



**CITY OF GRASS VALLEY
COMMUNITY DEVELOPMENT DEPARTMENT**

Initial Study & Proposed Mitigated Negative Declaration –

2418 Ridge Road/1030 Deeken Court

Ridge Village Tentative Subdivision Map

(19PLN-24)

(SCH# _____)

April 15, 2020

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INITIAL STUDY AND MITIGATED NEGATIVE DECLARATION**2418 Ridge Road/1030 Deeken Court – Ridge Village Tentative Subdivision Map**

In accordance with the California Environmental Quality Act (CEQA) Guidelines Section 15063 (Initial Study), the City of Grass Valley has prepared this Initial Study to assess the potential environmental impacts of a proposed Tentative Subdivision Map for the Ridge Village residential project located at 2418 Ridge Road/1030 Deeken Court. On the basis of the Initial Study, the City finds that the proposed project will not have a significant adverse effect on the environment and will not require the preparation of an Environmental Impact Report. Therefore, this Mitigated Negative Declaration has been prepared as the appropriate level of environmental review in accordance with CEQA and the CEQA Guidelines.

Public and Agency Review:

This Initial Study/Mitigated Negative Declaration will be circulated for a 30-day public and agency review commencing April 15, 2020 and ending close of business on May 14, 2020. The Initial Study may be viewed at the City of Grass Valley Community Development Department at the following link: <https://www.cityofgrassvalley.com/pod/environmental-documents>. Written comments on this Initial Study/Mitigated Negative Declaration may also be addressed as noted below.

Project title: 2418 Ridge Road/1030 Deeken Court – Ridge Village Tentative Subdivision Map (19PLN-24)

Lead agency name and address:

City of Grass Valley Community Development Department
125 E. Main Street
Grass Valley, CA 95945

Contact person, phone number, and e-mail:

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Grass Valley, CA 95945
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Project Location and Site Description:

The project is located at 2418 Ridge Road/1030 Deeken Court, situated north of Ridge Road; west of Hughes Road; and east of Slate Creek Road (APNs: 008-050-005 & 008-060-016). The project site contains ±6.35 acres consisting of 2 legal parcels. The project site is located in Section 22, Township 16N, Range 8E on City of Grass Valley 7.5-minute USA quadrangle M.D.B.M. (*Exhibit A – Vicinity Map and Exhibit B – Aerial Photograph*). Approximate coordinates of the center of the site are 39° 23' 39" north and -121° 06' 16" west.

There are no structures on the project site; however, much of the project area has been disturbed due to historic land uses. The project site contains areas of gravel, asphalt, and concrete. The project site fronts on Ridge Road and contains a 60-foot access and public utility easement on the west end connecting to Slate Creek Road.

The project is located at approximately $\pm 2,650$ feet above Mean Sea Level (MSL). The project area is relatively flat ranging between $\pm 2,665$ feet above MSL in the southeastern section of the project area where Deeken Court is located and $\pm 2,600$ feet above MSL in the northwestern section off Slate Creek Road. Drainage in the area is from south to north and within the northern section of the project area drainage is generally from the southwest towards the large pond and wetlands located on the adjacent parcel to the north (**Exhibit C – Site Photographs**).

Surrounding Land Uses:

The property is surrounded by development, primarily low-density residential uses to the north, south and west. A personal storage facility is located south of the property on Ridge Road.

Background:

The subject property was previously a part of a prior approved Ridge Village residential project consisting of 49 lots. The City previously adopted a Mitigated Negative Declaration for the project. The project approval has since expired in 2019.

Project Objective:

The project is a residential infill site located approximately 1 mile from downtown Grass Valley. Compatible with the Urban Low Density and Single Residential (R-1) Zone designations, the Ridge Village Subdivision proposes 24 single family lots ranging in size from $\pm 6,088$ (Lot 24) to $\pm 15,689$ (Lot 15) square feet. The Ridge Village project is anticipated to provide housing for the City's above moderate incomes group in accordance with the City's adopted 2019 – 2027 Housing Element.

Project sponsor's name and address:

Millennium Planning & Engineering
471 Sutton Way, Suite 210
Grass Valley, CA 95959
Attn: Rob Wood, AICP, Principal Planner
(530) 446-5765

PROJECT DESCRIPTION

Tentative Subdivision Map (TSM) – The Ridge Village Project includes a Tentative Subdivision Map for the division of the ± 6.35 acre parcel into 24 single family lots ranging in size from $\pm 6,088$ square feet (Lot 24) to $\pm 15,689$ square feet (Lot 15) in the Single Residential (R-1) Zone.

Additionally, there are two common parcels identified as Lots A & B. Lot A includes Deeken Court and the northwestern boundary of the project area including a landscaped common area, with drainage features and 5-foot pedestrian trail. The pedestrian trail borders the east and north property lines connecting with sidewalk improvements with the proposed road identified as Lot B.

Lot B connects Ridge Road with Slate Creek Road to the east. In total, Lot A is ±36,689 square feet and Lot B is ±43,302 square feet. Lot A will be dedicated to the City. Lot B will be maintained by the Ridge Village Homeowners Association (HOA).

Residential Building Design – The applicant intends on selling individual finished lots for residential construction. Accordingly, no residential floor plans or elevations have been submitted. In lieu of architectural plans, the applicant has submitted residential building design criteria. The building design criteria will be incorporated into the Conditions, Covenants and Restrictions (CC&Rs) for the project. The building design criteria will assure that the home designs comply with the minimum design requirements of the City's Development Code Section 17.44.210 (**Attachment 1 – Ridge Village Design Guidelines**).

Access, Parking & Circulation – Primary ingress/egress is proposed via Ridge Road connecting through to Slate Creek Road.

The roadway through the site, identified as Lot B comprising ±43,703 square feet, is proposed as a modified version of the City Standard Detail ST-14 consisting of two ±13.5 travel lanes with curb, gutter and sidewalk on both sides of the street. The road section is within a 42-foot right-of-way. No parking is proposed on either side of the street (See Section B-B – Residential Street).

Ridge Road is proposed to be widened with an 11-foot travel lane on the north side with 6-foot shoulder and curb, gutter and separated 5-foot sidewalk. The sidewalk is separated with 4-foot landscape strips on either side (See proposed Ridge Road Section).

For each lot, driveways will be a minimum of 20 foot in depth to accommodate off-street parking.

Deeken Court is a private 20-foot graveled access roadway serving five properties to the north. Deeken Court includes a 12-foot travel lane with a 4-foot pedestrian trail (See Section A-A – Deeken Court) Deeken Court will not be modified or abandoned as a result of the project.

Open Space/Trails – An open space/drainage parcel identified as Parcel A will be designated on the western and northern side of the property. The property will be maintained by the established Ridge Village Homeowners Association (HOA).

Landscaping – A preliminary landscape plan has been prepared for the project (Sheet L.1.0). The landscaping will consist of groundcover, shrubs and trees within and along the pedestrian trail; the bio-swale area; and, front yard landscaping for the individual residences. The rear yards shall be the responsibility of the homeowners.

Lighting – Lighting will consist of street lighting, to be installed, along the access way as well as individual lighting for each of the respective homes. The lighting will contain shields to direct lighting downward in accordance with City of Grass Valley Development Code standards.

Fencing – Residential wood fencing will be constructed between the individual homes along the side and rear property lines by each respective builder.

Tree Removal – The project area does not contain any heritage trees that are subject to City of Grass Valley policies; however, with development of the project site, an estimated 16 trees will

be removed. The tree removal plan is identified on Sheet 4 of the project plans. As shown, 16 Pine trees are to be removed ranging in size from 10 to 24 inches.

Grading/Retaining Walls – The project will include the construction of roadways, sidewalks, 24 single family homes, accessory uses and driveways. The project would require cut of $\pm 1,825$ cubic yards and fill of $\pm 1,381$ cubic yards resulting in an export of ± 444 cubic yards. However, due to the size of the lots, the grading is anticipated to balance with small amounts of excess material to be used on-site. No retaining walls are anticipated for the project.

Drainage – A preliminary drainage study has been prepared by *Millennium Planning & Engineering* dated December 2019. Hydrology calculations for the project site have been prepared and include Low Impact Design (LID) measures to retain and treat stormwater runoff based on the required treatment volume of the 85th percentile, 24-hour storm runoff event using volume capture coefficients from the *Urban Runoff Quality Management, WEF Manual Practice No. 23*. According to the Office of Water Programs LID sizing tool, the 85th percentile, 24-hour storm runoff event from impervious area is 1.36 inches.

Stormwater runoff will be collected and routed through a storm drain system that will direct runoff to bioretention treatment areas along the northern boundary of the project site. Overflow runoff will be directed to the pond north of the property.

Drainage systems have been designed to convey 24-hour storm events and mitigate any potential runoff increases as outlined in the City of Grass Valley standards. The proposed project is not anticipated to require additional drainage improvements for the site beyond those outlined in the preliminary drainage study and shown on the Tentative Subdivision Map.

Water Quality Treatment Methods – Storm drainage will be collected and routed through a proposed storm drain system that will end up in bioretention treatment areas. The following list includes Best Management Practices (BMP's) used prior to discharge of flow to existing drainage facilities and creeks.

BMP#

- TC-30 Earthen Swales and Rock Lined Swales are utilized to collect and slowly convey runoff to downstream discharge points. They are designed to treat runoff through filtering and trapping sediment with angular rock lining and/or vegetation in the channel, filtering through a subsoil matrix and infiltration into the underlying soils.
- TC-32 Bioretention areas remove pollutants by filtering runoff through plants and engineered subsurface soil, restores groundwater levels, and reduces peak runoff by capturing and filtering storm water.
- TC-50 Water quality treatment is provided in each Storm Drain Inlet utilizing a 12-inch deep sump. The sump located below the storm drain outlet captures sand and sediment and includes weep holes for infiltration.

The above storm water Quality BMPs provide removal of total suspended solids. The removal efficiency for the proposed multiple treatment system has been determined to be approximately 80-100% effective. (The referenced sources (i.e. Caltrans CASQA) were used to obtain in-field performance data for the selected BMPs).

During construction, additional BMPs including temporary erosion control facilities shall be implemented to control pollutants that have a potential to affect the quality of storm water discharges from the construction site. Implementation of BMPs for construction activities will be in accordance with *California State Water Resources Control Board (SWRCB)* requirements.

Utilities – Water Supply: The subject property will be connected to Nevada Irrigation District (NID) water lines that will be extended to serve the site. The nearest water lines are located along Ridge Road and Slate Creek Road.

Sanitary Sewer: The nearest sanitary sewer connection is located on Ridge Road, which will be extended to serve the site.

Dry Utilities: Dry utilities (i.e., natural gas, electrical supply, telephone, cable) are located along Ridge Road and Slate Creek Road. The proposed project will be connected to existing utilities from these locations.

General Plan Land Use Designation

The project area has a land use designation of Urban Low Density Residential, according to the *City of Grass Valley 2020 General Plan*. The Urban Low-Density Residential classification requires between 1.01 and 4.0 residential units per gross acre. ULD is intended primarily for single family detached houses, although higher density single family patio homes or Town houses could be accommodated, if offset with sufficient open space to maintain gross density with the indicated range. ULD is most compatible with Single Family districts.

The Ridge Village project at ±6.35 acres with 24 single family dwellings is at a density of ±3.77 units per acre.

Zoning Designation

The property is within the Single Residential (R-1) Zone district. The R-1 Zone is applied to areas of the City that are appropriate for neighborhoods of single dwellings on standard urban lots, surrounding the more densely developed City core. The R-1 Zone is consistent with and implements the Urban Low Density (ULD) designation of the General Plan.

Offsite Improvements

No offsite improvements are proposed or anticipated as part of the proposed Ridge Village project.

EXHIBIT A - VICINITY MAP

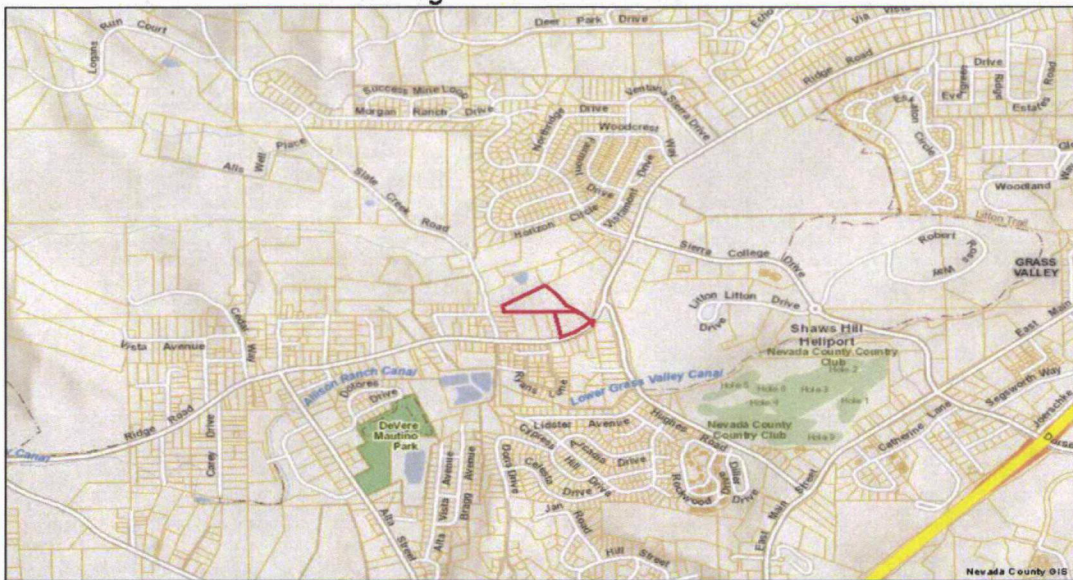


EXHIBIT B - AERIAL PHOTOGRAPH



EXHIBIT C - SITE PHOTOGRAPHS

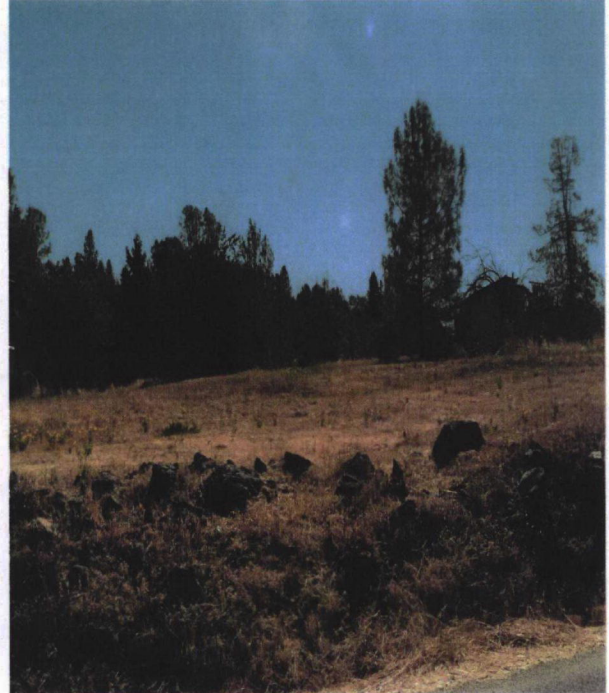
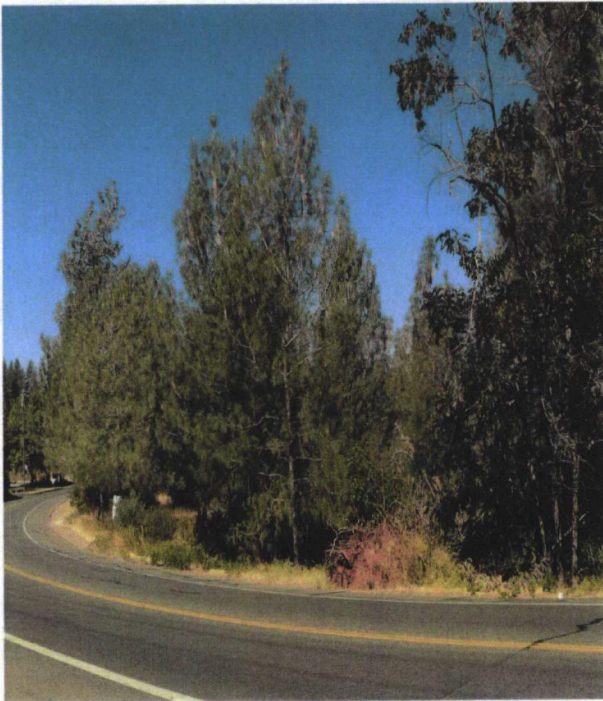
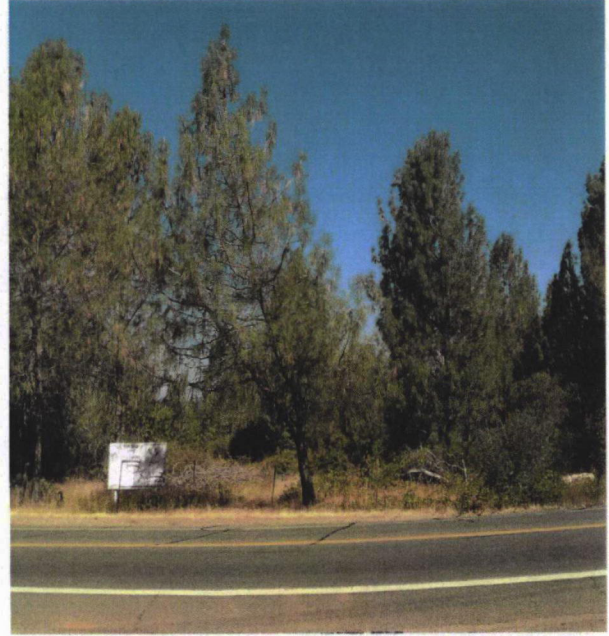
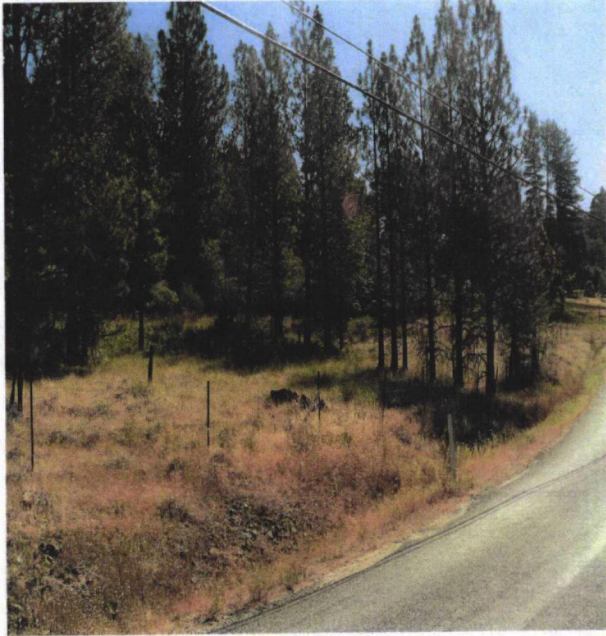
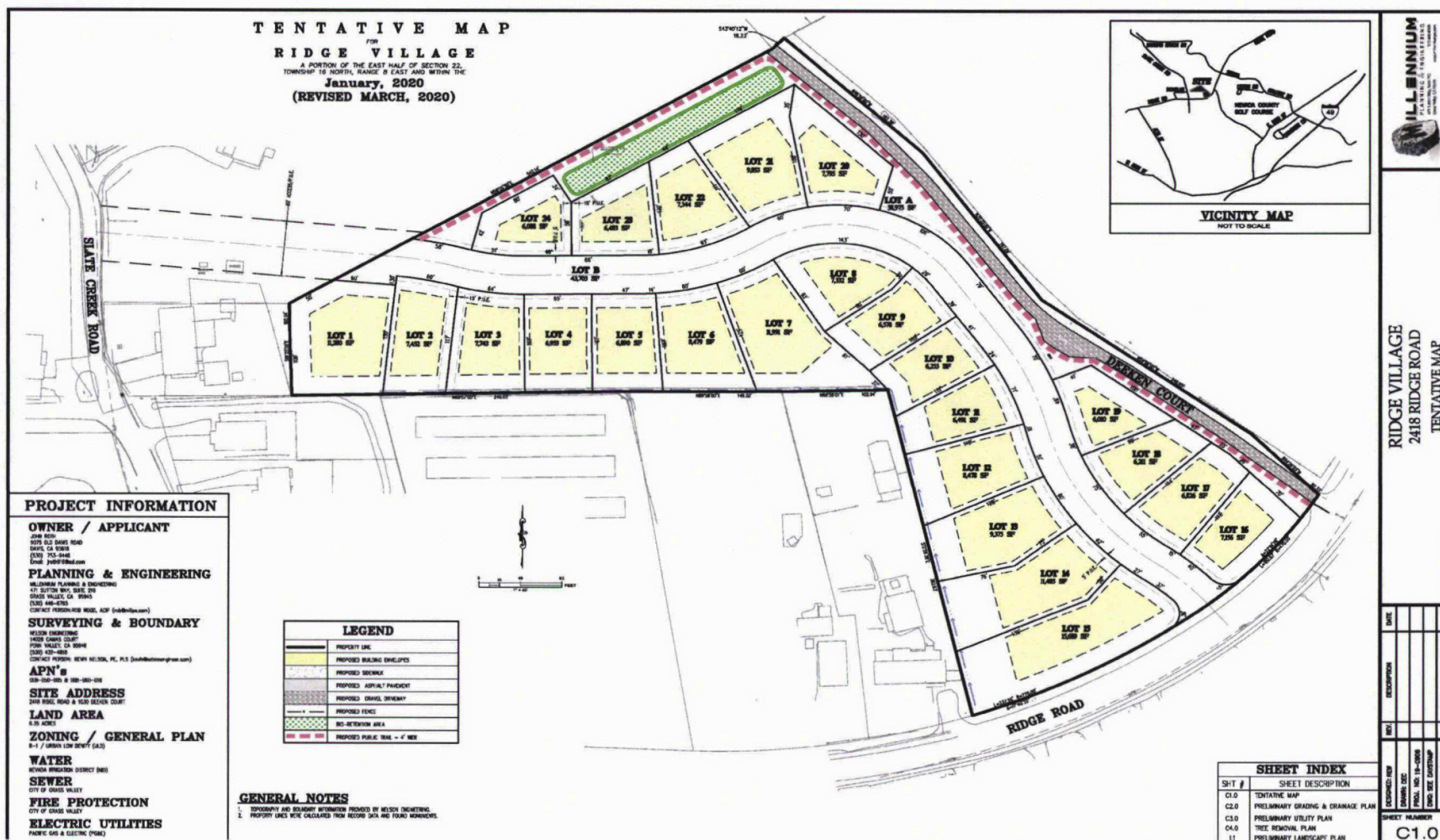


EXHIBIT D – TENTATIVE SUBDIVISION MAP



Regulatory Setting and Required Agency Approvals

The following City of Grass Valley, Responsible and/or Trustee Agency permits are required prior to construction of the project:

- City of Grass Valley Department of Public Works – Improvement Plan, Grading Plan, Encroachment Permit and Tree Permit approvals.
- City of Grass Valley Community Development Department – Site Plan and Building Plan Approvals and Conditions of Approval/Mitigation Measure compliance verification.
- City of Grass Valley Building Department – Building, Plumbing, Mechanical, and Electrical Permits.
- City of Grass Valley Fire Department – Site Plan and Building Plan Approvals.
- Regional Water Quality Control Board (RWQCB) – A Storm Water Pollution Prevention Plan (SWPPP) shall be approved by the RWQCB in accordance with the Clean Water Act.
- Northern Sierra Air Quality Management District (NSAQMD) – An Asbestos Dust and Dust Mitigation Plan shall be approved by the NSAQMD.
- California Department of Forestry and Fire Protection (CAF&F) – A Timber Harvest Permit Exemption (for less than 3-acre conversion) is required from the CAF&F Department.

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 a project 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) **"Potentially Significant Impact"** is appropriate if there is substantial evidence that an effect is significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an Environmental Impact Report (EIR) is required.
- 4) **"Potentially Significant Unless 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.
- 5) **"Less-Than-significant Impact:"** Any impact that is expected to occur with implementation of the project, but to a less than significant level because it would not violate existing standards.
- 6) **"No Impact:"** The project would not have an impact to the environment.
- 7) Earlier analyses may be used where, pursuant to Tiering, Program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or Negative Declaration.
- 8) Lead agencies are encouraged to incorporate into the checklist reference 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.

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"/> Agriculture & Forestry Resources | <input checked="" type="checkbox"/> Air Quality |
| <input checked="" type="checkbox"/> Biological Resources | <input checked="" type="checkbox"/> Cultural Resources | <input type="checkbox"/> Energy |
| <input checked="" type="checkbox"/> Geology/Soils | <input type="checkbox"/> Greenhouse Gases Emissions | <input type="checkbox"/> Hazards & Hazardous Mat. |
| <input checked="" type="checkbox"/> Hydrology/Water Quality | <input type="checkbox"/> Land Use/Planning | <input type="checkbox"/> Mineral Resources |
| <input checked="" type="checkbox"/> Noise | <input type="checkbox"/> Population/Housing | <input type="checkbox"/> Public Services |
| <input type="checkbox"/> Recreation | <input checked="" type="checkbox"/> Transportation | <input type="checkbox"/> Utilities/Service Systems |
| <input type="checkbox"/> Wildfire | <input type="checkbox"/> Mandatory Findings of Significance | <input type="checkbox"/> None |

DETERMINATION: (To be completed by the Lead Agency) On the basis of this initial evaluation:

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

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

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

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

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


Lance E. Lowe, AICP, Principal Planner

Date 4/14/2020

EVALUATION OF ENVIRONMENTAL IMPACTS:**I. AESTHETICS –**

Would the project:

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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) Substantially degrade the existing visual character or quality of the site and its surroundings?	<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 type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

SETTING

The aesthetic value of an area is a measure of its visual character and quality, combined with the viewer response to the area (*Federal Highway Administration, 1983*). The visual quality component can best be described as the overall impression that an individual viewer retains from residing in, driving through, walking through, or flying over an area. Viewer response is a combination of viewer exposure and viewer sensitivity. Viewer exposure is a function of the number of viewers, the number of views seen, the distance of the viewers, and the viewing duration. Viewer sensitivity relates to the extent of the public's concern for a particular view shed (*U.S. Bureau of Land Management, 1980*).

The *City of Grass Valley 2020 General Plan* notes that the City does not contain any designed scenic vistas or highways, but generally acknowledges the City and its surroundings as having a wide range of landscapes, scenic vistas and visual resources.

The site has historically been in agricultural use and is currently fallow. The project area is visually characterized by development, primarily low-density residential uses to the north, east and west. Immediately south is a personal storage facility.

The project site has ± 400 feet of frontage along Ridge Road. According to the project plans, an estimated 16 trees are proposed to be removed with initial infrastructure development of the project site. No other scenic resources, including, but not limited to trees, rock outcroppings, and historic buildings are located on the subject ± 6.35 -acre property.

Sources of existing light in the project area are streetlights and residential dwellings. Other sources of light and glare include vehicles traveling along Ridge Road and Slate Creek Road.

IMPACTS

- a)&b) From its undeveloped fallow state, the development of 24 single family dwellings and related improvements would alter the views from Ridge Road and to a lesser extent Slate Creek Road. As noted, the project is not adjacent to an identified scenic vista or highway.

A project would normally have a substantial adverse aesthetic effect where a project substantially degrades the visual intactness and unity of the scenic vista or highway. The project will not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway. The project is consistent with residential uses in the project vicinity. No impact will occur.

- c) Generally, new development, if not carefully designed, can result in adverse impacts on the existing character of the area and the creation of aesthetically offensive sites open to public view. However, policies of the *City's General Plan Community Design Element* (Chapter 10 of the 2020 General Plan) aim to preserve the desirable physical and design features in Grass Valley and carry them over into new development so that old and new development appear compatible. To this end, the City's Development Code establishes minimum design standards for residential development.

The project area has a predominately residential use appearance with low density residential surrounding the site. Accordingly, the proposed project site is not anticipated to substantially degrade the existing visual character or quality of the site and its surroundings.

Of the 30 trees identified on the Tree Removal Plan (Sheet C.4.0), the project is anticipated to remove ± 16 trees from the site (53%). However, standard conditions of approval require residential landscape plantings in the front yard for each respective lot. At a minimum, one tree per lot shall be planted in the front yards. Additionally, the project developer is required to install the common landscaping features along the street frontages thereby reducing potential visual impacts. Although the replanting will not make up for the trees removed, the additional trees and landscaping will soften the appearance of the residential development on neighboring properties, passing motorists and pedestrians alike.

In addition, prior to removing any trees, the applicant shall obtain a tree removal permit from the City of Grass Valley. As part of the tree permit approval, the applicant shall be required to install a fence to preserve trees to be retained. Accordingly, based upon the quantity of tree removal, proposed landscaping plan requirements and tree protection associated with the City's Tree Permit standards, these impacts are considered less than significant.

- d) Existing sources of day and nighttime light within and around Grass Valley include those common to urban areas, including motor vehicle lights along Ridge Road and Slate Creek Road, streetlights, parking lot lighting, building lighting and signage in the project area.

Lights to be installed within the residential development include streetlights, residence entryway lights and patio lights. All lighting requires shields thereby directing light downward. Accordingly, light spillover is not anticipated to cause a significant impact on adjoining properties. This impact is less than significant.

II. AGRICULTURE RESOURCES & FOREST RESOURCES—	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
Would the project:				
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 type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest uses?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

SETTING

The proposed project is situated in an area that has been designated and zoned for low density residential use by the *City of Grass Valley 2020 General Plan and Development Code* respectively. With the exception the project site, the project area has been largely built out in accordance with the City's residential land use designations. Although, the site has historically been used for farm grazing purposes, no current agricultural operations or forestry lands exist on the project site as defined according to the *U.S. Department of Agriculture*. Although, the property contains trees, the project site does not fall under the definition of forest lands as defined by *Public Resources Code Section 12220(g)*.

IMPACTS

- a)&b) No Prime Farmland, Unique Farmland or Farmland of Statewide Importance is found within the proposed project area. The proposed project site has been zoned for low density

residential uses and is surrounded by similar developed uses. Considering no farmland exists within the project area, the proposed project will not involve conversion of farmland or zoning for agricultural use, including any farmlands in Williamson Act Contract. No impact will occur.

- c)-e) As noted in the project setting above, the project will not conflict with existing zoning or cause the 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)).

Although, ± 16 trees from the site will be removed to accommodate the project, the project will not result in the loss of forest land or conversion of forest land to non-forest uses as defined. Standard conditions of approval require the applicant to obtain an exemption (for less than 3-acre conversion) of a Timber Harvest Permit from the California Department of Forestry and Fire Protection.

Additionally, the applicant will be required to obtain a Tree Removal Permit from the City in accordance with Chapter 12.36 of the City's Municipal Code. No impact will occur.

III. AIR QUALITY –

Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
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Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations.

Would the project:

- | | | | | |
|---|--------------------------|-------------------------------------|-------------------------------------|-------------------------------------|
| a) Conflict with or obstruct implementation of the applicable air quality plan? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| d) Expose sensitive receptors to substantial pollutant concentrations? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| e) Create objectionable odors affecting a substantial number of people? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

SETTING

The project is located within the Northern Sierra Air Quality Management District's (NSAQMD) area. The overall air quality in Nevada County is good but two known air quality problems exist, Ozone and Suspended Particulate Matter (PM-10). Nevada County is a "non-attainment" for both pollutants. PM-10 in Grass Valley meets federal ambient ozone standards but exceeds the more stringent State standards in the winter, primarily due to smoke created from wood stoves and fireplaces. Violations in the summer months have been noted during forest fires or periods of open burning. PM-10 is usually associated with dust generated during construction. Western Nevada County is a non-attainment area for the federal 8-hour ozone standard and the entire county is non-attainment for the state one-hour ozone standard.

The project will require excavation and grading work to accommodate the new residential uses. Dust generated by grading and construction activities could have a potential to create short-term air quality impacts.

The NSAQMD has adopted standard regulations and conditions of approval for projects that exceed certain air quality threshold levels to address and mitigate both short-and long-term emissions. The Northern Sierra Air Quality Management District (NSAQMD) has established the below thresholds of significance for PM-10 and the precursors to ozone, which are reactive organic gases (ROG) and nitrogen oxides (NOx). The NSAQMD has developed a tiered approach to significance levels: A project with emissions meeting Level A thresholds will require the most basic mitigations; projects with projected emissions in the level B range will require more extensive mitigations; and those projects which exceed Level C thresholds, will require an Environmental Impact Report to be prepared, which may result in even more extensive mitigations.

IMPACTS

- a) The project will not conflict with or obstruct implementation of an air quality plan. No impact will occur.
- b) Construction-related air pollutant emissions would originate from mobile and stationary sources including but not limited to construction equipment exhaust, dust resulting from earth-disturbance, painting, asphalt and/or concrete paving. Construction-related emissions vary substantially depending on the level of construction activity, length of the construction period, specific construction operations, types of equipment, number of personnel, wind and precipitation conditions as well as soil moisture content. In its developed condition as a low-density residential project, air pollutant emissions would be generated by, but not limited to, gas appliances, gas-powered landscaping equipment, and vehicle exhaust.

To quantify project emissions, the *California Emission Estimator Model (CalEEMod) Version 2016.3.2*, emissions modeling program was used to estimate air pollutant emissions associated with the proposed project.

According to *CalEEMod* modeling results, air quality impacts for both construction and operational (occupancy) phases would be less than significant for all regulated air pollutants.

Except for (Reactive Organic Gases/Volatile Organic Compounds (ROG/VOC), the daily emissions are below the Level A thresholds indicating the project requires standard air quality conditions relating to grading. For VOC/ROG emissions, which are at Level B thresholds, the project would require a specific mitigation. The sole reason for the ROG/VOC emissions to exceed Level A thresholds is from the application of architectural coating and paints. For example, the total daily ROG/VOC emissions are estimated to be 67.79 lbs/day. Of this total, 67.5 lbs/day or 99.5% are attributed to architectural coatings and paints. The remaining emissions are from off-road construction equipment, which is negligible. Table 1 quantifies air quality impacts resulting from the project.

Table 1 – Air Quality Impacts
Project Construction and Operational Emissions Estimates

	ROG (lbs/day)	NOx (lbs/day)	PM ₁₀ (lbs/day)	CO (lbs/day)
Project Construction Impacts	67.4	42.48	9.22	22.30
Project Operational Impacts	2.11	4.00	1.48	9.17
Level A Thresholds				
NSAQMD- Significance Thresholds	ROG (lbs/day)	NOx (lbs/day)	PM ₁₀ (lbs/day)	N/A
	<24 lbs/day	<24lbs/day	<79lbs/day	
Level B Thresholds				
Maximum Project Emissions	ROG (lbs/day)	NOx (lbs/day)	PM ₁₀ (lbs/day)	N/A
	24-136 lbs/day	24/136 lbs/day	79-136 lbs/day	
Level C Thresholds				
Maximum Project Emissions	ROG (lbs/day)	NOx (lbs/day)	PM ₁₀ (lbs/day)	N/A
	>136 lbs/day	>136 lbs/day	>136 lbs/day	

Based on *CalEEMod* modeling outputs for the proposed project, long-term operational emissions would not exceed NSAQMD Level A significance thresholds.

Although construction and operation of the proposed project would not exceed NSAQMD significance thresholds, NSAQMD's standard conditions of approval for projects with less than Level A would be imposed thereby minimizing project emissions. A specific mitigation is also applied to Level B architectural coatings and paints. Such conditions are considered appropriate to apply to the proposed project to promote maintenance of air quality in the region. The standard mitigation measures recommended are consistent with goals of State Implementation Plans for the District.

Since operational emissions would be in accordance with accepted thresholds and construction-related emissions would be short-term, it is expected that implementation of NSAQMD's standard mitigation measures, as noted below during project construction and operation, would ensure that impacts associated with the project would remain less than significant.

AQ 1 - Mitigation Measure:

It is expected that with implementation of the following standard mitigation measures, adverse impacts to air quality resulting from the proposed project would remain less than significant.

1. The project shall be required to use Low VOC paintings and coatings.
2. The applicant shall submit a Dust Mitigation Plan for review and approval by the Northern Sierra Air Quality Management District and City Engineer. Dust mitigation measures shall be implemented in accordance with the approved Dust Mitigation Plan. The Dust Mitigation Plan shall include the following:
 - a. The applicant shall be responsible for ensuring that all adequate dust control measures are implemented in a timely manner during all phases of project development and construction.
 - b. All material excavated, stockpiled, or graded shall be sufficiently watered, treated, or covered to prevent dust from leaving the property boundaries and causing a public nuisance or a violation of an ambient air standard. Watering should occur at least twice daily, with complete site coverage.
 - c. All land clearing, grading, earth moving, or excavation activities on the project shall be suspended as necessary to prevent excessive windblown dust when winds are expected to exceed 20 mph.
 - d. All inactive portions of the development site shall be covered, seeded, or watered until a suitable cover is established. Alternatively, the applicant shall be responsible for applying City approved non-toxic soil stabilizers (according to manufactures specifications) to all inactive construction areas (previously graded areas which remain inactive for 96 hours) in accordance with the local grading ordinance.
 - e. All areas with vehicle traffic shall be watered or have dust palliative applied as necessary for regular stabilization of dust emissions.
 - f. All material transported off-site shall be either sufficiently watered or securely covered to prevent public nuisance.
 - g. Paved streets adjacent to the project shall be swept at the end of each day, or as required to remove excessive accumulations of silt and/or mud which may have resulted from activities at the project site.
 - h. No burning of waste material or vegetation shall take place on-site. Alternatives to burning include chipping, mulching or converting to biomass.

Furthermore, according to the City's 2020 General Plan EIR, the site is in an area of naturally occurring asbestos (NOA) as substantiated by *Figure 3.1-1 of the General Plan EIR*. This is further substantiated by the site-specific *Geotechnical Report Prepared by Holdrege & Kull dated January 2008*. When asbestos is disturbed in connection with construction and grading, asbestos-containing dust can be generated. Exposure to asbestos can result in health ailments such as lung cancer, mesothelioma (cancer of the linings of the lungs and abdomen), and asbestosis (scarring of lung tissues that results in constricted breathing). According to the NSAQMD, an Asbestos Air Quality Dust Mitigation Plan must also be reviewed and approved by NSAQMD. This is a potentially significant impact; however, the following mitigation measures will reduce air quality impacts to a less than significant level.

AQ 2 – Mitigation Measure:

Prior to the issuance of a grading permit, the applicant shall obtain approval of an Asbestos Dust Mitigation Plan from the NSAQMD. The Asbestos Dust Mitigation Plan must specify dust mitigation practices which are adequate to ensure that no equipment or operation emits dust that is visibly crossing property lines. The Asbestos Dust Mitigation Plan shall include but not be limited to the following prevention measures:

- A. Track-out prevention and control measures;
- B. Control for traffic on on-site unpaved roads, parking lots, and staging areas;
- C. Control of earthmoving activities;
- D. Control for Off-site Transportation;
- E. Post Construction Stabilization of Disturbed Areas;
- F. Air Monitoring for Asbestos;
- G. Frequency Reporting; and,
- H. Recordkeeping and Reporting Requirements

With implementation of NSAQMD's recommended conditions of approval and mitigation measures, the proposed project's emissions are not anticipated to conflict with or obstruct implementation of an air quality plan, violate air quality standards or contribute substantially to an existing or projected air quality violation. Therefore, impacts are anticipated to remain less than significant with implementation of standard NSAQMD's conditions of approval for Level A & B projects and mitigation measures relating to asbestos dust as noted above.

- c)&d) Emissions associated with the proposed project would be greatest during construction activities, specifically when diesel-powered construction vehicles are used for earth-moving operations. The nearest sensitive receptor (i.e. residential use) is located approximately ± 40 feet from the proposed road connection of Slate Creek Road, where road grading is to occur. Although in close proximity to sensitive receptors, the emissions associated with the project would be short-term and are not anticipated to result in a substantial elevation of pollutant concentrations in the project area. Impacts associated with substantially elevated pollutant concentrations would be less than significant with respect to sensitive receptors near the proposed project.

The proposed project's operational emissions would be typical of those produced by residential development. As shown, operational emissions would consist of PM₁₀, CO, and ozone precursors (ROG and NO_x). These pollutants would be generated by gas-fired water heaters, as well as from engine emissions associated with vehicle trips to/from the project and subsequent homeowner gasoline-powered landscape maintenance devices. Based upon the *CalEEMod* analysis, on file with the Community Development Department, operational emissions are not anticipated to exceed Level A thresholds. These potential impacts are considered less than significant.

- e) The proposed project, being a residential development, is not anticipated to produce any objectionable odors in its finished condition that would affect a substantial number of people. Construction activities associated with the proposed development, such as paving and painting, are likely to temporarily generate objectionable odors. However, since odor-generating construction activities would be temporary, and are only likely to be detected by a small number of residents nearest the project site, impacts from temporary project-related odors are considered less than significant.

IV. BIOLOGICAL RESOURCES –

Would the project:

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or 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, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

SETTING

According to the *Biological Resource Inventory* conducted by Greg Matuzak, a Nevada County Biological Consultant, in December 2019, a reconnaissance-level biological resources survey and required background research related to potential sensitive biological resources was consulted to develop the *Biological Resources Inventory Technical Report*. In addition, potential California Department of Fish and Wildlife (CDFW), United States Fish and Wildlife Service (USFWS), and United States Army Corps of Engineers (Corps) jurisdiction was assessed. A previous Biological Inventory covering the project area was also developed by Marcus H. Bole & Associates dated October 10, 2002. The previous Biological Inventory conducted for the project area did not identify any special-status plants or wildlife, nor did it identify any sensitive habitats such as wetlands, riparian habitat, or stream zones within the project area.

The project area is located at approximately $\pm 2,650$ feet above Mean Sea Level (MSL). The project area is relatively flat ranging between $\pm 2,665$ feet above MSL in the southeastern section of the project area where Deeken Court is located and $\pm 2,600$ feet above MSL in the northwestern section along the access to the project site off Slate Creek Road.

IMPACTS

- a) According to the Biological Resource Inventory prepared for the project, the project area does not contain suitable habitat for any *Endangered Species Act* (ESA) or *California Endangered Species Act* (CESA) listed or protected plant or wildlife species, nor does the project contain any special-status plant species. The project area does not include any ponds, wetlands, or natural streams; therefore, the project area does not include any "waters of the U.S.", including wetlands as defined by the Corps criteria for being jurisdictional wetlands and regulated under the Clean Water Act (CWA). Through the neighboring parcel contains a large pond which is defined as "waters of the U.S.", the project is not going to encroach upon or impact the pond directly or indirectly. Additionally, the project area would not be subject to the City of Grass Valley Development Code 17.50 for Creek and Riparian Resource Protection as these features do not exist on the site.

However, there is a potential suitable habitat within the open disturbed and developed sections of the project area for the Coast Horned Lizard. In addition, the project includes sandy soils for this species within the identified habitat types. Although suitable habitat exists, this species has a low potential to occur within the project area considering the species has not been identified historically. However, the following mitigation measure will reduce potential impacts to the Coast Horned Lizard to a less than significant level:

BIO 1 - Mitigation Measure:

Prior to the issuance of a grading permit, a pre-construction survey for the Coast Horned Lizard species shall be conducted prior to any disturbance in order to avoid direct impacts to the species. If the species is documented during pre-construction surveys, a qualified wildlife biologist, approved by CDFW, has the authority to move individual Coast Horned Lizards outside of the proposed disturbed area(s) in order to avoid an impact to the species. Once the Coast Horned Lizard(s) have been removed from the disturbed area(s) and are out of harm's way, the proposed work would no longer poses a risk to the species.

Furthermore, the trees, shrubs, and grasslands within the project area contain suitable habitat for nesting raptors and *Migratory Bird Treaty Act (MBTA)* and *California Department of Fish and Wildlife (CDFW)* protected nesting bird species. The breeding season for most protected birds in the vicinity of the project area is generally from March 1 to August 15. Vegetation clearing or tree removal outside of the breeding season for such bird species would not require the implementation of any avoidance, minimization, or mitigation measures. However, construction or development activities during the breeding season could disturb or remove occupied nests of migratory birds or raptors and would require the implementation of a pre-construction survey within 250 feet of the disturbance area within the project area for nesting migratory birds and raptors prior to development.

With respect to the potential of protected birds identified above, the applicant has indicated that grading activities will likely commence during the breeding season (March 1 through August 30). Should the applicant decide to perform tree and land disturbance activities during the breeding season, the following mitigation measure will assure that impacts to migratory birds are reduced to a less than significant level:

BIO 2 - Mitigation Measure:

If construction or development activities occur during the breeding season (March 1 through August 30) and have the potential to disturb or remove occupied nests of migratory birds or raptors, the preparation of a pre-nesting construction survey, within 250 feet of any potential disturbance of any nesting migratory birds and raptors is required. If nesting raptors or migratory birds are identified during surveys, active nests should be avoided, and a no-disturbance or destruction area of the nest site shall be established until after the breeding season or after or after a wildlife biologist determines that the young have fledged. The extent of these buffers would be determined by a wildlife biologist and would depend on the special-status species present, the level of noise or construction disturbance, line of sight between the nest and the disturbance, ambient levels of noise and other disturbances, and other topographical or artificial barriers. These factors should be analyzed to make an appropriate decision on buffer distances.

Vegetation clearing or tree removal outside of the breeding season for such bird species would not require the implementation of any avoidance, minimization, or additional conditions.

- b)-c) The project site does not contain wetland vegetation. However, immediately downslope to the north of the northern boundary of the project area, a large pond and wetland complex (dominated by *Typha* sp.) are documented on the adjoining property. However, these wetland features would not be impacted by the proposed development.

Large Fremont's Cottonwood (*Populus fremontii*) trees are located along the northern boundary of the project area with several additional large Fremont's Cottonwoods being identified north of the project site around the pond. The riparian habitat containing the large Cottonwood trees will not be impacted except for a single, large Fremont's Cottonwood tree will be removed along the northern boundary of the project site given it is dead and a hazardous tree. All of the

other Fremont's Cottonwood trees are located on the parcel immediately to the north of the project area.

The project will not have an impact on riparian habitat or other sensitive communities or federally protected wetlands. No impact will occur.

- d) Known migratory deer ranges outlined in the *Nevada County General Plan* were reviewed for deer migration corridors, critical range, and critical fawning areas. The project area is not located in any know major deer corridors, known deer holding areas, or critical deer fawning areas. Per the *Migratory Deer Ranges Nevada County General Plan map*, the project is in an area of potential Deer Winter Range. The field survey did not record any observations of deer. The project area does not contain any known major deer migration corridors, known deer holding areas, nor critical deer fawning areas. This potential impact is less than significant.
- e) Prior to removing the 16 trees from the property, the applicant shall be required to obtain a Tree Permit in accordance with *Chapter 12.36 of the City Municipal Code*. The Tree Permit shall be approved by the City of Grass Valley Public Works Department prior to or concurrently with approval of improvement plans for the project. No tree removal or grading shall occur until such time a tree permit has been approved. Mitigation for the removal of trees shall be completed in accordance with Chapter 12.36.085 of the City's Development Code. Trees to be preserved on-site shall also be shown on the improvement plans and protective fencing shall be installed prior to any grading activities. The fencing shall be in accordance with 12.36.200 of the City's Development Code. As a result of the City's tree permitting and tree protection requirements, this impact is considered less than significant.
- f) The property is slated for urban development according to the *City of Grass Valley General Plan and Development Code*. The project will not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. No impact will occur.

V. CULTURAL RESOURCES –

Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
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Would the project:

- | | | | | |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Disturb any human remains, including those interred outside of formal cemeteries? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

TRIBAL CULTURAL RESOURCES –

Would the project:

Would the project cause a substantial adverse change in the significance of a tribal cultural resource, 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: ?

d) 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)?

☐☐☐☒

e) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set for the 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.

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SETTING

Nevada County is part of the Sierra Nevada Range, a geologic block approximately 400 miles long and 80 miles wide which extends in a north-south band along the eastern portion of California. Two features of the Sierra Nevada distinctly characterize the terrain of Nevada County. The western third of the county is comprised of rolling foothills which form a transition between the low-lying Sacramento Valley and the mountains to the east. The area extending from the Yuba County line to just northwest of the Grass Valley/Nevada City area is generally comprised of metavolcanics and granitic formations.

Biologically, the study area is in the transition zone between the lower foothill elevations and the higher Sierra Nevada mountains. This transition zone is considered the Yellow Pine Belt (Storer and Usinger 1963). Because it is a transition zone, or ecotone, a variety of flora and fauna species occur in the areas that typically occur at zones of either higher or lower elevations. As a transition area, the Yellow Pine Belt in the Grass Valley area is comprised of several specific habitat types (Holland 1986). The numerous habitats give rise to a wide variety of flora and fauna.

Prehistoric use and occupation focused on major surface water sources and other natural resource areas, with emphasis given to stream confluences and to ecotones created at the interface of foothill/valley lands, elements of which are located within and/or near the present study area.

Generally, environmental conditions within the region have remained stable throughout the past 8-10,000 years, although minor fluctuations in overall precipitation and temperature regime have been documented, and these may have influenced prehistoric patterns of land use and settlement.

All the Area of Potential Effect (APE) is situated within relatively flat lands that have been subjected to past logging and ranching activities over the past 150 years.

IMPACTS

- a)&b) Existing records of the *North Central Information Center (NCIC)* document that all the present Area of Potential Effect (APE) had been subject to previous archaeological investigation, and that no prehistoric or historic-era sites had been documented within the APE. As well, the present effort included an intensive-level pedestrian survey conducted by Sean Michael Jensen, M.A. The pedestrian survey failed to identify any prehistoric or historic-era sites within the APE. Additionally, no evidence of historic use or occupation was observed within the APE. No impact will occur.
- c)-e) Consultation was also undertaken with the *Native American Heritage Commission (NAHC)* regarding sacred land listing for the property, including an information request letter dated October 28, 2019. The NAHC responded indicating that a search of their Sacred Lands files returned negative results.

Although much of the area has been disturbed with past activities, evidence of human burial or scatted human remains related to prehistoric occupation of the area could be inadvertently encountered anywhere within the project area during future construction activity or other actions involving disturbance to the ground surface and subsurface components. In the event of such an inadvertent discovery, the County Coroner would have to be informed and consulted, per State law. Ultimately, the goal of consultation is to establish an agreement between the most likely lineal descendant designed by the *Native American Heritage Commission* and the project proponent(s) regarding a plan for treatment and disposition of any human remains and artifacts which might be found in association. Such treatments and disposition may require reburial and any identified human remains/burials with a "preserve" or other designed portion of the development property not subject to ground disturbing impacts.

Despite negative findings of the Cultural Resource Inventory Survey, the following standard mitigation measure will be required for the project in the case of inadvertent discovery:

CUL 1 – Mitigation Measure:

Awareness Training – Prior to approval of a grading permit, a consultant and construction worker tribal cultural resources awareness brochure and training program for all personnel involved in the project implementation will be developed in coordination with the *United Auburn Indian Community (UAIC)*. The brochure will be distributed, and the training will be conducted in coordination with qualified cultural resources specialist and UAIC. The program will include relevant information regarding sensitive tribal cultural resources, including applicable regulations, protocols for avoidance, and consequences for violating State laws and regulations. The worker cultural resource awareness program will also describe appropriate avoidance and minimization measures for resources that have the potential archaeological resources or artifacts are encountered. The program will also underscore the requirement for confidentiality and culturally appropriate treatment of any find of significance to Native Americans.

CUL 2 – Mitigation Measure:

Inadvertent Discoveries – If potential tribal cultural resources (TCRs), archaeological resources, other cultural resources, are discovered, work shall cease within 100 feet of the find (based on the apparent distribution of cultural resources) and a qualified cultural resources specialist and UAIC representative will assess the significance of the find and make recommendations for further evaluation and treatment as necessary. Culturally appropriate treatment may include, but is not limited to, processing materials for reburial, minimizing handling of cultural objects, leaving objects in place within the landscape, returning objects to a location within the project area where they will not be subject to future impacts. The Tribe does not consider curation of Tribal Cultural Resources (TCR's) to be appropriate or respectful and request materials not be permanently curated, unless requested by the Tribe.

If adverse impacts to tribal cultural resources, unique archaeology, or other cultural resources occurs, then consultation with UAIC and other traditionally and culturally affiliated Native American Tribes regarding mitigation contained in Public Resources Code sections 21084.3(a) and (b) and CEQA Guidelines section 15370 should occur.

CUL 3 – Mitigation Measure:

Inadvertent Discoveries – In the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the county in which the human remains are discovered has determined, in accordance with Chapter 10 (commencing with Section 27460) of Part 3 of Division 2 of Title 3 of the Government Code, that the remains are not subject to the provisions of Section 27491 of the Government Code or any other related provisions of law concerning investigation of the circumstances, manner and cause of any death, and the recommendations concerning the treatment and disposition of the human remains have been made to the person responsible for the excavation, or to his or her authorized representative, in the manner provided in Section 5097.98 of the Public Resources Code. The coroner shall make his or her determination within two working days from the time the person responsible for the excavation, or his or her authorized representative, notifies the coroner of the discovery or recognition of the human remains.

If the coroner determines that the remains are not subject to his or her authority and if the coroner recognizes the human remains to be those of a Native American, or has reason to believe that they are those of a Native American, he or she shall contact by telephone within 24 hours, the Native American Heritage Commission in accordance with Section 5097.98 of the Public Resource Code.

VI. ENERGY –

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
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Would the project:

- a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?
- 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"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

SETTING

Electricity and natural gas are the two primary forms of energy used in the City and are provided by Pacific Gas and Electric (PG&E). Grass Valley has already implemented programs that have resulted in or will lead to benefits in the form of energy efficiency, renewable energy, and water efficiency.

Energy conservation standards for new residential and commercial buildings were originally adopted by the California Energy Resources Conservation and Development Commission in June 1977 and have been updated periodically since (Title 24, Part 6 of the California Code of Regulations). In general, Title 24 requires the design of building shells and building components to conserve energy. The standards are updated periodically to allow for consideration and possible incorporation of new energy efficiency technologies and methods.

In July 2008, the *California Building Standards Commission* adopted the nation's first green building standards. The *California Green Building Standards Code* (Part II, Title 24) was adopted as part of the California Building Standards Code (Title 24, California Code of Regulations). Part 11 establishes voluntary standards on planning and design for sustainable site development, energy efficiency (in excess of California Energy Code requirements), water conservation, material conservation, and internal air contaminants.

IMPACTS

- a)&b) The project is subject to compliance with Title 24 energy efficiency standards and Green Building Codes adopted by the City. Approved residential building plans will be in accordance with Title 24 and Green Building Standards for energy efficiency standards.

The project will not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. Due to the Green Building recycling and Title 24 energy provisions, these impacts are considered less than significant.

VII. GEOLOGY AND SOILS –

Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
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Would the project:

a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

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

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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ii) Strong seismic ground shaking?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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iii) Seismic-related ground failure, including liquefaction?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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iv) Landslides?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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b) Result in substantial soil erosion or the loss of topsoil?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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d) Be located on expansive soil, as defined in the Building Code, creating substantial risks to life or property?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of waste water?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

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

The property is generally undeveloped; however, evidence of past improvements are present. A dirt driveway and the remains of a wooden shop building were observed in the eastern portion of the site. An alignment of an abandoned irrigation canal and stockpiles consisting of soil, rock, and fragments of asphaltic concrete in the north central portion of the property were also observed. Numerous slash piles and piled concrete debris were observed in the central portion of the site.

A shallow depression in the southern portion of Lot 5 in the southeastern portion of the site is present. The depression was roughly circular with an approximate diameter of 12 feet and an

appropriate depth of 3 feet. Scrap metal and angular cobbled-sized rock fragments where present around the perimeter of the depression.

A marsh area and pond are located in the northern portion of the property, generally outside the area of proposed residential lots. An ultramafic rock outcrop in the central and western portions of the property exists.

Site topography slopes gently to the north and northwest at gradients ranging from 5 to 10 percent. According to the base topographic map, site elevations range from 2,665 feet above mean sea level (MSL) at the southeastern corner of the property to 2,600 feet MSL at the northwestern corner of the property.

Vegetation onsite was typical for portions of the Sierra Nevada Foothills that are underlain by ultramafic rock, with areas of gray pine and chaparral and open fields of grasses and forbs. A pond surrounds riparian vegetation in the northern portion of the adjacent property.

The Soil Survey of Nevada County described the soil as Rock outcrop-Dubakella complex, which consists of 50% Dubakella gravelly loam, 40 percent ultrabasic rock outcrop, and 10 percent Dubakella soil. Dubakella soil is associated with rock outcrop sites and plants such as scrub oak, ceanothus and manzanity, sparse annual grasses, and occasional gray pine and blue oak. Dubakella soil is derived from weathering of the underlying ultrabasic rock and occurs on gently sloped to steep uplands.

The geologic maps indicate that the site geology generally consists of Paleozoic-aged, ultramafic rocks associated with rocks that include serpentinite and other asbestiform minerals. The inferred location of the Grass Valley fault is depicted as trending into an approximate north-south direction that parallels Slate Creek Road and transects Douglas Avenue and Ridge Road.

IMPACTS

- a) The property is located in the Foothills Fault System. The Foothills Fault System is designated as a Type C fault zone, with low seismicity and a low rate of recurrence. The 1997 edition of California Geological Survey Special Publication 43, Fault Rupture Hazard Zones in California, describes active faults and fault zones (activity within 11,000 years) as part of the Alquist-Priolo Earthquake Fault Zoning Act. The project is not located within an Alquist-Priolo active fault.

During the field investigation on October 18, 2007, an excavation of 9 exploratory trenches across the project site was conducted with depths ranging between 1 and 9 feet below the ground surface with a excavator equipped with an 18-inch bucket.

Based on the site geology of the surface conditions, grading and excavation onsite revealed variably weathered, fractured, metamorphic rock. Areas of resistant rock were also encountered which may require splitting, hammering, or blasting to increase the rate of predominately angular, gravel to cobble-sized rock fragments. This material may be suitable

for use as fill, depending on the nominal size of the rock fragments, but will likely require specific recommendations for fill placement and observation to confirm compaction.

Based upon the geotechnical analysis prepared for the project, the site is suitable for the proposed improvements, provided the geotechnical engineering recommendations and design criteria presented in this Geotechnical report are incorporated into the project plans. These impacts are considered less than significant.

- b) The project site is relatively level and erosion and loss of topsoil is not at issue. Once graded, graded portions of the site are required to be seeded as soon as possible to allow vegetation to become established prior to and during the rainy season. In addition, grading that results in greater than one acre of soil disturbance or in sensitive areas requires the preparation of a site-specific storm water pollution prevention plan. This impact is less than significant.
- c) As noted, a surface depression in the southern portion of the site was observed, which may be associated with past prospecting or mineral exploration. Although, resistant rock was found at approximately 7.5 feet in trench number 4, the Geotechnical Engineer of Record recommends that the depression be further investigated. The investigation could be conducted prior to site grading or during initial stages of site preparation. In addition, the location of the depression should be documented by survey prior to grading so that it can be found and observed during site preparation.

Based on the Tentative Subdivision Map, the depression is located in the southern portion of Lot 5. The loose backfill in the depression should be over excavated to competent material. It is anticipated that resistant rock will be encountered at depths less than 10 feet in the depression. After loose soil and debris are removed, the depression should be backfilled with compacted soil. The soil should be placed in 8-inch loose lifts and compacted to a maximum of 90 percent compaction based on ASTM D1557. A representative of H&K would need to be onsite to observe excavation prior to backfill placement and during fill placement and compaction.

If a competent bottom is not encountered during excavation or the depression appears to be a shaft, then the following recommendations may be appropriate. Loose fill and debris would be over excavated to a minimum depth of 10 feet or to competent material whichever is shallower. The excavation would be sloped to form an inverted cone or pyramid. Typically, the sides of the cone should be sloped at gradients between $\frac{3}{4}$:1 horizontal to vertical (H:V) and 1:1, (H:V). If a continuous void or shaft is observed in the base of the excavation, it may be necessary to place plywood sheets or a metal plate to temporarily support the concrete.

As noted, the depression could present unstable conditions resulting in collapse constituting a significant impact; however, the following mitigation measure will reduce this potential impact to a less than significant impact.

GEO 1 – Mitigation Measure:

Prior to the issuance of a grading permit, the depression on Lot 5 shall be surveyed. Upon commencement of grading activities, the depression shall be observed by the Geotechnical Engineer of Record and earthwork shall comply with the recommendations of the Geotechnical

Report prepared for the project. The Geotechnical Engineer of Record shall provide evidence that the depression has been satisfactorily investigated and mitigated in accordance with accepted engineering practices. Said evidence shall be to the satisfaction of the City Engineer.

- d) The soil survey described the soil at the site as Rock outcrop-Dubakella complex, which consists of 50 percent Dubakella gravelly loam, 40 percent ultrabasic rock outcrop and 10 percent Dubakella soil. The Geotechnical Engineer recommends to over excavate fine grained, potentially expansion soil underlying proposed roads, driveways and other paved areas. Potentially expansive soil underlying building pads may also require over excavation, as determined by H&K during grading. The average excavation depths of 2 feet below ground surface (bgs) to remove potentially expansion soil within a maximum excavation depth of 4 feet bgs. may be required. The potentially expansion soil may be able to be mixed with granular soil depending on the actual soil conditions encountered during grading or stockpiled for removal from the project site or for later use in landscaped areas. A typical mixing ratio for granular to expansive soil is 4 to 1.

As noted in the Geotechnical report prepared for the project, provided the recommendations are followed, impacts resulting from geologic and soil conditions are less than significant. As such, standard mitigation measures will reduce this potential impact to a less than significant level.

GEO 2 - Mitigation Measure:

The applicant shall submit to the City Engineer for review and acceptance two copies of a detailed Soils Engineering Report and Engineering Geology Report certified by a Civil Engineer registered in the State of California. In addition to the California Building Code requirements, the report shall specify the pavement structural sections for the proposed roadways in relation to the proposed traffic indexes. The improvements and grading plans shall incorporate the recommendations of the approved Soils Engineering Report and Engineering Geology Report. The project developer shall retain a civil engineer, soils engineer, and engineering geologist to provide professional inspection of the grading operations. If work is observed as not being in compliance with the California Building Code and the approved improvements and grading plans, the discrepancies shall be reported immediately in writing to the permittee, the Building Official, and the Engineering Division.

- e) The project will be connected to NID and City of Grass Valley utilities for both water and sewer. Therefore, this potential impact is not applicable. No impact will occur.
- f) The project will not directly or indirectly destroy a unique paleontological resource or site or unique geologic feature. No impact will occur.

VIII. GREENHOUSE GASES –

Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
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Would the project:

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

SETTING

The City of Grass Valley has not conducted a greenhouse gas emissions inventory or adopted a Climate Action Plan, performance standards, or a GHG efficiency metric. However, the Grass Valley 2020 General Plan includes numerous goals, policies, and programs which, if implemented, will reduce Grass Valley's impacts on global climate change and reduce the threats associated with global climate change to the City.

CEQA Guidelines Section 15064.4 provides direction to lead agencies in determining the significance of impacts from GHG emissions. Section 15064.4(a) calls on lead agencies to make a good faith effort, based upon available information, to describe, calculate or estimate the amount of GHG emissions resulting from a project. The lead agency has the discretion to determine, in the context of a particular project, how to quantify GHG emissions.

Greenhouse gasses (GHG) include gases that can affect the earth's surface temperature. The natural process through which heat is retained in the troposphere is called the greenhouse effect. The greenhouse effect traps heat in the troposphere through a process of absorbing different levels of radiation. GHG are effective in absorbing radiation which would otherwise escape back into space. Therefore, the greater the amount of radiation absorbed, the greater the warming potential of the atmosphere. GHG are created through a natural process and/or industrial processes. These gases include water vapor (H₂O), carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrfluorocarbons (HFCs), Perfluorocarbons (PFCs) and sulfur hexafluoride (SF₆).

The *United States Environmental Protection Agency (EPA)* identifies the following four primary constituents that represent the greenhouse gas emissions of most importance:

- Carbon Dioxide (CO₂): CO₂ is primarily generated by the burning of fossil fuels. Other sources including burning of solid waste and wood products.
- Methane (CH₄): CH₄ is emitted from incomplete combustion of forest files, landfills, livestock and animal land uses, and leaks in natural gas lines.
- Nitrous Oxide (N₂O): N₂O is produced by agricultural and industrial activities.
- Fluorinated Gases (HFCs and PFCs): These gases are emitted from industrial activities and refrigerants uses in both stationary refrigeration and mobile air conditioning.

The US EPA estimates nearly 85% of the nation's GHG emissions are comprised of carbon dioxide. For most non-industrial developed projects, motor vehicles make up the bulk of GHC emissions.

According to the California Air Resources Board, the primary GHG emitted by vehicles are CO₂, CH₄, H₂O, and HCFs.

Since 2005, the California legislature adopted several bills, and the Governor signed several Executive Orders, in response to the impacts related to global warming. Assembly Bill 32 states global warming poses a serious threat to California and directs the Air Resources Board to develop and adopt regulations that reduce GHG emissions to 1990 levels by the year 2020. Senate Bill 97 requires an assessment of projects GHG emissions as part of the CEQA process. SB 97 also required the *Office of Planning and Research* to develop guidelines to analyze GHG emissions.

The NSAQMD has not adopted thresholds of significance for GHG emissions. Additionally, *California Air Resources Board (CARB)* has not yet adopted any tools to measure the impact of a project on global warming. Due to the nature of global climate change, it is not anticipated that a single project would have a substantial impact on global climate change. Although it is possible to estimate a project's CO₂ emission, it is not possible to determine whether or how an individual project's relatively small incremental contribution might translate into physical effects on the environment.

IMPACTS

- a)&b) Calculating the Greenhouse Impacts on an individual project is difficult to qualify or quantify. The GHG emissions from the proposed project would not individually generate GHG emissions enough to measurably influence global climate change. However, ongoing occupancy and operation would result in a net increase of CO₂ and other greenhouse gas emissions due to increases in vehicle miles traveled, energy use, and solid waste disposal. According to the *CalEEMod* program conducted for the project, the following air quality impacts are anticipated with the proposed Ridge Village project.

Table 1 – Air Quality Impacts
Project Construction and Operational Emissions Estimates

	ROG (lbs/day)	NO _x (lbs/day)	PM ₁₀ (lbs/day)	CO (lbs/day)
Project Construction Impacts	67.4	42.48	9.22	22.30
Project Operational Impacts	2.11	4.0	1.48	9.17
Level A Thresholds				
NSAQMD- Significance Thresholds	<24 lbs/day	<24lbs/day	<79lbs/day	N/A
Level B Thresholds				
Maximum Project Emissions	24-136 lbs/day	24/136 lbs/day	79-136 lbs/day	N/A
Level C Thresholds				
Maximum Project Emissions	>136 lbs/day	>136 lbs/day	>136 lbs/day	N/A

As noted in the Air Quality Section of this Initial Study, the above impacts are within the acceptable level of impacts as viewed by the NSAQMD. In addition, the following project components and California Green Building requirements apply to the proposed project:

- All new residential construction with attached private garages shall have an electric vehicle (EV) charging station.
- Residential projects with an aggregate landscape area equal to or greater than 500 square feet shall comply with either a local water efficient landscape ordinance or the current California Department of Water Resources' Model Water Efficient Landscape Ordinance (MWEL0), whichever is more stringent.
- Toilets and showers shall be low flow.
- Construction waste management forms shall be completed including recycling and/or reuse a minimum of 65 percent of nonhazardous construction and demolition waste.
- All exterior lighting shall be high efficacy and be controlled by a manual on/off switch.
- All high efficacy light fixtures shall be certified as "high-efficacy" light fixtures by the *California Energy Commission*.
- Each of the homes shall be in accordance with Title 24 Energy efficiency standards.
- Solar shall be required for building permits.
- As an infill residential project, in proximity to services, it is anticipated that reduced vehicle trips will result than otherwise would have occurred.

The above CA Green Building Code requirements coupled with the analysis and conditions of approval in the Air Quality Section of this Initial Study, will assure that Greenhouse Gas impacts remain less than significant.

IX. HAZARDS AND HAZARDOUS MATERIALS –

Would the project:

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input checked="" 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	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

environment?

- | | | | | |
|--|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| f) Impair implementation of or physically interfere with a adopted emergency response plan or emergency evacuation plan? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" 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"/> |

SETTING

Based upon a search of the *Nevada County's Environmental Health Department's* website, the proposed project site is not listed in any database of hazardous materials sites. Hazardous materials stored and used onsite and on surrounding properties would be associated with common construction and household chemicals used. However, these chemicals are purchased legally and do not constitute a health hazard.

The Grass Valley City Fire Department responds to all calls for emergency services within City limits that include, but are not limited to fires, emergency medical incidents, hazardous materials incidents, public assists, traffic and vehicle accidents and other situations. The City's closest fire station is located on Sierra College Drive, which is staffed 24 hours a day. This station is located just over ±1.5 miles from the project site.

In the Grass Valley area, industrial and commercial facilities that use, store, or dispose of hazardous materials present the greatest potential hazards. A search of available environmental records conducted indicates that the project site is not listed as a hazardous materials site and no listed sites occur within an ASTM standard distance radius.

IMPACTS

- a)&b) The proposed project does not involve an activity that may create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. No impact will occur.
- c)&d) The proposed project does not involve an activity that will emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.

The project is not located on a site which is included on a list of hazardous materials sites. No impact will occur.

- e)&f) The subject project site is located approximately ± 3.25 miles (as the crow flies) from the Nevada County Airport. As required by the Public Utilities Code, the Airport Land Use Commission adopted the Nevada County Airport Land Use Compatibility Plan. The compatibility plan's function is to promote compatibility between the airport and surrounding land uses with respect to height (e.g. height of structures), safety (e.g. number of persons per acre), and noise (e.g. noise sensitive land uses). According to the *Nevada County Airport Land Use Compatibility Plan*, the project site is located outside of the area of influence.

The project will not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. No impact will occur.

- g) The Grass Valley region has a generally high potential for wildland fires of devastating intensity. This is due to the presence, particularly in less urban settings, of heavier timber, woodland and brush, the occurrence of steep slopes, dry weather conditions and human activity. Generally vegetative areas over 8% slope are considered as fire hazardous (County of Nevada 1995).

Existing City standards for the development provide adequate access, fire flows, and other facilities to maintain an appropriate level of fire protection. Specifically, the project is required to comply with the California Building Code and California Fire Code. Based upon these standards, the project is not anticipated to expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fire. This impact is less than significant.

X. HYDROLOGY AND WATER QUALITY –

Would the project:

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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				

X. HYDROLOGY AND WATER QUALITY –

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
runoff in a manner which would result in flooding on or off site;				
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 protect 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 type="checkbox"/>	<input checked="" type="checkbox"/>

SETTING

The City of Grass Valley is located within the Wolf Creek drainage basin in the Bear River Watershed. The Bear River Watershed covers an area of 300 square miles and is situated between two larger watersheds, the Yuba to the north and the American to the south. The Bear River watershed is a part of the larger Sacramento River Hydrologic Region and the City also falls within the Mountain Counties Hydrologic region overlay zone.

The south fork of Wolf Creek and Little Wolf Creek drain the eastern and southern portion of the City and discharge into Wolf Creek in the central Grass Valley area. Wolf Creek tributaries located within the City include French Ravine, Rhode Island Ravine, Slide Ravine, Murphy Hill, Matson Creek, South Fork Wolf Creek, Little Wolf Creek, Unnamed Ravine, Woodpecker Ravine and Olympia Creek.

IMPACTS

- a) According to the project plans, a total of $\pm 1,825$ cubic yards are anticipated to be excavated with fill accounting for $\pm 1,381$ cubic yards resulting in an export of ± 444 cubic yards. However, given the size of the lots, the site is expected to balance with small amount of excess fill material to be used on-site on each of the lots.

The proposed project will require a grading permit to be issued by the City of Grass Valley, Public Works Division pursuant to the City's Grading Ordinance. The City's Grading Ordinance requires specific measures to address erosion and the introduction of construction materials into surface waters. In addition, Section 402(p) of the Clean Water Act requires National Pollutant Discharge Elimination System (NPDES) storm water permitting to be

approved by the Regional Water Quality Control Board for projects disturbing over 1 acre. Standard mitigation measures requiring a NPDES permit from the RWQCB will effectively reduce potential impacts to a less than significant impact.

HDRO 1 – Mitigation Measures:

1. Prior to the issuance of a grading permit, the applicant shall submit a Storm Water Pollution Prevention Plan (SWPPP) to the City for acceptance, file a Notice of Intent with the California Water Quality Control Board and comply with all provisions of the Clean Water Act. The applicant shall submit the Waste Discharge Identification (WDID) number, issued by the state, to the City of Grass Valley Engineering Division.
 2. Prior to the issuance of a grading permit, a detailed grading, permanent erosion control and landscaping plan shall be submitted for review and approval by the Engineering Division prior to commencing grading. Erosion control measures shall be implemented in accordance with the approved plans. Any expenses made by the City to enforce the required erosion control measures will be paid by the deposit.
- b) The proposed project will be connected to the Nevada Irrigation District (NID) municipal water supply. Correspondence from NID requires the developer to dedicate utility easements for the extension of water lines through the project site. NID has indicated that water supply is adequate to serve the project.

The water connection of 24 single family homes is not anticipated to deplete groundwater supplies or interfere substantially with groundwater recharge, alter the existing drainage pattern of the site or area, exceed the capacity of the existing or planned capacity of storm water drainage systems or provide substantial additional sources of polluted runoff, degrade water quality.

- c) A preliminary drainage report has been prepared and the project has been designed to comply with the City of Grass Valley Design Standards for regulated projects (all projects that create and/or replace 5,000 square feet or more of impervious surface). Runoff from impervious surfaces will be directed into a bioretention treatment systems that is sized to capture and treat 85th percentile, 24-hour storm event throughout the site. The bioretention system is located on the northern end of the property.

Water quality treatment methods include storm water drainage to be collected and routed through gutters in the street that will direct runoff to the bioretention treatment area, which is sized according to City standards.

As noted above, the City's Grading Ordinance requires specific measures to address erosion and the introduction of construction materials into surface waters. In addition, Section 402(p) of the Clean Water Act requires National Pollutant Discharge Elimination System (NPDES) storm water permitting to be approved by the Regional Water Quality Control Board for projects disturbing over 1 acre. As a result, the project is not anticipated to result in substantial erosion, increase the amount of surface runoff or create runoff that would exceed the capacity of existing infrastructure. These impacts are less than significant.

- d) The subject property is not within an area of the 100-year flood plain according to FEMA Map panel number 06057C0631E dated February 3, 2010.

The Grass Valley region is not subject to tsunami or seiche zones and the risk of release of pollutants due to protected inundation is not present. No impact will occur.

- e) The project will not contribute with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. No impact will occur.

XI. LAND USE AND PLANNING —

Would the project:

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Physically divide an established community?	<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, regulation adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

SETTING

The ±6.35-acre site is an infill residential parcel surrounded by low density residential uses on the north, east and west. A personal storage facility is located immediately south of the project site.

The City of Grass Valley 2020 General Plan Land Use Map (updated February 2007) identifies the property and area as slated for Urban Low Density Residential (ULDR) uses. The zoning designation is likewise Single Residential (R-1), which permits residential and accessory uses.

IMPACTS

- a)&b) The project site is surrounded by urban development on all sides and is considered in-fill development with residential designs consistent with the neighborhood. Multiple 2020 General Plan policies, goals and objectives support both in-fill development and preservation of existing neighborhoods which include, but are not limited to:

- 2-LUG Promote infill as an alternative to peripheral expansion where feasible.
- 3-LUO Reduction in the amount of land necessary to accommodate future growth.
- 4-LUO Reduction in the environmental impacts associated with peripheral growth.
- 5-LUO Continued revitalization of central Grass Valley.
- 4-LUG Protect and enhance the character of established single-family neighborhoods.
- 10-LUO Preservation of existing neighborhoods.
- 11-LUO Retention of historic structures and community character.

3-CG Provide for the safe and efficient movements of people and goods in a manner that respects existing neighborhoods and the natural environment.

Development of the property will not divide an established community or conflict with any applicable land use plan, policy or regulation. The project is in accordance with the City's R-1 Zoning designation. No impact will occur.

XII. MINERAL RESOURCES –

Would the project:

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input checked="" type="checkbox"/>

SETTING

The City of Grass Valley adopted a *General Plan Mineral Management Element* (MME) on August 24, 1993. The MME contains four resource areas defined as: MRZ - 1 through MRZ - 4. The designations are described as follows:

MRZ - 1: Areas where adequate information indicates that no significant mineral deposits are present.

MRZ - 2: Areas where adequate information indicates that significant mineral deposits are present or where it is judged that there is a high likelihood for their presence.

MRZ - 3: Areas containing mineral deposits; the significance of which cannot be evaluated from available data.

MRZ - 4: Areas where available information is inadequate for assignment to any other MRZ zone.

IMPACTS

- a)&b) The *General Plan Mineral Management Element* does not show the site as being near an area classified as having significant mineral deposits. The Ridge Village property is not located near one of the two areas identified in the Mineral Management Element (MME) as being targeted for mining conservation. Should mining activities be proposed in the area, the MME includes a policy statement that requires a proposed mine project to address potential impacts on the urban uses based upon the nature of the mining activities. According to the

MME, the proposed project is not anticipated to result in the loss of availability of a known mineral resource or locally known minimal resource. No impact will occur.

XIII. NOISE—

Would the project:

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Generation of excessive ground borne vibration or ground borne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

SETTING

Noise is generally defined as loud, unpleasant, unexpected, or undesired sound that disrupts or interferes with normal human activities. Although exposure to high noise levels over an extended period has been demonstrated to cause hearing loss, the principal response to noise is annoyance.

Sound intensity is measured in decibels (dB) using a logarithmic scale. For example, a sound level of 0 dB is approximately the threshold of human hearing, while normal speech has a sound level of approximately 60 dB. Sound levels of approximately 120 dB become uncomfortable sounds.

Two composite noise descriptors are in common use today: L_{dn} and CNEL. The L_{dn} (Day-Night Average Level) is based upon the average hourly noise level over a 24-hour day, with a +10-decibel weighting applied to nighttime (10:00 p.m. to 7:00 a.m.) noise values. The nighttime penalty is based upon the assumption that people react to nighttime noise exposures as though they were subjectively twice as loud as daytime exposures.

The CNEL (Community Noise Equivalent Level), like L_{dn} , is based upon the weighted average hourly noise over a 24-hour day, except that an additional +4.77 decibel penalty is applied to evening (7:00 p.m. to 10:00 p.m.) hours. The CNEL was developed for the California Airport Noise Regulations and is normally applied to airport/aircraft noise assessments. The L_{dn} descriptor is a simplification of the CNEL concept, but the two will usually agree, for a given situation, within 1dB. Like the noise levels, these descriptors are also averaged and tend to disguise short-term variations in the noise environment. Because they presume increased evening or nighttime

sensitivity, these descriptors are best applied as criterial for land uses where nighttime noise exposures are critical to the acceptability of the noise environment, such as residential developments.

Potential noise in and around the area consists of vehicular traffic along Ridge Road and common noises associated with residential uses. The nearest sensitive receptors are the residential uses located adjoining the project to the west, north and east.

IMPACTS

- a) The project includes earthwork construction and house construction that will generate additional noise in the residential neighborhood. Earthwork construction is anticipated to be completed in one phase. Dependent upon lot sales, house construction may occur over several years. During the initial construction phase, noise from construction activities (dozers, graders, etc.), will occur. Activities involved in construction will generate noise levels, generally ranging from 70 to 90 dB at a distance of 50 feet. These can generally be reduced approximately 5 dB at distances of 100 feet.

Equipment used for the project and the dBA at 50 feet for each type of equipment includes the following:

Due to the distance to sensitive receptors, the equipment dBA listed may be reduced by approximately 5 dBA.

Equipment Type	dBA at 50 feet
Backhoe	84 dBA
Excavator	81 dBA
Generator	81 dBA
Jackhammer	89 dBA
Paver	77 dBA
Pickup Truck	75 dBA
Pneumatic Tools	85 dBA

In accordance with the City's Municipal Code, construction activities will be temporary in nature and will occur between normal working hours of 7:00 a.m. to 6:00 p.m. Monday through Friday and not at all on Sunday and legal holidays.

According to the State's General Plan Guidelines and City General Plan Noise Element, noises which are generally less than ± 65 dB CNEL are normally acceptable for outdoor low-density residential uses considering that any building impacted would be of normal conventional construction without any special noise insulation requirements. As noted, acceptable noise levels are determined using the Community Noise Equivalent Level (CNEL) over a 24-hour period. Although, the type of equipment used may intermittently exceed ± 60 dB, during the working hours from 7:00 a.m. to 6:00 p.m., the evening hours will not be impacted by the project. Based upon the temporary and fluctuating nature of construction noise and the following mitigation measure, construction noise would be reduced to a less than significant level.

NOISE 1 - Mitigation Measure:

Prior to the issuance of grading and/or building permits, the project grading and building plans shall identify locations for all stationary noise-generating construction equipment, such as air compressors and other construction equipment, that are located as far as practical from nearby homes. When such equipment must be located near adjacent residences, project

grading and improvement plans shall include provisions to provide acoustical shielding of such equipment. Shielding shall be to the satisfaction of the City Engineer.

- b) The project includes the use of equipment capable of producing ground borne vibration or ground borne noise levels. However, construction of the project is expected to employ the most significant vibration-producing construction equipment and/or activities (i.e. graders, dozers, etc.) that could generate vibration potentially damaging adjacent structures. The most significant equipment relative to generation of vibration includes dozers, loaded trucks, etc. The nearest residential land use is approximately ± 50 feet where road grading will occur connecting Lot B with Slate Creek Road. According to the *Federal Transit Authority* assessment of construction projects, use of heavy equipment generates vibration levels of 0.089 inches per second at a distance of 25 feet. For purposes of this analysis, 0.2 inches per second is used as a damage criterion since it applies to engineered timber construction similar to the existing residential buildings in the area. The nearest single-family dwelling is 50 feet away. At a distance of ± 50 feet, the residential vibration from construction equipment with the highest vibration potential anticipated .0445 or 0.1555 below the damage criteria for engineered timber construction. Therefore, this potential impact is considered a less than significant impact.
- c) As the crow flies, the project is located approximately 3 miles from the City of Grass Valley Municipal Airport. Due to the distance from the Nevada County Airport, noise impacts associated with the airport will not occur. No impact will occur.

XIV. POPULATION AND HOUSING –

Would the project:

- | | Potentially
Significant
Impact | Less Than
Significant
With
Mitigation
Incorporation | Less Than
Significant
Impact | No Impact |
|---|--------------------------------------|---|-------------------------------------|-------------------------------------|
| a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)? | <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"/> |

SETTING

The proposed project is located in an area of low-density residential use. The land use designation for the project site is Urban Low Density Residential (ULD) according to the *City of Grass Valley General Plan*. The zoning designation is similarly Single Residential (R-1). Such land uses are not generally growth inducing.

The project site is an infill site slated for residential development according to the General Plan. As such, the population growth anticipated with development of the site has been anticipated and accounted for in the Certified General Plan EIR.

IMPACTS

- a) Based upon 24 homes and an average household size of 2.04 persons per household, the project is anticipated to generate forty-nine (49) persons which may or may not be new residents. The potential addition of forty-nine (49) persons is not considered substantial population growth in an area, either directly or indirectly. This potential impact is considered less than significant.
- b) The project will not displace substantial numbers of existing housing, necessitating the construction of replacement housing or people elsewhere. No impact will occur.

XV. PUBLIC SERVICES —

Would the project:

- a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
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 type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

SETTING

The proposed project area is within the City of Grass Valley; served by the following public services:

- *Fire Protection:* The City of Grass Valley Fire Department provides fire protection and emergency medical services within the City. The Ophir Hill Fire Protection District serves lands east of the City limits, and the Nevada County Consolidated Fire District (NCCFD) serves the area generally north, west, and south of the City limits. The Fire Department is part of the tri-agency Joint Operating Agreement that includes the Nevada City Fire Department and NCCFD. The Fire Department has three locations: Fire Station #1 (474 Brighton Street), Fire Station #2 (213 Sierra College Drive), and administrative offices at City Hall (125 East Main Street). Equipment

includes three front line engines, one reserve engine, one Office of Emergency Services (OES) engine, a ladder truck, one air support unit, and five staff vehicles.

- *Police Protection:* The Department currently employs 24 FTE sworn members and 3 FTE civilian staff. Based upon Grass Valley's population of 12,860 the department's ratio of police officers per 1,000 residents is 1.9.
- *Schools:* Throughout Grass Valley, the Grass Valley School District serves K-5 students and the Nevada Joint Union School District serves students in grades 9 – 12. In addition, through inter-district contracts (which can be retracted), 467 students from Grass Valley currently attend schools in other school districts.
- *Parks:* The Grass Valley public parks and recreation system is comprised of approximately 108 acres of City park lands, including seven developed parks (Dow Alexander, Elizabeth Daniels, Glenn Joes, Milnnie, Memorial, DeVere, Mautino, and Condon and one underdeveloped park Morgan Ranch) within the City limits.

IMPACTS

- a) The project is not anticipated to have substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities; a need for new or physically altered governmental facilities; the construction of which could cause significant environmental impacts in order to maintain acceptable service ratios; response times or other performance objectives for any of the public services.

The applicant will be required to pay the City's impact fees for residential development, including fees for police, fire and Quimby Act (park) fees. The fees collected by the City are used to augment fire, police, parks and other public facilities. Accordingly, impacts to fire protection, police protection, schools, parks, or other public facilities will have a less than significant impact on the City's public services.

XVI. RECREATION –

Would the project:

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might, have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

SETTING

The City owns and maintains eight park/recreation facilities. These include two parks currently classified as "community parks": Condon Park and Memorial Park. Two of the eight parks, Morgan Ranch and Matino Park, are in the process of being developed. In addition, the City contracts with Nevada County Historical Society to operate the Pelton Wheel Mining Museum/Glen Jones Park. An inventory of City owned/operated parks and recreation facilities include: Memorial Park, 8.4 acres; Condon Park, 80 acres; Pelton Wheel Mining Museum/Glen Jones Park, 1.7 acres; Brighton Street Park (Minnie Street), 1.6 acres; Elizabeth Daniels Park, 0.3 acres; Dow Alexander Park, 0.5 acres; Morgan Ranch Park, 4.08 acres; and Matino Park, 12.5 acres.

Additional park/recreational facilities within the City of Grass Valley, but owned and maintained by entities other than the City are, Nevada County Country Club, 58 acres; Sierra College Park, 7.95 acres; Hennessy School, 3 acres.

IMPACTS

- a)&b) The Ridge Village residential project is anticipated to generate forty-nine persons considering 24 single family dwellings and an average household of 2.04 persons. As noted, the project will be subject to City of Grass Valley development fees including Quimby Act fees (Park fees); however, the project is not anticipated to increase the use of existing neighborhood and regional parks, recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment. The proposed project will not generate the need for additional park facilities. No impact will occur.

XVII. TRANSPORTATION/TRAFFIC –

Would the project:

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	<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 features (e.g. sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

SETTING

The project site is an infill property that has been slated for development according to the City's General Plan and Zoning Ordinance. The project site is generally bound by Ridge Road to the south and Slate Creek Road to the west.

Ridge Road – Ridge Road is an east/west collector roadway north of Historic Downtown Grass Valley. Fronting the project site, Ridge Road consists of two east/west travel lanes with 5-foot shoulders on both sides of the roadway within an approximate 50-foot right-of-way. No curb, gutter and sidewalk are located on either side of the street. The speed limit is posted at 35 miles per hour (mph).

Slate Creek Road – State Creek Road is a local residential street consisting of two 12.5-foot lanes within a 35-foot right-of-way. Curb and gutter have been constructed on the east side. The west side is undeveloped. No parking is permitted on either side of the roadway. The speed limit is not posted near the project site.

IMPACTS

- a) The project would generate temporary construction traffic initially. However, this would be temporary and would not materially alter the traffic volumes along Ridge Road, Slate Creek Road or surrounding roadways.

Based upon the trip generation rates identified in the 10th Edition of the *Institute of Transportation Engineers (ITE)* transportation generation rates manual, trip generation rates for single family dwellings have an average of 9.44 trips per day, 0.74 trips in the a.m. peak hour and 0.99 trips in the p.m. peak hour. Accordingly, the following trips are calculated from the Ridge Village project at: 227 daily trips, 18 a.m. peak hour trips, and 24 p.m. peak hour trips.

The above p.m. peak trips are below the threshold of 63 p.m. peak hour trips that require a traffic study by the City of Grass Valley. Considering that the project site was included in the traffic analysis provided by the General Plan and General Plan EIR, these vehicle trips have been anticipated in the cumulative impact totals of the City's General Plan buildout and accounted for in the Levels of Service analysis on Ridge Road, Slate Creek and nearby roadways and intersections.

The applicant will be subject to the payment of AB 1600 traffic mitigation fees, (i.e. City of Grass Valley and regional traffic impact fees) which is the acceptable form of traffic mitigation for this type of infill residential project. These fees are used exclusively for projects identified in the City's Capital Improvement Program to finance needed infrastructure improvements to achieve the Level of Service (LOS) anticipated with the City's 2020 General Plan. These impacts are less than significant.

- b) CEQA Section 15064.3 establishes a Vehicle Miles Traveled (VMT) threshold for land use projects. Specifically, Vehicle Miles Traveled exceeding an applicable threshold of significance may indicate a significant impact. Section 15064.3 notes that generally, projects within one-half

mile of either an existing major transit stop or a stop along an existing high-quality transit corridor should be presumed to cause a less than significant transportation impact according to the *CEQA Guidelines*. Moreover, projects that decrease vehicle miles traveled in the project area compared to existing conditions should also be presumed to have a less than significant transportation impact.

The project is an infill site located in proximity to transit stops. Specifically, there are four transit stops on Ridge Road; two located east of the project and two located west of the project. The project is therefore consistent with CEQA Section 15064.3 for Vehicle Miles Traveled. This potential impact is considered less than significant.

- c) The proposed project access is located on a curve that could create a sight distance safety issue on Ridge Road. To assess the intersections, the applicant retained TJKM traffic consultants. The primary purpose of the analysis was to determine the sight distance between the main access roadway for Ridge Village and traffic on Ridge Road. TJKM also conducted a sight distance evaluation at the existing intersection of Ridge Road and Slate Creek Road. The western extension of the main project road will connect with Slate Creek Road about 575 feet north of Ridge Road. About one-half of the residents of the 24 lots will find it convenient to use the Slate Creek Road to travel to and from the west. No Ridge Village residents will have access to Deeken Court (**Attachment 2 – Sight Distance Evaluation for Ridge Village**).

The sight distance is the distance from which oncoming vehicles on Ridge Road can safely stop if a vehicle from the side street, in this case the Ridge Village access road, pulls into the roadway. It is primarily dependent on vehicle speeds and a clear vision. The speed limit on Ridge Road is 35 mph and the safe stopping distance for a vehicle traveling 35 mph is 250 feet, based on Table 201.1 in the *Caltrans Design Manual*. However, the *City of Grass Valley's Design Standards, Section 6-12* includes factors in addition to safe stopping distance, requiring up to 440 feet of design sight distance to the left for vehicles existing a side street or driveway onto a two-lane highway with 35 mph design speed. To the right, the required design sight distance is 350 feet. The City is permitted to make adjustments in special circumstances, but in no case would sight distances be lower than those established by Caltrans, noted above be permitted.

View from Ridge Village Entrance Street – TJKM conducted the site distance analysis with two personnel and a measuring wheel. The entrance to Ridge Village is located on the inside portion of a horizontal curve which provides a limitation to the sight distance. In addition, the pre-development area is characterized as wooded with three to five-foot-high bushes and several trees; however, development of infrastructure improvements along Ridge Road will necessitate essentially all of the bushes to be removed along with many of the trees. It appears any remaining trees in the sight distance triangles would not significantly obstruct sight distance for motorists leaving Ridge Village and looking to the left or right for approaching traffic. This assumes any tree trunks would have branches removed in the lower seven to ten feet.

In this case, the existing site distance to the oncoming vehicle is approximately 250 feet. However, with the bushes and trees removed and trimmed, the sight distance is estimated to be approximately 320 feet.

The 320 feet of sight distance to the left can accommodate a safe stopping distance of about 42 mph. However, the Grass Valley requirement of 440 feet cannot be obtained because of the curve in the roadway and the vegetation on the property to the northeast. As it turns out, the distance from the proposed driveway to the center of Hughes Road intersection is 440 feet. To improve the sight distance beyond 320 feet, TJKM recommends the proposed access roadway be shifted to the northeast. Shifting to the west in this case is counter-productive due to the sight distance restrictions caused by the horizontal curve. Sliding to the northeast by 50 feet or so, increases sight distance. To optimize the sight distances to the northwest from the driveway, the following steps would be required:

1. Remove all underbrush and trees on the property to be developed within about 30 feet of the edge of the existing pavement.
2. Remove the trees within the street right-of-way on the northeast edge of the Deeken Road intersection. If required, trim the lower 10 feet of any remaining obstructions on or near the public right of way line.
3. Northeast of Deeken Road remove all roadside underbrush within the public right of way.
4. Northeast of Deeken Road remove all small trees within the public right of way. Trim the lower 10 feet of all larger trees in or near the public right of way.

It appears that with the sight distance improvements described, it should be possible to view southwest bound vehicles at the intersection of Hughes Road and Ridge Road. Because the driveway may have been shifted to the northeast, a total clear sight distance of 440 feet may not be achievable. This is less important because of the stop signs regulating all traffic at the intersection of Hughes and Ridge Roads, resulting in southwest bound traffic leaving the intersection from a stop. In addition, Ridge Road crests just northeast of the intersection, restricting the view of oncoming southwest bound traffic from the area near the proposed intersection. However, a clear distance of about 400 feet should be possible.

With the roadside bushes removed, this distance is increased, resulting in better conditions. Therefore, the required sight distance of 350 feet to the right is acceptable.

View from Slate Creek Road – As noted earlier, about one-half of the home sites would be advantaged to use Slate Creek Road to reach Ridge Road when traveling to and from the west. TJKM evaluated sight distance for motorists using the Slate Creek Road – Ridge Road intersection, shown in the middle of the Google aerial, looking southerly, Ridge Road is straight and level in this area and existing sight distance exceeds the required 440 feet to the left and 350 feet to the right. Therefore, TJKM considers the sight distance using the intersection acceptable.

In conclusion, TJKM finds that the sight distance will be acceptable and less than significant, at both locations under future conditions with the following mitigation measures. The City of Grass Valley Engineering Division concurs with this sight distance assessment.

TRAN - 1 Mitigation Measure:

A. Prior to the issuance of a Certificate of Occupancy for the first home, the developer shall perform the following to the satisfaction of the City Engineer:

1. Remove all underbrush and trees on the property to be developed within about 30 feet of the edge of the existing pavement.
2. Remove the trees within the street right-of-way on the northeast edge of the Deeken Road intersection. If required, trim the lower 10 feet of any remaining obstructions on or near the public right of way line.
3. Northeast of Deeken Road remove all roadside underbrush within the public right of way.
4. Northeast of Deeken Road remove all small trees within the public right of way. Trim the lower 10 feet of all larger trees in or near the public right of way.

B. Prior to the issuance of a Certificate of Occupancy, the developer shall also: Install the landscaping fronting Ridge Road consisting of low shrubbery and ground cover not to exceed thirty (30) inches in height. The established Ridge Village Homeowner's Association shall be responsible for the maintenance of the common area landscaping. Landscaping on the side yards of Lots 15 and 16 shall also include low shrubbery and ground cover not to exceed 30 inches in height. Said requirements shall be memorialized in the CC&R's for the project, which shall be monitored and enforced by the Ridge Village Homeowner's Association.

- d) The project will be constructed in accordance with City of Grass Valley Fire Department Standards in accordance with the latest edition of the Uniform Fire Code. Compliance with minimum fire code standards will ensure that adequate emergency access is maintained. This impact is less than significant.

XVIII. UTILITIES AND SERVICE SYSTEMS –

Would the project:

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	<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"/>

XVIII. UTILITIES AND SERVICE SYSTEMS –

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
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 protected 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"/>

SETTING

Drainage from and around the project site includes natural swales, ditches and storm water infrastructure. Historical drainage from the project site followed natural topography and flowed south toward Ridge Road.

Solid waste within the project area is collected by Waste Management, a licensed private disposal company. Solid waste is transported to the company's transfer station located on McCourtney Road.

Domestic water service to the proposed development is provided by the Nevada Irrigation District (NID) via existing water lines that were installed following development in the project area. According to the General Plan EIR, water supplies are enough to supply growth anticipated in the General Plan, which included the project site.

Sewage collection is provided by the City of Grass Valley via existing sewer lines along Ridge Road and Slate Creek Road. According to the General Plan EIR, sewage collection facilities are enough to supply growth anticipated in the General Plan, which included the project site.

IMPACTS

- a) The project will not require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunication facilities, the construction or relocation of which could cause significant environmental effects. All new infrastructure shall be placed underground per City standards. These impacts are less than significant.
- b) As noted in the Hydrology and Water Quality Section of this Initial Study, NID water supplies are adequate to serve the proposed development. The applicant shall pay the requisite

connection fees and install the water lines in accordance with NID standards. This impact is considered less than significant.

- c) New sewer connections are proposed with the project and will be served via the extension of existing utilities on the property from Ridge Road and Slate Creek Road.

Sewer Connection Fees are collected with the issuance of a building permit or at a request to connect to the City's sewer system. Sewer service connection fees for new development are currently due at the time of building permit issuance. This potential impact is less than significant.

- d)&e) The proposed project will be served by a landfill with enough permitted capacity to accommodate the project's solid waste disposal needs. The proposed project will comply with federal, state, and local statutes and regulations related to solid waste. This impact is considered less than significant.

XIX. WILDFIRE –

Would the project:

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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"/>

SETTING

The Grass Valley region has a generally high potential for wildland fires of devastating intensity. This is due to the presence, particularly in less urban settings, of heavier timber, woodland and brush, the occurrence of steep slopes, dry weather conditions, and human activity. Generally, vegetative areas of over 20% slope are considered as fire hazardous areas. The City limits have a distinct urban/wildland interface area. The greatest threat for wildfire hazards is from those that may originate outside the City. Historical data on wildfires in or near Grass Valley is kept on the Firehouse Reporting Data System. Because of the extended urban/wildland interface area, the City

has participated in regional efforts to reduce wildfire risks to the City. These efforts include participation in Nevada County's Local Hazard Mitigation Plan and the *Fire Safe Council of Nevada County* Community Wildfire Protection Plan. Nevada County OES and the Fire Safe Council also maintain historical fire records.

IMPACTS

- a) The project will not substantially impair an adopted emergency response plan or emergency evacuation plan. No impact will occur.
- b)-c) The project will not exacerbate wildfire risks and thereby expose project occupants to pollution concentrations from a wildfire or the uncontrolled spread of a wildfire.

The project will not 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 on-going impacts to the environment. All utilities serving the site shall be installed underground in accordance with City of Grass Valley Development Standards. These impacts are considered less than significant.

- d) The project will not expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes. This impact is considered less than significant.

XX. MANDATORY FINDINGS OF SIGNIFICANCE –

Would the project:

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

XX. MANDATORY FINDINGS OF SIGNIFICANCE –

Would the project:

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
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"/>

a)-c) This environmental analysis provides evaluation of the potential environmental effects of the proposed project, including project effects on the quality of the environment, fish and wildlife habitat (including special status species), and cultural resources. These potential impacts are considered less than significant.

REFERENCES The following references used in preparing this report have not been attached to this report. The reference material listed below is available for review upon request of the Grass Valley Community Development Department, 125 East Main Street, Grass Valley, CA 95945.

- City of Grass Valley 2020 General Plan and General Plan EIR
- City of Grass Valley Community Design Element
- City of Grass Valley Development Code
- U.S. Department of Agriculture
- City of Grass Valley Municipal Code
- Northern Sierra Air Quality Management District
- California Emission Estimator Model (CalEEMod) Version 2016.3.2
- Endangered Species Act (ESA)
- California Endangered Species Act (CESA)
- Migratory Bird Treaty Act (MBTA)
- California Department of Fish and Wildlife (CDFW)
- Nevada County General Plan
- California Building Code
- United States Environmental Protection Agency
- Nevada County Airport Land Use Compatibility Plan
- California Air Resources Board
- Mineral Management Element of the City's General Plan, dated August 24, 1993
- Community Noise Equivalent Level
- 10th Edition of the Institute of Transportation Engineers Transportation Rates
- Caltrans Design Manual
- Background Report, City of Grass Valley General Plan Update, November 1998
- Soil Survey of Nevada County, United States Department of Agriculture, Soil Conservation Service
- Flood Insurance Rate Map 06057C0631E dated February 3, 2010
- Online soil survey maps and data from USDA - <http://websoilsurvey.nrcs.usda.gov>

- Preliminary Geotechnical Report Prepared by Holdrege and Kull dated October January 2, 2008
- Biological Inventory Prepared by Greg Matuzak, Biological Consultant dated December 2019
- Archaeological Inventory Survey Prepared by Sean Michael Jensen dated October 2019
- Air Quality and Greenhouse Gas Impacts Analysis Prepared by the City of Grass Valley Community Development Department dated March 25, 2020
- City of Grass Valley Capital Improvement Program
- Preliminary Drainage Study Prepared by Millennium Planning & Engineering dated December 2019
- Office of Planning and Research

EXHIBITS

Exhibit A – Vicinity Map

Exhibit B – Aerial Photograph

Exhibit C – Site Photographs

Exhibit D – Ridge Village Tentative Subdivision Map

TABLES

Table 1 – Air Quality Impacts

ATTACHMENTS

Attachment 1 – Ridge Village Design Guidelines

Attachment 2 – Sight Distance Evaluation prepared by TKJM dated March 12, 2020

Attachment 3 – Ridge Village Project Plans



ATTACHMENTS

RIDGE VILLAGE

DESIGN GUIDELINES



APN's 008-050-005 & 008-060-016
Grass Valley, California
March 17, 2020

ATTACHMENT 1

I. PURPOSE

The purpose of the design guidelines is to provide guidance for future development of Ridge Village related to aesthetics, character and design details of the homes. Conformance with design guidelines is not mandatory but rather to be used as a general guide to help preserve and enhance Grass Valley's character and quality of life. The review authority may interpret these design guidelines with some flexibility in the application of specific lots and building permits.

The overall objective is to ensure that the intent and spirit of the design guidelines are generally followed to ensure the overall development fits into its surroundings and contributes to Grass Valley's sense of place. Considerations in design include scale, proportion, architectural detailing, materials, textures and colors.

II. DESIGN GUIDELINES & CONSIDERATIONS

The design guidelines for Ridge Village are intended to promote high quality building design with visual interest and compatibility with residential properties within close proximity. These Design Guidelines are encouraged, but not required.

This section provides guidelines for architecture design, mass, scale and quality. These design considerations include desirable qualities and elements to be considered during individual lot and home design. The overall objective is for the intent and spirit of the design guidelines contained herein to be followed.

1. Building Features & Architectural Design Considerations

Although there is no particular "style" proposed for Ridge Village, the intent is to create visual interest, character and a sense of place that is unique to Grass Valley. As such, building design within Ridge Village should include the following architectural design elements:

- a. Building orientation should consider energy efficiency, such as passive lighting, natural heating and/or cooling, sun and wind exposure and solar energy opportunities.
- b. Incorporate wall articulation to break up mass, bulk and long blank walls.
- c. Whenever possible, homes should be sited to take advantage of the natural topography, existing drainage, existing vegetation, solar exposure and related natural features.
- d. Exterior materials should fit within the surrounding area and shall conform to the standards of the Grass Valley Building Code.

2. Roofs

- a. Overall, roofs should convey and establish scale and interest through a successful composition of varied pitches and forms. Roof pitches shall have no less of a pitch than 3:12.

- b. Roof overhangs should be used, where appropriate, to shade large glass areas and avoid reflective glare. Overhangs shall not be less than 1 foot.
- c. All roof projections including, but not limited to, flues and vents, should be compatible in height and material with the structure from which they project.
- d. Dormers can be functional and aesthetic elements of the architecture; however, they should be used with some restraint, in keeping with the simple character of Grass Valley.

3. Mass & Scale

- a. Height and scale of new structures should be compatible with the R-1 zoning district as well as the surrounding area. Total living area (excluding garages) for individual homes should range between 1000 sf – 3000 sf.
- b. Overall height shall be limited to 35 feet and 2- stories.

4. Colors & Trim

- a. Natural, earth tone colors are encouraged however darker colors may also be appropriate.
- b. Color of architectural detailing, including trim at windows, doors and porches should compliment the façade.

5. Garages

- a. The garage door design should be compatible with the overall building architecture.
- b. Garages should not be a dominant forward protruding mass and should be offset to the primary structure or integrated into the main structure.
- c. Garage doors that face the street should provide detail to avoid the appearance of a plain two-car garage door. Details can include windows, double doors, hinges, etc.
- d. Porches, entryways and decks can be used effectively to lessen the visual impact of garage doors from the street.

6. Parking

- a. Driveways should be designed to allow for at minimum of 2 off-street parking spaces.

7. Fences & Walls

- a. Fences and/or walls shall not exceed 6 feet in height.
 - b. Chain link and barbed wire fences are prohibited.
-



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TECHNICAL MEMORANDUM

Date: February 5, 2020 **UPDATED March 12, 2020**

To: John Roth, Clear Creek Land Company, LLC

From: Chris D. Kinzel, P.E.
Vice President

Subject: ***Sight Distance Evaluation for Ridge Village***

TJKM was retained by the Clear Creek Land Company, LLC, the developers of the 24-lot Ridge Village, located at 2418 Ridge Road. The proposed development is located on the north side of Ridge Road between Ryan's Lane and Hughes Road. See the attached tentative map for Ridge Village.

The primary purpose of this analysis is to determine the sight distance between the main access roadway in Ridge Village and traffic on Ridge Road. TJKM also conducted sight distance evaluations at the existing intersection of Ridge Road and Slate Creek Road. The western extension of the main project road will connect with Slate Creek Road about 575 north of Ridge Road. About one-half of the residents of the 24 lots will find it convenient to use the Slate Creek Road to travel to and from the west. No Ridge Village residents will have access to Deeken Court.

The sight distance is the distance from which an oncoming vehicle on Ridge Road can safely stop if a vehicle from the side street, in this case the Ridge Village access road, pulls into the roadway. It is primarily dependent on vehicle speeds and a clear vision. The speed limit on Ridge Road is 35 mph and the safe stopping distance for a vehicle driving 35 mph is 250 feet, based on Table 201.1 in the Caltrans Design Manual. However, the City of Grass Valley's *Design Standards*, Section 6-12, which includes factors in addition to safe stopping distance, requires up to 440 feet of design sight distance to the left for vehicles exiting a side street or driveway onto a two-lane highway with 35 mph design speed. To the right, the required design sight distance is 350 feet. The City is permitted to make adjustments in special circumstances, but in no case would sight distances lower than those established by Caltrans (noted above) be allowed.

View from Entrance Street The entrance to Ridge Village is located on the inside portion of a horizontal curve which provides a limitation to the sight distance. In addition, the pre-development area is characterized as wooded with three to five foot high bushes and several trees; however as part of the Ridge Village development, essentially all of the bushes will be

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DBE • SBE

ATTACHMENT 2

TENTATIVE MAP
FOR
RIDGE VILLAGE
A PORTION OF THE EAST HALF OF SECTION 22,
TOWNSHIP 18 NORTH, RANGE 8 EAST AND WITHIN THE
OCTOBER, 2019

PROJECT INFORMATION

OWNER / APPLICANT
JOHN RICH
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DAVIS, CA 95618
(530) 753-0465
Email: jrich@rich.com

PLANNING & ENGINEERING
NIELSON PLANNING & ENGINEERING
471 BUTTER WPT, SUITE 210
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CONTACT PERSON: KYLE WOOD (kwood@npe.com)

SURVEYING & BOUNDARY
NELSON ENGINEERING
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POWELL VALLEY, CA 95946
(530) 422-4811
CONTACT PERSON: KATHY NELSON (knelson@nelsonengr.com)

APN's
988-001-001 & 988-001-014

SITE ADDRESS
2145 RIDGE ROAD & 550 RICHMOND STREET

LAND AREA
8.35 ACRES

ZONING / GENERAL PLAN
R-1.7 (GENERAL USE RESIDENTIAL)

WATER
MENDOTA WATERSHED DISTRICT (MWD)

SEWER
CITY OF DAVIS WASTEWATER

FIRE PROTECTION
CITY OF DAVIS FIRE

NOTES
1. TOPOGRAHY AND BOUNDARY INFORMATION PROVIDED BY NELSON

LEGEND

[Symbol]	EASTING TREES TO REMAIN
[Symbol]	NEW SIDEWALK
[Symbol]	NEW ASPHALT PAVEMENT
[Symbol]	PROPOSED FENCE
[Symbol]	COMMON AREA - LANDSCAPE
[Symbol]	PROPOSED PUBLIC TRAIL - 4' WIDE

SHEET INDEX

SHEET #	SHEET DESCRIPTION
C1.0	TENTATIVE MAP

VICINITY MAP
NOT TO SCALE



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CALIFORNIA

**RIDGE VILLAGE
2418 RIDGE ROAD
TENTATIVE MAP**

CITY OF GRASS VALLEY

[illegible]

DESIGNED: RHW	DRAWN: DEC	PROD. NO: 19-0906	CHK: SEE DAYSTAMP	DATE: OCT, 2019
SHEET NUMBER				
C1.0				

OWNER / APPLICANT
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SURVEYING & BOUNDARY
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Nelson@NelsonEngineering.com

APN's
808-050-002 & 008-040-016

SITE ADDRESS
415 UNION AVE SE (2ND ST)

LAND AREA
8.33 ACRES

ZONING / GENERAL PLAN
R-1 / Greenbelt (SDP1) (S2)

WATER
MINNEAPOLIS WATERSHED DISTRICT (MWD)

SEWER
CITY OF GRAND HAVY







FIRE PROTECTION
CITY OF GRAND HAVY

ELECTRIC UTILITIES

NOTES

1. TOPOGRAPHY AND BOUNDARY INFORMATION PROVIDED BY NELSON ENGINEERING.
2. PROPERTY LINES WERE CALCULATED FROM RECORD DATA AND FOUND MONUMENTS.

LEGEND

LEGEND	
	EXISTING TREES TO REMAIN
	NEW SIDEWALK
	NEW ASPHALT PAVEMENT
	PROPOSED FENCE
	COMMON AREA - LANDSCAPE
	PROPOSED PUBLIC TRAIL - 4' WIDE

SHEET INDEX

SHT #	SHEET DESCRIPTION
C1.0	TENTATIVE MAP
C2.0	PRELIMINARY GRADING & DRAINAGE PLAN
C3.0	TREE REMOVAL PLAN
L1	PRELIMINARY LANDSCAPE PLAN

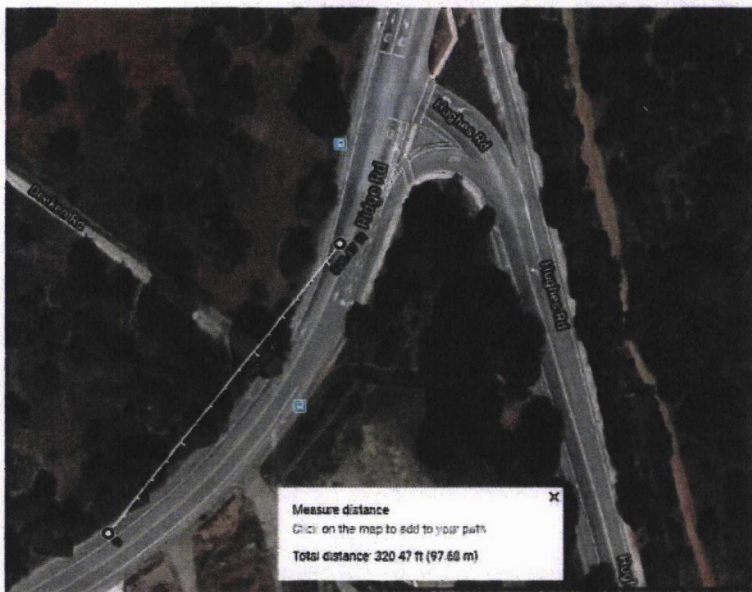


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removed along with many of the trees. It appears any remaining trees in the sight triangles would not significantly obstruct sight distance for motorists leaving Ridge Village and looking to the left or right for approaching traffic. This assumes any tree trunks would have branches removed in the lower seven to ten feet.

TJKM conducted the site distance analysis with two personnel and a measuring wheel. The ground-based photos were taken at the site of the proposed entrance roadway. The top photo shows the existing view to the left (east) and the second photo shows a Google view of the same area.

In this case, the existing sight distance to the oncoming vehicle is approximately 250 feet. However, with the bushes and trees removed and trimmed, the sight distance is estimated to be approximately 320 feet, as shown in the lower aerial photo.



The 320 feet of sight distance to the left can accommodate a safe stopping distance of about 42 mph. However, the Grass Valley requirement of 440 feet cannot be obtained because of the curve in the roadway and the vegetation on the property to the northeast. As it turns out, the distance from the proposed driveway to the center of the Hughes Road intersection is 440 feet. To improve the sight distance beyond 320 feet, TJKM recommends the proposed access



roadway be shifted to the northeast. (Shifting to the west in this case is counter-productive due to the sight restrictions caused by the horizontal curve. Sliding to the northeast by 50 feet or so, increases the sight distance to the northeast from the driveway, the following steps would be required:

1. Remove all underbrush and trees on the property to be developed within about 30 feet of the edge of existing pavement.
2. Remove the trees within the street right of way on the northeast edge of the Deeken Road intersection. If required, trim the lower 10 feet of any remaining obstructions on near the public right of way line.
3. Northeast of Deeken Road, remove all roadside underbrush within the public right of way.
4. Northeast of Deeken Road, remove all small trees within the public right of way. Trim the lower 10 feet of all larger trees in or near the public right of way.

It appears that with the sight distance improvements described, it should be possible to view southwest bound vehicles at the intersection of Hughes Road and Ridge Road. Because the driveway may have been shifted to the northeast, a total clear sight distance of 440 feet may not be achievable. This is less important because of the stop signs regulating all traffic at the intersection, resulting in southwest bound traffic leaving the intersection from a stop. In addition, Ridge Road crests just northeast of the intersection, restricting the view of oncoming southwest bound traffic from the area near the proposed new intersection. However, a clear distance of about 400 feet should be possible.

The photo here shows the view from the future street to the right (west.) In this case, oncoming traffic can be seen from a distance of approximately 360 feet under existing conditions. With the roadside bushes removed, this distance is increased, resulting in better conditions. Therefore, the required sight distance of 350 feet to the right is acceptable.

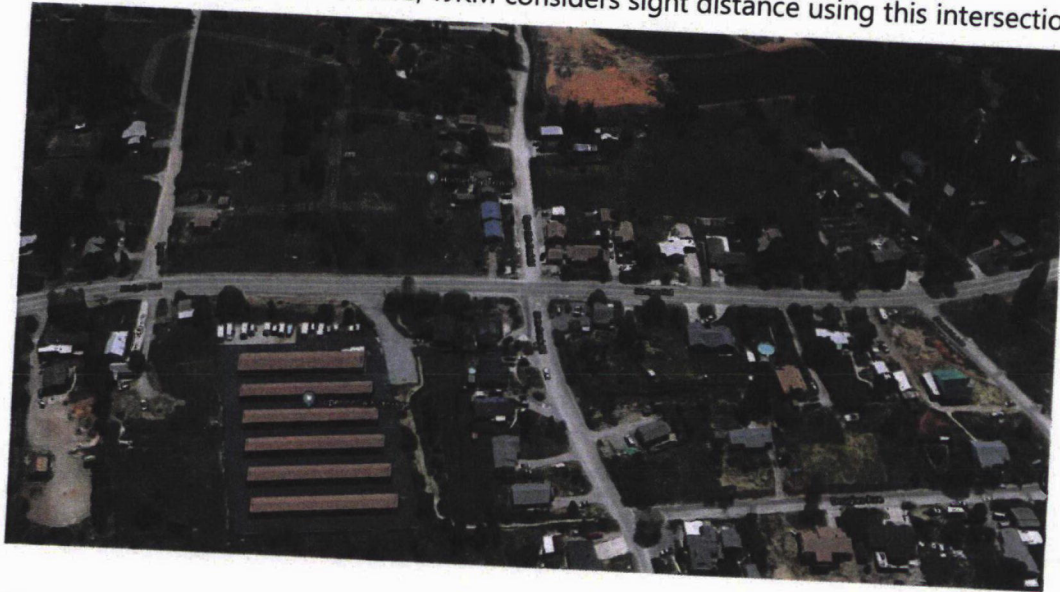




TJKM

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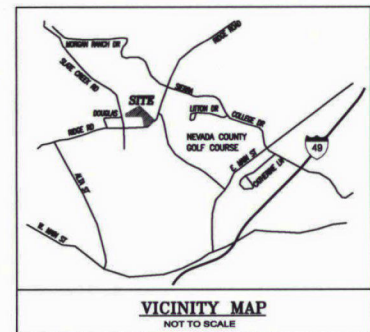
View from Slate Creek Road As noted earlier, about one-half of the home sites would be advantaged to use Slate Creek Road to reach Ridge Road when traveling to and from the west. TJKM evaluated sight distance for motorists using the Slate Creek Road - Ridge Road intersection, shown in the middle of the Google aerial, looking southerly, Ridge Road is straight and level in this area and existing sight distance exceeds the required 440 feet to the left and 350 feet to the right. Therefore, TJKM considers sight distance using this intersection acceptable.



Conclusion TJKM finds that sight distance will be acceptable at both locations under future conditions. This assumes that roadside bushes will be removed, trees will be trimmed, and no new vegetation or walls in the line of sight will exceed about 30 inches in height.

Please contact me at ckinzel@tjkm.com if there are questions.

(REVISED MARCH, 2020)



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CALIFORNIA

RIDGE VILLAGE
 2418 RIDGE ROAD
 TENTATIVE MAP

CITY OF GRASS VALLEY

SHEET NUMBER C1.0	DESIGNED: REW	REV.	DESCRIPTION	DATE
	DRAWN: DEC			
	PROJ. NO: 19-0908			
	DWG. SEE DAYSTAMP			
	DATE: MARCH, 2020			

1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2035, 2036, 2037, 2038, 2039, 2040, 2041, 2042, 2043, 2044, 2045, 2046, 2047, 2048, 2049, 2050, 2051, 2052, 2053, 2054, 2055, 2056, 2057, 2058, 2059, 2060, 2061, 2062, 2063, 2064, 2065, 2066, 2067, 2068, 2069, 2070, 2071, 2072, 2073, 2074, 2075, 2076, 2077, 2078, 2079, 2080, 2081, 2082, 2083, 2084, 2085, 2086, 2087, 2088, 2089, 2090, 2091, 2092, 2093, 2094, 2095, 2096, 2097, 2098, 2099, 2100, 2101, 2102, 2103, 2104, 2105, 2106, 2107, 2108, 2109, 2110, 2111, 2112, 2113, 2114, 2115, 2116, 2117, 2118, 2119, 2120, 2121, 2122, 2123, 2124, 2125, 2126, 2127, 2128, 2129, 2130, 2131, 2132, 2133, 2134, 2135, 2136, 2137, 2138, 2139, 2140, 2141, 2142, 2143, 2144, 2145, 2146, 2147, 2148, 2149, 2150, 2151, 2152, 2153, 2154, 2155, 2156, 2157, 2158, 2159, 2160, 2161, 2162, 2163, 2164, 2165, 2166, 2167, 2168, 2169, 2170, 2171, 2172, 2173, 2174, 2175, 2176, 2177, 2178, 2179, 2180, 2181, 2182, 2183, 2184, 2185, 2186, 2187, 2188, 2189, 2190, 2191, 2192, 2193, 2194, 2195, 2196, 2197, 2198, 2199, 2200, 2201, 2202, 2203, 2204, 2205, 2206, 2207, 2208, 2209, 2210, 2211, 2212, 2213, 2214, 2215, 2216, 2217, 2218, 2219, 2220, 2221, 2222, 2223, 2224, 2225, 2226, 2227, 2228, 2229, 2230, 2231, 2232, 2233, 2234, 2235, 2236, 2237, 2238, 2239, 2240, 2241, 2242, 2243, 2244, 2245, 2246, 2247, 2248, 2249, 2250, 2251, 2252, 2253, 2254, 2255, 2256, 2257, 2258, 2259, 2260, 2261, 2262, 2263, 2264, 2265, 2266, 2267, 2268, 2269, 2270, 2271, 2272, 2273, 2274, 2275, 2276, 2277, 2278, 2279, 2280, 2281, 2282, 2283, 2284, 2285, 2286, 2287, 2288, 2289, 2290, 2291, 2292, 2293, 2294, 2295, 2296, 2297, 2298, 2299, 2300, 2301, 2302, 2303, 2304, 2305, 2306, 2307, 2308, 2309, 2310, 2311, 2312, 2313, 2314, 2315, 2316, 2317, 2318, 2319, 2320, 2321, 2322, 2323, 2324, 2325, 2326, 2327, 2328, 2329, 2330, 2331, 2332, 2333, 2334, 2335, 2336, 2337, 2338, 2339, 2340, 2341, 2342, 2343, 2344, 2345, 2346, 2347, 2348, 2349, 2350, 2351, 2352, 2353, 2354, 2355, 2356, 2357, 2358, 2359, 2360, 2361, 2362, 2363, 2364, 2365, 2366, 2367, 2368, 2369, 2370, 2371, 2372, 2373, 2374, 2375, 2376, 2377, 2378, 2379, 2380, 2381, 2382, 2383, 2384, 2385, 2386, 2387, 2388, 2389, 2390, 2391, 2392, 2393, 2394, 2395, 2396, 2397, 2398, 2399, 2400, 2401, 2402, 2403, 2404, 2405, 2406, 2407, 2408, 2409, 2410, 2411, 2412, 2413, 2414, 2415, 2416, 2417, 2418, 2419, 2420, 2421, 2422, 2423, 2424, 2425, 2426, 2427, 2428, 2429, 2430, 2431, 2432, 2433, 2434, 2435, 2436, 2437, 2438, 2439, 2440, 2441, 2442, 2443, 2444, 2445, 2446, 2447, 2448, 2449, 2450, 2451, 2452, 2453, 2454, 2455, 2456, 2457, 2458, 2459, 2460, 2461, 2462, 2463, 2464, 2465, 2466, 2467, 2468, 2469, 2470, 2471, 2472, 2473, 2474, 2475, 2476, 2477, 2478, 2479, 2480, 2481, 2482, 2483, 2484, 2485, 2486, 2487, 2488, 2489, 2490, 2491, 2492, 2493, 2494, 2495, 2496, 2497, 2498, 2499, 2500, 2501, 2502, 2503, 2504, 2505, 2506, 2507, 2508, 2509, 2510, 2511, 2512, 2513, 2514, 2515, 2516, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2526, 2527, 2528, 2529, 2530, 2531, 2532, 2533, 2534, 2535, 2536, 2537, 2538, 2539, 2540, 2541, 2542, 2543, 2544, 2545, 2546, 2547, 2548, 2549, 2550, 2551, 2552, 2553, 2554, 2555, 2556, 2557, 2558, 2559, 2560, 2561, 2562, 2563, 2564, 2565, 2566, 2567, 2568, 2569, 2570, 2571, 2572, 2573, 2574, 2575, 2576, 2577, 2578, 2579, 2580, 2581, 2582, 2583, 2584, 2585, 2586, 2587, 2588, 2589, 2590, 2591, 2592, 2593, 2594, 2595, 2596, 2597, 2598, 2599, 2600, 2601, 2602, 2603, 2604, 2605, 2606, 2607, 2608, 2609, 2610, 2611, 2612, 2613, 2614, 2615, 2616, 2617, 2618, 2619, 2620, 2621, 2622, 2623, 2624, 2625, 2626, 2627, 2628, 2629, 2630, 2631, 2632, 2633, 2634, 2635, 2636, 2637, 2638, 2639, 2640, 2641, 2642, 2643, 2644, 2645, 2646, 2647, 2648, 2649, 2650, 2651, 2652, 2653, 2654, 2655, 2656, 2657, 2658, 2659, 2660, 2661, 2662, 2663, 2664, 2665, 2666, 2667, 2668, 2669, 2670, 2671, 2672, 2673, 2674, 2675, 2676, 2677, 2678, 2679, 26

LEGEND	
	PROPERTY LINE
	PROPOSED BUILDING ENVELOPES
	PROPOSED SIDEWALK
	PROPOSED ASPHALT PAVEMENT
	PROPOSED GRAVEL DRIVEWAY
	PROPOSED FENCE
	BIO-RETENTION AREA
	PROPOSED PUBLIC TRAIL - 4' WIDE

1. TOPOGRAPHY AND BOUNDARY INFORMATION PROVIDED BY NELSON ENGINEERING.
2. PROPERTY LINES WERE CALCULATED FROM RECORD DATA AND FOUND MONUMENTS.

SHEET INDEX	
SHT #	SHEET DESCRIPTION
C1.0	TENTATIVE MAP
C2.0	PRELIMINARY GRADING & DRAINAGE PLAN
C3.0	PRELIMINARY UTILITY PLAN
C4.0	TREE REMOVAL PLAN
L1	PRELIMINARY LANDSCAPE PLAN

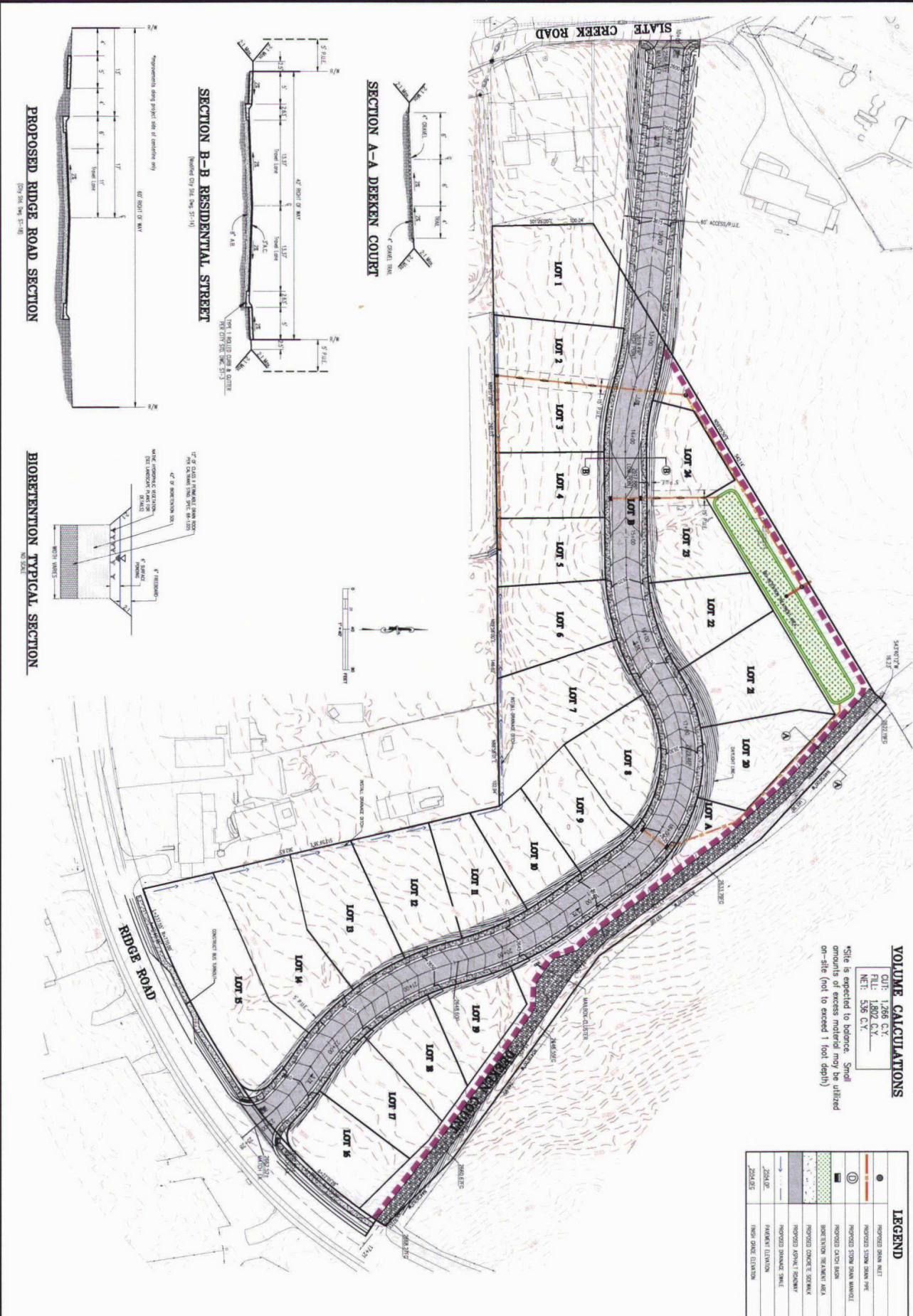
ATTACHMENT 3

VOLUME CALCULATIONS

CUT: 1,266 C.Y.
 FILL: 1,802 C.Y.
 NET: 536 C.Y.

*Site is expected to balance. Small amounts of excess material may be utilized on-site (not to exceed 1 foot depth)

LEGEND	
	PROPOSED STORM WATER NET
	PROPOSED STORM WATER PIPE
	PROPOSED STORM WATER MANHOLE
	PROPOSED STORM WATER BASIN
	PROPOSED STORM WATER AREA
	PROPOSED STORM WATER STRUCTURE
	PROPOSED STORM WATER FEATURE
	PROPOSED STORM WATER ELEMENT
	PROPOSED STORM WATER COMPONENT
	PROPOSED STORM WATER PART
	PROPOSED STORM WATER DETAIL
	PROPOSED STORM WATER SECTION
	PROPOSED STORM WATER VIEW
	PROPOSED STORM WATER ELEVATION



RIDGE VILLAGE
 2418 RIDGE ROAD
 PRELIMINARY GRADING AND DRAINAGE

CALIFORNIA



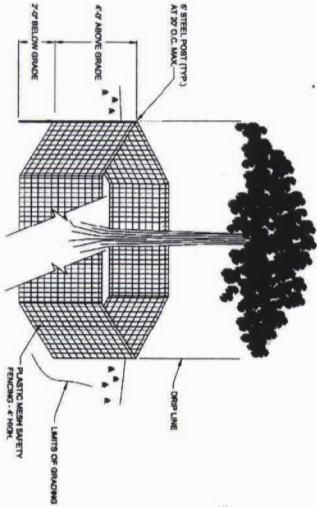
DESIGNED: REW	REV.	DESCRIPTION	DATE
DRAWN: DEC			
PROJ. NO: 19-0906			
DWG. SEE DAYSTAMP			
DATE: MARCH, 2020			

C2.0

LEGEND

	TREES TO REMAIN (DOT NOTED ON PLAN)
	TREES TO BE REMOVED (CROSS NOTED ON PLAN)
	TREES TO BE REMOVED (CROSS NOTED ON PLAN)

GENERAL NOTES
 1. TREES LESS THAN 6" DBH SHALL BE NOTED AND REMOVED.
 2. TREES 6" DBH AND GREATER SHALL BE NOTED AND REMOVED.
 3. LOCATION AND TYPE OF TREE PROTECTION FENCING SHALL CORRESPOND TO CITY OF GRASS VALLEY STANDARD CODE SET TREE PROTECTION OTHER THIS SHEET.



- NOTES**
- ALL EXISTING TREES OR GROUPINGS OF TREES SHALL BE FENCED FOLLOWING.
 - WHEN ANY CONSTRUCTION ACTIVITIES, FENCING SHALL BE AS SHOWN.
 - TREES SHALL BE PLACED AT THE APPROPRIATE CORNER LINE OF THE TRIGGER CATCHY ON THE LIMIT OF THE GRADING, WHICHEVER IS APPROPRIATE.

APPROVED BY:		PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION TREE PROTECTION
SCALE: 1" = 40'	DATE: MARCH 2020	
DRAWN BY:		GR - 5

DESIGNED: NEW	REV.	DESCRIPTION	DATE
DRAWN: DEC			
PROJ. NO: 19-0908			
DWG. SET: DAYSTAMP			
DATE: MARCH, 2020			

CITY OF GRASS VALLEY

RIDGE VILLAGE 2418 RIDGE ROAD TREE REMOVAL PLAN



CALIFORNIA