connections with County roadways, including private driveways, allow for safe travel, both for those using the roadways as well as anyone entering into or exiting a driveway. Sight distance is factored into the decision to approve or deny an encroachment request. The project has been conditioned to require the project proponent to secure an Encroachment Permit. An encroachment detail must be submitted to the Engineering Division of the Department of Public Works for review and approval.

The project has also been conditioned to require a grading plan and parking area plan to be submitted to the Engineering Division for review and approval. These plans are required to address the roadway construction and internal circulation. Approval of the grading plan and parking area plan will ensure that the roads are constructed to meet all standards and that the project will not introduce hazardous design. The project will be developed with single-family dwellings. Therefore, the users of the road will be limited to vehicle traffic of residents and visitors of the subdivision. There will not be any incompatible uses of the roadways. The impact will be less than significant.

- d) The proposed internal roads will be designed and constructed in accordance with all applicable regulations contained in Titles 11 and 15 of the Tuolumne County Ordinance Code and the California Fire Code to allow for sufficient emergency vehicle access, including width and clearance of the roadways, the surfacing of the roadways, and turnaround bulbs and hammerheads for emergency vehicles. The Tuolumne County Fire Prevention Division reviewed the proposed project and provided conditions to ensure compliance with these requirements. These conditions have been incorporated into the projects' conditions of approval. Therefore, there will be a less than significant impact.

Mitigation Measures: None required.

Mitigation Monitoring: Not applicable.

XVIII. TRIBAL CULTURAL RESOURCES:

Issues and Supporting Information Sources

<i>Potentially Significant Impact</i>	<i>Less-than- Significant with Mitigation Incorporation</i>	<i>Less-than- Significant Impact</i>	<i>No Impact</i>
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Would the Proposed Project/Action:

Cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

- | | | | | |
|--|--------------------------|-------------------------------------|--------------------------|--------------------------|
| a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or pursuant to Section 15064.5? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe. | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Environmental Setting

CEQA requires lead agencies to consider whether projects will affect tribal cultural resources. PRC 21074 states the following:

- a) "Tribal cultural resources" are either of the following:
 - 1) Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:
 - A) Included or determined to be eligible for inclusion in the CRHR.
 - B) Included in a local register of historical resources as defined in subdivision (k) of Section 5020.1.
 - 2) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Section 5024.1. In applying the criteria set forth in subdivision (c) of Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.
- b) A cultural landscape that meets the criteria of subdivision (a) is a tribal cultural resource to the extent that the landscape is geographically defined in terms of the size and scope of the landscape.
- c) A historical resource described in Section 21084.1, a unique archaeological resource as defined in subdivision (g) of Section 21083.2, or a "nonunique archaeological resource" as defined in subdivision (h) of Section 21083.2 may also be a tribal cultural resource if it conforms with the criteria of subdivision (a).

AB 52, signed by the California Governor in September of 2014, establishes a new class of resources under CEQA: "tribal cultural resources." It requires that lead agencies undertaking CEQA review must, upon written request of a California Native American tribe, begin consultation once the lead agency determines that the application for the project is complete, prior to the issuance of a notice of preparation of an EIR or notice of intent to adopt a negative declaration or mitigated negative declaration.

To date, two tribal entities have contacted the Tuolumne County Community Development Department to request formal consultation under the AB 52 process. The Chicken Ranch Rancheria of Me-Wuk Indians and Tuolumne Band of Me-Wuk Indians have requested formal consultation under the AB 52 process for projects

subject to CEQA.

In accordance with Senate Bill 52, formal consultation letters were sent to the contacts for the Chicken Ranch Rancheria of Me-Wuk Indians and Tuolumne Band of Me-Wuk Indians Tribes. AB 52 consultation letters were sent via certified mail on April 13, 2020. Informal project notification letters were sent to both Tribes on January 30, 2020 during the initial project notification period.

Analysis:

- a,b) In accordance with Senate Bill 52, formal consultation letters were sent to the contacts for the Chicken Ranch Rancheria of Me-Wuk Indians and Tuolumne Band of Me-Wuk Indians Tribes. AB 52 consultation letters were sent via certified mail on April 13, 2020. Informal project notification letters were sent to both Tribes on January 30, 2020 during the initial project notification period.

The Tuolumne Band of Me-Wuk Indians requested consultation on the project. The Tribe met with County staff and project applicant on the project site on July 29, 2020. At the consultation meeting, the Tribe and County agreed on additional Mitigation Measures to ensure protection of resources on site. The Tribe requested that a Tribal Monitor be present on-site during construction and earth disturbing activities. Mitigation Measure CUL-5 has been incorporated to require a Tribal Monitor. The Tribe also expressed concern of how to protect the resources in the future once the project is built out. The resources are contained within O-1 zoning, so they are protected from any disturbance due to development, but the Tribe had concerns about future property owners' impact on the resources. The Tribes preferred method of protection would be to incorporate signage that identifies the resources and educates people of the resource and the importance to the Tribe. Mitigation Measure CUL-6 has been incorporated to include this measure.

Incorporation of Mitigation Measures CUL-1 through CUL-6 will result in a less than significant impact on Tribal Cultural Resources.

Mitigation Measures: See Cultural Resources section of this report.

Mitigation Monitoring: See Cultural Resources section of this report.

XIX. UTILITIES AND SERVICE SYSTEMS:

Issues and Supporting Information Sources		Potentially Significant Impact	Less-than- Significant With Mitigation Incorporation	Less-than- Significant Impact	No Impact
Would the Proposed Project/Action:					
a)	Require or result in the relocation or construction of new or expanded water wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b)	Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c)	Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d)	Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e)	Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Environmental Setting:

The project site is located within the area that is served public water and sewer by TUD. TUD maintains a treated water system, also referred to as a "water distribution system" which includes TUD's 14 surface water treatment plants, 25 water wells, and the treated water customer service meters, which consists of 17 separate distribution systems. Surface water makes up approximately 96% of TUD's water supply, which originates as rainfall and snowpack runoff that fill TUD's reservoirs. The remaining 4% of TUD's water supply consists of groundwater from 30 wells that TUD maintains.

TUD operates a wastewater treatment plan in the City of Sonora, which treats water from the TUD and Twain Harte Community Services District wastewater collection systems. The wastewater treatment plant provides primary and secondary treatment of wastewater.

Pacific Gas and Electric provides electric service to the project site. There is no natural gas consumption in Tuolumne County. There are existing telecommunications facilities that serve the area.

Cal Sierra Disposal Inc, which is owned by Waste Management, is responsible for garbage and recycling collection in the Sonora area. Chapter 8.05 of the Tuolumne County Ordinance Code contains the County's regulations for refuse, rubbish, and recycling handling and storage. All of the solid waste generated within the County is processed at one of the transfer stations where solid waste is sorted to remove recyclables and hazardous materials from the waste stream. Residual waste is transported to the Highway 59 Landfill located in Merced. The maximum capacity of the Highway 59 Landfill is 30,012,352 cubic yards.

Cal Sierra Disposal operates a buy-back center at 14959 Camage Avenue, in East Sonora. Untreated wood and yard waste are presently accepted by Cal Sierra Disposal at its Earth Resources Facility located at 14909 Camage Avenue. Such material is accepted for a fee and is ground up or chipped and sold as compost or any other uses deemed appropriate for such material.

Analysis:

- a) The project site is located within an urbanized area with electrical service, telecommunication services, and public wastewater treatment readily available. Stormwater will be handled via an on-site

detention/retention basin. TUD provides water and sewer service to the area. TUD reviewed the project and indicated that there is an 8-inch water main located within the Soulsbyville Road right-of-way adjacent to the project site. A 6-inch sewer main is located on the project site within an existing PUE. TUD responded that there is adequate capacity for water supply, water storage, and wastewater treatment.

PG&E was notified in writing of the project but offered no written comments. Electrical lines are located along Soulsbyville Road adjacent to the project and would not require significant expansion of the lines to provide service to the project site. The project will not require the construction of new or expanded water wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities. Therefore, there will be a less than significant impact.

- b) TUD will provide public water service to the project site. The provision of water service from TUD requires sufficient water supply, treatment, storage, and distribution facilities. Water is supplied from the South Fork Stanislaus River via Phoenix Lake as a storage reservoir. TUD has indicated that there is adequate water supply and water treatment capacity to serve the project. Therefore, there would be a less than significant impact.
- c) TUD indicated that there is limited capacity for sewer pumping at the existing lift station located adjacent to the northern property boundary. TUD has asked the developer to dedicate a 50' by 100' portion of the project site adjacent to the existing sewer lift station so TUD can develop a new sewer lift station which would replace the existing facility. Once completed, there would be sufficient capacity to serve the project and provide sewer services. See the Biological Resources section for a discussion of impacts and mitigation measures in response to the construction of this lift station. Because the project will support the construction of the new lift station, impacts will be less than significant.
- d,e) The Highway 59 Landfill is below its maximum capacity; therefore, there is capacity to serve the project. Any future construction on the project site or land use would be required to comply with all applicable Federal, State, and Local statutes and regulations related to solid waste. Conditions have been added to the project to ensure compliance with the provisions of Chapter 8.05 of the TCOC, which contains the County's regulations for the storage and handling of solid waste. Therefore, there would be a less than significant impact.

Mitigation Measures: None required.

Mitigation Monitoring: Not applicable.

XX. WILDFIRE:

Issues and Supporting Information Sources	Potentially Significant Impact	Less-than- Significant With Mitigation Incorporation	Less-than- Significant Impact	No Impact
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the Proposed Project:				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Environmental Setting:

In 2018, a Multi-Jurisdictional Hazard Mitigation Plan (Plan) for Tuolumne County was prepared to provide mitigation solutions to minimize each jurisdiction's vulnerability to the identified hazards and ultimately reduce both human and financial losses subsequent to a disaster. The Plan includes existing information on typical hazards, such as earthquakes, flooding, and fire, and provides risk assessments of each hazard and the potential for occurrence within the County. Specific wildland fire objectives provided in the Plan include vegetation management, code enforcement, GIS mapping, and compliance with the planning process. Mitigation actions provided in the Plan range from improving water supply systems and conveyance systems for potential fire needs, initiating fuel thinning and chipping projects in high-priority areas, to updating existing and preparing new fire protection and evacuation plans. The Plan states that Tuolumne County Fire Protection District/CAL FIRE along with seven fire districts and one city fire department provide life and property emergency response. In addition to services traditionally provided by most fire protection agencies nationwide, these agencies work cooperatively with the U.S. Forest Service and the National Park Service in providing wildfire response in Tuolumne County. Although there are existing plans, programs, ordinances, and regulations in place within the County, wildland fire risks and the potential for future fire hazards occurring within the County is considered high (Tuolumne County 2018).

Tuolumne County does not have a static emergency plan or evacuation plan due to the dynamic nature of emergencies. In the event of an emergency, the Tuolumne County Sheriff Office is the responsible entity for declaring and directing evacuations in the case of emergencies. The Sheriff's Department will inform members of the public via the Emergency Notification System, local media, and door-to-door when feasible.

The project site is located within a State Responsibility Area (SRA) and is rated as high and very high fire hazard severity zone. This rating is based on factors of slope, vegetation and annual summer weather patterns. These zones, referred to as Fire Hazard Severity Zones (FHSZ), provide the basis for application of various mitigation strategies to reduce risks to buildings associated with wildland fires. The zones also relate to the requirements for building codes designed to reduce the ignition potential to buildings in the wildland-urban interface zone.

Analysis:

- a) Tuolumne County does not have a static emergency plan or evacuation plan due to the dynamic nature of emergencies. Tuolumne County does not have any designated evacuation routes because fires can happen anywhere and may block specific roads and certain areas may not be safe for travel. The Tuolumne County Sheriff Office is the responsible entity for declaring and directing

evacuations in the case of emergencies. The Sheriff's Department will inform members of the public via the Emergency Notification System, local media, and door-to-door when feasible of where the wildfire is located, which routes are safe to use, and which locations are safe to seek refuge from the fire. Generalized emergency information is also contained within the adopted Multi-Jurisdictional Hazard Mitigation Plan.

In an emergency, the most likely route of travel for residents of the project site would be to utilize Soulsbyville road north toward State Route 108. The addition of 25 dwelling units would not significantly impact the use of this route in the event of an emergency. Approval of this project would result in a less than significant impact on Tuolumne County's emergency or evacuation plans.

- b,c) Slopes on the site range between 1% and 25% surrounding the riparian corridor. Due to the location of the project site to existing roadways and other developed areas, it is unlikely that the project would exacerbate wildfire risks.

The project has been reviewed by the Tuolumne County Fire Prevention Division (FPD) for consistency with the National Fire Code, California Fire Code, California Building Code, the Tuolumne County General Plan and Ordinance Code. Any future development on the project site will be subject to the rules and regulations contained in these documents. Prior to the approval of the final map, the following conditions will be required to be met:

- The project site is located in an area that is rated as a very high fire hazard by the California Department of Forestry and Fire Protection (CalFire). The fire hazard shall be reduced through a fuel modification program approved by the Tuolumne County Fire Prevention Division. The fuel modification program shall provide for the reduction of flammable vegetation by the thinning of brush, small trees and the removal of piles of dead brush from the project site. The fuel modification plan shall be completed by the and inspected by the Fire Prevention Division prior to approval of the Final Map.
- The following statement shall be recorded on the final map: "Modification to Defensible Space Building Setbacks may be made prior to securing a Building Permit subject to approval of the Tuolumne County Fire Prevention Division."
- All proposed access to the project shall be constructed to meet current road requirements. Fire apparatus access roads shall be provided, constructed, and maintained as follows: The roads shall be constructed to have an unobstructed width of not less than 20 feet and an unobstructed vertical clearance of not less than 13 feet 6 inches. The roads shall be designed and maintained to support the imposed loads of fire apparatus and shall be provided with a surface so as to provide all-weather driving capabilities. All cul-de-sac roads shall terminate in a 40' radius turn bulb or approved hammerhead T.
- All streets shall be signed and identified at intersection to allow for a speedy response of emergency equipment. All cul-de-sac roads shall be posted "Not a Through Road."
- All roads accessing the project site shall be cleared of flammable vegetation over 18 inches in height to a distance of 25 feet from the centerline of the road.

Additional conditions have been identified by the FPD to address the requirements for construction and development of the driveways to serve the site and the residential gate. These conditions have been incorporated into the projects' conditions of approval. Additionally, the project proposal consists of the development of on-site fire hydrants. Once developed, each homeowner would be responsible for compliance with defensible space requirements as enforced by CalFire through annual property inspections.

The incorporation of these conditions and compliance with the National Fire Code, California Fire Code, California Building Code, the Tuolumne County General Plan, and Tuolumne County Ordinance Code would reduce the risk of wildfire and would not exacerbate wildfire risks or the risk of uncontrolled spread of wildfire. Project development would not require the installation or maintenance of associated infrastructure. Therefore, there would be a less than significant impact.

- d) As discussed under “Geology and Soils,” and “Hydrology and Water Quality,” runoff occurs naturally at the project site and flooding and landslide events are not common within the project area. Once operational, onsite drainage would not affect offsite drainage conditions, including runoff that naturally occurs north of the project site. The project site and surrounding areas have not been subject to burns such that downslope areas would be affected by project development. Impacts would be less than significant.

Mitigation Measures: None required.

Mitigation Monitoring: Not applicable.

XXI. MANDATORY FINDINGS OF SIGNIFICANCE:

Supporting Information Sources

Proposed Project/Action:

a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

Potentially Significant Impact	Less-than- Significant With Mitigation Incorporation	Less-than- Significant Impact	No Impact
--------------------------------------	--	-------------------------------------	--------------

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------	--------------------------

b) Does the project have impacts that are individually limited, but cumulative considerable? ("Cumulative 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)?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	-------------------------------------	--------------------------

c) does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	-------------------------------------	--------------------------

Analysis:

- a) As discussed under "Biological Resources," the project site provides suitable habitat for nesting birds and potentially for special-status plant species. Mitigation has been included that requires preconstruction surveys to identify the presence of these species, avoid or remove them from the construction area (if they are present), and establish disturbance buffers to ensure they are not disturbed during construction. The project site contains an ephemeral drainage that conveys water through the site from north to south; these features may be considered waters of the United States. However, project components would avoid this aquatic feature, with incorporation of mitigation measures to reduce impacts to a less than significant level. In addition, mitigation has been included to ensure the project does not affect riparian habitat.

As discussed in the "Cultural Resources" section, several resources were identified, and mitigation is proposed to reduce impacts to those resources to a less than significant level. It is possible that previously unknown historical or archaeological resources could be discovered during grading and excavation work associated with project construction. Mitigation has been included that would ensure that the project would not result in adverse changes to historical or archaeological resources by requiring cessation of work and implementation of proper data recovery and/or preservation procedures upon discovery of previously unknown resources. Further, there is the potential for unmarked, previously unknown Native American or other graves to be present and be uncovered during construction activities. Mitigation has been included that would ensure that proper procedures would be followed in the event of the discovery of previously unknown human remains. For the reasons above, this would be a less-than-significant impact with mitigation incorporated.

- b) As discussed throughout the "Environmental Checklist," all potentially significant impacts would be reduced to a less-than-significant level with mitigation. In addition, aesthetic, biological resources, cultural and tribal cultural resources, greenhouse gas emissions, noise, and recreation impacts discussed above would result from temporary construction activities and would be limited to the immediate project site, and, therefore, would not combine with impacts from other past, present, and probable future development. Noise-related impacts are also localized and limited to the immediate project vicinity. Operation of the project would be limited a small increase in residential units in the area. The project's potential contribution to significant cumulative impacts would not be considerable

and this impact would be less than significant.

- c) As discussed above in the “Hazards and Hazardous Materials,” construction activities would require the use of hazardous materials such as fuels, lubricants, and solvents. However, all construction activities would be required to comply with existing regulations that would limit exposure of nearby sensitive receptors and construction workers to hazardous materials. Operation of the project would not include the use or storage of any hazardous material and would not result in adverse effects on people. This impact would be less than significant.

Mitigation Measures: None required.

Mitigation Monitoring: Not applicable.

AGENCIES CONTACTED:

Tuolumne County:

Community Development Department, Building and Safety Division
Community Development Department, Environmental Health Division
Department of Public Works, County Surveyor
Department of Public Works, Engineering Division
Department of Public Works, Solid Waste Division
Department of Public Works, Roads
Fire Department, Fire Prevention Division
Sheriff's Department
Sonora Union High School District
Soulsbyville Elementary
Superintendent of Schools
Tuolumne County Transportation Council

State of California:

Department of Fish and Wildlife
Department of Forestry and Fire Protection
Department of Highway Patrol
Department of Transportation, Caltrans District 10
Regional Water Quality Control Board

Other:

AT&T
Audubon Society
Central Sierra Environmental Resource Center
Chicken Ranch Rancheria of Me-Wuk Tribal Council
Citizens for Responsible Growth
Comcast Cable Communications
Pacific Gas & Electric Company
Sierra Club, Tuolumne Group
Jamestown School District
Sonora Union High School District
Tuolumne County Association of Realtors
Tuolumne County Farm Bureau
Tuolumne Heritage Committee
Tuolumne Me-Wuk Tribal Council
Tuolumne Utilities District
United States Fish and Wildlife Service
U.S. Army Corp of Engineers
U.S. Postal Service
Willow Springs Homeowners Association

SOURCES REVIEWED:

Tuolumne County:

2018 General Plan
EIR for the 2018 General Plan Update
Zoning Ordinance (Title 17)
Land Divisions Ordinance (Title 16)
Road Standards (Title 11)
Connecting Roadways (Chapter 12.04)
Grading Ordinance (Chapter 12.20)
Water and Sewers (Title 13)

Construction Codes (Chapter 15.04)
Fire Code (Chapter 15.08)
Fire Safety Standards (Chapter 15.20)
Traffic Impact Mitigation Fees (Chapter 3.54)
County Service Impact Mitigation Fees (Chapter 3.50)
Rubbish, Refuse and Recyclables (8.05)
Geotechnical Interpretive Maps
General Plan Maps
Wildlife Habitat Maps
Tuolumne County Wildlife Handbook
Wildlife Aerial Photography
Fire Hazard Maps
Deer Herd Maps
Regional Transportation Plan
Historic/Archeological Index to Studies

Other:

California Air Resources Board. 2005 (April). *Air Quality and Land Use Handbook: A Community Health Perspective*. Available: <https://ww3.arb.ca.gov/ch/handbook.pdf>. Accessed September 9, 2020.

California Air Resources Board. 2016. *California's Advanced Clean Cars Program*. Available: <https://ww2.arb.ca.gov/our-work/topics/clean-cars> and <https://ww2.arb.ca.gov/news?id=282>. Accessed September 9, 2020.

California Department of Conservation. 2018. Geologic Map of California. Available: <https://maps.conservation.ca.gov/cgs/gmc/>. Accessed September 14, 2020.

California Energy Commission. 2018a (June 21). 2017 Total System Electric Generation in Gigawatt Hours. Available: <https://www.energy.ca.gov/data-reports/energy-almanac/california-electricity-data/2019-total-system-electric-generation/2018>. Accessed September 9, 2020.

California Energy Commission. 2018b (March). 2019 Building Energy Efficiency Standards: Frequently Asked Questions. Available: https://ww2.energy.ca.gov/title24/2019standards/documents/Title24_2019_Standards_detailed_faq.pdf. Accessed September 11, 2020.

California Environmental Quality Act

California Public Utilities Commission. 2018. California Renewables Portfolio Standard (RPS). Available: <https://www.cpuc.ca.gov/rps/>. Accessed September 9, 2020.

Census Bureau - Biannual Population Estimates, Department of Finance

Consulting Engineers and Land Surveyors of California: "2018 Planning and Zoning Law"

Cultural Resources Survey, Springer Subdivision near Soulsbyville, Tuolumne County, California, Charla M. Francis of Francis Heritage LLC, Sonora California, and Terry Brejla of Foothill Resource Ltd, Murphys California, June 2013.

Federal Transit Administration. 2006 (May). *Transit Noise and Vibration Impact Assessment*. FTA-VA-90-1003-03. Washington, DC.

Natural Diversity Data Base Maps, Department of Fish & Wildlife

Office of Environmental Health Hazard Assessment. 2015 (February). *Air Toxics Hot Spots Program: Risk Assessment Guidelines, Guidance Manual for Preparation of Health Risk Assessments*. Available: <https://oehha.ca.gov/media/downloads/cmr/2015guidancemanual.pdf>. Accessed September 9, 2020.

Tuolumne County Regional Blueprint Greenhouse Gas Study, Rincon Consultants, Inc., San Luis Obispo, January 2012.

Tuolumne County. 2007. *Tuolumne County Water Quality Plan*. Available: <https://www.tuolumnecounty.ca.gov/DocumentCenter/View/7570/Tuolumne-County-Water-Quality-Plan?bidId=>. Accessed September 9, 2020.

Tuolumne County. 2018. *Tuolumne County Multi-Jurisdictional Hazards Mitigation Plan*. Volume 1: Countywide Elements, 2018 Update, Revision 3. Available: <https://www.tuolumnecounty.ca.gov/DocumentCenter/View/8045/TuolumneLHMP2018?bidId=>. Accessed September 9, 2020.

PREPARED BY: Natalie Rizzi, Land Use Coordinator
Quincy Yaley, AICP, Community Development Director
Steve Gregory, Fire Prevention Bureau
Dave Ruby, Department of Public Works
Brian Bell, Chief Building Official

S:\Planning\PROJECTS\Rezone\2019\IRZ19-014 Kenning Properties (TSM19-049 & PUD19-001)\CEQA Documents\Initial Study- Springer .doc



OFFICE OF ENVIRONMENTAL COORDINATOR

Quincy Yaley, AICP
Environmental Coordinator

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MITIGATED NEGATIVE DECLARATION

**PROJECT
PROPONENT:**

Kenning Properties

**PROJECT
NUMBER:**

Zone Change RZ19-014, Tentative Subdivision Map TSM19-049, and Planned Unit Development PUD19-001

**PROJECT
DESCRIPTION:**

1. Zone Change RZ19-014 to rezone a 6.1± acre parcel from RE-2 (Residential Estate, Two Acre Minimum) and O-1 (Open Space-1) to R-1:PD (Single-Family Residential:Planned Unit Development Combining) and O-1:PD (Open Space-1:Planned Unit Development Combining) under Title 17 of the Tuolumne County Ordinance Code.
2. Tentative Subdivision Map TSM19-049 to divide a 6.1± acre parcel into 25 residential parcels and 3 common area parcels.
3. Planned Unit Development PUD19-001 to allow the following:
 - a. Reduction in the minimum lot size
 - b. Reduction in the minimum width at the front setback line
 - c. Reduction in the required building setbacks
 - d. Reduction in the number and location of public utility easements
 - e. Increase in the maximum floor area ratio

LOCATION:

The project site is located at 20313 Soulsbyville Road, approximately 2,000± feet southeast of the intersection of State Highway 108 and Soulsbyville Road. The project site is within a portion of Section 30, Township 2 North, Range 16 East, Mount Diablo Baseline and Meridian, and within Supervisorial District 2. Assessor's Parcel Number 067-010-16.

**ASSESSOR'S
PARCEL NO:**

067-010-16

COUNTY:

County of Tuolumne

LEAD AGENCY:

Tuolumne County Community Development Department

DETERMINATION

In accordance with the California Environmental Quality Act (CEQA), the Environmental Coordinator for the County has conducted an Initial Study to determine whether the proposed project may have a significant effect on the environment. On the basis of that study and the following findings, the Environmental Coordinator makes the following determination:

- [] The proposed project **will not** have a significant effect on the environment and a Negative Declaration has been prepared.

- [X] Although the project, as originally proposed, had a potential to have a significant effect on the environment, the project has been modified by incorporating measures to mitigate the potential impacts into the conditions of approval; therefore, a Mitigated Negative Declaration has been prepared.

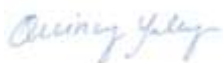
The attached Initial Study incorporates all relevant information regarding the potential environmental effects of the project, includes project mitigation measures, and confirms the determination that an Environmental Impact Report (EIR) is not required for the project.

FINDINGS

- A. The proposed project will not result in significant adverse impacts to the environment.
- B. The Mitigated Negative Declaration was prepared in accordance with the California Environmental Quality Act (CEQA) and State and County Guidelines for the implementation of CEQA.
- C. The Mitigated Negative Declaration reflects the independent judgment of the County of Tuolumne.
- D. Pursuant to Section 21081.6(a)(1) of the Public Resources Code, a reporting and/or monitoring plan has been prepared, as incorporated into the conditions of project approval, in order to avoid significant effects to the environment.
- E. The conditions of project approval are roughly proportional to the respective potential environmental impacts associated with the proposed project.
- F. Pursuant to Section 21081.6(a)(2) of the Public Resources Code, the custodian and location of the documents and materials which constitute the record of proceedings upon which this decision to adopt the Mitigated Negative Declaration had been made are as follows:

Environmental Coordinator/Community Development Department Director, Tuolumne County
Community Development Department, 48 Yaney, Sonora, California.

Fire Protection, Tuolumne County Fire Department, 48 Yaney, Sonora, California.



Quincy Yaley, AICP
Environmental Coordinator

September 29, 2020
Date

QY:nr

Appendix A:

Kenning Properties Soulsbyville Project - Tuolumne County, Annual

Kenning Properties Soulsbyville Project Tuolumne County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	25.00	Dwelling Unit	6.10	50,000.00	72

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	66
Climate Zone	1			Operational Year	2022
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Per project description

Table Name	Column Name	Default Value	New Value
tblLandUse	LandUseSquareFeet	45,000.00	50,000.00
tblLandUse	LotAcreage	8.12	6.10
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural

2.0 Emissions Summary

[illegible]

Kenning Properties Soulsbyville Project - Tuolumne County, Annual

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	3-1-2021	5-31-2021	0.9936	0.9936
2	6-1-2021	8-31-2021	0.6541	0.6541
3	9-1-2021	11-30-2021	0.6480	0.6480
4	12-1-2021	2-28-2022	0.5983	0.5983
5	3-1-2022	5-31-2022	1.0842	1.0842
		Highest	1.0842	1.0842

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.8478	0.0328	2.1222	3.5200e-003		0.2725	0.2725		0.2725	0.2725	26.8239	11.1334	36.9574	0.0241	2.0300e-003	38.1658
Energy	1.6300e-003	0.0140	5.9400e-003	9.0000e-005		1.1300e-003	1.1300e-003		1.1300e-003	1.1300e-003	0.0000	79.2721	79.2721	3.1600e-003	8.9000e-004	79.6155
Mobile	0.1656	0.6084	2.0549	3.8700e-003	0.3145	4.9800e-003	0.3195	0.0846	4.6800e-003	0.0893	0.0000	351.2840	351.2840	0.0215	0.0000	351.8213
Waste						0.0000	0.0000		0.0000	0.0000	3.6538	0.0000	3.6538	0.2159	0.0000	9.0522
Water						0.0000	0.0000		0.0000	0.0000	0.5188	3.6096	4.1263	0.0532	1.2900e-003	5.8408
Total	2.0150	0.6561	4.1830	7.4800e-003	0.3145	0.2786	0.5932	0.0846	0.2783	0.3630	29.9945	445.2991	475.2937	0.3180	4.2100e-003	484.4956

Kenning Properties Soulsbyville Project - Tuolumne County, Annual

2.2 Overall Operational**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.8478	0.0328	2.1222	3.5200e-003		0.2725	0.2725		0.2725	0.2725	25.8239	11.1334	36.9574	0.0241	2.0300e-003	38.1658
Energy	1.6300e-003	0.0140	5.9400e-003	9.0000e-005		1.1300e-003	1.1300e-003		1.1300e-003	1.1300e-003	0.0000	79.2721	79.2721	3.1600e-003	8.9000e-004	79.6155
Mobile	0.1656	0.6084	2.0549	3.8700e-003	0.3145	4.9800e-003	0.3195	0.0846	4.6800e-003	0.0893	0.0000	351.2840	351.2840	0.0215	0.0000	351.8213
Waste						0.0000	0.0000		0.0000	0.0000	3.6538	0.0000	3.6538	0.2159	0.0000	9.0522
Water						0.0000	0.0000		0.0000	0.0000	0.5188	3.6096	4.1263	0.0532	1.2900e-003	5.8408
Total	2.0150	0.6561	4.1830	7.4800e-003	0.3145	0.2786	0.5932	0.0846	0.2783	0.3630	29.9945	445.2991	475.2937	0.3180	4.2100e-003	484.4956

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail**Construction Phase**

Kenning Properties Soulsbyville Project - Tuolumne County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	3/1/2021	3/26/2021	5	20	
2	Site Preparation	Site Preparation	3/27/2021	4/9/2021	5	10	
3	Grading	Grading	4/10/2021	5/7/2021	5	20	
4	Building Construction	Building Construction	5/8/2021	3/25/2022	5	230	
5	Paving	Paving	3/26/2022	4/22/2022	5	20	
6	Architectural Coating	Architectural Coating	4/23/2022	5/20/2022	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 0

Residential Indoor: 101,250; Residential Outdoor: 33,750; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0
(Architectural Coating – sqft)

OffRoad Equipment

Kenning Properties Soulsbyville Project - Tuolumne County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Demolition	Excavators	3	8.00	158	0.38
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Excavators	1	8.00	158	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Paving	Pavers	2	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Paving	Paving Equipment	2	8.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

Kenning Properties Soulsbyville Project - Tuolumne County, Annual

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	9.00	3.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	2.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0317	0.3144	0.2157	3.9000e-004		0.0155	0.0155		0.0144	0.0144	0.0000	34.0008	34.0008	9.5700e-003	0.0000	34.2400
Total	0.0317	0.3144	0.2157	3.9000e-004		0.0155	0.0155		0.0144	0.0144	0.0000	34.0008	34.0008	9.5700e-003	0.0000	34.2400

Kenning Properties Soulsbyville Project - Tuolumne County, Annual

3.2 Demolition - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0100e-003	1.8400e-003	0.0147	2.0000e-005	1.8400e-003	2.0000e-005	1.8600e-003	4.9000e-004	2.0000e-005	5.1000e-004	0.0000	1.6854	1.6854	1.4000e-004	0.0000	1.6888
Total	2.0100e-003	1.8400e-003	0.0147	2.0000e-005	1.8400e-003	2.0000e-005	1.8600e-003	4.9000e-004	2.0000e-005	5.1000e-004	0.0000	1.6854	1.6854	1.4000e-004	0.0000	1.6888

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0317	0.3144	0.2157	3.9000e-004		0.0155	0.0155		0.0144	0.0144	0.0000	34.0007	34.0007	9.5700e-003	0.0000	34.2400
Total	0.0317	0.3144	0.2157	3.9000e-004		0.0155	0.0155		0.0144	0.0144	0.0000	34.0007	34.0007	9.5700e-003	0.0000	34.2400

Kenning Properties Soulsbyville Project - Tuolumne County, Annual

3.2 Demolition - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0100e-003	1.8400e-003	0.0147	2.0000e-005	1.8400e-003	2.0000e-005	1.8600e-003	4.9000e-004	2.0000e-005	5.1000e-004	0.0000	1.6854	1.6854	1.4000e-004	0.0000	1.6888
Total	2.0100e-003	1.8400e-003	0.0147	2.0000e-005	1.8400e-003	2.0000e-005	1.8600e-003	4.9000e-004	2.0000e-005	5.1000e-004	0.0000	1.6854	1.6854	1.4000e-004	0.0000	1.6888

3.3 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0194	0.2025	0.1058	1.9000e-004		0.0102	0.0102		9.4000e-003	9.4000e-003	0.0000	16.7179	16.7179	5.4100e-003	0.0000	16.8530
Total	0.0194	0.2025	0.1058	1.9000e-004	0.0903	0.0102	0.1006	0.0497	9.4000e-003	0.0591	0.0000	16.7179	16.7179	5.4100e-003	0.0000	16.8530

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3.3 Site Preparation - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2100e-003	9.8000e-004	8.8400e-003	1.0000e-005	1.1000e-003	1.0000e-005	1.1200e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	1.0112	1.0112	8.0000e-005	0.0000	1.0133
Total	1.2100e-003	9.8000e-004	8.8400e-003	1.0000e-005	1.1000e-003	1.0000e-005	1.1200e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	1.0112	1.0112	8.0000e-005	0.0000	1.0133

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0194	0.2025	0.1058	1.9000e-004		0.0102	0.0102		9.4000e-003	9.4000e-003	0.0000	16.7178	16.7178	5.4100e-003	0.0000	16.8530
Total	0.0194	0.2025	0.1058	1.9000e-004	0.0903	0.0102	0.1006	0.0497	9.4000e-003	0.0591	0.0000	16.7178	16.7178	5.4100e-003	0.0000	16.8530

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3.3 Site Preparation - 2021**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2100e-003	9.8000e-004	8.8400e-003	1.0000e-005	1.1000e-003	1.0000e-005	1.1200e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	1.0112	1.0112	8.0000e-005	0.0000	1.0133
Total	1.2100e-003	9.8000e-004	8.8400e-003	1.0000e-005	1.1000e-003	1.0000e-005	1.1200e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	1.0112	1.0112	8.0000e-005	0.0000	1.0133

3.4 Grading - 2021**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0655	0.0000	0.0655	0.0337	0.0000	0.0337	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0229	0.2474	0.1586	3.0000e-004		0.0116	0.0116		0.0107	0.0107	0.0000	26.0537	26.0537	8.4300e-003	0.0000	26.2644
Total	0.0229	0.2474	0.1586	3.0000e-004	0.0655	0.0116	0.0771	0.0337	0.0107	0.0443	0.0000	26.0537	26.0537	8.4300e-003	0.0000	26.2644

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3.4 Grading - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0100e-003	1.8400e-003	0.0147	2.0000e-005	1.8400e-003	2.0000e-005	1.8600e-003	4.9000e-004	2.0000e-005	5.1000e-004	0.0000	1.6854	1.6854	1.4000e-004	0.0000	1.6888
Total	2.0100e-003	1.8400e-003	0.0147	2.0000e-005	1.8400e-003	2.0000e-005	1.8600e-003	4.9000e-004	2.0000e-005	5.1000e-004	0.0000	1.6854	1.6854	1.4000e-004	0.0000	1.6888

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0655	0.0000	0.0655	0.0337	0.0000	0.0337	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0229	0.2474	0.1586	3.0000e-004		0.0116	0.0116		0.0107	0.0107	0.0000	26.0537	26.0537	8.4300e-003	0.0000	26.2643
Total	0.0229	0.2474	0.1586	3.0000e-004	0.0655	0.0116	0.0771	0.0337	0.0107	0.0443	0.0000	26.0537	26.0537	8.4300e-003	0.0000	26.2643

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3.4 Grading - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0100e-003	1.6400e-003	0.0147	2.0000e-005	1.8400e-003	2.0000e-005	1.8600e-003	4.9000e-004	2.0000e-005	5.1000e-004	0.0000	1.6854	1.6854	1.4000e-004	0.0000	1.6888
Total	2.0100e-003	1.6400e-003	0.0147	2.0000e-005	1.8400e-003	2.0000e-005	1.8600e-003	4.9000e-004	2.0000e-005	5.1000e-004	0.0000	1.6854	1.6854	1.4000e-004	0.0000	1.6888

3.5 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1616	1.4817	1.4089	2.2900e-003		0.0815	0.0815		0.0766	0.0766	0.0000	196.8917	196.8917	0.0475	0.0000	198.0792
Total	0.1616	1.4817	1.4089	2.2900e-003		0.0815	0.0815		0.0766	0.0766	0.0000	196.8917	196.8917	0.0475	0.0000	198.0792

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3.5 Building Construction - 2021**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.1900e-003	0.0309	0.0111	6.0000e-005	1.5000e-003	1.1000e-004	1.6100e-003	4.3000e-004	1.0000e-004	5.3000e-004	0.0000	6.0261	6.0261	2.0000e-004	0.0000	6.0310
Worker	0.0103	8.3400e-003	0.0751	1.0000e-004	9.3900e-003	1.0000e-004	9.4900e-003	2.5000e-003	9.0000e-005	2.5900e-003	0.0000	8.5953	8.5953	7.0000e-004	0.0000	8.6128
Total	0.0115	0.0392	0.0862	1.6000e-004	0.0109	2.1000e-004	0.0111	2.9300e-003	1.9000e-004	3.1200e-003	0.0000	14.6214	14.6214	9.0000e-004	0.0000	14.6438

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1616	1.4817	1.4089	2.2900e-003		0.0815	0.0815		0.0766	0.0766	0.0000	196.8915	196.8915	0.0475	0.0000	198.0790
Total	0.1616	1.4817	1.4089	2.2900e-003		0.0815	0.0815		0.0766	0.0766	0.0000	196.8915	196.8915	0.0475	0.0000	198.0790

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3.5 Building Construction - 2021**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.1900e-003	0.0309	0.0111	6.0000e-005	1.5000e-003	1.1000e-004	1.6100e-003	4.3000e-004	1.0000e-004	5.3000e-004	0.0000	6.0261	6.0261	2.0000e-004	0.0000	6.0310
Worker	0.0103	8.3400e-003	0.0751	1.0000e-004	9.3900e-003	1.0000e-004	9.4900e-003	2.5000e-003	9.0000e-005	2.5900e-003	0.0000	8.5953	8.5953	7.0000e-004	0.0000	8.6128
Total	0.0115	0.0392	0.0862	1.6000e-004	0.0109	2.1000e-004	0.0111	2.9300e-003	1.9000e-004	3.1200e-003	0.0000	14.6214	14.6214	9.0000e-004	0.0000	14.6438

3.5 Building Construction - 2022**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0512	0.4685	0.4909	8.1000e-004		0.0243	0.0243		0.0228	0.0228	0.0000	69.5176	69.5176	0.0167	0.0000	69.9339
Total	0.0512	0.4685	0.4909	8.1000e-004		0.0243	0.0243		0.0228	0.0228	0.0000	69.5176	69.5176	0.0167	0.0000	69.9339

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3.5 Building Construction - 2022**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.8000e-004	0.0104	3.5200e-003	2.0000e-005	5.3000e-004	3.0000e-005	5.6000e-004	1.5000e-004	3.0000e-005	1.9000e-004	0.0000	2.1168	2.1168	7.0000e-005	0.0000	2.1164
Worker	3.4200e-003	2.6600e-003	0.0235	3.0000e-005	3.3100e-003	3.0000e-005	3.3500e-003	8.8000e-004	3.0000e-005	9.1000e-004	0.0000	2.9348	2.9348	2.2000e-004	0.0000	2.9402
Total	3.8100e-003	0.0131	0.0271	5.0000e-005	3.8400e-003	6.0000e-005	3.9100e-003	1.0300e-003	6.0000e-005	1.1000e-003	0.0000	5.0515	5.0515	2.9000e-004	0.0000	5.0586

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0512	0.4685	0.4909	8.1000e-004		0.0243	0.0243		0.0228	0.0228	0.0000	69.5175	69.5175	0.0167	0.0000	69.9339
Total	0.0512	0.4685	0.4909	8.1000e-004		0.0243	0.0243		0.0228	0.0228	0.0000	69.5175	69.5175	0.0167	0.0000	69.9339

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3.5 Building Construction - 2022**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.8000e-004	0.0104	3.5200e-003	2.0000e-005	5.3000e-004	3.0000e-005	5.6000e-004	1.5000e-004	3.0000e-005	1.9000e-004	0.0000	2.1168	2.1168	7.0000e-005	0.0000	2.1164
Worker	3.4200e-003	2.6600e-003	0.0235	3.0000e-005	3.3100e-003	3.0000e-005	3.3500e-003	8.8000e-004	3.0000e-005	9.1000e-004	0.0000	2.9348	2.9348	2.2000e-004	0.0000	2.9402
Total	3.8100e-003	0.0131	0.0271	5.0000e-005	3.8400e-003	6.0000e-005	3.9100e-003	1.0300e-003	6.0000e-005	1.1000e-003	0.0000	5.0515	5.0515	2.9000e-004	0.0000	5.0586

3.6 Paving - 2022**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0110	0.1113	0.1458	2.3000e-004		5.6800e-003	5.6800e-003		5.2200e-003	5.2200e-003	0.0000	20.0276	20.0276	6.4800e-003	0.0000	20.1895
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0110	0.1113	0.1458	2.3000e-004		5.6800e-003	5.6800e-003		5.2200e-003	5.2200e-003	0.0000	20.0276	20.0276	6.4800e-003	0.0000	20.1895

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3.6 Paving - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.9000e-003	1.4800e-003	0.0131	2.0000e-005	1.8400e-003	2.0000e-005	1.8600e-003	4.9000e-004	2.0000e-005	5.1000e-004	0.0000	1.6304	1.6304	1.2000e-004	0.0000	1.6335
Total	1.9000e-003	1.4800e-003	0.0131	2.0000e-005	1.8400e-003	2.0000e-005	1.8600e-003	4.9000e-004	2.0000e-005	5.1000e-004	0.0000	1.6304	1.6304	1.2000e-004	0.0000	1.6335

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0110	0.1113	0.1458	2.3000e-004		5.6800e-003	5.6800e-003		5.2200e-003	5.2200e-003	0.0000	20.0275	20.0275	6.4800e-003	0.0000	20.1895
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0110	0.1113	0.1458	2.3000e-004		5.6800e-003	5.6800e-003		5.2200e-003	5.2200e-003	0.0000	20.0275	20.0275	6.4800e-003	0.0000	20.1895

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3.6 Paving - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.9000e-003	1.4800e-003	0.0131	2.0000e-005	1.8400e-003	2.0000e-005	1.8600e-003	4.9000e-004	2.0000e-005	5.1000e-004	0.0000	1.6304	1.6304	1.2000e-004	0.0000	1.6335
Total	1.9000e-003	1.4800e-003	0.0131	2.0000e-005	1.8400e-003	2.0000e-005	1.8600e-003	4.9000e-004	2.0000e-005	5.1000e-004	0.0000	1.6304	1.6304	1.2000e-004	0.0000	1.6335

3.7 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.7822					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.0500e-003	0.0141	0.0181	3.0000e-005		8.2000e-004	8.2000e-004		8.2000e-004	8.2000e-004	0.0000	2.5533	2.5533	1.7000e-004	0.0000	2.5574
Total	0.7842	0.0141	0.0181	3.0000e-005		8.2000e-004	8.2000e-004		8.2000e-004	8.2000e-004	0.0000	2.5533	2.5533	1.7000e-004	0.0000	2.5574

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3.7 Architectural Coating - 2022**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.5000e-004	2.0000e-004	1.7400e-003	0.0000	2.5000e-004	0.0000	2.5000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	0.2174	0.2174	2.0000e-005	0.0000	0.2178
Total	2.5000e-004	2.0000e-004	1.7400e-003	0.0000	2.5000e-004	0.0000	2.5000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	0.2174	0.2174	2.0000e-005	0.0000	0.2178

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.7822					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.0500e-003	0.0141	0.0181	3.0000e-005		8.2000e-004	8.2000e-004		8.2000e-004	8.2000e-004	0.0000	2.5533	2.5533	1.7000e-004	0.0000	2.5574
Total	0.7842	0.0141	0.0181	3.0000e-005		8.2000e-004	8.2000e-004		8.2000e-004	8.2000e-004	0.0000	2.5533	2.5533	1.7000e-004	0.0000	2.5574

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3.7 Architectural Coating - 2022**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.5000e-004	2.0000e-004	1.7400e-003	0.0000	2.5000e-004	0.0000	2.5000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	0.2174	0.2174	2.0000e-005	0.0000	0.2178
Total	2.5000e-004	2.0000e-004	1.7400e-003	0.0000	2.5000e-004	0.0000	2.5000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	0.2174	0.2174	2.0000e-005	0.0000	0.2178

4.0 Operational Detail - Mobile**4.1 Mitigation Measures Mobile**

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.1856	0.6094	2.0549	3.8700e-003	0.3145	4.9800e-003	0.3195	0.0848	4.8800e-003	0.0893	0.0000	351.2840	351.2840	0.0215	0.0000	351.8213
Unmitigated	0.1856	0.6094	2.0549	3.8700e-003	0.3145	4.9800e-003	0.3195	0.0848	4.8800e-003	0.0893	0.0000	351.2840	351.2840	0.0215	0.0000	351.8213

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	238.00	247.75	215.50	843,658	843,658
Total	238.00	247.75	215.50	843,658	843,658

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Single Family Housing	16.80	7.10	7.90	37.30	20.70	42.00	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Single Family Housing	0.483457	0.047842	0.208016	0.157307	0.049674	0.007506	0.019049	0.011796	0.003290	0.001259	0.006861	0.001784	0.002160

5.0 Energy Detail

Historical Energy Use: N

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5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	63.1078	63.1078	2.8500e-003	5.8000e-004	63.3548
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	63.1078	63.1078	2.8500e-003	5.8000e-004	63.3548
NaturalGas Mitigated	1.6300e-003	0.0140	5.9400e-003	9.0000e-005		1.1300e-003	1.1300e-003		1.1300e-003	1.1300e-003	0.0000	16.1646	16.1646	3.1000e-004	3.0000e-004	16.2606
NaturalGas Unmitigated	1.6300e-003	0.0140	5.9400e-003	9.0000e-005		1.1300e-003	1.1300e-003		1.1300e-003	1.1300e-003	0.0000	16.1646	16.1646	3.1000e-004	3.0000e-004	16.2606

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Single Family Housing	302913	1.6300e-003	0.0140	5.9400e-003	9.0000e-005		1.1300e-003	1.1300e-003		1.1300e-003	1.1300e-003	0.0000	16.1646	16.1646	3.1000e-004	3.0000e-004	16.2606
Total		1.6300e-003	0.0140	5.9400e-003	9.0000e-005		1.1300e-003	1.1300e-003		1.1300e-003	1.1300e-003	0.0000	16.1646	16.1646	3.1000e-004	3.0000e-004	16.2606

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5.2 Energy by Land Use - NaturalGas**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Single Family Housing	302913	1.6300e-003	0.0140	5.9400e-003	9.0000e-005		1.1300e-003	1.1300e-003		1.1300e-003	1.1300e-003	0.0000	16.1646	16.1646	3.1000e-004	3.0000e-004	16.2606
Total		1.6300e-003	0.0140	5.9400e-003	9.0000e-005		1.1300e-003	1.1300e-003		1.1300e-003	1.1300e-003	0.0000	16.1646	16.1646	3.1000e-004	3.0000e-004	16.2606

5.3 Energy by Land Use - Electricity**Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	216930	63.1076	2.8500e-003	5.9000e-004	63.3548
Total		63.1076	2.8500e-003	5.9000e-004	63.3548

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5.3 Energy by Land Use - Electricity**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	216930	63.1076	2.8500e-003	5.9000e-004	63.3548
Total		63.1076	2.8500e-003	5.9000e-004	63.3548

6.0 Area Detail**6.1 Mitigation Measures Area**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.8478	0.0328	2.1222	3.5200e-003		0.2725	0.2725		0.2725	0.2725	25.8239	11.1334	36.9574	0.0241	2.0300e-003	38.1658
Unmitigated	1.8478	0.0328	2.1222	3.5200e-003		0.2725	0.2725		0.2725	0.2725	25.8239	11.1334	36.9574	0.0241	2.0300e-003	38.1658

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6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0782					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1953					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	1.5687	0.0306	1.9363	3.5100e-003		0.2715	0.2715		0.2715	0.2715	25.8239	10.8302	36.6541	0.0238	2.0300e-003	37.8552
Landscaping	5.6100e-003	2.1400e-003	0.1858	1.0000e-005		1.0300e-003	1.0300e-003		1.0300e-003	1.0300e-003	0.0000	0.3032	0.3032	2.9000e-004	0.0000	0.3105
Total	1.8478	0.0328	2.1222	3.5200e-003		0.2725	0.2725		0.2725	0.2725	25.8239	11.1334	36.9574	0.0241	2.0300e-003	38.1658

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6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0782					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1953					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	1.5687	0.0306	1.9363	3.5100e-003		0.2715	0.2715		0.2715	0.2715	25.8239	10.8302	36.6541	0.0238	2.0300e-003	37.8552
Landscaping	5.6100e-003	2.1400e-003	0.1858	1.0000e-005		1.0300e-003	1.0300e-003		1.0300e-003	1.0300e-003	0.0000	0.3032	0.3032	2.9000e-004	0.0000	0.3105
Total	1.8478	0.0328	2.1222	3.5200e-003		0.2725	0.2725		0.2725	0.2725	25.8239	11.1334	36.9574	0.0241	2.0300e-003	38.1658

7.0 Water Detail

7.1 Mitigation Measures Water

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	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	4.1263	0.0532	1.2900e-003	5.8408
Unmitigated	4.1263	0.0532	1.2900e-003	5.8408

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	1.62885 / 1.02688	4.1263	0.0532	1.2900e-003	5.8408
Total		4.1263	0.0532	1.2900e-003	5.8408

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7.2 Water by Land Use**Mitigated**

	Indoor/Outdoor Use	Total CO ₂	CH ₄	N ₂ O	CO ₂ e
Land Use	Mgal	MT/yr			
Single Family Housing	1.62885 / 1.02688	4.1263	0.0532	1.2900e-003	5.8408
Total		4.1263	0.0532	1.2900e-003	5.8408

8.0 Waste Detail**8.1 Mitigation Measures Waste****Category/Year**

	Total CO ₂	CH ₄	N ₂ O	CO ₂ e
	MT/yr			
Mitigated	3.6538	0.2159	0.0000	9.0522
Unmitigated	3.6538	0.2159	0.0000	9.0522

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8.2 Waste by Land Use**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	18	3.6538	0.2159	0.0000	9.0522
Total		3.6538	0.2159	0.0000	9.0522

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	18	3.6538	0.2159	0.0000	9.0522
Total		3.6538	0.2159	0.0000	9.0522

9.0 Operational Offroad

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

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation
