SNOW Sports Museum and Community Cultural Center Project

SCH# 2022030511

Draft Environmental Impact Report

Prepared for
Placer County

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1. INTRODUCTION

1.1 TYPE AND PURPOSE OF THE EIR

The SNOW Sports Museum and Community Cultural Center Project Environmental Impact Report (EIR) has been prepared in accordance with the California Environmental Quality Act (CEQA) of 1970, Public Resources Code (PRC) Sections 21000-21178, as amended and the Guidelines for Implementation of the California Environmental Quality Act, California Code of Regulations (CCR) Title 14, Sections 15000-15387 (CEQA Guidelines). Placer County is the lead agency for the environmental review of the SNOW Sports Museum and Community Cultural Center Project (proposed project) evaluated herein and has the principal responsibility for reviewing the impacts of and considering approval of the proposed project. As required by Section 15121 of the CEQA Guidelines, this EIR will (a) inform public agency decision-makers, and the public generally, of the significant environmental effects of the project, (b) identify possible ways to minimize the significant adverse environmental effects, and (c) describe reasonable and feasible project alternatives which reduce environmental effects. The public agency shall consider the information in the EIR along with other information that may be presented to the agency.

As provided in the CEQA Guidelines Section 15021, public agencies are charged with the duty to avoid or minimize environmental damage where feasible. The public agency has an obligation to balance a variety of public objectives, including economic, environmental, and social issues. CEQA requires the preparation of an EIR prior to approving any project that may have a significant effect on the environment. For the purposes of CEQA, the term *project* refers to the whole of an action, which has the potential for resulting in a direct physical change or a reasonably foreseeable indirect physical change in the environment (CEQA Guidelines Section 15378[a]). With respect to the proposed project, the County has determined that the proposed development is a *project* within the definition of CEQA, which has the potential for resulting in significant environmental effects.

The lead agency is required to consider the information in the EIR along with any other available information in deciding whether to approve the application. The basic requirements for an EIR include discussions of the environmental setting, environmental impacts, mitigation measures, alternatives, growth inducing impacts, and cumulative impacts.

The CEQA Guidelines identify several types of EIRs, each applicable to different project circumstances. This EIR has been prepared as a *project-level EIR* pursuant to CEQA Guidelines Section 15161, which is an analysis that examines the environmental impacts of a specific development project. A *project-level EIR* focuses primarily on the changes in the environment that would result from the development of the project, and examines all phases of the project including planning, construction, and operation.

1.2 KNOWN RESPONSIBLE AND TRUSTEE AGENCIES

“Responsible agency” means a public agency that proposes to carry out or approve a project for which a lead agency is preparing or has prepared an EIR or Negative Declaration. For the purpose of CEQA, the term responsible agency includes all California public agencies other than the lead

agency that have discretionary approval power over the project or an aspect of the project. The Lahontan Regional Water Quality Control Board (RWQCB) is identified as a responsible agency.

"Trustee agency" means a State agency having jurisdiction by law over natural resources affected by a project, which are held in trust for the people of the State of California. The known possible trustee agencies for the project are the California Department of Fish and Wildlife (CDFW) and the California Department of Forestry and Fire Protection (CAL FIRE).

Although not subject to California law, and, thus, outside the definitions of responsible agency or trustee agency, the U.S. Forest Service (USFS), U.S. Army Corps of Engineers (USACE) and U.S. Fish and Wildlife Service (USFWS) may also be called upon to grant approvals — under federal law — necessary for the development of the project site. The above agencies do not have duties under CEQA, but, rather, are governed by a variety of federal statutes, such as the Clean Water Act, which governs the dredging and filling of waters of the U.S. (e.g., wetlands), and the Endangered Species Act, which requires USACE to consult with the USFWS as part of the review process for any wetland or fill permits that may be required.

1.3 PROJECT SUMMARY

The project site consists of approximately one acre of the 26.8-acre Olympic Valley Park site, 101 Olympic Valley Road, southwest of the intersection of Olympic Valley Road and State Route (SR) 89, in the unincorporated community of Olympic Valley. Olympic Valley Park is a 26.8-acre park, consisting of five parcels, owned and operated by Placer County. The project site is identified by portions of Assessor's Parcel Numbers (APNs) 096-290-021-000 and 096-290-056-000, and would be located between the Olympic Valley Park driveway entrance to the parking lot from Olympic Valley Road and the existing pickleball courts. The project site is designated as Conservation Preserve (CP) in the 1983 Squaw Valley General Plan (SVGP) and Land Use Ordinance, and the current zoning designation for the site is Forest Recreation (FR). The project site is situated on undulating topography which runs north to south, and contains areas of vegetation, predominantly montane coniferous forest, which largely consist of white fir and pine trees native to the area. Patches of willow scrub occur in scattered locations within stormwater detention basins constructed for the Olympic Valley Park. The southeast portion of the project site is currently developed with an existing parking lot.

The project site is bounded by Olympic Valley Road to the north, SR 89 and the Truckee River Trail to the east, and Olympic Valley Park facilities to the south and west. The area north of the project site, across Olympic Valley Road, is sparsely developed and is largely occupied by forest and meadow vegetation. However, a commercial recreation store and convenience store (7-Eleven) are located on the west side of SR 89, north of the project site, across Olympic Valley Road. A soccer field and playground are located west of the project site within Olympic Valley Park. The Olympic Valley community is located further west, the nearest structures of which include condominiums and single-family residences in the vicinity of the project site to the northwest. The Lake Tahoe Preparatory School is also located northwest of the project site. Rural residences are located east of the project site, across SR 89, and the Truckee River. The Truckee River Trail and forest land are located south of the project site. Palisades Tahoe, which contains lodging, ski lifts, a golf course, and associated commercial uses is located further southwest.

The proposed project would include development of a museum and community cultural center building celebrating the 1960 Winter Olympics and history of winter sports in the Sierra Nevada. The proposed development would include the construction of a new, two-story, U-shaped

building, various site improvements, and a number of amenities such as event space. The two-story, U-shaped building would consist of up to 20,000 square feet (sf) of building space with a maximum height of approximately 30 feet. The second/upper floor would serve as the entrance to the building due to the museum having a stepped floor plan. Although not yet determined, the building could also include a mezzanine.

Outdoor gathering spaces and amenities would be provided, such as a plaza deck to be located south of the building and a V-shaped garden to be located east of the building. Various other improvements would be included in the development of the proposed project, including, but not limited to, landscaping and utility installation, as well as improvements to the existing facilities at Olympic Valley Park. In total, the construction of the building and associated improvements would comprise approximately one acre. However, the proposed project would only result in a total disturbance area of approximately 0.68-acre.

The existing Olympic Valley Park parking lot has a total of 116 spaces (61 in the upper/western area and 55 in the lower/eastern area). The existing parking lot would be resurfaced, and the parking area directly fronting the museum would be restriped to include two additional Americans with Disabilities Act (ADA) parking spaces. A planting area in the eastern portion of the parking lot would be removed and replaced with eight vehicle parking spaces. Including existing and proposed parking, a total of 121 parking spaces (including seven ADA-compliant parking spaces) would be provided on-site.

The proposed project would require County approval of the following entitlements:

- Certification of the EIR;
- Adoption of the Mitigation Monitoring and Reporting Program;
- Amendment to the SVGP Land Use Ordinance to add Section 261 to establish the new Cultural Amenities Land Use District, and a subsequent Rezone of the approximately one-acre project site to the newly established district;
- Text Amendment to Section 12.24.040 of the Placer County Government Code;
- Conditional Use Permit to allow a museum and community cultural center within the new land use district;
- Design Review; and
- Potential Minor Land Division to create a new parcel for the proposed project.

In addition to the above County approvals, the proposed project could require the following approvals/permits from other responsible and trustee agencies:

- Less than three-acre Conversion Exemption – CAL FIRE;
- Authority to Construct and Permit to Operate a Sewer Lift Station – Placer County Air Pollution Control District (PCAPCD);
- Section 404 Nationwide Permit (or Letter of Permission) – USACE;
- Section 401 Water Quality Certification – Lahontan RWQCB;
- Section 1602 Permit – CDFW; and
- National Pollutant Discharge Elimination System (NPDES) Construction General Permit – Lahontan RWQCB.

1.4 EIR PROCESS

The EIR process begins with the decision by the lead agency to prepare an EIR, either during a preliminary review of a project or at the conclusion of an Initial Study. Once the decision is made to prepare an EIR, the lead agency sends a Notice of Preparation (NOP) to appropriate government agencies and, when required, to the State Clearinghouse (SCH) in the Office of Planning and Research (OPR), which will ensure that responsible and trustee State agencies reply within the required time. The SCH assigns an identification number to the project, which then becomes the identification number for all subsequent environmental documents on the project. Commenting agencies have 30 days to respond to the NOP and provide information regarding alternatives and mitigation measures they wish to have explored in the Draft EIR and to provide notification regarding whether the agency will be a responsible agency or a trustee agency for the project.

Upon completion of the Draft EIR and prior to circulation to State and local agencies and interested members of the public, a notice of completion is filed with the SCH and a public notice of availability is published to inform interested parties that a Draft EIR is available for agency and public review. In addition, the notice provides information regarding the location of copies of the Draft EIR available for public review and any public meetings or hearings that are scheduled. The Draft EIR is circulated for a minimum period of 45 days, during which time reviewers may submit comments on the document to the lead agency. The lead agency must respond to comments in writing. If significant new information, as defined in CEQA Guidelines Section 15088.5, is added to an EIR after public notice of availability is given, but before certification of the EIR, the revised EIR or affected chapters must be recirculated for an additional public review period with related comments and responses.

A Final EIR will be prepared, containing public comments on the Draft EIR and written responses to those comments, as well as a list of changes to the Draft EIR text necessitated by public comments, as warranted. Before considering approval of a project, the lead agency shall certify that the EIR (consisting of the Draft EIR and Final EIR) has been completed in compliance with CEQA, and that the EIR has been presented to the decision-making body of the lead agency, which has reviewed and considered the EIR. The lead agency shall also certify that the EIR reflects the lead agency's independent judgment and analysis.

The findings prepared by the lead agency must be based on substantial evidence in the administrative record and must include an explanation that bridges the gap between evidence in the record and the conclusions required by CEQA. If the decision-making body elects to proceed with a project that would have unavoidable significant impacts, then a Statement of Overriding Considerations explaining the decision to balance the benefits of the project against unavoidable environmental impacts must be prepared.

1.5 PROJECT BASELINE

The CEQA Guidelines identify several types of EIRs, each applicable to different project circumstances. This EIR has been prepared as a project-level EIR pursuant to CEQA Guidelines Section 15161, which is an analysis that examines the environmental impacts of a specific development project. A project-level EIR focuses primarily on the changes in the environment that would result from the development of the project, and examines all phases of the project including planning, construction, and operation.

According to CEQA Guidelines Section 15125, an EIR must include a description of the existing physical environmental conditions in the vicinity of the project to provide the "baseline physical conditions" against which project-related changes could be compared. In addition, CEQA Guidelines Section 15126.2(a) states that an EIR shall identify and focus on the significant environmental effects of the proposed project. The CEQA Guidelines, Section 15126.2(a), states in pertinent part:

> An EIR shall identify and focus on the significant environmental effects of the proposed project. In assessing the impact of a proposed project on the environment, the lead agency should normally limit its examination to changes in the existing physical conditions in the affected area as they exist at the time the notice of preparation is published, or where no notice of preparation is published, at the time environmental analysis is commenced.

Normally, the baseline condition is the physical condition that exists when the NOP is published. The NOP for the proposed project was published on March 18, 2022. Therefore, conditions existing at that time are considered to be the baseline against which changes that would result from the proposed project are evaluated. Impacts could include both direct and indirect physical changes to the baseline condition. The baseline condition for the proposed project site is described in Chapter 3, Project Description, of this EIR. The baseline conditions pertaining to each resource area are described in the "Existing Environmental Setting" section of the respective chapters of this EIR.

1.6 SCOPE OF THE EIR

The Initial Study prepared for the proposed project during the scoping period (see Appendix A) includes a detailed environmental checklist addressing a range of technical environmental issues. For each technical environmental issue, the Initial Study identifies the level of impact for the proposed project. The Initial Study identifies the environmental effects as either "no impact," "less than significant," "less than significant with mitigation incorporated," or "potentially significant." Impacts identified for the proposed project in the Initial Study as "no impact," "less-than-significant," or "less-than-significant with mitigation incorporated" are summarized below. All remaining issues identified in the Initial Study as "potentially significant" are discussed in the subsequent technical chapters of this EIR.

- *Aesthetics (Item I-2):* According to the California Scenic Highway Mapping System, the project site is not located within the vicinity of an officially designated State Scenic Highway. While SR 89, located approximately 100 feet east of the project site, is an Eligible State Scenic Highway, the roadway has not been officially designated. Therefore, development of the proposed project would not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State Scenic Highway, and a *less-than-significant* impact would occur.

- *Agricultural & Forest Resources (All Items):* The project site has not been mapped by the Farmland Mapping and Monitoring Program. However, the site currently consists of undeveloped areas of vegetation, predominantly montane coniferous forest, which largely consist of white fir and pine trees native to the area, as well as an existing parking lot, and is, therefore, not considered Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. As such, development of the proposed project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to a non-agricultural

use. In addition, the project site is not under an existing Williamson Act contract, nor is the site zoned for agricultural use. The project site is currently zoned FR.

The project site is considered to be "timberland" pursuant to the Forest Practice Act. However, pursuant to Section 1104.1 of the CCR, a conversion exemption is applicable for a conversion of Timberland to a non-timber use for land less than three acres in one contiguous ownership, so long as the property owner seeking the exemption has not obtained such an exemption in the prior five years. Because the project site consists of an approximately one-acre portion of Olympic Valley Park, the proposed project would require preparation of a Notice of Conversion Exemption Timber Operations in accordance with CCR Section 1104.1(a). Although the project site currently contains trees that would require removal for development of the site, the area is not currently used or zoned for Timberland Production. Furthermore, the parcel on which the project site is located is currently in use as a recreational park. Therefore, timberland production at the project site would be incompatible with the site and the surrounding area. Based on the above, a *less-than-significant* impact would occur related to agricultural and forest resources.

- *Biological Resources (All Items):* For the purposes of the analysis included in the Initial Study for the proposed project, a Biological Resources Assessment (BRA) was prepared for the project site by WRA, Inc. The BRA included a search of the California Natural Diversity Database (CNDDB) for the Tahoe City, Truckee, Homewood, Martis Peak, Kings Beach, Meeks Bay, Norden, Granite Chief, and Wentworth Springs 7.5-minute U.S. Geological Survey (USGS) quadrangle maps. The Placer County Conservation Program (PCCP) area, which is a Habitat Conservation Plan (HCP), does not include the project site or surrounding area. Therefore, the project site is not currently subject to any habitat conservation plans, and the project would not conflict with the provisions of an adopted HCP, Natural Community Conservation Plan (NCCP), or other approved local, regional, or state habitat conservation plan. As such, *no impact* related to said Plans would occur.

  In addition, according to the BRA prepared for the proposed project, due to the intensity of surrounding development throughout Olympic Valley, the fragmented habitat within the project site itself does not function as a movement corridor or serve as a critical linkage connecting patches of "high quality" habitat considered to be essential to the long-term survival of migratory wildlife species. Therefore, the proposed project would not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites, and a *less-than-significant* impact would occur.

  Based on the results of the CNDDB search, several special-status plant and wildlife species are known to occur within the project region. WRA conducted site surveys on July 23rd and July 24th, 2020, which included a protocol-level rare plant survey for which the project site was traversed on foot to evaluate plant communities present within the project site. In addition, the site survey included evaluation of whether potential suitable habitat for special-status wildlife species is present on-site. Based upon a review of species databases and literature, 13 special-status plant species, six special status bat species, and migratory birds protected by the Migratory Bird Treaty Act (MBTA) were determined to have to potential to occur on the project site. Based on the negative results of the protocol level rare plant survey, it was determined that special status plant species are not present on the project site. However, the BRA determined that implementation of the

proposed project would have the potential to disturb habitat for special-status bats and migratory birds protected by the MBTA. Implementation of Mitigation Measures IV-1 and IV-2 would reduce adverse effects, either directly or through habitat modifications, on six special-status bat species, as well as migratory birds which could be considered species identified as special-status species in local or regional plans, policies, or regulations, or by the CDFW or the USFWS, to a *less-than-significant* level.

According to the Tree Survey prepared for the proposed project, a total of 228 native trees exist within the project site. Of the 228 trees, 57 are recommended for removal due to health; however, during project construction, an estimated 109 trees would be removed for development of the site. The Placer County Woodland Conservation Ordinance (Chapter 19, Article 50, of the Placer County Code) regulates the encroachment of construction activities into protected zones of protected trees and the removal of any protected trees. Tree permits are required for any development activities within the protected zone of any tree, as defined in the Code, on public or private land. The proposed project would comply with all of the requirements included in the Placer County Woodland Conservation Ordinance. Therefore, the proposed project would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance and a *less-than-significant* impact would occur.

An Aquatic Resources Delineation Report was prepared for the project site, which determined that the project site contains a 0.04-acre drainage swale that meets the USACE wetland criteria. Based on the current Clean Water Act (CWA) regulations, the assumption can be made that the drainage swale would be regulated as a federally protected wetland due to the swale's connectivity with the Truckee River. In addition to the drainage swale, the project site contains two patches of willow scrub totaling 0.05-acre. The BRA determined that the willow scrub does not meet the USACE wetland criteria; however, project construction activities could result in the direct removal and/or disturbance of willow scrub that occurs within depressional areas, which may be regulated by CDFW. Implementation of Mitigation Measures IV-3 and IV-4 would reduce impacts to sensitive riparian habitats and jurisdictional wetlands through removal of vegetation, excessive erosion, and/or non-native species incursion to a *less-than-significant* level.

- *Cultural Resources (All Items):* According to the Cultural Resources Inventory and Evaluation prepared for the proposed project, one historic built environment resource, the remnants of a gravel processing facility and possible quarry (SVOM-1), is located on the project site. However, the Cultural Resource Inventory and Evaluation concluded that SVOM-1 does not contain important information regarding an understanding of recreation and community development within the area, and does not meet the criteria of a historical resource. In addition, the Cultural Resources Inventory and Evaluation did not identify any known existing religious or sacred uses within the project site. Therefore, a *less-than-significant* impact would occur related to causing a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines Section 15064.5, and related to restricting existing religious or sacred uses within the potential impact area.

  While the record search completed as part of the Cultural Resource Inventory and Evaluation identified five historical and archaeological resources within one-eighth mile of the project site, the record search did not identify any recorded archaeological resources within the project site boundaries. In addition, a search of the Native American Heritage

Commission (NAHC) Sacred Lands File did not identify any known sacred sites within the project area. Furthermore, given the extent of documented Native American occupations within the project region, unknown archaeological resources have the potential to be uncovered during ground-disturbing activities associated with the proposed project. Although human remains or evidence thereof was not identified during the site surveys, the potential for unknown human remains to be discovered during construction cannot be eliminated given the known prehistoric occupation of the vicinity by Native American tribes. However, implementation of Mitigation Measures V-1 and V-2 would reduce all such impacts to a *less-than-significant* level.

- *Energy (Item VI-1):* Operation of the proposed project is required to comply with the California Building Standards Code (CBSC) and the 2019 Building Energy Efficiency Standards (which is a portion of the CBSC). Compliance with the CBSC would ensure that the proposed project would not result in insufficient or wasteful use of energy during operations. All construction equipment and operation thereof would be regulated per the California Air Resources Board (CARB) In-Use Off-Road Diesel Vehicle Regulation. Project construction would also be required to comply with all applicable PCAPCD rules and regulations related to energy efficiency, which would help to further reduce energy use associated with the proposed project. Therefore, the proposed project would not result in a wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operations, and the impact would be considered *less than significant*.

- *Geology & Soils (All Items):* Given that the proposed project would be served by the existing public sewer system, the project would result in *no impact* related to having soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems.

  Buildout of the proposed project would require grading, excavation, and other construction-related activities that could cause topsoil to be exposed, potentially resulting in erosion or an accelerated rate of erosion. While Improvement Plans would conform to provisions of the County Grading Ordinance (Article 15.48 of the Placer County Code) and the Stormwater Quality Ordinance (Article 8.28 of the Placer County Code), short-term construction-related impacts associated with soil erosion and the loss of top soil could occur.

  According to the Placer County General Plan, the eastern portion of the County, in which the project site is located, is generally characterized by high seismicity. However, the proposed project site is not underlain by any active faults and is not located within an Alquist-Priolo Fault Study Zone. While strong ground shaking could occur, the design of project structures would be required to adhere to the provisions within the CBSC. The Geotechnical Exploration prepared for the proposed project determined that, based on site observations, topographic and lithologic data, subsurface data, and regional geology, the overall potential for landslides, lateral spreading, or liquefaction, at the site is low to negligible. Additionally, the Geotechnical Exploration did not identify expansive soils within the project site. However, due to the existing fill on-site, potential for subsidence to pose a risk to the proposed development is high. As such, implementation of the recommendations included in the original Geotechnical Engineering Report as well as the Geotechnical Engineering Report Update Letter would be required in order to ensure adequate support of the proposed project. The Geology and Soils section of the Initial

Study also considered paleontological resources, and determined that the potential exists for paleontological resources or unique geologic features to be unearthed and disturbed during construction. Implementation of Mitigation Measures VII-1 through VII-6, which include the County's standard geology and soils requirements for development projects, would reduce all aforementioned impacts to *less-than-significant* levels.

- *Hazards and Hazardous Materials (Items IX-1 through IX-5):* The project area is not located within the vicinity of a public airport or a private airstrip, nor is the site located within an airport land use plan. Therefore, the proposed project would not create safety hazards for people living or working in the project area as a result of being in close proximity to an airport, and *no impact* would occur.

  During construction of the proposed project, proper handling and usage of potentially hazardous materials in accordance with label instructions would ensure that adverse impacts to human health or the environment would not occur. Operations of the proposed project would not include the routine transport, use, disposal, or generation of substantial amounts of hazardous materials. The project is not located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. Features such as septic systems, wells, above-ground storage tanks, underground storage tanks, or other features related to uses of environmental concern were not identified on the site. The project site is located approximately 0.2-mile from the Lake Tahoe Preparatory School. Therefore, the project site is located within one-quarter mile of a school. However, projects that emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste are typically industrial in nature. The proposed project would not be industrial in nature. Thus, operations of the proposed project would not create a significant hazard to the public or the environment through hazardous emissions or the handling of hazardous or acutely hazardous materials.

  Overall, the proposed project would have a *less-than-significant* impact with respect to the following: creating a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials; creating 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; emitting hazardous emissions or handling hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school; and being located on a list of hazardous materials sites complied pursuant to Government Code Section 56962.5.

- *Hydrology & Water Quality (All Items):* Although the proposed project would rely on groundwater as a potable water source, the cumulative water demand of all reasonably foreseeable development projects within Olympic Valley, including the development of the proposed museum, was anticipated by the Olympic Valley Public Service District (OVPSD); thus, the water demand from buildout of the project site is generally accounted for in the cumulative water demand projections. As such, OVPSD would have sufficient water supplies available to serve the proposed project as well as reasonably foreseeable future development during normal, dry, and multiple dry years. Further, the proposed project would not substantially degrade groundwater quality given the limited infiltration potential of the on-site soils. Therefore, the proposed project would result in a *less-than-significant* impact related to substantially decreasing groundwater supplies or interfering

substantially with groundwater recharge, or conflicting with or obstructing implementation of a water quality control plan or sustainable groundwater management plan.

The proposed project would satisfy the treatment and flow control requirements set by the East Placer Storm Water Quality Design Manual and would appropriately manage runoff from 100-year storm events. Thus, the project would not substantially alter the existing drainage pattern of the project area or substantially increase the rate or amount of surface runoff. As established in Mitigation Measures X-1 and X-2, a final drainage report would be required with the project Improvement Plans to substantiate the preliminary drainage design. Without approval of a final drainage report, a potentially significant impact could occur. Compliance with the State NPDES Construction General Permit and Article 8.28 and 15.48 of the Placer County Code, as required by Mitigation Measures VII-1 through VII-4 within the Initial Study, would minimize the potential degradation of stormwater quality and downstream surface water associated with construction of the proposed project. In addition, Best Management Practices (BMPs) would be required to be designed in accordance with the California Stormwater Quality Association Stormwater Best Management Practice Handbooks for Construction and for New Development/Redevelopment (or other similar source as approved by the Engineering and Surveying Division). Implementation of Mitigation Measures X-1 through X-7 would reduce the aforementioned potential impacts to *less-than-significant* levels.

According to the Federal Emergency Management Agency's flood insurance rate map, the project site is not located within a 100-year flood zone. Therefore, the proposed project would not place housing or improvements within a 100-year flood hazard area, and *no impact* would occur.

- *Land Use & Planning (Items XI-1, XI-3, and XI-4):* The proposed project would be consistent with the intensity of planned uses in the vicinity of the project site. Therefore, the proposed project would not physically divide an established community or disrupt or divide the physical arrangement of an established community. The zoning designation for the site is Forest Recreation (FR), and the General Plan land use designation is Conservation Preserve (CP). The proposed project would include a text amendment to add Section 12.24.040(B)(6) to the Placer County Code which would add the proposed SNOW Sports Museum as an exception to Section 12.24, and allow the proposed museum to remain open later than specified in the County Code in order to accommodate special events and museum operations. The proposed changes would allow for development of a museum, community cultural center, and ancillary uses within the FR zoning district with a Conditional Use Permit (CUP).

  As noted in Chapter 3, Project Description, of this EIR, the Olympic Valley Park site is bound by a deed restriction relating to the past purchase of the parcel from the USFS to Placer County, which occurred in 2000. The Quit Claim Deed conveying the park parcel to Placer County from the USFS includes the following restriction: "[T]he use of the property for a community park does not include the use of the property for private development of a commercial, residential, or industrial nature." Placer County is currently coordinating with the USFS regarding the deed restriction, and will pursue the agreed upon course of action to allow for the proposed project to be developed within the Olympic Valley Park site.

Nonetheless, as noted in the Initial Study, the question of land use compatibility in the context of the analysis for the proposed project is focused on physical environmental effects that could result from placing one land use next to another, such as placing industrial uses next to residential uses, where the noise and hazards associated with industrial operations could adversely affect the residents. The question of whether the proposed project is consistent with the terms of the deed restriction is a legal consideration, not an environmental consideration subject to CEQA. Moreover, the potential compatibility issues associated with building a museum and cultural center at the existing Olympic Valley Park are evaluated throughout the Initial Study, as well as the technical chapters included within this EIR, which provide evidence that the proposed museum and cultural center would not present significant environmental incompatibilities with the adjacent park or nearest residential uses. As a result, the proposed project would result in a *less-than-significant* impact related to physically dividing an established community, incompatible uses and/or the creation of land use conflicts, or economic or social changes that would result in significant adverse physical changes to the environment such as urban decay or deterioration.

- *Mineral Resources (All Items):* Pursuant to the California Division of Mines and Geology (CDMG), the project site is classified as MRZ-3a$^{(sg\text{-}15)}$ for aggregate as a result of glacial deposits. The MRZ-3a designation is used to describe areas underlain by geologic settings within which undiscovered mineral resources similar to known deposits in the same producing district or reason may be reasonably expected to exist. However, the project site is located within the existing Olympic Valley Park. Therefore, regardless of the proposed project being developed, the potential for mining activities to occur on-site would be very low. In addition, according to Table 8-6 in the Placer County Final EIR, the project area is not identified as an area containing existing or potential mineral extraction sites. As a result, *no impact* to mineral resources would occur as a result of development of the project.

- *Noise (Item XIII-3)*: The project site is not covered by an airport land use plan and is not located within two miles of a private airstrip, public airport, or public use airport. Therefore, the proposed project would result in *no impact* related to exposing people in the project area to excessive noise levels associated with air traffic.

- *Population & Housing (All Items*): The proposed project would include development of a museum and community cultural center building, as well as various site improvements, and a number of amenities such as event space. As a result, the proposed project would not be considered to induce substantial unplanned population growth, and a *less-than-significant* impact would result. In addition, the project site does not contain any existing housing. Therefore, the proposed project would not displace existing people or housing, necessitating the construction of replacement housing elsewhere, and *no impact* would occur.

- *Public Services (All Items):* Given that the Olympic Valley Fire Department (OVFD) is located approximately 0.25-mile from the project site, and the proposed project would include the incorporation of fire protection features in building design, the proposed project would not require new or physically altered fire protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for fire protection. The

proposed project would not substantially increase demand for Placer County Sheriff services such that construction or expanded facilities would be required. The proposed development would not result in an increase in demand for school services, and therefore would not necessitate the construction of new school facilities. The proposed project would include development of a museum and community cultural center building, as well as various site improvements, and a number of amenities such as event space within an undeveloped area of the Olympic Valley Park. Thus, the proposed project would not result in the need for new or physically altered park facilities. Additionally, although project-generated traffic could result in an incremental increase in maintenance of County roads in the project area, such an increase would be negligible due to the limited number of visitors and employees, and associated vehicle trips. Museums are considered public facilities, and, thus, the proposed project would provide additional public facility space to residents and visitors of Olympic Valley. In addition, the proposed museum and community facility would not be expected to substantially increase the population within the project area. Therefore, the proposed project would not generate any additional demand on existing public facilities, and would increase the availability of public facilities within Placer County. Based on the above, the proposed project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental services and/or facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or performance objectives for maintenance of public facilities, including roads, or for other government services. Thus, a *less-than-significant* impact would occur.

- *Recreation (All Items):* The proposed project would provide additional community space to residents and visitors of Olympic Valley. In addition, the proposed museum and community facility would not be expected to substantially increase the population within the project area. Therefore, the proposed project would not generate any additional demand on existing recreational facilities in the project vicinity or increase use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of such facilities would occur or be accelerated. Thus, the proposed project would result in a *less-than-significant* impact related to recreation.

- *Tribal Cultural Resources (All Items):* A search of the Sacred Lands File maintained by the NAHC returned negative results for the presence of known Native American sacred sites in the immediate project vicinity. Pursuant to Assembly Bill 52, invitations to consult were sent to tribes who requested notification of proposed projects within this geographic area on August 28, 2017. The United Auburn Indian Community of the Auburn Rancheria (UAIC) initiated consultation and requested copies of cultural searches/surveys. The County provided copies of all requested documentation prepared for the proposed project, and consultation with the UAIC was closed on October 19, 2017. The Shingle Springs Rancheria (SSR) requested copies of cultural searches/surveys, which were provided, and consultation with the SSR was closed on October 26, 2017. While none of the contacted tribes identified known Tribal Cultural Resources on the project site, the possibility exists that construction of the proposed project could result in a substantial adverse change in the significance of a tribal cultural resource if previously unknown tribal cultural resources are uncovered during grading or other ground-disturbing activities. However, implementation of Mitigation Measure XVIII-1 would ensure that impacts associated with Tribal Cultural Resources would be reduced to a *less-than-significant* level.

- *Utilities & Service Systems (All Items):* Electricity, telecommunications, water, and sanitary sewer services would be provided by way of new connections to existing infrastructure in the project area. Given that the groundwater basin has adequate capacity, the proposed project would not significantly impact the OVPSD's water supply. Furthermore, the project would include a connection to existing water infrastructure in the project vicinity. Off-site water system improvements would not be required. Therefore, the proposed project would not require major relocation or expansion of any water supply infrastructure. Sewer service would be provided to the site by the OVPSD. Collected sewage is conveyed to the Tahoe Truckee Sanitation Agency (TTSA) Water Reclamation Plant, located adjacent to the Truckee River and Tahoe Truckee Airport. The TTSA previously upgraded and expanded wastewater facilities to increase handling capacity. The proposed project would construct a sanitary sewer force main along Olympic Valley Road. In addition, a wet well and sanitary sewer lift station would be constructed north of the project site, near the project driveway, within the Olympic Valley Road right-of-way. All sewer improvements would be consistent with Placer County's "All Districts" Sewer System Master Plan. The off-site sewer improvements would require disruption of existing pavement, but disturbance of natural habitats would not occur. As such, the proposed project would not require major relocation or expansion of any sewer service infrastructure, the construction of which could cause significant environmental effects. Based on the conclusions of the Preliminary Drainage Report prepared for the proposed project, the proposed on-site stormwater system would be properly sized to handle stormwater under the 10- and 100-year events, and off-site expansion or relocation would not be required. With respect to operational solid waste generation, due to the nature and scale of the proposed project, the project would not be expected to generate substantial amounts of solid waste. Therefore, the proposed project would not 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 and would comply with federal, State, and local management and reduction statutes and regulations related to solid waste. Based on the above, impacts related to utilities and service systems would be *less than significant*.

Pursuant to the CEQA Guidelines, the scope of this EIR addresses specific issues and concerns identified as potentially significant in the Initial Study prepared for the proposed project. The sections of the CEQA Checklist identified for study in this EIR include:

- Aesthetics (Items I-1, I-3, and I-4);
- Air Quality, Greenhouse Gas Emissions, and Energy (Items III-1 through III-4, VIII-1 and VIII-2, and VI-2);
- Land Use and Planning (Item XI-2 [the proposed project's consistency with applicable policies adopted for the purpose of avoiding or mitigating an environmental effect related to aesthetics, air quality, greenhouse gas, noise, transportation, and wildfire is addressed in each technical chapter throughout this EIR]);
- Noise (Items XIII-1 and XIII-2);
- Transportation (All Items); and
- Wildfire (Items IX-6 and IX-7, and XX-1 through XX-4).

The evaluation of effects is presented on a resource-by-resource basis in Chapters 4 through 8 of the EIR. Each chapter is divided into the following four sections: Introduction, Existing Environmental Setting, Regulatory Context, and Impacts and Mitigation Measures. The Impacts and Mitigation Measures section addresses both project-specific and cumulative impacts. Impacts

that are determined to be significant in Chapters 4 through 8, and for which feasible mitigation measures are not available to reduce those impacts to a less-than-significant level, are identified as *significant and unavoidable*. Chapter 9 of the EIR presents a discussion of growth-inducing impacts, summary of cumulative impacts, and significant irreversible environmental changes associated with the project. Alternatives to the proposed project are discussed in Chapter 10 of the EIR.

1.7 SIGNIFICANCE CRITERIA

The CEQA Guidelines define a significant effect on the environment as "a substantial, or potentially substantial adverse change in any of the physical conditions within the area affected by the project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic and aesthetic significance." In addition, the Guidelines state, "An economic or social change by itself shall not be considered a significant effect on the environment. A social or economic change related to a physical change may be considered in determining whether the physical change is significant." (CEQA Guidelines Section 15382).

As presented in Section 1.12 below, the level of significance of an impact prior to mitigation is included at the end of each impact discussion throughout the technical chapters of this EIR. The following levels of significance prior to mitigation are used in this EIR:

1) Less-than-Significant: Impacts that are insubstantial, do not exceed the specified thresholds of significance, and do not require any mitigation to reduce impacts;
2) Significant: Impacts that exceed the defined standards of significance and require mitigation;
3) Less than Cumulatively Considerable: Where cumulative impacts have been identified, but the project's incremental contribution towards the cumulative impacts would not be considered significant; and
4) Cumulatively Considerable: Where cumulative impacts have been identified and the project's incremental contribution towards the cumulative impacts would be considered significant.

If an impact is determined to be significant or cumulatively considerable, mitigation is included, if available, in order to reduce the specific impact to the maximum extent feasible. A statement of the level of significance of an impact after mitigation is also included in each impact discussion throughout the technical chapters of this EIR. The following levels of significance after implementation of mitigation are used in the EIR:

1) Less-than-Significant: Impacts that exceed the defined standards of significance but can be eliminated or reduced to a less-than-significant level through the implementation of feasible mitigation measures;
2) Less than Cumulatively Considerable: Where the project's incremental contribution towards cumulative impacts would be eliminated or reduced to a less than cumulatively considerable level through the implementation of feasible mitigation measures; and
3) Significant and Unavoidable: An impact (project-level or cumulative) that cannot be eliminated or reduced to a less-than-significant or less than cumulatively considerable level through the implementation of feasible mitigations measures.

Each environmental area of analysis uses a distinct set of significance criteria. Where measurable and explicit quantification of significance is identified, such as violation of an ambient noise level

standard, this measurement is used to assess the level of significance of a particular impact in this EIR. If criteria for determining significance relative to a specific environmental resource impact are not identified in the CEQA Guidelines, criteria were developed for this EIR.

The significance criteria are identified at the beginning of the Impacts and Mitigation Measures section in each of the technical chapters of this EIR. Although significance criteria are necessarily different for each resource considered, the provided significance levels ensure consistent evaluation of impacts for all resource areas evaluated.

1.8 NOTICE OF PREPARATION AND SCOPING

In accordance with CEQA Guidelines Section 15082, an NOP (see Appendix A), as well as an attached Initial Study, was circulated to the public, local, State and federal agencies, and other known interested parties for a 30-day public and agency review period from March 18, 2022 to April 18, 2022. The purpose of the NOP was to provide notification that the County will be preparing an EIR for the proposed project and to solicit public input on the scope and content of the document.

Pursuant to CEQA Guidelines Section 15082, the County held an NOP scoping meeting for the EIR during the review period on March 28, 2022 for the purpose of receiving comments on the scope of the environmental analysis to be prepared for the proposed project. Agencies and members of the public were invited to attend in person or remotely and provide input on the scope of the EIR. All comments were taken into consideration during the preparation of this EIR. A summary of the NOP comments received, including the verbal comments received at the NOP scoping meeting, is provided in Section 1.9 below.

1.9 COMMENTS RECEIVED ON THE NOTICE OF PREPARATION

During the NOP public review period from March 18, 2022 to April 18, 2022, Placer County received eight comment letters. A copy of each letter is provided in Appendix B of this EIR. The comment letters were submitted by the following representatives of agencies, local groups, and individual members of the general public.

Agencies

- California Department of Fish and Wildlife – Barker, Kelley;
- California Department of Transportation (CalTrans) – Yount, Kevin;
- Native American Heritage Commission – Torres-Fuentes, Pricilla; and
- Tahoe National Forest Supervisor's Office – Ilano, Eli.

Group

- Tavern Inn Condominiums Association – Basler, Janet.

Individuals

- Heneveld, Ed;
- Siewert, Marylyn; and
- Worrall, Rozlynn.

The following list, categorized by issue, summarizes the concerns brought forth in the comment letters and verbal comments at the NOP scoping meeting received on the scope of the EIR:

Air Quality, Greenhouse Gas Emissions, and Energy *(Chapter 5)*	Concerns related to: • Impacts related to the proximity of toxic air contaminants to sensitive receptors.
Noise (Chapter 6)	Concerns related to: • Noise pollution/increase in ambient noise levels.
Transportation *(Chapter 7)*	Concerns related to: • Adequacy of parking infrastructure on the project site. • Safety of the proposed entrance and exit roadways. • Increased traffic congestion in the project area. • Interference with emergency access and egress.
Initial Study (see Appendix A)	Concerns related to: • Incompatibility of the proposed project with the surrounding land uses. • Impacts related to the proposed change in land use designation. • Impacts on protected species and habitats. • Impacts related to compliance with local habitat conservation plans. • Impacts on water quality. • Proper consultation with the appropriate Native American tribes.

All of these issues are addressed in this EIR in the relevant sections identified in the first column, as well as in the attached Initial Study.

1.10 DRAFT EIR AND PUBLIC REVIEW

This Draft EIR is being circulated for public review and comment for a period of 45 days. During this period, the general public, organizations, and agencies can submit comments to the Lead Agency on the Draft EIR's accuracy and completeness. Release of the Draft EIR marks the beginning of a 45-day public review period pursuant to CEQA Guidelines Section 15105. The public can review the Draft EIR at the County's website at:

http://www.placer.ca.gov/departments/communitydevelopment/envcoordsvcs/eir

or at the following address during normal business hours:

Placer County, Community Development Resource Agency – North Lake Tahoe
775 North Lake Boulevard
Tahoe City, CA 96145

Comments may be submitted both in written form and/or orally at the public hearing on the Draft EIR. Notice of the time and location of the hearing will be published in local newspapers, mailed to property owners and residents surrounding the project site, emailed to residents that have requested to be placed on the project's email notification list, posted on the County's website, and posted at and adjacent to the site prior to the hearing.

All comments or questions regarding the Draft EIR should be addressed to:

Placer County, Community Development Resource Agency
Environmental Coordination Services
3091 County Center Drive, Suite 190
Auburn, CA 95603

(530) 745-3132
cdraecs@placer.ca.gov

1.11 ORGANIZATION OF THE DRAFT EIR

The SNOW Sports Museum and Community Cultural Center Project EIR is organized into the following sections:

Chapter 1 – Introduction

Provides an introduction and overview describing the intended use of the EIR and the review and certification process, as well as summaries of the chapters included in the EIR and summaries of the issues and concerns received from the public and public agencies during the NOP review period.

Chapter 2 – Executive Summary

Summarizes the elements of the project and the environmental impacts that would result from implementation of the proposed project, describes proposed mitigation measures, and indicates the level of significance of impacts after mitigation. In addition, the Executive Summary includes a summary of the project alternatives and areas of known controversy.

Chapter 3 – Project Description

Provides a detailed description of the proposed project, including the project's location, background information, major objectives, and technical characteristics.

Chapter 4 – Aesthetics

The Aesthetics chapter of the EIR summarizes existing regional and project area aesthetics and visual setting. To the extent applicable, the chapter describes project-specific aesthetics issues such as scenic vistas, trees, existing visual character or quality of the project area, as well as light and glare. Pursuant to Appendix G of the CEQA Guidelines, the focus of the analysis concerning the project's effects on visual character or quality of the project site and its surroundings is on whether the proposed project will substantially degrade the existing visual character or quality of public views of the site and its surroundings.

The Aesthetics chapter of the EIR is based in part on photo simulations showing pre- and post-project views of the project site from key public vantage points. The results of the analysis are incorporated into the Aesthetics chapter of the EIR to determine whether the proposed project would substantially degrade the visual character or quality of the site and its surroundings.

Chapter 5 – Air Quality, Greenhouse Gas Emissions, and Energy

The Air Quality, Greenhouse Gas (GHG) Emissions, and Energy chapter of the EIR describes the impacts of construction and operation of the proposed project related to air quality, global climate change, and energy consumption. The chapter was prepared using methodologies and assumptions recommended within the CEQA Air Quality Handbook of the PCAPCD, as well as the GHG reduction and energy efficiency measures included in the Placer County Sustainability Plan.

Chapter 6 – Noise

The Noise chapter of the EIR is based on a project-specific Noise Study. The chapter addresses potential noise impacts resulting from project construction and operation, including existing and future traffic noise levels on the local roadway network. Noise-sensitive land uses or activities in

the project vicinity are identified and ambient noise and vibration level measurements on, and in the vicinity of, the project site have been conducted to quantify existing background noise and vibration levels for comparison to the predicted project-generated levels. Noise exposure levels are then compared to applicable significance criteria in the Placer County General Plan Noise Element, the SVGP and Land Use Ordinance, and CEQA.

Chapter 7 – Transportation

The Transportation chapter of the EIR is based on a Vehicle Miles Traveled (VMT) Analysis prepared for the proposed project. VMT will be used as the metric for assessing transportation impacts under CEQA. The proposed project's impacts to alternative modes such as pedestrian, bicycle and transit facilities are assessed based on their significance criteria contained in the adopted Placer County guidelines. The EIR chapter also includes an analysis of the proposed project's potential impacts related to conflicting with applicable programs, policies, and ordinances addressing the circulation system, vehicle safety hazards, and emergency access.

Chapter 8 – Wildfire

The Wildfire chapter of the EIR is primarily based on an Emergency Preparedness and Evacuation Plan (EPEP) prepared for the proposed project in coordination with the local fire service providers. Recommendations from the EPEP are incorporated into the EIR to address potential impacts related to wildfire risk consistent with Section XX, Wildfire, of Appendix G of the CEQA Guidelines. Specifically, the proposed project is evaluated to determine if the project would substantially impair an adopted emergency response plan or emergency evacuation plan. In addition, the chapter considers whether the proposed project would exacerbate fire risk, as well as whether the project would expose people or structures to significant post-fire risks, including downslope or downstream flooding or landslides.

Chapter 9 – Statutorily Required Sections

The Statutorily Required Sections chapter of the EIR provides discussions required by CEQA regarding impacts that would result from the proposed project, including a summary of cumulative impacts, potential growth-inducing impacts, significant and unavoidable impacts, and significant irreversible changes to the environment.

Chapter 10 – Alternatives Analysis

The Alternatives Analysis chapter of the EIR describes and evaluates a reasonable range of alternatives to the proposed project. It should be noted that the alternatives are analyzed at a level of detail less than that of the proposed project; however, the analyses include sufficient detail to allow for a meaningful comparison of impacts.

Chapter 11 – EIR Authors and Persons Consulted

The EIR Authors and Persons Consulted chapter of the EIR lists EIR and technical report authors who provided technical assistance in the preparation and review of the EIR.

Chapter 12 – References

The References chapter of the EIR provides bibliographic information for all references and resources cited.

Appendices

The Appendices include the NOP and IS, comments received during the NOP comment period, and technical reports prepared for the proposed project.

1.12 TECHNICAL CHAPTER FORMAT

Each technical chapter addressing a specific environmental issue begins with an **introduction** describing the purpose of the section. The introduction is followed by a description of the project's **existing environmental setting** as the setting pertains to that particular CEQA issue. The setting description is followed by the **regulatory context** and the **impacts and mitigation measures** discussion, which contains the **standards of significance**, followed by the **method of analysis**. The **impact and mitigation measures** discussion includes impact statements prefaced by a number in bold-faced type (for both project-level and cumulative analyses). An explanation of each impact and an analysis of the impact's significance follow each impact statement. All mitigation measures pertinent to each individual impact follow directly after the impact statement (see below). The degree of relief provided by identified mitigation measures is also evaluated. An example of the format is shown below:

Project-Specific Impacts and Mitigation Measures

The following discussion of impacts is based on the implementation of the proposed project in comparison with the standards of significance.

X-1 Statement of Impact

Discussion of impact for the proposed project in paragraph format.

Statement of ***level of significance*** of impact prior to mitigation is included at the end of each impact discussion. The following levels of significance are used in the EIR: less than significant, significant, or significant and unavoidable. If an impact is determined to be significant, mitigation will be included in order to reduce the specific impact to the maximum extent feasible. Impacts that cannot be reduced to a less-than-significant level with implementation of all feasible mitigation would be considered to remain significant and unavoidable.

Mitigation Measure(s)

Statement of *level of significance* after the mitigation is included immediately preceding mitigation measures.

X-1(a) *Required mitigation measure(s) presented in italics and numbered in consecutive order.*

X-1(b) *Required additional mitigation measure, if necessary.*

Cumulative Impacts and Mitigation Measures

The following discussion of cumulative impacts is based on implementation of the proposed project in combination with cumulative development within the applicable area or region.

X-2 Statement of Cumulative Impact

Discussion of cumulative impacts for the proposed project in paragraph format.

As discussed in detail in Chapter 9, Statutorily Required Sections, of the EIR, the cumulative setting for the proposed project is generally considered to be development

anticipated to occur upon buildout of the SNOW Sports Museum and Community Cultural Center Project, as well as buildout of a number of approved or reasonably foreseeable projects within the project region.

Statement of ***level of significance*** of cumulative impact prior to mitigation is included at the end of each impact discussion. The following levels of significance are used in the EIR for cumulative impacts: less than significant, less than cumulatively considerable, cumulatively considerable, or significant and unavoidable. If an impact is determined to be cumulatively considerable, mitigation will be included in order to reduce the specific impact to the maximum extent feasible. Impacts that cannot be reduced to a less than cumulatively considerable level with the implementation of all feasible mitigation would be considered to remain significant and unavoidable.

Mitigation Measure(s)

Statement of *level of significance* after the mitigation is included immediately preceding mitigation measures.

X-2(a) *Required mitigation measure(s) presented in italics and listed in consecutive order.*

X-2(b) *Required additional mitigation measure, if necessary.*

1.13 FINAL EIR AND EIR CERTIFICATION

Upon completion of the Draft EIR public review period, a Final EIR will be prepared that will include written comments on the Draft EIR received during the public review period and responses to those comments. The Final EIR will also include the Mitigation Monitoring and Reporting Plan (MMRP) prepared in accordance with PRC Section 21081.6. The Final EIR will address any revisions to the Draft EIR made in response to public comments. The Draft EIR and Final EIR together will comprise the EIR for the proposed project. Before the County can consider approval of the project, it must first certify that the EIR has been completed in compliance with CEQA, that the County Board of Supervisors has reviewed and considered the information in the EIR, and that the EIR reflects the independent judgment of the County. The County also will be required to adopt Findings of Fact and, for any impacts determined to be significant and unavoidable, adopt a Statement of Overriding Considerations.

2. Executive Summary

2. EXECUTIVE SUMMARY

2.1 INTRODUCTION

The Executive Summary chapter of the EIR provides an overview of the proposed project (see Chapter 3, Project Description, for further details) and provides a table summary of the conclusions of the environmental analysis provided in Chapters 4 through 8. This chapter also summarizes the alternatives to the proposed project that are described in Chapter 10, Alternatives Analysis, and identifies the Environmentally Superior Alternative. Table 2-1 contains the environmental impacts associated with the proposed project, the significance of the impacts, the proposed mitigation measures for the impacts, and the significance of the impacts after implementation of the mitigation measures.

2.2 SUMMARY DESCRIPTION OF THE PROPOSED PROJECT

The project site consists of approximately one acre of the 26.8-acre Olympic Valley Park site, 101 Olympic Valley Road, southwest of the intersection of Olympic Valley Road and River Road/State Route (SR) 89 in the unincorporated community of Olympic Valley. Olympic Valley Park is identified by Assessor's Parcel Numbers (APNs) 096-290-021-000, 096-290-056-000, 096-290-061-000, 096-310-009-000, and 096-310-040-000. The project site is identified by portions of APNs 096-290-021-000 and 096-290-056-000, and would be located between the Olympic Valley Park driveway entrance to the parking lot from Olympic Valley Road and the existing pickleball courts. The project site is designated as Conservation Preserve (CP) in the 1983 Squaw Valley General Plan (SVGP) and Land Use Ordinance, and the current zoning designation for the site is Forest Recreation (FR). The project site contains areas of vegetation, predominantly montane coniferous forest, which largely consist of white fir and pine trees native to the area.

The project site is bounded by Olympic Valley Road to the north, SR 89 and the Truckee River Trail to the east, and Olympic Valley Park facilities to the south and west. The area north of the project site, across Olympic Valley Road, is sparsely developed and is largely occupied by forest and meadow vegetation. However, a commercial recreation store and convenience store (7-Eleven) are located on the west side of SR 89, north of the project site, across Olympic Valley Road. A soccer field and playground are located west of the project site within Olympic Valley Park. The Olympic Valley community is located further west, which includes condominiums and single-family residences in the vicinity of the project site to the northwest. Rural residences are located east of the project site, across SR 89, and the Truckee River is located further east, approximately 790 feet from the project site. The Truckee River Trail and forest land are located south of the project site. The Palisades Tahoe, which contains lodging, ski lifts, a golf course, and associated commercial uses is located further southwest.

The proposed project would include development of a museum and community cultural center building celebrating the 1960 Winter Olympics and history of winter sports in the Sierra Nevada. The proposed development would include the construction of a new, two-story, U-shaped building, various site improvements, and a number of amenities such as event space. The two-story, U-shaped building would consist of up to 20,000 square feet (sf) of building space with a maximum height of approximately 30 feet. The second/upper floor would serve as the entrance

to the building due to the museum having a stepped floor plan. Although not yet determined, the building could also include a mezzanine.

Outdoor gathering spaces and amenities would be provided, such as a plaza deck to be located south of the building and a V-shaped garden to be located east of the building. Various other improvements would be included in the development of the proposed project, including, but not limited to, landscaping and utility installation, as well as improvements to the existing facilities at Olympic Valley Park. In total, the construction of the building and associated improvements would comprise approximately one acre. However, the proposed project would only result in a total disturbance area of approximately 0.68-acre.

The existing Olympic Valley Park parking lot has a total of 116 spaces (61 in the upper/western area and 55 in the lower/eastern area). The existing parking lot would be resurfaced, and the parking area directly fronting the museum would be restriped to include two additional Americans with Disabilities Act (ADA) parking spaces. A planting area in the eastern portion of the parking lot would be removed and replaced with eight vehicle parking spaces. Including existing and proposed parking, a total of 121 parking spaces (including seven ADA-compliant parking spaces) would be provided on-site.

The proposed project would require County approval of the following entitlements:

- Certification of the EIR;
- Adoption of the Mitigation Monitoring and Reporting Program;
- Amendment to the SVGP Land Use Ordinance to add Section 261 to establish the new Cultural Amenities Land Use District, and a subsequent Rezone of the approximately one-acre project site to the newly established district;
- Text Amendment to Section 12.24.040 of the Placer County Government Code;
- Conditional Use Permit to allow a museum and community cultural center within the new land use district;
- Design Review; and
- Potential Minor Land Division to create a new parcel for the proposed project.

In addition to the above County approvals, the proposed project could require the following approvals/permits from other responsible and trustee agencies:

- Less than three-acre Conversion Exemption – California Department of Forestry and Fire Protection (CAL FIRE);
- Authority to Construct and Permit to Operate a Sewer Lift Station – Placer County Air Pollution Control District (PCAPCD);
- Section 404 Nationwide Permit (or Letter of Permission) – U.S. Army Corps of Engineers (USACE);
- Section 401 Water Quality Certification – Lahontan Regional Water Quality Control Board (RWQCB);
- Section 1602 Permit – California Department of Fish and Wildlife (CDFW); and
- National Pollutant Discharge Elimination System (NPDES) Construction General Permit – Lahontan RWQCB.

Please refer to Chapter 3, Project Description, of this EIR for a detailed description of the proposed project and entitlements, as well as a full list of the project objectives.

2.3 ENVIRONMENTAL IMPACTS AND MITIGATION

Under CEQA, a significant effect on the environment is defined as a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project, including land, air, water, mineral, flora, fauna, ambient noise, and objects of historic or aesthetic significance. Mitigation measures must be implemented as part of the proposed project to reduce potential adverse impacts to a less-than-significant level. Such mitigation measures are noted in this EIR and are found in the following technical chapters: Aesthetics; Noise; Transportation; and Wildfire. Additionally, the Initial Study prepared for the proposed project (see Appendix A) includes mitigation measures that must be implemented as part of the proposed project associated with the following resource areas: Biological Resources, Cultural Resources, Geology and Soils, Hazards and Hazardous Materials, Hydrology and Water Quality, and Tribal Cultural Resources. The mitigation measures required for the proposed project, as presented in this EIR and the Initial Study, will form the basis of the Mitigation Monitoring and Reporting Program.

In Table 2-1, provided at the end of this chapter, a summary of the proposed project's impacts are identified for each technical chapter (Chapters 4 through 8) of the EIR, as well as the proposed project's mitigable impacts identified in the Initial Study (see Appendix A). Refer to Chapter 1, Introduction, of the EIR for more information regarding the analysis included in the Initial Study. In addition, Table 2-1 includes the level of significance of each impact, any mitigation measures required for each impact, and the resulting level of significance after implementation of mitigation measures for each impact.

2.4 SUMMARY OF PROJECT ALTERNATIVES

The following section presents a summary of the evaluation of the alternatives considered for the proposed project, which include the following:

- No Project (No Build) Alternative;
- 7-Eleven Off-Site Alternative; and
- Reduced Project Alternative.

For a more thorough discussion of project alternatives, please refer to Chapter 10, Alternatives Analysis.

No Project (No Build) Alternative

The No Project (No Build) Alternative assumes that the proposed project site would remain in its current condition and would not be developed. As described in this EIR, the project site consists predominantly of montane coniferous forest, which largely contains white fir and pine trees native to the area. Patches of willow scrub occur on-site in scattered locations within stormwater detention basins constructed for the Olympic Valley Park, and an existing parking lot is located within the project site. Because development of the site would not occur, land disturbance, and any associated physical environmental impacts related to such land disturbance, would not occur; however, the No Project (No Build) Alternative would not meet any of the project objectives.

7-Eleven Off-Site Alternative

The 7-Eleven Off-Site Alternative would involve construction of the SNOW Sports Museum and Community Cultural Center, as proposed, on a portion of the 4.6-acre parcel to the north of the site, across Olympic Valley Road, which is partially developed with a 7-Eleven Convenience

Store, Tahoe Dave's Ski and Snowboard Rentals, and an associated parking lot; the remainder of the site is occupied primarily by forest. A shallow open drainage ditch is present along the southern and eastern boundaries of the alternative site; this ditch runs north along the western side of SR 89 to a point that is coterminous with the approximate rear of the 7-11 building, at which point the ditch is piped under SR 89, where it then sheet flows into the Truckee River. The alternative location is zoned Entrance Commercial (EC).

The proposed SNOW Sports Museum and Community Cultural Center would require an approximately 10,000 square-foot (sf) building footprint, and an additional 13,000 sf for parking, for a total of approximately 25,000 sf (including an extra 2,000 sf to allow for some design flexibility). The intent would be to locate the museum and cultural center building on the currently disturbed portions of the alternative site to the maximum extent feasible in order to avoid impacts to forested habitat. At an estimated development footprint of 25,000 sf, the 7-Eleven Off-Site Alternative would require demolition of all on-site structures, and likely some disturbance and/or removal of on-site vegetation, though to a lesser extent than the proposed project.

The Alternative would require improvements to the site similar to the improvements proposed for the project, including, but not limited to, construction of a sewer pump station and approximately 1,000 linear feet of force main. In addition, while the 7-Eleven Off-Site Alternative would still require approval of a Text Amendment to Section 12.24.040 of the Placer County Government Code, and Design Review, similar to the proposed project, the Alternative would not require a Rezone, a Conditional Use Permit, or a Potential Minor Land Division to create a new land use district to accommodate the proposed project, allow a museum and community cultural center within the new land use district, and create a new parcel for the proposed project, respectively. Furthermore, while the project site is bound by a deed restriction, which does not allow the use of the property for private development of a commercial, residential, or industrial nature, the alternative location would not be bound by such restrictions.

Because the 7-Eleven Off-Site Alternative would include the development of the SNOW Sports Museum and Community Cultural Center, Project Objective 1, Project Objectives 3 through 10, and Project Objective 14 would be met. However, because the 7-Eleven Off-Site Alternative would not involve development within the Olympic Valley Park, Project Objectives 2 and 11 would not be met. In addition, because the 7-Eleven Off-Site Alternative is currently developed with existing structures and is privately owned, Project Objectives 12 and 13 would not be met.

Reduced Project Alternative

The Reduced Project Alternative would consist of buildout of the project site with the proposed SNOW Sports Museum; however, development of the Community Cultural Center would not be included as part of the Reduced Project Alternative. As such, the Reduced Project Alternative would result in the development of approximately 1,404 sf less building space than the proposed project. For the proposed project, the Community Cultural Center would be located on the second story of the building, which would be at grade level of the existing Olympic Valley Park parking lot. Therefore, because the Reduced Project Alternative would eliminate the portion of the building's second floor dedicated to the Community Cultural Center, the building would be reduced in scale when viewed from the parking lot. In addition, because the Community Cultural Center would not be developed, after-hours events such as lectures, film screenings, and private parties would not occur as part of museum operations. Nonetheless, a text amendment to Section 12.24 of the Placer County Code would still be required to allow for limited museum operations to occur later than specified in the Code. The Reduced Project Alternative would still require all other

on- and off-site improvements included as part of the proposed project. Similar to the proposed project, the Alternative would require approval of a Rezone, Conditional Use Permit, Design Review, and Potential Minor Land Division.

Because the Reduced Project Alternative would include development of the SNOW Sports Museum without the Community Cultural Center, the Alternative would not meet Project Objectives 6 or 9. However, the remaining Project Objectives would be met by the Reduced Project Alternative.

Environmentally Superior Alternative

An EIR is required to identify the environmentally superior alternative from among the range of reasonable alternatives that are evaluated. Section 15126(e)(2) of the CEQA Guidelines requires that an environmentally superior alternative be designated and states, "If the environmentally superior alternative is the 'no project' alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives." The No Project (No Build) Alternative would be considered the environmentally superior alternative, because the project site is assumed to remain in its current condition under the alternative. Consequently, the impacts resulting from the proposed project would not occur under the Alternative. However, the No Project (No Build) Alternative would not meet any of the project objectives.

Both the 7-Eleven Off-Site Alternative and the Reduced Project Alternative would meet most project objectives. As previously noted, the 7-Eleven Off-Site Alternative would not meet Project Objectives 2 and 11-13; the Reduced Project Alternative would not meet Project Objectives 6 and 9.

As discussed throughout the Alternatives chapter, the 7-Eleven Off-Site Alternative could result in greater impacts than the proposed project related to hazards and hazardous materials, hydrology and water quality, and construction noise; fewer impacts related to cultural resources and tribal cultural resources, and similar impacts to the proposed project for the remaining topics. However, the Reduced Project Alternative could result in fewer impacts related to construction noise, and similar impacts to the proposed project for the remaining impacts.

Based on the above, the Reduced Project Alternative would be considered the environmentally superior alternative to the proposed project.

2.5 AREAS OF KNOWN CONTROVERSY

Areas of controversy that were identified in NOP comment letters, and are otherwise known for the project area, include the following:

- Incompatibility of the proposed project with surrounding land uses.
- Loss of plant and wildlife habitat.
- Concerns related to the proper consultation of the appropriate Native American tribes.
- Concerns about the adequacy of parking infrastructure on the project site.
- Interference with the emergency access and egress.
- Increased traffic congestion in the project area.
- Safety of the proposed entrance and exit roadways.
- Impacts related to the proximity of toxic air contaminants to sensitive receptors.
- Concerns related to noise pollution/increase in ambient noise levels.

Table 2-1
Summary of Impacts and Mitigation Measures

Impact		Level of Significance Prior to Mitigation	Mitigation Measures		Level of Significance After Mitigation
4. Aesthetics					
4-1	**Have a substantial adverse effect on a scenic vista.**	LS	*None required.*		N/A
4-2	**In a non-urbanized area, substantially degrade the existing visual character or quality of public views of the site and its surroundings (public views are those that are experienced from publicly accessible vantage point) or, in an urbanized area, conflict with applicable zoning and other regulations governing scenic quality.**	LS	*None required.*		N/A
4-3	**Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.**	S	*4-3*	*Prior to the issuance of building permits for any development on the project site, the project applicant shall submit a lighting plan for the project to the Olympic Valley Design Review Committee for review and approval, demonstrating that proposed lighting is Dark-Sky compliant as specified by the International Dark-Sky Association and consistent with Squaw Valley Design Review Guidelines. The lighting plan shall include, but not necessarily be limited to, the following provisions:* • *Shield or screen lighting fixtures to direct the light downward and prevent light spill on adjacent properties;* • *Place and shield or screen flood and area*	LS

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Table 2-1
Summary of Impacts and Mitigation Measures

Impact		Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
			lighting needed for construction activities and/or security so as not to disturb adjacent residential areas and passing motorists; • *For public lighting, prohibit the use of light fixtures that are of unusually high intensity or brightness (e.g., harsh mercury vapor, low-pressure sodium, or fluorescent bulbs) or that blink or flash; and* • *Use appropriate building materials (such as low-glare glass, low-glare building glaze or finish, neutral, earth-toned colored paint and roofing materials), shielded or screened lighting, and appropriate signage to prevent light and glare from adversely affecting motorists on nearby roadways.*	
4-4	**Long-term changes in visual character associated with cumulative development of the proposed project in combination with future buildout of the SVGP.**	LCC	*None required.*	N/A
4-5	**Creation of new sources of light or glare associated with cumulative development of the proposed project in combination with future buildout of the SVGP.**	LCC	*None required.*	N/A
5. Air Quality, GHG Emissions, and Energy				
5-1	**Conflict with or obstruct implementation of the**	LS	*None required.*	N/A

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Table 2-1
Summary of Impacts and Mitigation Measures

	Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
	applicable air quality plan during project construction.			
5-2	**Conflict with or obstruct implementation of the applicable air quality plan during project operation.**	LS	*None required.*	N/A
5-3	**Expose sensitive receptors to substantial pollutant concentrations.**	LS	*None required.*	N/A
5-4	**Result in other emissions (such as those leading to odors) affecting a substantial number of people.**	LS	*None required.*	N/A
5-5	**Conflict with or obstruct a State or local plan for renewable energy or energy efficiency.**	LS	*None required.*	N/A
5-6	**Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or State ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors).**	LCC	*None required.*	N/A
5-7	**Generation of GHG emissions that may have a significant impact on the environment or**	LCC	*None required.*	N/A

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Table 2-1
Summary of Impacts and Mitigation Measures

	Impact	Level of Significance Prior to Mitigation		Mitigation Measures	Level of Significance After Mitigation
	conflict with an applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of GHGs.				
			6. Noise		
6-1	**Generation of a substantial temporary 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.**	S	*6-1*	*Prior to issuance of a grading permit, the project applicant shall prepare a construction noise management plan that identifies measures to be taken to minimize construction noise on surrounding sensitive land uses and include specific noise management measures to be included within the project plans and specifications, subject to review and approval by the Placer County Community Development Resource Agency. The project applicant shall demonstrate, to the satisfaction of the County that the project complies with the following:* • *Noise-generating construction activities (e.g., construction, alteration, or repair activities), including truck traffic coming to and from the project site for any purpose, shall be limited to the hours outlined in Placer County Board of Supervisors Minute Order 90-08; specifically, a) Monday through Friday, 6:00 AM to 8:00 PM (during daylight savings); b) Monday through Friday, 7:00 AM to 8:00 PM (during standard time); and c) Saturdays, 8:00 AM to 6:00 PM.*	LS

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Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		• *All heavy construction equipment used on the proposed project shall be maintained in good operating condition, with all internal combustion, engine-driven equipment fitted with intake and exhaust mufflers that are in good condition.* • *All mobile or fixed noise producing equipment used on the proposed project that is regulated for noise output by a local, state, or federal agency shall comply with such regulations while in the source of project activity.* • *Where feasible, electrically-powered equipment shall be used instead of pneumatic or internal combustion powered equipment.* • *All stationary noise-generating equipment shall be located as far away as possible from neighboring property lines.* • *Signs prohibiting unnecessary idling of internal combustion engines shall be posted.* • *The use of noise-producing signals, including horns, whistles, alarms and bells shall be for safety warning purposes only.* • *The proposed project shall incorporate the use of eight-foot-tall temporary sound barriers along the west and east boundaries of the construction site. The approximate locations of the sound walls are shown on Figure 6-3. The sound barrier fencing shall consist of 0.5-inch plywood or minimum STC 27 sound curtains placed to shield nearby sensitive receptors. The*	

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Table 2-1
Summary of Impacts and Mitigation Measures

Impact		Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
			plywood barrier shall be free from gaps, openings, or penetrations to ensure maximum performance. *The proposed project shall incorporate the use of six-foot-tall temporary sound barriers along the north and south sides of the off-site sewer improvement route. The approximate locations of the temporary construction sound walls are shown on Figure 6-3. The sound barrier fencing shall consist of 0.5-inch plywood or minimum STC 27 sound curtains placed to shield nearby sensitive receptors. The plywood barrier shall be free from gaps, openings, or penetrations to ensure maximum performance. The temporary sound walls along the off-site sewer pipe alignment shall be removed within 24 hours of completing the sewer pipe improvement.*	
6-2	**Generation of a substantial 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.**	LS	*None required.*	N/A
6-3	**Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels.**	LS	*None required.*	N/A

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Table 2-1
Summary of Impacts and Mitigation Measures

Impact		Level of Significance Prior to Mitigation	Mitigation Measures		Level of Significance After Mitigation
6-4	**Generation of a substantial permanent increase in ambient noise levels associated with development of the proposed project in combination with future development. Based on the analysis below, the project's incremental contribution to this significant cumulative impact is less than cumulatively considerable.**	LCC	*None required.*		N/A
			7. Transportation		
7-1	**Conflict with a program, plan, ordinance, or policy, except LOS, addressing the circulation system during construction activities.**	S	*7-1*	*The Improvement Plans shall include a striping and signage plan and shall include all on- and off-site traffic control devices. Prior to the commencement of construction, a construction signage and traffic control plan shall be provided to the Engineering and Surveying Division for review and approval. The construction signage and traffic control plan shall include (but not be limited to) items such as:* • *Guidance on the number and size of trucks per day entering and leaving the project site;* • *Identification of arrival/departure times that would minimize traffic impacts;* • *Approved truck circulation patterns;* • *Locations of staging areas;* • *Locations of employee parking and methods to encourage carpooling and use of alternative transportation;*	LS

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Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		• *Methods for partial/complete street closures (e.g., timing, signage, location and duration restrictions);* • *The temporary sound walls along the off-site sewer pipe alignment shall be removed within 24 hours of completing the sewer pipe improvement;* • *Criteria for use of flaggers and other traffic controls;* • *Preservation of safe and convenient passage for bicyclists and pedestrians through/around construction areas;* • *Monitoring for roadbed damage and timing for completing repairs;* • *Limitations on construction activity during peak/holiday weekends and special events;* • *Preservation of emergency vehicle access;* • *Coordination of construction activities with construction of other projects that occur concurrently in Olympic Valley to minimize potential additive construction traffic disruptions, avoid duplicative efforts (e.g., multiple occurrences of similar signage), and maximize effectiveness of traffic mitigation measures (e.g., joint employee alternative transportation programs);* • *Removing traffic obstructions during emergency evacuation events; and* • *Providing a point of contact for Olympic Valley residents and guests to obtain construction*	

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Table 2-1
Summary of Impacts and Mitigation Measures

Impact		Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
			information, have questions answered, and convey complaints. *The construction signing and traffic control plan shall be developed such that the following minimum set of performance standards is achieved throughout project construction. It is anticipated that additional performance standards would be developed once details of project construction are better known.* • *All construction employees shall park in designated lots owned by the project applicant or on private lots otherwise arranged for by the project applicant; and* • *Roadways shall be maintained clear of debris (e.g., rocks) that could otherwise impede travel and impact public safety.*	
7-2	**Conflict with a program, plan, ordinance or policy addressing transit, bicycle and pedestrian facilities.**	LS	*None required.*	N/A
7-3	**Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b).**	LS	*None required.*	N/A
7-4	**Substantially increase hazards to vehicle safety due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible**	LS	*None required.*	N/A

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Table 2-1
Summary of Impacts and Mitigation Measures

	Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
	uses (e.g., farm equipment), or result in inadequate emergency access or access to nearby uses.			
7-5	**Substantially increase hazards to vehicle safety under Cumulative Plus Project conditions.**	LLC	*None required.*	N/A
	8. Wildfire			
8-1	**Substantially impair an adopted emergency response plan or emergency evacuation plan.**	LS	*None required.*	N/A
8-2	**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**	S	*8-2* *Prior to the approval of Improvement Plans, the plans shall include a note requiring CAL FIRE-approved spark arrestors on all construction equipment with internal combustion engines. The project contractor shall provide proof of compliance with this measure to the Placer County Community Development Resource Agency, prior to initiation of construction activities.*	LS
8-3	**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.**	LS	*None required.*	N/A

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Table 2-1
Summary of Impacts and Mitigation Measures

Impact		Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
8-4	**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.**	LS	*None required.*	N/A
8-5	**Increase in wildfire risk attributable to the proposed project, in combination with cumulative development.**	LS	*None required.*	N/A

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3. Project Description

3.0 PROJECT DESCRIPTION

3.1 INTRODUCTION

Pursuant to CEQA Guidelines Section 15124, an EIR is required to include a project description that includes the following information: project objectives, project location, a general description of the project's technical, economic and environmental characteristics, and a statement briefly describing the intended uses of the EIR, including a list of agencies expected to use the EIR and a list of permits and other approvals required to implement the project.

The Project Description chapter of the EIR provides a comprehensive description of the Sierra Nevada Olympic Winter (SNOW) Sports Museum and Community Cultural Center Project (proposed project) in accordance with the CEQA Guidelines. Please note that this chapter provides an overall general description of the existing environmental conditions; however, detailed discussions of the existing setting in compliance with Section 15125 of CEQA Guidelines, as it relates to each given potential CEQA impact area, is included in each technical chapter of this EIR.

3.2 PROJECT LOCATION

The project site consists of approximately one acre (with a disturbance area of 0.68-acre) of the 26.8-acre Olympic Valley Park site, 101 Olympic Valley Road, southwest of the intersection of Olympic Valley Road and River Road/State Route (SR) 89 in the unincorporated community of Olympic Valley. Olympic Valley Park is identified by Assessor's Parcel Numbers (APNs) 096-290-021-000, 096-290-056-000, 096-290-061-000, 096-310-009-000, and 096-310-040-000.

3.3 PROJECT SETTING AND SURROUNDING LAND USES

The project site consists of approximately one acre (with a disturbance area of 0.68-acre) of the 26.8-acre Olympic Valley Park site, 101 Olympic Valley Road, southwest of the intersection of Olympic Valley Road and SR 89, in the unincorporated community of Olympic Valley (see Figure 3-1 and Figure 3-2). Regional access to the site is provided by Interstate 80 (I-80) and State Route (SR) 89. Palisades Tahoe (formerly Squaw Valley Ski Resort) and other Olympic Valley ski resorts (e.g., Olympic Village Inn), as well as other recreational and commercial uses, are located approximately 1.89 miles southwest of the project site. Lake Tahoe is located approximately four miles southeast of the project site, and the Town of Truckee is located approximately nine miles northwest of the project site. Lake Tahoe is considered a unique and significant environmental resource; the U.S. Supreme Court has noted that Lake Tahoe is "uniquely beautiful," and a "national treasure" famous for its water's "exceptional clarity," (Tahoe-Sierra Preservation Council, Inc. v. Tahoe Regional Planning Agency [2002] 535 U.S. 302, 307).

Olympic Valley Park is an approximately 26.8-acre park, consisting of five parcels (APNs 096-310-009-000, 096-310-040-000, 096-290-021-000, 096-290-061-000, and 096-290-056-000), owned and operated by Placer County. The project site is identified by portions of APNs 096-290-021-000 and 096-290-056-000, and would be located between the Olympic Valley Park driveway entrance to the parking lot from Olympic Valley Road and the existing pickleball courts.

Figure 3-1
Regional Location Map

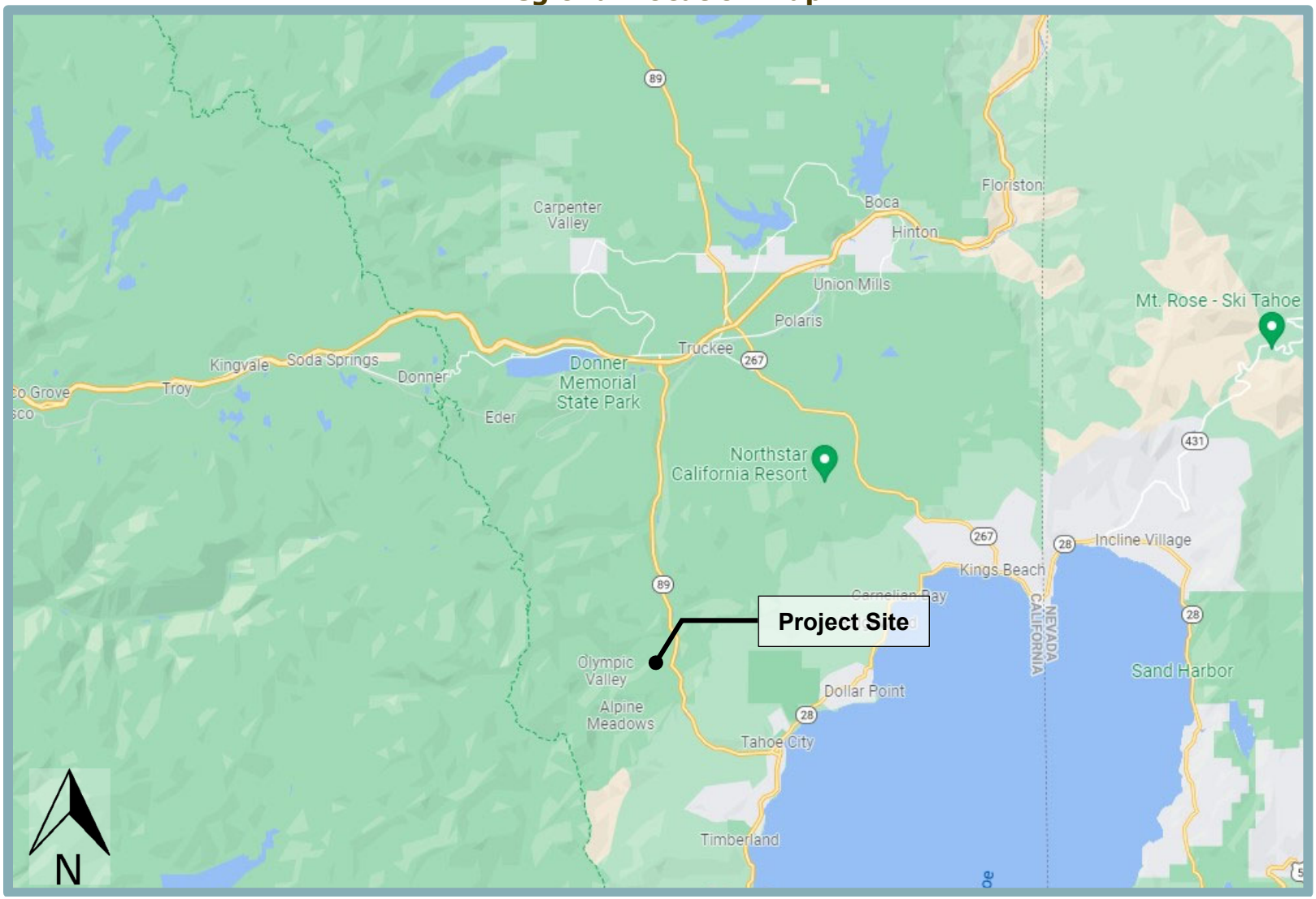


Figure 3-2
Project Site Boundaries

The project site is designated as Conservation Preserve (CP) in the 1983 Squaw Valley General Plan (SVGP) and Land Use Ordinance, and the current zoning designation for the site is Forest Recreation (FR).

The project site is situated on undulating topography which runs north to south. The scattered rock outcrops and boulders located on-site create microtopographic variations ranging from 6,115 feet to 6,130 feet above mean sea level. The project site contains areas of vegetation, predominantly montane coniferous forest, which largely consist of white fir and pine trees native to the area. Patches of willow scrub occur in scattered locations within stormwater detention basins constructed for the Olympic Valley Park.

Riprap stone is scattered along the eastern boundary of the project site along the pickleball courts and the northwestern corner of the project site. A 0.04-acre drainage swale, which was constructed as part of the 2004 improvements to Olympic Valley Park, supports wetland vegetation and occurs along the south side of Olympic Valley Road, flowing from west to east. The Truckee River is located approximately 790 feet east of the project site, across SR 89.

The project site is bounded by Olympic Valley Road to the north, SR 89 and the Truckee River Trail to the east, and Olympic Valley Park facilities to the south and west. The area north of the project site, across Olympic Valley Road, is sparsely developed and is largely occupied by forest and meadow vegetation. However, a commercial recreation store and convenience store (7-Eleven) are located on the west side of SR 89, north of the project site, across Olympic Valley Road. A soccer field and playground are located west of the project site within Olympic Valley Park. The Olympic Valley community is located further west, which includes condominiums and single-family residences in the vicinity of the project site to the northwest.

Rural residences are located east of the project site, across SR 89, and the Truckee River is located further east, approximately 790 feet from the project site. The Truckee River Trail and forest land are located south of the project site. The Palisades Tahoe, which contains lodging, ski lifts, a golf course, and associated commercial uses, is located further southwest.

As shown in Figure 3-2, the Tower of Nations structures are located at the southwest corner of the SR 89 and Olympic Valley Road intersection, adjacent to the project site, and in the northwest corner of the SR 89 and Olympic Valley Road intersection, northeast of the project site. The original Tower of Nations structure is a 79-foot-tall and 29-foot-wide structure created for the 1960 Winter Olympic Games that took place in Olympic Valley. The structure displays the crests of all the nations which competed in the games, as well as the five Olympic rings. The second Tower of Nations structure located in the project vicinity is a replica of the original, and includes displays of the recreational opportunities within Olympic Valley.

3.4 PROJECT OBJECTIVES

The objectives for the proposed project are as follows:

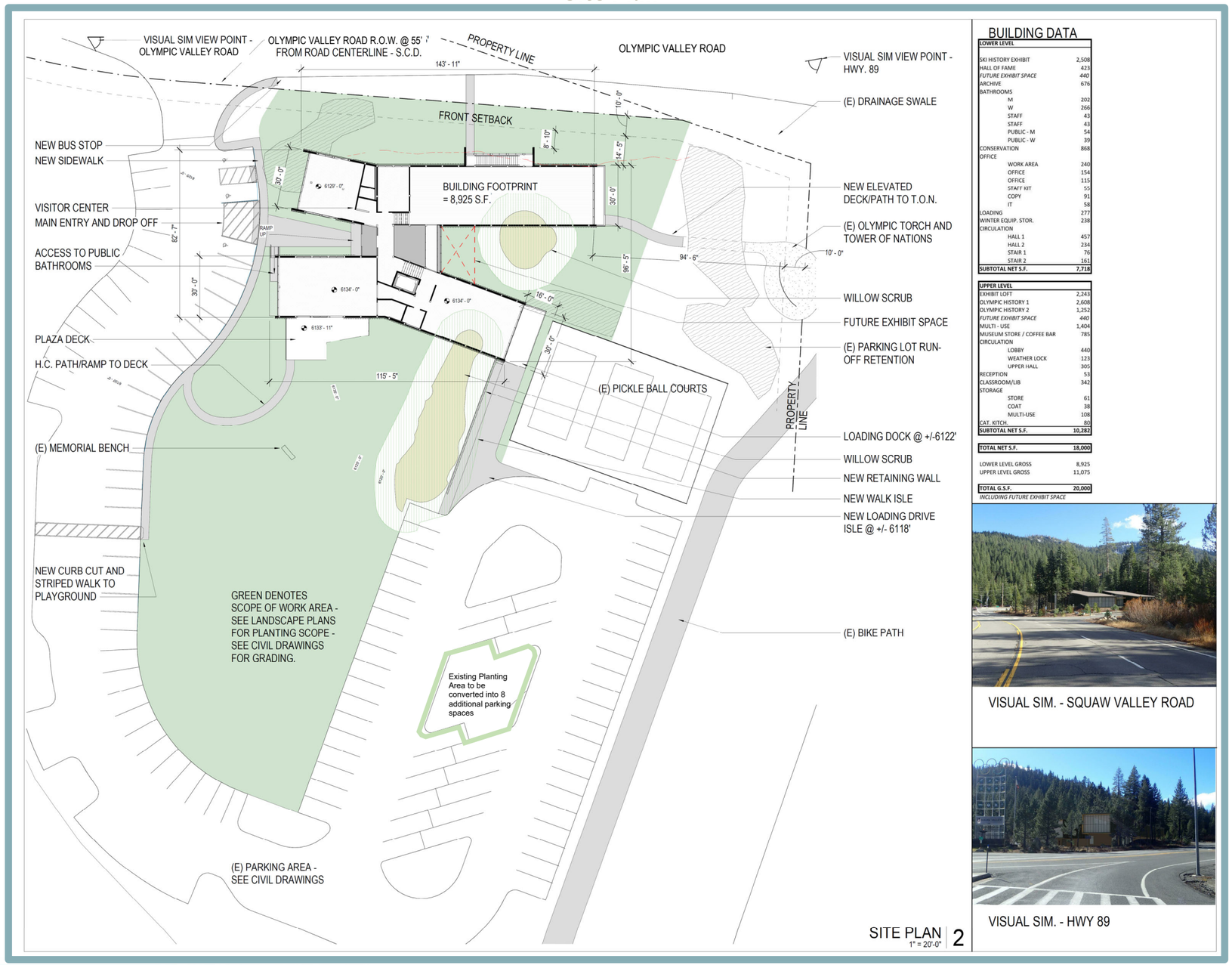
1. Establish a place where the evolution of winter sports in the Sierra Nevada and the 1960 Winter Olympics can be researched, studied, and displayed in an inspiring, environmentally beautiful building; collect, preserve, archive, and assemble in one place, artifacts and memorabilia relating to the snow sports history presently distributed throughout the community;
2. Ensure consistency with existing and potential future Olympic Valley Park uses;

3. Mitigate environmental and community impacts to the extent feasible;
4. Establish an Olympic Museum to commemorate the events of the 1960 Winter Olympic Games held in Olympic Valley and Lake Tahoe and the ensuing effects on regional and western ski history;
5. Establish a museum of Sierra Nevada ski history beginning with the Washoe Tribe traveling on hand-hewn snowshoes to 19th century gold miners on 14-foot longboards to California and Nevada veterans of the 10th Mountain Division to current World Cup athletes;
6. Establish a place for events that will be available to the residents and visitors to enjoy and participate in exhibits, films, conferences, lectures, dinners, and community events in a mountain-modern building with state-of-the-art facilities, including a multi-purpose community room and classroom where patrons can reserve a space for events;
7. Establish a visitor center or kiosk that will provide information on recreational activities, hiking and biking trails, lodging, camping, dining, and backcountry winter access;
8. Establish a small café and museum shop as an accessory to the museum;
9. Construct a community multi-purpose room available for local meetings and events, and a classroom for educational programming;
10. Establish a hall of fame to honor winter sports athletes and leaders of the California and Nevada winter sports industry;
11. Construct publicly accessible restrooms for Olympic Valley Park users, and the addition of water and sewer lines for the existing park bathrooms, and a new water fountain for the pickleball courts;
12. Use an available site location that is not fragmented with respect to ownership, easements, or restrictions;
13. Use an available site location that is not owned by a private third party, which could exert control over, diminish, or eliminate future museum operations (sites that have been examined in the vicinity of Palisades Tahoe Resort); and
14. Use an available site location that is not affected by electromagnetic radiation, underground contamination, unacceptable visual impacts, land-use restrictions due to high voltage power lines, or other such environmental limitations (the parcels on the north side of Olympic Valley Road).

3.5 PROJECT COMPONENTS

The proposed project would include development of a museum and community cultural center building celebrating the 1960 Winter Olympics and history of winter sports in the Sierra Nevada. The proposed development would include the construction of a new, two-story, U-shaped building, various site improvements, and a number of amenities such as event space (see Figure 3-3). The proposed project would require County approval of a Rezone to create a new land use district to accommodate the proposed project, a Text Amendment to Section 12.24.040 of the Placer County Government Code, Conditional Use Permit (CUP), Design Review, and potential Minor Land Division to create a new parcel for the proposed project. The proposed project components, along with all required entitlements and approvals, are described in further detail in the following sections.

Figure 3-3
Site Plan



Proposed Development

The two-story, U-shaped building would consist of up to 20,000 square feet (sf) of building space with a height of 29.8 feet (see Figure 3-4 through Figure 3-7). The second/upper floor would serve as the entrance to the building due to the museum having a stepped floor plan. Although not yet determined, the building could also include a mezzanine. Table 3-1 below outlines the allocated space within the proposed building.

Table 3-1
Proposed Building Space and Area

Building Space	Area (sf)
First/Lower Level	
Ski History Exhibit	2,508
Hall of Fame	423
Future Exhibit Space	440
Archive	676
Restrooms – internal	554
Restrooms – accessible from exterior	93
Conservation	868
Office	713
Winter Equipment Storage	238
Loading Dock	277
Circulation	928
Approximate net area (First/Lower Level)	**7,718**
Second/Upper Level	
Exhibit Loft	2,243
Olympic History 1	2,608
Olympic History 2	1,252
Future Exhibit Space	440
Cultural/Community Room	1,404
Museum Shop/Café	785
Circulation	881
Event Space/Classroom/Library	342
Storage	207
Catering Kitchen	80
Plaza Deck	600
Approximate net area (Second/Upper Level)	**10,842**

Note: Room areas are based on current plans, which show a gross building area of 17,285 gross sf and a footprint of 8,925 sf. As building design proceeds to construction design, the final floor area of these rooms may be adjusted. For the purposes of the CEQA analysis, it is anticipated that the building will have a gross area of up to 20,000 sf.

Figure 3-4
Entry-Level/Second Floor Plan

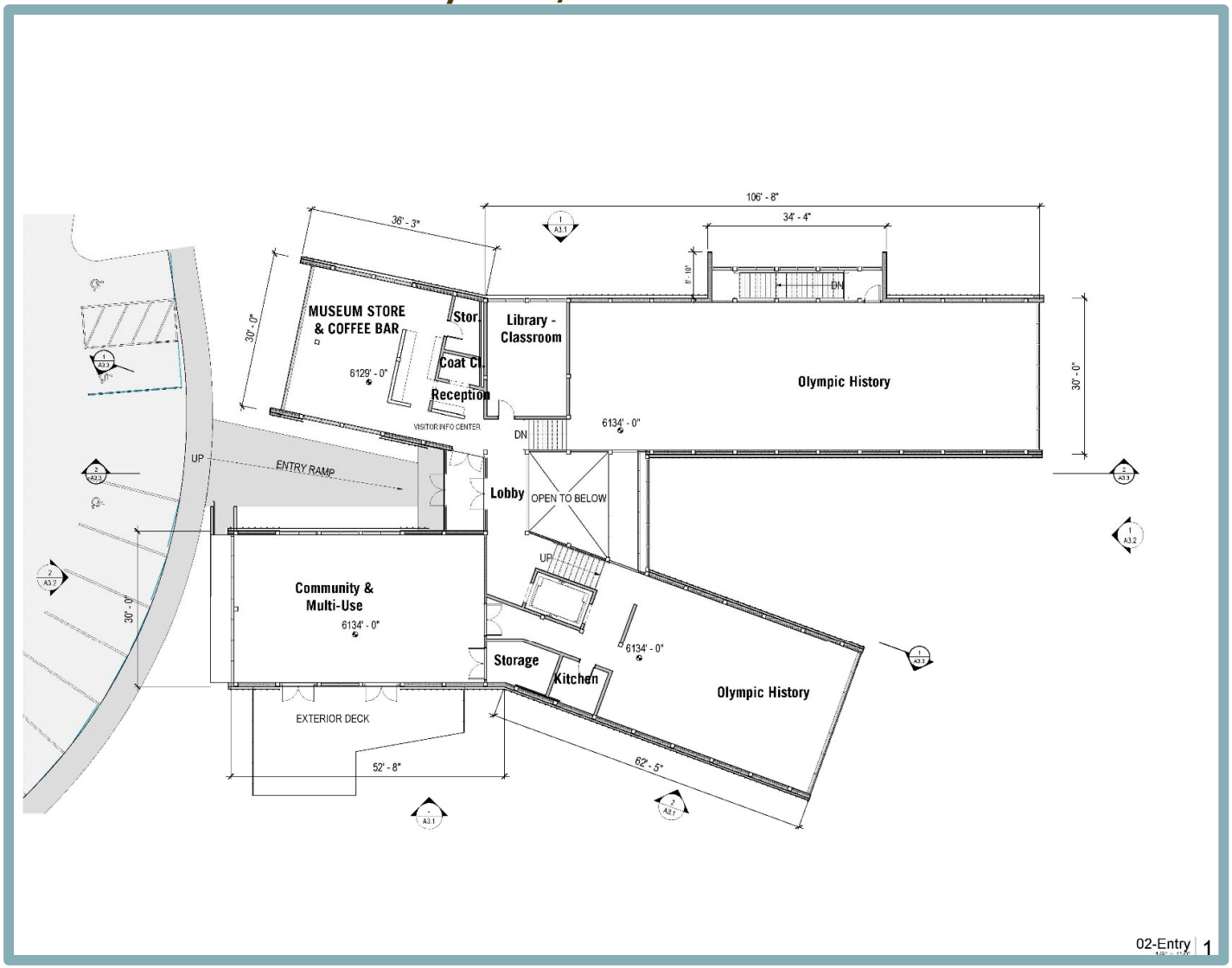


Figure 3-5
First Floor Plan

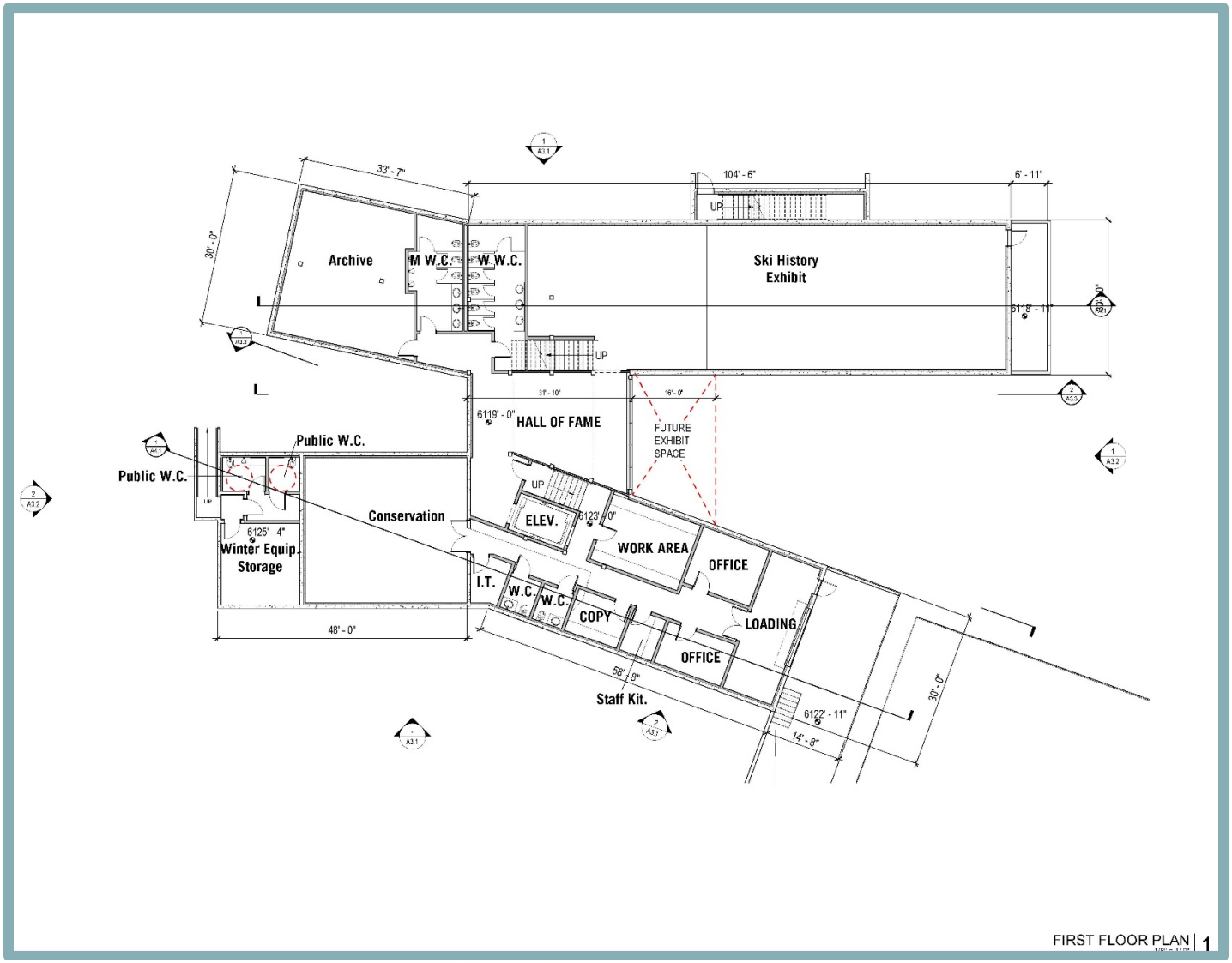


Figure 3-6
Exterior Building Elevations (South and North)

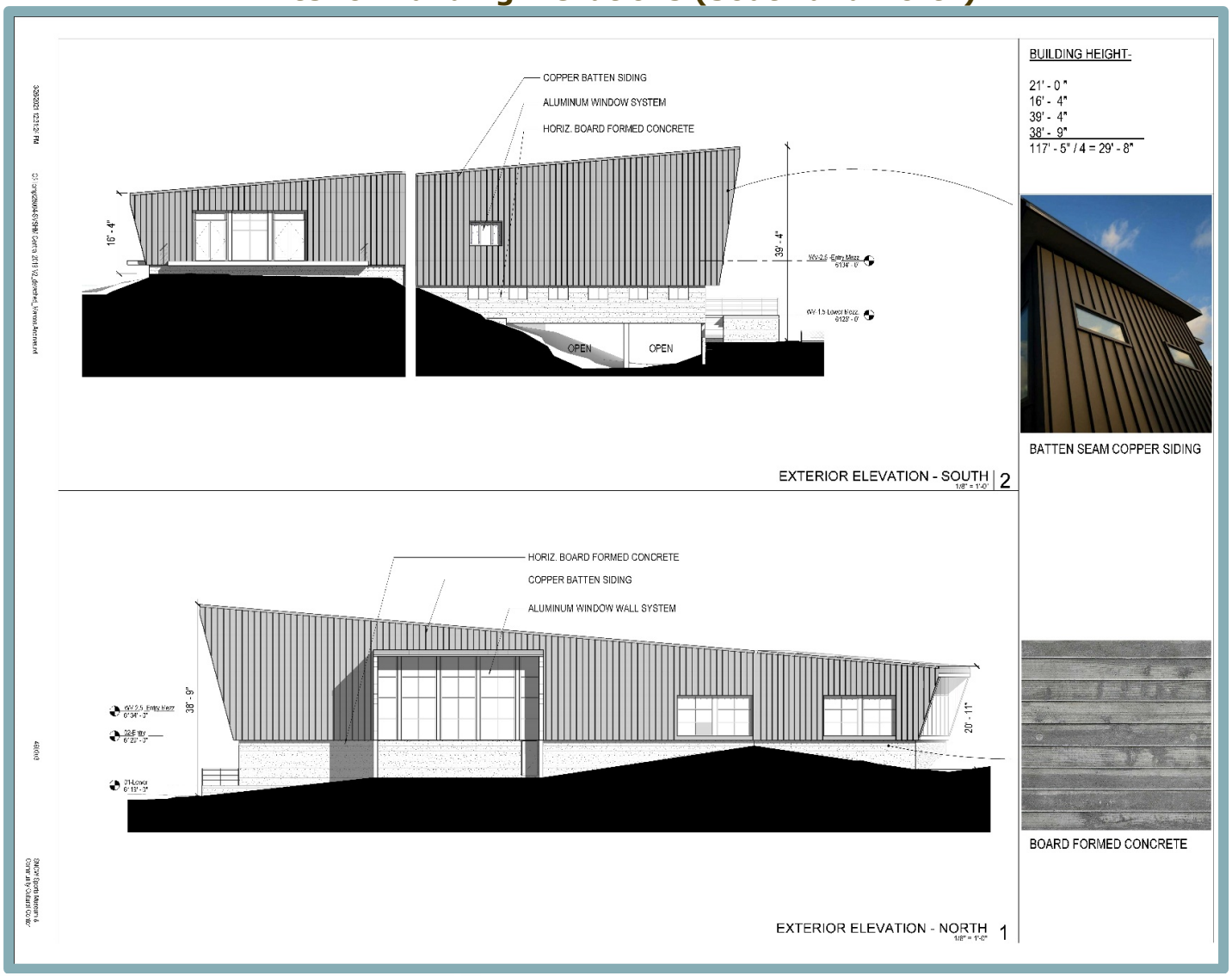
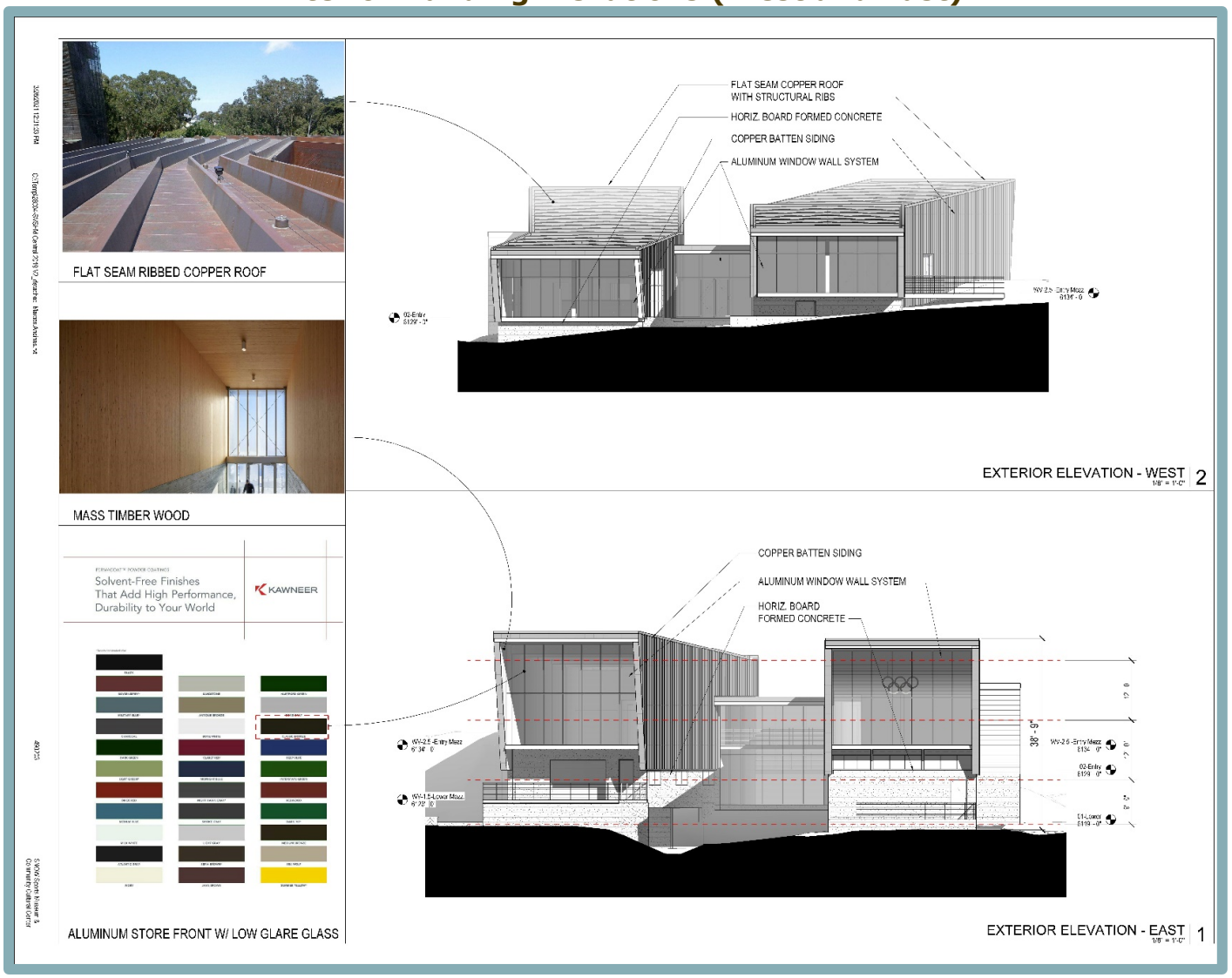


Figure 3-7
Exterior Building Elevations (West and East)



Outdoor gathering spaces and amenities would be provided, such as a plaza deck to be located south of the building and a V-shaped garden to be located east of the building. Various other improvements would be included in the development of the proposed project, including, but not limited to, landscaping and utility installation, as well as improvements to the existing facilities at Olympic Valley Park. Such improvements are discussed in further detail below.

In total, the construction of the building and associated improvements would comprise approximately one acre. However, while a portion of the existing parking lot would be resurfaced, ground disturbance would not occur within this paved area with the exception of a 2,234-sf planter area in the eastern portion of the parking lot, which would be removed and replaced with eight vehicle parking spaces as part of the project. Thus, the proposed project would result in a total disturbance area of approximately 0.68-acre.

The existing Olympic Valley Park parking lot has a total of 116 spaces (61 in the upper/western area and 55 in the lower/eastern area). Up to 6,000 sf of the existing parking lot would be resurfaced and the parking area directly fronting the museum would be restriped to include two additional Americans with Disabilities Act (ADA) parking spaces. As discussed above, a planter area in the eastern portion of the parking lot would be removed and replaced with eight vehicle parking spaces. Including existing and proposed parking, a total of 121 parking spaces (including seven ADA-compliant parking spaces) would be provided on-site in accordance with Section 17.54.060 of the Placer County Code.

Further discussion of the proposed project's operations, access and circulation, grading activities, utilities and public services, landscaping and trails, and off-site improvements is provided below.

Project Operations

The SNOW Sports Museum and Community Cultural Center would operate on a year-round schedule with exact hours and admission fees to be determined. Conservatively, the museum is anticipated to operate daily from 10:00 AM to 6:00 PM with up to six special events per year. Special events would occur after the normal closing hour of 6:00 PM and are assumed to have up to 100 guests.

During the peak visitation season, up to six employees, three full-time and three part-time, would report to the site. In addition to general visitation hours, the museum would also host after-hours events (e.g., fundraisers, community gatherings, etc.).

Similar to the use of rooms in other County community centers, the community room and classroom would be available for recreation, social interactions, and meetings by both the museum and the community. The events may include lectures, film screenings, exercise classes, and private parties renting the museum facilities. Events would typically be held in the evenings so as not to conflict with peak daytime usage of the park by recreational users, and are assumed not to extend past 10:00 PM. The reservation systems for both the museum and park uses would be coordinated to avoid overcrowding from overlapping events. The proposed project is estimated to generate 70,000 to 80,000 total annual visitors, including approximately 60,000 to 70,000 museum visitors (assuming approximately 10,000 student visitors), as well as approximately 10,000 visitors for special events/community facilities.

The proposed project operations would also include snow removal, as necessary, which would be managed by the Sierra Nevada Olympic & Winter Sports Museum (SNOW Sports Museum

Foundation) and would involve the removal of snow at the proposed museum and community cultural center only. Placer County would continue to be responsible for snow removal at the existing parking areas. The cost of snow removal in the entry and parking area would be shared between the SNOW Sports Museum Foundation and Placer County.

Access and Circulation

Vehicle access to the proposed project would be provided by an existing driveway from Olympic Valley Road, which currently serves as the entrance to Olympic Valley Park and connects to the existing surface parking lot. The entrance provides full access to the project site. Up to 6,000 sf of the driveway and asphalt parking lot would be resurfaced, and the parking area directly fronting the museum would be restriped to include two additional ADA parking spaces. The re-striping of the parking lot would allow space for a bus turnaround for buses up to 40 feet in length in the eastern portion of the parking lot. Additionally, a planting area in the eastern portion of the parking lot would be removed and replaced with eight vehicle parking spaces.

The project site would also be accessible to cyclists from the Class III bikeways along SR 89, Class I and II bikeways along Olympic Valley Road, and the Class I Truckee River Trail along the southern boundary of the project site and along SR 89. Six-foot-wide concrete walkways would be included throughout the site to provide pedestrian and bicycle access to the proposed building from the existing parking lot and Olympic Valley Road. In addition, a six-foot-wide concrete ramp would be constructed at the building entry point behind rolled curb and gutter to meet the ADA requirements. Improved pedestrian facilities would include a crosswalk connecting the sidewalk in front of the building to the playground and sports field west of the building. Additionally, the project would construct a walking path, which would bisect the proposed V-shaped garden and lead from the building to the Tower of Nations structure at the southwest corner of the SR 89 and Olympic Valley Road intersection.

The Tahoe Truckee Area Regional Transit (TART) includes a transit stop adjacent to the entrance to Olympic Valley Park on the south side of Olympic Valley Road for transit headed toward Tahoe City and Truckee, as well as a second transit stop across Olympic Valley Road for buses headed to the Olympic Valley Village turn-around point. Several other shuttle services provide transportation within Olympic Valley for patrons of nearby ski resorts that also use the nearby stops. During ski season, the Palisades Tahoe/Alpine Express shuttle runs continuously between Olympic Valley and Alpine Meadows, and the Mountaineer (micro transit) offers on-demand intra-valley shuttle service. Lastly, the North Lake Tahoe Express, a shuttle transit company providing service between the Reno-Tahoe International Airport and destinations around the Tahoe Basin, services the existing transit stop at Olympic Valley Park.

Grading Activities

To prepare the project site for development, the existing slope would be regraded immediately adjacent to the driveway entrance from Olympic Valley Road to create a level transition from the parking and ADA spaces to the museum entrance. Additional grading would occur adjacent to the western portion of the parking lot to create a level surface for the proposed concrete walkway and for installation of the building foundation. In total, grading activities would result in up to approximately 1,500 cubic yards of cut and 300 cubic yards of fill, with the net 1,200 cubic yards of cut earth being hauled off-site for disposal.

Utilities and Public Services

The proposed project would connect to public utilities located within Olympic Valley Road at the project frontage and within Olympic Valley Park. Sewer and water services would be provided by the Olympic Valley Public Service District (OVPSD). A six-inch water service lateral, underground electrical conduit, and fire hydrant would be provided in the northwest corner of the project site. The water services extension would connect to the existing lateral adjacent to the proposed building within Olympic Valley Road. All sewer improvements would be consistent with the Placer County "All Districts" Sewer System Master Plan. The museum project will provide sewer service to the existing vault restroom building at the park. This will support the conversion of the restroom building from vault type to flush restrooms. Solid waste would be collected by Truckee Tahoe Sierra Disposal. Electricity would be provided by Liberty Utilities and a new propane tank would be provided on-site.

The proposed on-site stormwater system would consist of installation of an underground rainstore retention facility and several infiltration trenches. The infiltration trenches would be constructed throughout the project site along the concrete walkways adjacent to the western parking lot, between the western parking lot and the south wing of the building, between the western parking lot and the north wing of the building, between the south wing and the north wing of the building, and north of the pickleball courts. As such, the stormwater drainage from the project site would be directed to the newly constructed stormwater infiltration system. The existing stormwater basin located in the northwest corner of the site would remain as-is following project development.

The proposed project would also include minor improvements at the existing pickleball courts, along the eastern boundary of the project site, such as an underground electrical conduit and pull box, and water line for a new drinking fountain.

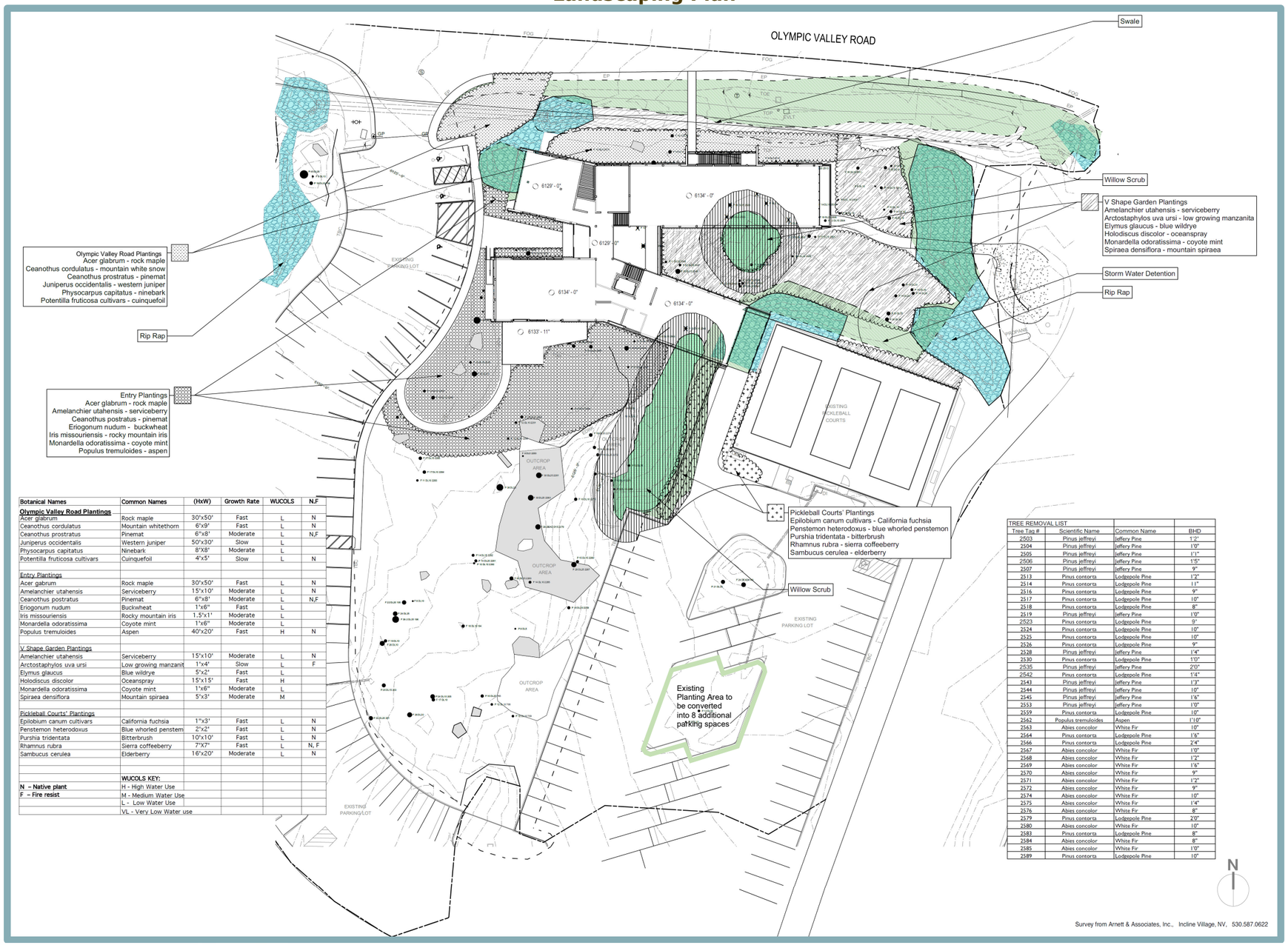
The proposed project would be served by the Placer County Sheriff's Department, California Highway Patrol (CHP), and Olympic Valley Fire Department. Law enforcement would be provided by the Sheriff's Department, while traffic-related enforcement services would be provided by CHP. The Olympic Valley Fire Department station is located at 305 Olympic Valley Road, approximately 1,400 feet northwest of the project driveway entrance.

Landscaping and Trails

A total of 228 trees are currently located on the project site. As part of the proposed project, approximately 109 trees would be removed (see Figure 3-8). The existing willow scrub areas would remain; however, the existing rock outcrop near the upper entrance to the museum would be removed. Landscaping improvements would be provided throughout the project site, as well as along the Olympic Valley Road frontage in the northwest corner of the site.

A variety of drought-tolerant trees, shrubs, and flowers would be provided along the frontage of Olympic Valley Road, the main entry of the proposed building, at the southwest corner of the pickleball courts, and at the proposed V-shaped garden. The proposed V-shaped garden would be located in the northeastern portion of the project site and would include native and naturalized plantings. All landscaping would comply with the State's Model Water Efficient Landscape Ordinance (MWELO).

Figure 3-8
Landscaping Plan



Botanical Names	Common Names	(HxW)	Growth Rate	WUCOLS	N,F
Olympic Valley Road Plantings					
Acer glabrum	Rock maple	30'x50'	Fast	L	N
Ceanothus cordulatus	Mountain whitethorn	6'x9'	Fast	L	N
Ceanothus prostratus	Pinemat	6"x8'	Moderate	L	N,F
Juniperus occidentalis	Western juniper	50'x30'	Slow	L	
Physocarpus capitatus	Ninebark	8'X8'	Moderate	L	
Potentilla fruticosa cultivars	Cuinquefoil	4'x5'	Slow	L	N
Entry Plantings					
Acer gabrum	Rock maple	30'x50'	Fast	L	N
Amelanchier utahensis	Serviceberry	15'x10'	Moderate	L	N
Ceanothus postratus	Pinemat	6"x8'	Moderate	L	N,F
Eriogonum nudum	Buckwheat	1'x6"	Fast	L	
Iris missouriensis	Rocky mountain iris	1.5'x1'	Moderate	L	
Monardella odoratissima	Coyote mint	1'x6'	Moderate	L	
Populus tremuloides	Aspen	40'x20'	Fast	H	N
V Shape Garden Plantings					
Amelanchier utahensis	Serviceberry	15'x10'	Moderate	L	N
Arctostaphylos uva ursi	Low growing manzanit	1'x4'	Slow	L	F
Elymus glaucus	Blue wildrye	5'x2'	Fast	L	
Holodiscus discolor	Oceanspray	15'x15'	Fast	H	
Monardella odoratissima	Coyote mint	1'x6"	Moderate	L	
Spiraea densiflora	Mountain spiraea	5'x3'	Moderate	M	
Pickleball Courts' Plantings					
Epilobium canum cultivars	California fuchsia	1"x3'	Fast	L	N
Penstemon heterodoxus	Blue whorled penstem	2'x2'	Fast	L	N
Purshia tridentata	Bitterbrush	10'x10'	Fast	L	N
Rhamnus rubra	Sierra coffeeberry	7'X7'	Fast	L	N, F
Sambucus cerulea	Elderberry	16'x20'	Moderate	L	N
	WUCOLS KEY:				
N – Native plant	H - High Water Use				
F – Fire resist	M - Medium Water Use				
	L - Low Water Use				
	VL - Very Low Water use				

TREE REMOVAL LIST			
Tree Tag #	Scientific Name	Common Name	BHD
2503	Pinus jeffreyi	Jeffery Pine	1'2"
2504	Pinus jeffreyi	Jeffery Pine	1'0"
2505	Pinus jeffreyi	Jeffery Pine	1'1"
2506	Pinus jeffreyi	Jeffery Pine	1'5"
2507	Pinus jeffreyi	Jeffery Pine	9"
2513	Pinus contorta	Lodgepole Pine	1'2"
2514	Pinus contorta	Lodgepole Pine	1'1"
2516	Pinus contorta	Lodgepole Pine	9"
2517	Pinus contorta	Lodgepole Pine	1'0"
2518	Pinus contorta	Lodgepole Pine	8"
2519	Pinus jeffreyi	Jeffery Pine	1'0"
2523	Pinus contorta	Lodgepole Pine	9"
2524	Pinus contorta	Lodgepole Pine	1'0"
2525	Pinus contorta	Lodgepole Pine	1'0"
2526	Pinus contorta	Lodgepole Pine	9"
2528	Pinus jeffreyi	Jeffery Pine	1'4"
2530	Pinus contorta	Lodgepole Pine	1'0"
2535	Pinus jeffreyi	Jeffery Pine	2'0"
2542	Pinus contorta	Lodgepole Pine	1'4"
2543	Pinus jeffreyi	Jeffery Pine	1'3"
2544	Pinus jeffreyi	Jeffery Pine	1'0"
2545	Pinus jeffreyi	Jeffery Pine	1'6"
2553	Pinus jeffreyi	Jeffery Pine	1'0"
2559	Pinus contorta	Lodgepole Pine	1'0"
2562	Populus tremuloides	Aspen	1'10"
2563	Abies concolor	White Fir	1'0"
2564	Pinus contorta	Lodgepole Pine	1'6"
2566	Pinus contorta	Lodgepole Pine	2'4"
2567	Abies concolor	White Fir	1'0"
2568	Abies concolor	White Fir	1'2"
2569	Abies concolor	White Fir	1'6"
2570	Abies concolor	White Fir	9"
2571	Abies concolor	White Fir	1'2"
2572	Abies concolor	White Fir	9"
2574	Abies concolor	White Fir	1'0"
2575	Abies concolor	White Fir	1'4"
2576	Abies concolor	White Fir	8"
2579	Pinus contorta	Lodgepole Pine	2'0"
2580	Abies concolor	White Fir	1'0"
2583	Pinus contorta	Lodgepole Pine	8"
2584	Abies concolor	White Fir	8"
2585	Abies concolor	White Fir	1'0"
2589	Pinus contorta	Lodgepole Pine	1'0"

Survey from Arnett & Associates, Inc., Incline Village, NV, 530.587.0622

Approximately 616 sf of riprap located in the northwest corner of the project site and 760 sf of riprap adjacent to the pickleball courts would be removed in order to construct the building's loading dock. A four-foot-wide raised path is planned for development and would run from the north wing of the building to the Tower of Nations located along the northeastern boundary of the site, adjacent to SR 89.

Off-Site Improvements

The proposed project would construct a sanitary sewer force main along Olympic Valley Road. The force main would begin at the intersection of Olympic Valley Road and the project driveway, and run northwest approximately 760 feet along Olympic Valley Road to connect to the existing sanitary sewer manhole located east of the Tavern Inn Condominiums. In addition, a wet well and sanitary sewer lift station would be constructed north of the project site in an existing manhole, near the project driveway, within the Olympic Valley Road right-of-way. The sewer system improvements would be sized to provide flush sewer service to the existing vault restroom in the park that currently has a stubbed sewer line to the existing manhole, operated by OVPSD.

Rezone

The SVGP land use designation for the site is CP and the current zoning is FR. The project includes a request to amend the SVGP Land Use Ordinance to establish a new land use district: Cultural Amenities. The proposed project would include a Rezone of the approximately one-acre project site to the new Cultural Amenities land use district in order to accommodate the proposed project. Section 200: Land Use Districts of the Squaw Valley General Plan and Land Use Ordinance would be amended to include the following language:

> **Section 261 - Cultural Amenities Land Use District:** This land use district is intended for properties to permit cultural amenities such as museums, libraries, and community centers. The permitted uses in this land use district are narrowly defined to include only those land uses that would be compatible with such cultural amenities while not adversely affecting the general character of adjoining land use districts.
>
> Section 261.10 - Permitted Principal Uses and Structures
>
> a) Museums, libraries, and community centers.
> b) Area for short-term outdoor exhibits; outdoor covered gathering area.
> c) Picnic areas, including picnic shelters in excess of 200 square feet.
> d) Other recreation uses which do not require structures or impervious surfaces in excess of 200 square feet (excluding golf course). For purposes of this use category, artificial turf surfaces are considered pervious and not subject to the 200 square foot restriction.
> e) Structures and uses required for the operation of a public utility or performance governmental function.
> f) Other uses determined by the Placer County Community Development Director to be consistent with the permitted uses and intent of this land use district.
>
> Section 261.20 – Permitted Accessory Uses and Structures uses such as staff offices, gift shops, event spaces, seating areas, and food service, which are customarily accessory and incidental to the permitted principle uses and structures shall be permitted in this district.

Section 261.30 – Development Standards and Design Guidelines

a) A project within the Cultural Amenities Land Use District shall require the issuance of a Conditional Use permit, approved by the Planning Commission (or Board of Supervisors in the case of an appeal).
b) A project within the Cultural Amenities Land Use District shall be operated by a governmental agency or non-profit entity.
c) Structures allowed in the Cultural Amenities Land Use District are subject to design review by the County.
d) The building site shall be located within ½ mile of the State Route 89 right-of-way.
e) Gross floor area of buildings shall not exceed 25,000 square feet.
f) Maximum building height shall be 36 feet.
g) Structures allowed in the Cultural Amenities Land Use District shall be setback a reasonable distance (as determined through the design review process) from the adjacent land use district or property lines.
h) The project shall not contribute to fragmentation of contiguous undisturbed natural forest or grassland habitat.
i) Intense utilization of already disturbed areas shall be promoted and preferred to fringe development or non-contiguous development of previously undisturbed areas, consistent with the guidelines in Section III of the Olympic (Squaw) Valley General Plan.
j) The project shall comply with all environmental regulations regarding the preservation of natural resources, including the California Environmental Quality Act, the Endangered Species Act, the Clean Water Act, and the Porter-Cologne Water Quality Act.

Section 261.40 - Parking Requirements: As established by the Conditional Use Permit for the project.

Section 261.50 - Minimum Lot Area: The minimum permissible lot area within this Land Use District shall be 1 acre.

Section 261.60 - Landscaping: Any landscaping or revegetation projects undertaken in this district shall utilize native and fire-resistant species of plants indigenous to the Olympic Valley area.

The new Cultural Amenities land use district would only be applied to the project site. Any future development projects applying for a Rezone to the new designation would do so independently of the proposed project, and would be subject to separate environmental review and discretionary approval. Approval of the requested Rezone for this project would not commit the County towards any particular course of action regarding future Rezones.

Text Amendment to Section 12.24.040, Placer County Code

Section 12.24 of the Placer County Code states that County Public Recreation Areas (PRAs) are closed to the public from one-half hour after sunset until one-half hour before sunrise. Section 12.24.040(B) provides exceptions to Section 12.24, which allow for different hours of operation for specific PRAs.

The proposed project would include a text amendment to add Section 12.24.040(B)(6) to the Placer County Code which would add the proposed SNOW Sports Museum as an exception to Section 12.24, and allow the proposed museum to remain open later than specified in the County Code in order to accommodate special events and museum operations.

Conditional Use Permit

It is the County's intent that the new land use district to be established as part of the project's entitlements would identify a museum and community cultural center as a conditional use. Therefore, the proposed project would require a CUP to construct the proposed on-site museum, community cultural center, and ancillary uses within the new land use district.

Design Review

Pursuant to Section 102.14 of the SVGP, and Section 17.62.070 of the Placer County Code, the proposed project would be subject to Design Review by the County. Specifically, the site plan would be analyzed based on elements of design, development location, arrangement of all structures, and design in harmony with surrounding facilities. The purpose of the regulations is to allow design review of all developments, signs, buildings, structures, and other facilities in order to further enhance the County's appearance, and the livability and usefulness of properties.

Minor Land Division

The project may include a Minor Land Division to create a separate parcel for the proposed project. This would result in the project being located on a separate parcel from the surrounding Olympic Valley Park.

Deed Restriction

In addition to the Placer County regulations, the Olympic Valley Park site is bound by a deed restriction relating to the past purchase of the parcel from the U.S. Forest Service (USFS) to Placer County, which occurred in 2000. The Quit Claim Deed conveying the park parcel to Placer County from the USFS includes the following restriction: "[T]he use of the property for a community park does not include the use of the property for private development of a commercial, residential, or industrial nature." Placer County is currently coordinating with the USFS regarding the deed restriction, and will pursue a course of action that is agreeable to both parties to allow for the proposed project to be developed within the Olympic Valley Park site.

3.6 PROJECT PUBLIC APPROVALS

The proposed project would require County approval of the following:

- Certification of the EIR;
- Adoption of the Mitigation Monitoring and Reporting Program;
- Amendment to the SVGP Land Use Ordinance to add Section 261 to establish the new Cultural Amenities Land Use District, and a subsequent Rezone of the approximately one-acre project site to the newly established district;
- Text Amendment to Section 12.24.040 of the Placer County Government Code;
- Conditional Use Permit to allow a museum and community cultural center within the new land use district;
- Design Review; and
- Potential Minor Land Division to create a new parcel for the proposed project.

Review or Approvals by Other Agencies

In addition to the above County approvals, the proposed project would require the following approvals/permits from other responsible and trustee agencies:

- Less than three-acre Conversion Exemption – California Department of Forestry and Fire Protection (CAL FIRE);
- Authority to Construct and Permit to Operate a Sewer Lift Station – Placer County Air Pollution Control District (PCAPCD);
- Section 404 Nationwide Permit (or Letter of Permission) – U.S. Army Corps of Engineers (USACE);
- Section 401 Water Quality Certification – Lahontan Regional Water Quality Control Board (RWQCB);
- Section 1602 Permit – California Department of Fish and Wildlife (CDFW); and
- National Pollutant Discharge Elimination System (NPDES) Construction General Permit – Lahontan RWQCB.
- Will-serve letter and approval of water and sewer service including lift station (Olympic Valley PSD)

4. Aesthetics

4. AESTHETICS

4.1 INTRODUCTION

The Aesthetics chapter of the EIR describes existing aesthetic resources in the area of the proposed project and the broader region, and evaluates the potential aesthetic impacts of the project. CEQA describes the concept of aesthetic resources in terms of scenic vistas, scenic resources (such as trees, rock outcroppings, and historic buildings within a State scenic highway), and the existing visual quality of the project area. In addition, pursuant to CEQA Guidelines, this chapter describes potential impacts related to light and glare. The following analysis is based on information drawn from the Placer County General Plan,[1] the Placer County General Plan EIR,[2] the Placer County Design Guidelines,[3] the Placer County Landscape Design Guidelines,[4] and the Squaw Valley General Plan (SVGP) and Land Use Ordinance.[5]

Pursuant to the court ruling in *Preserve Poway v. City of Poway* (2016) 245 Cal. App.4th 560 [199 Cal.Rptr. 3d 600], community character is separate and apart from aesthetic impacts and, thus, is not a CEQA issue. Rather, the analysis of aesthetics should be limited to tangible, physical evidence that a project is visually inconsistent with the surrounding community (rather than a psychological "feel"). Therefore, where applicable, the analysis presented within this chapter focuses on potential physical changes to visual composition of the project site and surrounding area, rather than overall community character.

4.2 EXISTING ENVIRONMENTAL SETTING

The following setting information provides an overview of the existing conditions of visual resources in the vicinity of the project site, which is located southwest of the intersection of Olympic Valley Road and State Route (SR) 89, in the unincorporated community of Olympic Valley (formerly known as Squaw Valley), Placer County, California.

Visual Character of the Region

The project site is located within the existing Olympic Valley Park, which is situated within the Squaw Creek watershed of the Sierra Nevada range (Sierras). The Squaw Creek watershed encompasses an area of approximately 5,350 acres, and is characterized by steep mountain slopes and a relatively flat high mountain meadow. Three major peaks dominate the western edge of the Valley: Granite Chief (9,006 feet), Emigrant Peak (8,797 feet), and Washeshu Peak (8,885 feet). The valley floor is approximately 6,200 feet above mean sea level (msl). The valley is a flat grass-covered open area traversed by numerous natural drainage channels of Squaw Creek, which converge into one channel at the mouth of the valley to the west before emptying into the Truckee River. During the summer months a golf course (Resort at Squaw Creek) is visible in the meadow to the south of Olympic Valley Road heading west. To the east, the valley floor opens into a narrow valley formed by the Truckee River surrounded on the north, south, and west by the

1 Placer County. *Countywide General Plan Policy Document*. August 1994 (Updated May 2013).
2 Placer County. *Countywide General Plan EIR*. July 1994.
3 Placer County. *Design Guidelines Manual*. Revised September 24, 2003.
4 Placer County. *Placer County Landscape Design Guidelines*. Adopted May 7, 2013.
5 Placer County. *1983 Squaw Valley General Plan and Land Use Ordinance*. October 6, 1983.

steep walls of the valley. The valley floor is a narrow box canyon that is visually and physically separated from other surrounding areas. The community of Alpine Meadows is located to the south on the other side of the 8,070-foot KT-22 ski run. The project area is known for its recreational amenities, including snow skiing, snowboarding, and sledding, as well as golfing, swimming, tennis, hiking, bicycling, and ice skating.

According to the SVGP, the visual characteristics of the Olympic Valley environment are one of its most important attributes, which can be divided into two categories of equal importance: natural features and man-made features.

Natural Features

Natural features in the region consist primarily of the mountain slopes, the peaks, the meadow and adjoining area, and the watercourses, which provide the key identifying characteristics of Olympic Valley. The degree to which the natural features of the area may be altered by humans without adversely affecting the region's aesthetic value must be considered in reviewing each proposed development project. The mountain peaks and ridges define the point at which the mountains meet the sky, and, thus, are important to retain from a visual standpoint. The edge of the meadow, where the coniferous trees approach, provides an area separating the mountain slopes from the valley floor. According to the SVGP, the watercourses and related stream environment zones of the region are a similar type of transition area that deserves protection.

Man-Made Features

The visual impact of buildings, parking lots, signs, roads and other man-made structures play an important part in the success of converting Olympic Valley into an active, viable, destination resort community. Unfortunately, poor design, denuded areas, overhead utilities, junk cars, debris, and poorly designed signs all detract from the aesthetics of the area. The Olympic Valley Design Review Committee (DRC) has been established, which has authority over most new construction, remodeling, rehabilitation of structures, and other proposed improvements. The proposed project is subject to DRC review.

Summer Characteristics

During the summer months the area generally has fewer people and less activity on the ski slopes of Olympic Valley, resulting in less traffic in the valley and fewer cars parked at the base of the mountain. The views of the mountains are less obstructed during the summer months due to the presence of fewer people in the area. The chair lifts, lift towers, and areas of snow storage are elements that are not as dominant during the summer months.

Winter Characteristics

During the winter months, the chair lifts and lift towers become visually more dominant due to the white backdrop of the snow. In addition, because the overall activity level of the area increases during the winter months, people skiing on the mountain and hundreds of parked cars in the day-skier parking lot become visually dominant elements in contrast to the summer months.

State Scenic Highways

The nearest State highway to the project site, located approximately 125 feet to the east, is SR 89. According to the California Department of Transportation (Caltrans) map of designated and eligible scenic routes under the California Scenic Highway Program, SR 89 is not an officially

designated State scenic highway and designated State scenic highways do not exist within the vicinity of the project site or in Placer County.[6]

Visual Character of the Project Site and Surrounding Area

The following information provides an overview of the physical conditions of the project site and surrounding area in relation to visual character.

Project Site

The project site consists of approximately one acre located within the 26.8-acre Olympic Valley Park site, 101 Olympic Valley Road, southwest of the intersection of Olympic Valley Road and SR 89, in the unincorporated community of Olympic Valley (see Figure 4-1). Olympic Valley Park is an approximately 26.8-acre park, consisting of five parcels, owned and operated by Placer County. The project site is identified by Assessor's Parcel Numbers (APNs) 096-290-021-000 and 096-290-056-000, and would be located between the Olympic Valley Park driveway entrance to the parking lot from Olympic Valley Road, and the existing pickleball courts.

The project site is situated on undulating topography which runs north to south. The scattered rock outcrops and boulders located on-site create microtopographic variations ranging from 6,115 feet to 6,130 feet above msl. The project site contains areas of vegetation, predominantly montane coniferous forest, which largely consist of white fir and pine trees native to the area. Patches of willow scrub occur in scattered locations within stormwater detention basins constructed for the Olympic Valley Park.

Riprap stone is scattered along the eastern boundary of the project site along the pickleball courts and the northwestern corner of the project site. A 0.04-acre drainage swale, which was constructed as part of the 2004 improvements to Olympic Valley Park, supports wetland vegetation and occurs along the south side of Olympic Valley Road, flowing from west to east.

Surrounding Areas

The project site is bounded by Olympic Valley Road to the north, SR 89 and the Truckee River Trail to the east, and Olympic Valley Park facilities to the south and west. The area north of the project site, across Olympic Valley Road, is sparsely developed and is largely occupied by forest and meadow vegetation. However, a commercial recreation store and convenience store (7-Eleven) are located on the west side of SR 89, north of the project site, across Olympic Valley Road. A soccer field and playground are located west of the project site within Olympic Valley Park. The Olympic Valley community is located further west, which includes condominiums and single-family residences in the vicinity of the project site to the northwest.

Rural residences are located east of the project site, across SR 89, and the Truckee River is located further east, approximately 790 feet from the project site. The Truckee River Trail and forest land are located south of the project site. The Palisades Tahoe, which contains lodging, ski lifts, a golf course, and associated commercial uses is located further southwest.

[6] Department of Transportation. *California Scenic Highway Mapping System, Placer County.* Available at: https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aacaa. Accessed February 2022.

Figure 4-1
Project Site Boundaries

Lake Tahoe is located approximately four miles southeast of the project site, and the Town of Truckee is located approximately nine miles northwest of the project site. Although the proposed project would not have potential to affect Lake Tahoe within the context of aesthetics, it is noted that Lake Tahoe is considered a unique and significant environmental resource; the U.S. Supreme Court has noted that Lake Tahoe is "uniquely beautiful," and a "national treasure" famous for its water's "exceptional clarity," (Tahoe-Sierra Preservation Council, Inc. v. Tahoe Regional Planning Agency [2002] 535 U.S. 302, 307.).

Off-Site Improvement Areas

The proposed project would include a sanitary sewer force main along Olympic Valley Road. The force main would begin at the intersection of Olympic Valley Road and the project driveway, and run northwest approximately 760 feet along Olympic Valley Road to connect to the existing sanitary sewer manhole located east of the Tavern Inn Condominiums. In addition, a wet well and sanitary sewer lift station would be constructed north of the project site, near the project driveway, within the Olympic Valley Road right-of-way (ROW). Generally, the off-site improvement areas do not possess any unique visual characteristics.

Viewer Types

Viewer types in the vicinity that have views of the project site include the following:

- *Residents* with views of the project site include the Tavern Inn Condominiums to the west, and the rural residences to the east. However, views are blocked by existing vegetation in the area.
- *Motorists* along Olympic Valley Road and SR 89 have existing views of the project site as they drive past the project site.
- *Recreationists* include those individuals who are involved in recreational activities and have views of the project site. This group of individuals could include employees; skiers/snowboarders; bicyclists, pedestrians and tram riders during the winter and summer; and individuals using the Olympic Valley Park and trail system in the project vicinity. As they travel to their destination or participate in outdoor recreational activities, recreationists have views of the project site.

Public Versus Private Views

Motorists along nearby roadways, as well as the nearby residents east and west of the project site, and recreationalists traveling within the project vicinity would be considered sensitive visual receptors. However, it is important to distinguish between public and private views. Private views are views seen from privately-owned land and are typically viewed by individual viewers, including views from private residences. Public views are views that are experienced by the collective public. In the case of the proposed project, public views would consist primarily of views from Olympic Valley Road and SR 89 in the project vicinity.

CEQA (Public Resources Code Section 21000 et seq.) case law has established that only public views, not private views, are protected under CEQA. For example, in *Association for Protection etc. Values v. City of Ukiah* (1991) 2 Cal.App.4th 720 [3 Cal. Rptr.2d 488] the court determined that "we must differentiate between adverse impacts upon particular persons and adverse impacts upon the environment of persons in general. As recognized by the court in *Topanga Beach Renters Assn. v. Department of General Services* (1976) 58 Cal.App.3d 188 [129 Cal.Rptr. 739]: '[A]ll government activity has some direct or indirect adverse effect on some persons. The issue is not whether [the project] will adversely affect particular persons but whether [the project] will

adversely affect the environment of persons in general.'" Such a conclusion is consistent with the thresholds of significance established in Appendix G of the CEQA Guidelines. Therefore, it is appropriate to focus the aesthetic impact analysis on potential impacts to public views, rather than private views.

Existing Conditions of Key Viewpoints

Key public viewpoints that would most clearly display the proposed project's potential visual effects have been selected for in-depth analysis. The segments of Olympic Valley Road and SR 89 within the project vicinity are characterized as key viewpoints (see Figure 4-2).

Existing Views from Olympic Valley Road

Views from Olympic Valley Road east (i.e., views of the south side of the roadway from motorists travelling eastbound toward SR 89) consist of mainly Olympic Valley Road and the existing Olympic Valley Park (Figure 4-3). While the existing on-site trees are visible from Olympic Valley Road east, the project site is not screened from the roadway. Rather, the existing Olympic Valley Park entrance and associated parking lot can be seen from this viewpoint. Views of the forested mountains are visible in the background.

Similarly, views from Olympic Valley Road west (i.e., views of the south side of the roadway from motorists travelling westbound towards Palisades Tahoe) towards the project site consist of Olympic Valley Road and the existing Olympic Valley Park (see Figure 4-4). However, as shown in the figure, the project site is heavily screened from the roadway by existing on-site trees, and the existing Tower of Nations structures can be seen at the intersection of Olympic Valley Road and SR 89. Views of the forested mountains are visible in the background.

Existing Views from SR 89

Views from SR 89 towards the project site consist of the roadway and existing on-site trees in the foreground and midground, followed by densely forested mountains in the background (see Figure 4-5). The existing Tower of Nations structures can be seen in the distance, and the existing pickleball courts are marginally visible through the trees along the roadway. The rural, forested visual character of the viewshed is consistent with the montane coniferous forest landscape in the project vicinity.

Light Pollution and Glare

Light pollution refers to all forms of unwanted light in the night sky, including glare, light trespass, sky glow, and excessive illumination at an intensity that is inappropriate. Views of the night sky can be an important part of the natural environment, particularly in communities surrounded by extensive open space, such as mountain communities in the Tahoe-Truckee region. Excessive light and glare can also be visually disruptive to humans and nocturnal animal species.

Electric lighting also increases night sky brightness and is the human-made source of sky glow. Light that is either emitted directly upward by luminaires or reflected from the ground is scattered by dust and gas molecules in the atmosphere, producing a luminous background, which has the effect of reducing one's ability to view the stars.

Figure 4-2
Representative Views of the Proposed Project

Figure 4-3
Existing Views Towards The Project Site From Olympic Valley Road East (View 1)

Figure 4-4
Existing Views Towards The Project Site From Olympic Valley Road West (View 2)

Figure 4-5
Existing Views Towards The Project Site From SR 89 (View 3)

Currently, the project site is primarily characterized by undeveloped areas of vegetation, predominantly montane coniferous forest, which largely consist of white fir and pine trees native to the area. However, the site is located between the Olympic Valley Park driveway entrance to the parking lot from Olympic Valley Road and the existing pickleball courts. As such, sources of light and glare that currently occur on the project site include parking lot lighting and headlights from vehicles using the parking lot.

4.3 REGULATORY CONTEXT

Applicable federal laws or regulations pertaining to the aesthetic quality of the project area do not exist. However, the existing State and local laws and regulations applicable to the proposed project are listed below.

State Regulations

The following is an applicable State regulation related to aesthetic resources.

California Scenic Highway Program

The State Scenic Highway System includes a list of highways that are either eligible for designation as scenic highways or have been so designated. Such highways are identified in Section 263 et seq. of the California Streets and Highways Code.

Local Regulations

The following local regulations are applicable to the proposed project.

Placer County General Plan

The following design goals and policies of the Placer County General Plan are applicable to the proposed project.

Goal 1.K To protect the visual and scenic resources of Placer County as important quality-of-life amenities for County residents and a principal asset in the promotion of recreation and tourism.

Policy 1.K.1 The County shall require that new development in scenic areas (e.g., river canyons, lake watersheds, scenic highway corridors, ridgelines, and steep slopes) is planned and designed in a manner which employs design, construction, and maintenance techniques that:

a. Avoid locating structures along ridgelines and steep slopes;
b. Incorporate design and screening measures to minimize the visibility of structures and graded areas; and
c. Maintain the character and visual quality of the area.

Policy 1.K.2 The County shall require that new development in scenic areas be designed to utilize natural landforms and vegetation for screening structures, access roads, building foundations, and cut and fill slopes.

Policy 1.K.3 The County shall require that new development in rural areas incorporates landscaping that provides a transition between the vegetation in developed areas and adjacent open space or undeveloped areas.

Policy 1.K.4 The County shall require that new development incorporates sound soil conservation practices and minimizes land alterations. Land alterations should comply with the following guidelines:

a. Limit cuts and fills;
b. Limit grading to the smallest practical area of land;
c. Limit land exposure to the shortest practical amount of time;
d. Replant graded areas to ensure establishment of plant cover before the next rainy season;
e. Create grading contours that blend with the natural contours on site or with contours on property immediately adjacent to the area of development; and
f. Provide and maintain site-specific construction Best Management Practices (BMPs).

Policy 1.K.5 The County shall require that new roads, parking, and utilities be designed to minimize visual impacts. Unless limited by geological or engineering constraints, utilities should be installed underground and roadways and parking areas should be designed to conform to the natural terrain.

Goal 1.O To promote and enhance the quality and aesthetics of development in Placer County.

Policy 1.O.1 Except as otherwise provided in the Design Guidelines of an approved Specific Plan, the County shall require all new development to be designed in compliance with applicable provisions of the Placer County Design Guidelines Manual.

Policy 1.O.3 The County shall require that all new development be designed to be compatible with the scale and character of the area. Structures, especially those outside of village, urban, and commercial centers, should be designed and located so that:

a. They do not silhouette against the sky above ridgelines or hilltops;
b. Rooflines and vertical architectural features blend with and do not detract from the natural background or ridge outline;
c. They fit the natural terrain; and
d. They utilize building materials, colors, and textures that blend with the natural landscape (e.g., avoid high contrasts).

Policy 1.O.4 The County shall require that new rural and suburban development be designed to preserve and maintain the rural character and quality of the County.

Policy 1.O.5 The County shall require that new development at entrances to rural communities be designed to include elements such as signage, landscaping, and appropriate architectural detailing to help establish distinct identities for such communities.

Policy 1.O.8 The County shall, where appropriate, require new development to provide activity pockets along public sidewalks as pedestrian amenities, including such features as benches, sitting ledges, and mini-parks.

Policy 1.O.9 The County shall discourage the use of outdoor lighting that shines unnecessarily onto adjacent properties or into the night sky.

Goal 6.D To preserve and protect the valuable vegetation resources of Placer County.

Policy 6.D.1 The County shall encourage landowners and developers to preserve the integrity of existing terrain and natural vegetation in visually-sensitive areas such as hillsides, ridges, and along important transportation corridors.

Policy 6.D.12 The County shall support the retention of heavily vegetated corridors along circulation corridors to preserve their rural character.

Placer County Landscape Design Guidelines

The Placer County Landscape Design Guidelines were adopted by the Placer County Board of Supervisors on May 7, 2013. The overall purpose of the Placer County Landscape Design Guidelines is to provide County staff, prospective developers, and stakeholders with a basic framework for designing landscaped areas within unincorporated Placer County and to ensure continuity, consistency, and quality design. In addition, the Guidelines are used to assist the Planning Services Division with their review of submitted plans for landscape improvements by providing consistent and specific design criteria intended to help determine if a proposal is acceptable. The Guidelines focus on landscaping requirements for streetscape and parking lots.

Placer County Design Guidelines Manual

The Placer County Design Guidelines Manual includes guidelines and standards that aim to remove as much design discretion as possible at the staff level in order for prospective developers to assess their chances of approval based on consistency with the manual. The overall goal of the Placer County Design Guidelines Manual is to promote visual environments in the communities of Placer County that are of high aesthetic quality, offer variety in developing community design images reflective of community heritage, and, in some cases, maintain an overall rural continuity while, in others, identify an appropriate urban design theme.

While the Placer County Design Guidelines Manual does not include a particular "style" for residential or institutional structures in Placer County, the focus should be on constructing a high-quality environment which is sensitive to the surrounding neighborhood character. The Guidelines strive for "quality" architecture through the descriptions of appropriate and inappropriate materials and architectural expression.

Squaw Valley Design Review Guidelines

The SVGP requires design review for all buildings and signs proposed in the valley visible from Olympic Valley Road. The Squaw Valley Design Review Guidelines set forth the design standards and guidelines used by the DRC and the County planning staff in reviewing projects.

Squaw Valley General Plan and Land Use Ordinance

The SVGP was adopted by the Placer County Board of Supervisors in June 1983 (last revised in 1997) and is the community plan for the approximately 4,700-acre unincorporated area of Placer County that includes Olympic Valley. The implementing Ordinance, the Squaw Valley Land Use Ordinance (Chapter 40, Placer County Code), was adopted in June 1983; and modified on September 13, 1983; February 11, 1986 (ZTA-278); April 16, 1985 (GPA-250, REA-843); August 14, 1986 (GPA-312, REA-857). The proposed project would be subject to all policies, objectives, recommendations, and standards contained in the Plan Text and Land Use Ordinance, which guides future development of Olympic Valley and includes the following guideline pertaining to the protection and enhancement of the visual environment from Section III, Purposes, Principles, and Goals of the SVGP:

1) Both the quality and quantity of development must be planned to conserve, protect, and enhance the aesthetic, ecological and environmental assets of Olympic Valley.

4.4 IMPACTS AND MITIGATION MEASURES

This section describes the standards of significance and methodology used to analyze and determine the proposed project's potential impacts related to aesthetics. A discussion of the project's impacts, as well as mitigation measures where necessary, is also presented.

Standards of Significance

Consistent with Appendix G of the CEQA Guidelines, an aesthetics impact is considered significant if the proposed project would:

- Have a substantial adverse effect on a scenic vista;
- Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway;
- In a non-urbanized area, substantially degrade the existing visual character or quality of public views of the site and its surroundings (public views are those that are experienced from publicly accessible vantage point) or, in an urbanized area, conflict with applicable zoning and other regulations governing scenic quality; or
- Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

The following issue related to whether the proposed project would result in impacts have already been dismissed in the Initial Study for the proposed project, included as Appendix A to this EIR, and will not be discussed further:

- Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway.

Method of Analysis

The section below gives full consideration to the development of the proposed project and acknowledges physical changes to the existing setting. Impacts to the existing environment of the project area are to be determined by the contrast between the visual setting before and after buildout of the proposed project. The standards of significance listed above are used to delineate the significance of any visual alterations of the site, including alterations that would impact views from public viewsheds in the project area. The standards are not based solely on a change in the visual character or quality of the site and its surroundings, but whether the changes would *substantially* degrade said visual character or quality. Computer-generated photo simulations were used to aid in this evaluation.

Project-Specific Impacts and Mitigation Measures

The following discussion of impacts related to aesthetics is based on implementation of the proposed project in comparison to existing conditions and the standards of significance presented above.

4-1 Have a substantial adverse effect on a scenic vista. Based on the analysis below, the impact is *less than significant*.

A scenic vista, as defined in this EIR, is an area that is designated, signed, and accessible to the public for the express purposes of viewing and sightseeing. This includes any such areas designated by a federal, State, or local agency. According to Policy 1.K.1 in the Placer County General Plan, Placer County considers resources such as river canyons, lake watersheds, scenic highway corridors, ridgelines, and steep slopes to be valuable scenic resources. In general, a project's impact to a scenic vista would occur if development of the project would substantially change or remove a scenic vista.

The SVGP states that natural features, primarily mountain slopes, peaks, meadows, and watercourses, provide the key identifying characteristics of Olympic Valley. According to the SVGP, the degree to which natural features may be altered by man without adversely affecting their aesthetic value must be considered in reviewing each proposed development project. Nonetheless, federal and State agencies have not designated any such locations within Olympic Valley for viewing and sightseeing. Similarly, Placer County has not officially designated scenic vistas within Olympic Valley. Notwithstanding, unofficial scenic views are prevalent throughout Olympic Valley. The surrounding mountain slopes and peaks create scenic views from almost any location within Olympic Valley. While the mountain peaks and ridges are important to retain from a visual standpoint, as they define the point at which the mountains meet the sky, the project site is located within a relatively flat area of Olympic Valley. Therefore, the proposed project would not alter the distant views of the mountain peaks and ridges that are present in the background of the project viewshed.

Because officially-designated scenic vistas are not located in Olympic Valley, the proposed project would result in a ***less-than-significant*** impact related to scenic vistas.

Mitigation Measure(s)

None required.

4-2 In a non-urbanized area, substantially degrade the existing visual character or quality of public views of the site and its surroundings (public views are those that are experienced from publicly accessible vantage point) or, in an urbanized area, conflict with applicable zoning and other regulations governing scenic quality. Based on the analysis below, the impact is *less than significant*.

While urban development currently exists within the project vicinity, the visual quality of the area surrounding the project site is largely characterized by undeveloped forest land. As such, the analysis within this chapter considers the project area to be non-urbanized in order to provide a conservative analysis.

The proposed project would develop the site with a 29.8-foot-tall, two-story, U-shaped, 20,000 square-foot (sf) museum and community cultural center building. Various associated improvements would be included in the development of the proposed project, including, but not limited to parking lot improvements, landscaping and utility installation, as well as construction of a wet well, sewer lift station and force main within the Olympic Valley Road ROW.

Vehicle access to the proposed project would be provided by an existing driveway from Olympic Valley Road, which currently serves as the entrance to Olympic Valley Park and connects to the existing surface parking lot. Up to 6,000 sf of the driveway and asphalt parking lot would be resurfaced and restriped, and a planting area in the eastern portion of the parking lot would be removed. Four-foot-wide concrete walkways would be included throughout the site to provide pedestrian and bicycle access to the proposed building from the existing parking lot and Olympic Valley Road. In addition, a six-foot-wide concrete ramp would be constructed at the building entry point behind rolled curb and gutter. Improved pedestrian facilities would include a crosswalk connecting the sidewalk in front of the building to the playground and sports field west of the building. Additionally, the project would construct a walking path, which would bisect the proposed V-shaped garden and lead from the building to the existing Tower of Nations structure at the southwest corner of the SR 89 and Olympic Valley Road intersection.

With respect to the proposed landscaping, a total of 228 trees are currently located on the project site, and approximately 109 trees would be removed as part of the proposed project. However, the existing willow scrub areas would remain, and landscaping improvements, including a variety of drought-tolerant trees, shrubs, and flowers, would be provided throughout the project site, as well as along the Olympic Valley Road frontage in the northwest corner of the site. As such, the proposed landscaping and preservation of the remaining on-site trees would help to screen the project from public views.

The majority of the proposed utilities infrastructure improvements would be located on-site; however, as previously discussed, the proposed project would construct a wet well and a sanitary sewer lift station north of the project site, near the project driveway, within the Olympic Valley Road right-of-way, as well as a sanitary sewer force main along Olympic Valley Road. All new utility lines would be placed underground; as such,

installation of the proposed utilities would not permanently degrade the visual character or quality of the project area.

Construction activities associated with the proposed project and associated off-site improvements would include grading of the site, trenching for utilities, and other temporary activities that would be visible from Olympic Valley Road and SR 89. It should be noted that, as required by Mitigation Measure 6-1 (see Chapter 6, Noise, of this EIR), the proposed project would be required to incorporate the use of eight-foot-tall temporary sound barriers along the west and east boundaries of the construction site, as well as six-foot-tall temporary sound barriers along the north and south sides of the off-site sewer improvement route. The approximate locations of the sound barriers are shown on Figure 6-3 of this EIR. While the sound barriers would be visible from Olympic Valley Road, the use of sound barriers would be temporary. For example, construction of the proposed sanitary sewer force main is anticipated to occur over a total of five days. Therefore, the use of sound barriers at the project site during construction would not substantially degrade the existing visual character or quality of public views of the site and its surroundings.

As discussed above, public views of the project site are afforded from Olympic Valley Road and SR 89. Changes to the aforementioned public views due to development of the proposed project are discussed separately in further detail below. Photo simulations were conducted by Ward Young Architecture & Planning (Ward Young) and include public views of the project site with a rendering of the proposed project.

Views from Olympic Valley Road

Currently, views from this public vantage point along Olympic Valley Road consist of the roadway and the existing Olympic Valley Park. While the project site is heavily screened from the roadway by existing on-site trees when travelling westbound along the roadway, when travelling eastbound, the existing Olympic Valley Park entrance and associated parking lot can be seen from the road. In addition, views of the existing Tower of Nations structures can be seen in the distance, and forested mountains are visible in the background.

Figure 4-6 and Figure 4-7 show the view of the project site from Olympic Valley Road, first as the viewshed currently exists, followed by a view with the proposed project incorporated. As shown in the figures, the proposed project would be clearly visible to motorists, bicyclists, and pedestrians travelling both east and west along Olympic Valley Road. However, existing trees along the project boundary would partially screen the building from travelers along the roadway, and the project site is already developed with the Olympic Valley Park and surface parking lot. Additionally, the proposed building design would be stepped down toward the parking lot in order to minimize the building height measured from the project site entrance. As a result, while the proposed building would reach a maximum height of 29.8 feet at the southern end of the building, the building would reach a maximum height of 16.4 feet at the northern end of the building (see Figure 3-6 included in, Chapter 3, Project Description, of this EIR). In addition, even at the building's tallest point (29.8 feet), the building would not project above the tree line or skyline and, thus, the distant mountain ridgeline and skyline would be preserved with the implementation of the proposed project; therefore, the proposed project would not substantially alter the existing distant mountain views.

Figure 4-6
Pre-Project (A) Versus Post-Project (B) Views From Olympic Valley Road East (View 1)

Figure 4-7
Pre-Project (A) Versus Post-Project (B) Views From Olympic Valley Road West (View 2)

Furthermore, the proposed project would implement the use of natural looking building materials to help the structures blend with the natural vegetation. As such, the proposed project, as simulated from the Olympic Valley Road viewpoints, adheres to the policies included in the Placer County General Plan with respect to the use of natural landforms and vegetation for screening purposes, the requirement that all new development be designed to be compatible with the scale and character of the area, and the requirement that new rural and suburban development be designed to preserve and maintain the rural character and quality of the County.

Based on the above, public views of the project site from Olympic Valley Road would not be considered to be substantially degraded by the proposed project.

Views from SR 89

Currently, views from SR 89 towards the project site consist of the roadway and existing on-site trees in the foreground and midground, framed by densely forested mountains in the background. The existing Tower of Nations structures can be seen in the distance, and the existing pickleball courts are just barely visible through the trees along the roadway. Figure 4-8 shows the view of the project site from SR 89, first as the viewshed currently exists, followed by a view with the proposed project incorporated.

As shown in the figure, the existing mature trees along the project boundary would almost completely screen the proposed building from the roadway. As such, the skyline seen from the vantage point of SR 89 would be preserved with the implementation of the proposed project. Furthermore, as discussed above, the proposed project would implement the use of natural looking building materials to help the structures blend with the natural vegetation. Therefore, public views towards the project site from SR 89 would not be substantially degraded by the proposed project.

Conclusion

While the proposed project would result in changes in the view from Olympic Valley Road, the project would be almost completely screened from SR 89, and the distant mountain ridgeline and skyline would be preserved with the implementation of the proposed project. In addition, the proposed project would be designed to be of the same style and décor as the surrounding community to maintain the small village atmosphere required by the SVGP, and the proposed building would implement the use of natural looking building materials to help the structures blend with the natural vegetation.

Furthermore, as described above, the SVGP requires design review for all buildings and signs proposed in the Valley visible from Olympic Valley Road. The Squaw Valley Design Review Guidelines set forth the design standards and guidelines used by the DRC and the County planning staff in reviewing projects. Pursuant to County Code Section 17.52.070(A), the purpose of design review is to provide special regulations to protect and enhance the aesthetic character of lands and buildings within public view; to protect historic buildings; to minimize any adverse impacts of conflicting land uses; to enhance tourism through the protection of lands and buildings having unique aesthetic characteristics; and to provide special project review procedures for lands and uses which by their nature require special attention to landscaping, circulation, and/or energy conservation.

Figure 4-8
Pre-Project (A) Versus Post-Project (B) Views From SR 89 (View 3)

Issues to be considered by the DRC include, but are not limited to, review of proposed building arrangements, setbacks, walls and fences, building exterior appearance, off-street parking, grading, drainage, circulation (including pedestrian and bicycle circulation), landscaping, lighting, and signs.

Based on the above, the proposed project would not be considered to substantially degrade the existing visual character or quality of public views of the site and its surroundings, or conflict with regulations governing scenic quality. Thus, a ***less-than-significant*** impact would occur.

Mitigation Measure(s)
None required.

4-3 Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area. Based on the analysis below and with implementation of mitigation, the impact is *less than significant*.

As noted previously, the project site is primarily characterized by an undeveloped landscape located between the Olympic Valley Park driveway entrance and the existing pickleball courts. Development of the proposed project would include the construction of a two-story museum and community cultural center building, as well as various associated on- and off-site improvements.

Sources of light and glare currently occur on the project site in the form of parking lot lighting and headlights from vehicles using the parking lot. The proposed project includes the construction of a two-story museum and community cultural center building; thus, the proposed project would increase the amount of light on the project site in the form of light fixtures on the exteriors of the buildings, spillover light from the interior lighting of the building, and increased motor vehicle traffic within the parking lot. In addition, the glass windows facing Olympic Valley Road have the potential to result in increased glare in the project vicinity. Furthermore, the proposed project would include occasional evening events which could result in the generation of additional sources of nighttime light and glare on-site.

The proposed project would be required to comply with the Squaw Valley Design Review Guidelines, which includes the following guidelines related to lighting:

1. Exterior lighting should be designed as part of the architectural and site design of the project.
2. Fixture mounting height should be appropriate to the use, the project, and the setting.
3. Overall lighting levels should be compatible with neighborhood ambient light level.
4. Parking lot and building lights should be directed downward to prevent spillover onto neighboring properties and streets.
5. Posts and standards along thoroughfares and in parking lots should be replaced so that they do not present hazards to pedestrians, vehicles or snow removal activities.
6. Lights shall not blink, flash or change intensity.

In addition, the proposed project would be required to be constructed using appropriate building materials such as low-glare glass and low-glare building glaze or finish. However, because the types and specific locations of lighting have not yet been determined, the proposed project could increase the amount of light and glare generated on-site, which could be visible from the surrounding residential development and roadways in the project vicinity. Therefore, the proposed project could be considered to create a new source of substantial light or glare which would adversely affect day or nighttime views in the area, and a ***significant*** impact could occur.

Mitigation Measure(s)

Implementation of the following mitigation measure would reduce the above potential impact to a *less-than-significant* level.

4-3 *Prior to the issuance of building permits for any development on the project site, the project applicant shall submit a lighting plan for the project to the Olympic Valley Design Review Committee for review and approval, demonstrating that proposed lighting is Dark-Sky compliant as specified by the International Dark-Sky Association and consistent with Squaw Valley Design Review Guidelines. The lighting plan shall include, but not necessarily be limited to, the following provisions:*

- *Shield or screen lighting fixtures to direct the light downward and prevent light spill on adjacent properties;*
- *Place and shield or screen flood and area lighting needed for construction activities and/or security so as not to disturb adjacent residential areas and passing motorists;*
- *For public lighting, prohibit the use of light fixtures that are of unusually high intensity or brightness (e.g., harsh mercury vapor, low-pressure sodium, or fluorescent bulbs) or that blink or flash; and*
- *Use appropriate building materials (such as low-glare glass, low-glare building glaze or finish, neutral, earth-toned colored paint and roofing materials), shielded or screened lighting, and appropriate signage to prevent light and glare from adversely affecting motorists on nearby roadways.*

Cumulative Impacts and Mitigation Measures

As defined in Section 15355 of the CEQA Guidelines, “cumulative impacts” refers to two or more individual effects which, when considered together, are considerable, compound, or increase other environmental impacts. The individual effects may be changes resulting from a single project or a number of separate projects. The cumulative impact from several projects is the change in the environment that results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects.

Some types of impacts to aesthetic resources are localized and not cumulative in nature. For example, the creation of glare or shadows at one location is not worsened by glare or shadows created at another location. Rather these effects are independent, and the determination as to whether they are adverse is specific to the project and location where they are created. Projects that block a view or affect the visual quality of a site also have localized aesthetic impacts. The

impact occurs specific to a site or area and remains independent from another project elsewhere that may block a view or degrade the visual environment of a specific site.

Two types of aesthetic impacts may be additive in nature and, thus, cumulative, including night sky lighting and overall changes in the visual environment as the result of increasing urbanization of large areas. As development in one area changes from rural to urban, and this pattern continues to occur throughout the undeveloped areas of a jurisdiction, the changes in visual character may become additive and cumulatively considerable.

Similarly, as development in one area increases and possibly expands over time and meets or connects with development in an adjoining exurban area, the effect of night sky lighting experienced outside of the region may increase in the form of larger and/or more intense nighttime glow in the viewshed. The proposed project's incremental contribution to changes in visual character and night sky lighting are addressed below.

4-4 Long-term changes in visual character associated with cumulative development of the proposed project in combination with future buildout of the SVGP. Based on the analysis below, the project's incremental contribution to the significant cumulative impact is *less than cumulatively considerable*.

The geographic setting for analysis of long-term cumulative changes in visual character associated with the proposed project is the area covered by the SVGP, as development within the SVGP has the potential to affect many of the same views analyzed for the proposed project. Specific existing views of the project site from Olympic Valley Road and SR 89 are identified in Figure 4-6 through Figure 4-8, above. Future development within the SVGP would result in changes to the existing land use environment through conversion of vacant land to developed uses that would result in a change in visual character. The goals and objectives of the SVGP are to identify features of the SVGP area that characterize the unique nature and identifying traits of the community and then to specify standards of site development for proposed projects, which would implement the goals and policies of the SVGP.

The cumulative setting also includes the development of the approved Village at Palisades Tahoe Specific Plan (VPTSP). The VPTSP area encompasses approximately 94 acres, within which the proposed project is not located. The VPTSP would allow for development of resort hotel, residential, commercial, retail, and recreational uses. The VPTSP EIR concluded the visual resources impacts resulting from the VPTSP are substantial, and would contribute considerably to a cumulative impact.

The development of the proposed project in combination with other cumulative development, including the VPTSP, would result in a significant impact related to the change in visual character of the surrounding area. However, in accordance with CEQA Guidelines Section 15064(h)(4), "The mere existence of significant cumulative impacts caused by other projects alone shall not constitute substantial evidence that the proposed project's incremental effects are cumulatively considerable." Therefore, it is not necessarily true that, even where cumulative impacts are significant, any level of incremental contribution must be deemed cumulatively considerable.

Development of the proposed project would only minimally contribute to the change in the visual character of the Valley because the project entails developing a portion of the previously developed Olympic Valley Park, much of which is currently screened from existing roadways by forest vegetation. In addition, the project site is separated from the VPTSP area by approximately 1.75 miles. Given the forested, mountainous terrain of the surrounding environment, views of the project site from the VPTSP area are completely obscured. Nonetheless, any cumulative development within the vicinity of the project area would result in a change in visual character of the region. However, similar to the proposed project, development within the Valley would be required to comply with the SVGP, any applicable specific plan, any applicable development guidelines, and the County Zoning Code, which govern allowable uses and development architecture and design. Compliance with such plans would help to ensure that impacts related to aesthetics are minimized through the location and design of future projects and consistency with what has been anticipated by the County. In addition, a substantial portion of the Olympic Valley area has already been built out; thus, the remainder of the anticipated development associated with such, including the proposed project, would not be expected to represent a substantial contribution to the change in visual character of the region.

Overall, in terms of the change to the visual character of the region, development on the project site would be typical of what is anticipated to occur in the surrounding area and elsewhere in Olympic Valley. Thus, the project's incremental contribution to the cumulative aesthetic impact due to implementation of past, present, and reasonably foreseeable future projects, would be considered ***less than cumulatively considerable***.

Mitigation Measure(s)

None required.

4-5 Creation of new sources of light or glare associated with cumulative development of the proposed project in combination with future buildout of the SVGP. Based on the analysis below, the project's incremental contribution to the significant cumulative impact is *less than cumulatively considerable*.

Cumulative effects of lighting are visible over a wide area, due to the potential for lighting from a number of projects to create sky glow. The project site currently has night time lighting under existing conditions; however, the proposed project would introduce new lighting sources at the project site. The proposed project in combination with related development projects, listed above, could result in a significant cumulative impact related to night lighting and sky glow in the region. However, for the reasons set forth below, the project's incremental contribution to this potential significant cumulative impact is not cumulatively considerable.

As described in Impact 4-3, above, the project would be required to submit a lighting plan for the project to the Olympic Valley DRC for review and approval prior to the issuance of any building permit (see Mitigation Measure 4-3). Mitigation Measure 4-3 requires the project's lighting to be Dark-Sky compliant as specified by the International Dark-Sky Association. In addition, the Placer County Design Guidelines Manual contains outdoor lighting standards which aim to prohibit unnecessary and unwarranted illumination of an adjacent residential property. The Manual restricts the maximum height for building and

freestanding lighting to 14 feet, restricts lighting directed towards roadways, and discourages upward lighting. The exterior lighting throughout the project site would be designed and selected to provide appropriate light levels to reduce long-range visibility of night lighting with full cut-off fixture designs.

As part of the Design Review process, the DRC will review the project's proposed lighting to ensure that it is Dark-Sky compliant and minimizes any adverse impacts of conflicting land uses. In addition, the DRC would review project plans to ensure that the project does not include the use of any highly reflective materials or reflective glass in order to avoid the creation of substantial glare. Thus, the proposed project would not be anticipated to create any glare issues. Similar to the proposed project, any future development in the project area would also be required to be reviewed by the DRC, and those project-specific impacts related to light and glare would be less than significant.

Based on the above, the proposed project's incremental contribution to the cumulative impact of light and glare due to past, present and reasonably foreseeable development in the area would be ***less than cumulatively considerable***.

Mitigation Measure(s)

None required.

5. Air Quality, Greenhouse Gas Emissions, and Energy

5. AIR QUALITY, GREENHOUSE GAS EMISSIONS, AND ENERGY

5.1 INTRODUCTION

The Air Quality, Greenhouse Gas Emissions, and Energy chapter of the EIR describes the potential impacts of the proposed project on local and regional air quality emissions, potential impacts related to greenhouse gas emissions (GHGs) and climate change, and potential impacts related to energy. The chapter includes a discussion of the existing air quality, GHG, and energy setting, construction-related air quality impacts resulting from grading and equipment emissions, direct and indirect emissions associated with operations of the project, the impacts of these emissions on both the local and regional scale, impacts associated with energy use, and mitigation measures warranted to reduce or eliminate any identified significant impacts. This chapter is based on the Placer County General Plan[1] and associated EIR,[2] the Placer County Air Pollution Control District's (PCAPCD) *CEQA Air Quality Handbook*,[3] PCAPCD's *Review of Land Use Projects Under CEQA*,[4] the *Placer County Sustainability Plan: A Greenhouse Gas Emission Reduction Plan and Adaptation Strategy,*[5] and the technical analysis performed by Raney Planning and Management, Inc.

5.2 EXISTING ENVIRONMENTAL SETTING

The following information provides an overview of the existing environmental setting in relation to air quality within the proposed project area. Air basin characteristics, ambient air quality standards (AAQS), attainment status and regional air quality plans, local air quality monitoring, odors, and sensitive receptors are discussed. In addition to the information pertaining to air quality, information related to climate change, GHGs, and energy is provided as well.

Air Basin Characteristics

The project site is located in eastern Placer County, which falls within the Mountain Counties Air Basin (MCAB) and is within the jurisdictional boundaries of the PCAPCD. The MCAB includes portions of Amador, Calaveras, El Dorado, Mariposa, Nevada, Placer, Plumas, Sierra, and Tuolumne counties, and is composed of seven air districts within the central and northern Sierra Nevada mountain range with elevations ranging from several hundred feet in the foothills to over 6,000 feet above mean sea level along the Sierra ridge.

The climate of the MCAB is influenced by the foothill and mountainous terrain unique to the counties included in the MCAB. The general climate of the MCAB varies considerably with elevation and proximity to the Sierra ridge. The terrain features of the MCAB allow various climates to exist in relatively close proximity. The pattern of mountains and hills causes a wide variation in rainfall, temperature, and localized winds throughout the MCAB. Temperature variations have an important influence on basin wind flow, dispersion along mountain ridges,

1 Placer County. *Countywide General Plan Policy Document*. August 1994 (Updated May 2013).
2 Placer County. *Countywide General Plan EIR*. July 1994.
3 Placer County Air Pollution Control District. *CEQA Air Quality Handbook*. November 21, 2017.
4 Placer County Air Pollution Control District. *Review of Land Use Projects Under CEQA*. October 13, 2016.
5 Placer County Community Development Resource Agency. *Placer County Sustainability Plan: A Greenhouse Gas Emission Reduction Plan and Adaptation Strategy*. January 28, 2020.

vertical mixing, and photochemistry. In the winter, the Sierra Nevada Range receives large amounts of precipitation from storms moving in from the Pacific. In the summer, the area receives lighter amounts of precipitation from intermittent "monsoonal" moisture flows from the south and cumulus buildup. Precipitation levels are high in the highest mountain elevations but decline rapidly toward the western portion of the MCAB. Winter temperatures in the mountains can be below freezing for weeks at a time and substantial depths of snow can accumulate, while in the summer, temperatures in the mountains are mild, with daytime peaks in the 70s to low 80s Fahrenheit.

Due to the topographical features and meteorological conditions of the region, local conditions predominate in determining the effect of emissions in the MCAB, and, thus, the MCAB is more sensitive to negative impacts on air quality than most other areas of the State. Regional air flows are affected by the mountains and hills, which direct surface air flows, cause shallow vertical mixing and hinder dispersion, creating areas of high pollutant concentrations. Cold temperatures and mild winds often result in temperature inversions in which upper layers of warmer air trap colder air near the land surface. Local pollutant sources within the area are trapped by frequent inversions, which limit the volume of air into which pollutants can be mixed and result in elevated pollutant concentrations. The most frequent episodes of high pollution occur during local basin inversions, when emissions from local sources such as motor vehicles, chimney smoke, and forest burning are trapped in the basin. In the winter, local basin inversions can lead to CO "hotspots" along heavily traveled roads and at busy intersections. Local air basin inversions in the project area are a result of the cold temperatures of Lake Tahoe, which contribute to the occurrence of subsidence and radiation inversions throughout the year. The nighttime cooling effects of the lake result in down-slope nocturnal winds, which transport local pollutants from developed areas around the lake out onto the lake and contribute to increased pollutant deposition into the lake, which is the most common meteorological condition contributing to air quality degradation in the project area. Lake Tahoe is located approximately four miles east of the project site. While the lake is outside of the MCAB boundaries, information regarding Lake Tahoe is noted herein, as the lake can affect the climate and air quality of the region.

During summer's longer daylight hours, stagnant air, high temperatures, and plentiful sunshine provide the conditions and energy necessary for the photochemical reaction between reactive organic compounds (ROG) and oxides of nitrogen (NO_X), which results in the formation of ozone. Ozone is considered a regional pollutant rather than a local hotspot problem due to the prolonged formation time of the pollutant. In addition, summer conditions allow strong upwind valley air to flow into the MCAB from the Central Valley, creating an effective transport medium for ozone precursors and for ozone generated in the Bay Area and the Sacramento and San Joaquin Valleys. The transported pollutants are the predominant cause of ozone in the MCAB.

Air quality in the project vicinity is influenced by both local and distant emission sources. Air pollutant sources in the immediate project vicinity primarily include emissions from vehicle traffic on nearby roadways. Other sources of air pollutants in the area include activities associated with commercial, residential, and industrial land uses.

Ambient Air Quality Standards

Both the U.S. Environmental Protection Agency (USEPA) and the California Air Resources Board (CARB) have established AAQS for common pollutants. The federal standards are divided into primary standards, which are designed to protect the public health, and secondary standards, which are designed to protect the public welfare. The AAQS for each contaminant represent safe

levels that avoid specific adverse health effects. Pollutants for which AAQS have been established are called "criteria" pollutants. Table 5-1 identifies the major pollutants, characteristics, health effects and typical sources.

Table 5-1
Summary of Criteria Pollutants

Pollutant	Characteristics	Health Effects	Major Sources
Ozone	A highly reactive gas produced by the photochemical process involving a chemical reaction between the sun's energy and other pollutant emissions. Often called photochemical smog.	• Eye irritation • Wheezing, chest pain, dry throat, headache, or nausea • Aggravated respiratory disease such as emphysema, bronchitis, and asthma	Combustion sources such as factories, automobiles, and evaporation of solvents and fuels.
Carbon Monoxide	An odorless, colorless, highly toxic gas that is formed by the incomplete combustion of fuels.	• Impairment of oxygen transport in the bloodstream • Impaired vision, reduced alertness, chest pain, and headaches • Can be fatal in the case of very high concentrations	Automobile exhaust, combustion of fuels, and combustion of wood in woodstoves and fireplaces.
Nitrogen Dioxide	A reddish-brown gas that discolors the air and is formed during combustion of fossil fuels under high temperature and pressure.	• Lung irrigation and damage • Increased risk of acute and chronic respiratory disease	Automobile and diesel truck exhaust, industrial processes, and fossil-fueled power plants.
Sulfur Dioxide	A colorless, irritating gas with a rotten egg odor formed by combustion of sulfur-containing fossil fuels.	• Aggravation of chronic obstruction lung disease • Increased risk of acute and chronic respiratory disease	Diesel vehicle exhaust, oil-powered power plants, and industrial processes.
Particulate Matter (PM_{10} and $PM_{2.5}$)	A complex mixture of extremely small particles and liquid droplets that can easily pass through the throat and nose and enter the lungs.	• Aggravation of chronic respiratory disease • Heart and lung disease • Coughing • Bronchitis • Chronic respiratory disease in children • Irregular heartbeat • Nonfatal heart attacks	Combustion sources such as automobiles, power generation, industrial processes, and wood burning. Also from unpaved roads, farming activities, and fugitive windblown dust.
Lead	A metal found naturally in the environment as well as in manufactured products.	• Loss of appetite, weakness, apathy, and miscarriage • Lesions of the neuromuscular system, circulatory system, brain, and gastrointestinal tract	Industrial sources and combustion of leaded aviation gasoline.

Sources:

- ***California Air Resources Board. California Ambient Air Quality Standards (CAAQS). Available at: https://ww2.arb.ca.gov/resources/california-ambient-air-quality-standards. Accessed November 2022.***
- ***Sacramento Metropolitan, El Dorado, Feather River, Placer, and Yolo-Solano Air Districts, Spare the Air website. Air Quality Information for the Sacramento Region. Available at: sparetheair.com. Accessed November 2022.***
- ***California Air Resources Board. Glossary of Air Pollution Terms. Available at: https://ww2.arb.ca.gov/glossary. Accessed November 2022.***

The national and California AAQS (NAAQS and CAAQS, respectively) are summarized in Table 5-2. The NAAQS and CAAQS were developed independently with differing purposes and methods. As a result, the federal and State standards differ in some cases. In general, the State of California standards are more stringent than the federal standards, particularly for ozone and particulate matter (PM).

A description of each criteria pollutant and its potential health effects is provided in the following section.

Table 5-2
Ambient Air Quality Standards

Pollutant	Averaging Time	CAAQS	NAAQS	
			Primary	Secondary
Ozone	1 Hour	0.09 ppm	-	Same as primary
	8 Hour	0.070 ppm	0.070 ppm	
Carbon Monoxide	8 Hour	9 ppm	9 ppm	-
	1 Hour	20 ppm	35 ppm	
Nitrogen Dioxide	Annual Mean	0.030 ppm	53 ppb	Same as primary
	1 Hour	0.18 ppm	100 ppb	-
Sulfur Dioxide	24 Hour	0.04 ppm	-	-
	3 Hour	-	-	0.5 ppm
	1 Hour	0.25 ppm	75 ppb	-
Respirable Particulate Matter (PM_{10})	Annual Mean	20 ug/m^3	-	Same as primary
	24 Hour	50 ug/m^3	150 ug/m^3	
Fine Particulate Matter ($PM_{2.5}$)	Annual Mean	12 ug/m^3	12 ug/m^3	15 ug/m^3
	24 Hour	-	35 ug/m^3	Same as primary
Lead	30 Day Average	1.5 ug/m^3	-	-
	Calendar Quarter	-	1.5 ug/m^3	Same as primary
Sulfates	24 Hour	25 ug/m^3	-	-
Hydrogen Sulfide	1 Hour	0.03 ppm	-	-
Vinyl Chloride	24 Hour	0.010 ppm	-	-
Visibility Reducing Particles	8 Hour	see note below	-	-

ppm = parts per million
ppb = parts per billion
µg/m^3 = micrograms per cubic meter

Note: Statewide Visibility Reducing Particle Standard (except Lake Tahoe Air Basin): Particles in sufficient amount to produce an extinction coefficient of 0.23 per kilometer when the relative humidity is less than 70 percent. This standard is intended to limit the frequency and severity of visibility impairment due to regional haze and is equivalent to a 10-mile nominal visual range.

Source: California Air Resources Board. Ambient Air Quality Standards. May 4, 2016. Available at: https://ww2.arb.ca.gov/sites/default/files/2020-07/aaqs2.pdf. Accessed November 2022.

Ozone

Ozone is a reactive gas consisting of three oxygen atoms. In the troposphere, ozone is a product of the photochemical process involving the sun's energy, and is a secondary pollutant formed as a result of a complex chemical reaction between ROG and NO_X emissions in the presence of sunlight. As such, unlike other pollutants, ozone is not released directly into the atmosphere from

any sources. In the stratosphere, ozone exists naturally and shields Earth from harmful incoming ultraviolet radiation. The primary source of ozone precursors is mobile sources, including cars, trucks, buses, construction equipment, and agricultural equipment. Ground-level ozone reaches the highest level during the afternoon and early evening hours. High levels occur most often during the summer months. Ground-level ozone is a strong irritant that could cause constriction of the airways, forcing the respiratory system to work harder in order to provide oxygen. Ozone at the Earth's surface causes numerous adverse health effects and is a major component of smog. High concentrations of ground level ozone can adversely affect the human respiratory system and aggravate cardiovascular disease and many respiratory ailments.

Reactive Organic Gas

ROG refers to several reactive chemical gases composed of hydrocarbon compounds typically found in paints and solvents that contributes to the formation of smog and ozone by involvement in atmospheric chemical reactions. A separate health standard does not exist for ROG. However, some compounds that make up ROG are toxic, such as the carcinogen benzene.

Oxides of Nitrogen

NO_X are a family of gaseous nitrogen compounds and are precursors to the formation of ozone and particulate matter. The major component of NO_X, nitrogen dioxide (NO_2), is a reddish-brown gas that discolors the air and is toxic at high concentrations.

NO_X results primarily from the combustion of fossil fuels under high temperature and pressure. On-road and off-road motor vehicles and fuel combustion are the major sources of NO_X. NO_X reacts with ROG to form smog, which could result in adverse impacts to human health, damage the environment, and cause poor visibility. Additionally, NO_X emissions are a major component of acid rain. Health effects related to NO_X include lung irritation and lung damage and can cause increased risk of acute and chronic respiratory disease.

Carbon Monoxide

Carbon monoxide (CO) is a colorless, odorless, poisonous gas produced by incomplete burning of carbon-based fuels such as gasoline, oil, and wood. When CO enters the body, the CO combines with chemicals in the body, which prevents blood from carrying oxygen to cells, tissues, and organs. Symptoms of exposure to CO can include problems with vision, reduced alertness, and general reduction in mental and physical functions. Exposure to CO can result in chest pain, headaches, reduced mental alertness, and death at high concentrations.

Sulfur Dioxide

Sulfur dioxide (SO_2) is a colorless, irritating gas with a rotten egg odor formed primarily by the combustion of sulfur-containing fossil fuels from mobile sources, such as locomotives, ships, and off-road diesel equipment. SO_2 is also emitted from several industrial processes, such as petroleum refining and metal processing. Similar to airborne NO_X, suspended sulfur oxide particles contribute to poor visibility. The sulfur oxide particles are also a component of PM_{10}.

Particulate Matter

Particulate matter, also known as particle pollution or PM, is a complex mixture of extremely small particles and liquid droplets. Particle pollution is made up of a number of components, including acids (such as nitrates and sulfates), organic chemicals, metals, and soil or dust particles. The size of particles is directly linked to their potential for causing health impacts. The USEPA is concerned about particles that are 10 micrometers in diameter or smaller (PM_{10}) because those

are the particles that generally pass through the throat and nose and enter the lungs. Once inhaled, the particles could affect the heart and lungs and cause serious health effects. The USEPA groups particle pollution into three categories based on their size and where they are deposited:

- "Inhalable coarse particles ($PM_{2.5-10}$)," which are found near roadways and dusty industries, are between 2.5 and 10 micrometers in diameter. $PM_{2.5-10}$ is deposited in the thoracic region of the lungs.
- "Fine particles ($PM_{2.5}$)," which are found in smoke and haze, are 2.5 micrometers in diameter and smaller. $PM_{2.5}$ particles could be directly emitted from sources such as forest fires, or could form when gases emitted from power plants, industries, and automobiles react in the air. They penetrate deeply into the thoracic and alveolar regions of the lungs.
- “Ultrafine particles (UFP),” are very, very small particles (less than 0.1 micrometers in diameter) largely resulting from the combustion of fossil fuels, meat, wood, and other hydrocarbons. While UFP mass is a small portion of $PM_{2.5}$, their high surface area, deep lung penetration, and transfer into the bloodstream could result in disproportionate health impacts relative to their mass. UFP is not currently regulated separately, but is analyzed as part of $PM_{2.5}$.

PM_{10}, $PM_{2.5}$, and UFP include primary pollutants, which are emitted directly to the atmosphere and secondary pollutants, which are formed in the atmosphere by chemical reactions among precursors. Generally speaking, $PM_{2.5}$ and UFP are emitted by combustion sources like vehicles, power generation, industrial processes, and wood burning, while PM_{10} sources include the same sources plus roads and farming activities. Fugitive windblown dust and other area sources also represent a source of airborne dust. Long-term PM pollution, especially fine particles, could result in significant health problems including, but not limited to, the following: increased respiratory symptoms, such as irritation of the airways, coughing or difficulty breathing; decreased lung function; aggravated asthma; development of chronic respiratory disease in children; development of chronic bronchitis or obstructive lung disease; irregular heartbeat; heart attacks; and increased blood pressure.

Lead

Lead is a relatively soft and chemically resistant metal that is a natural constituent of air, water, and the biosphere. Lead forms compounds with both organic and inorganic substances. As an air pollutant, lead is present in small particles. Sources of lead emissions in California include a variety of industrial activities. Gasoline-powered automobile engines were a major source of airborne lead through the use of leaded fuels. The use of leaded fuel has been mostly phased out, with the result that ambient concentrations of lead have dropped dramatically. However, because lead was emitted in large amounts from vehicles when leaded gasoline was used, lead is present in many soils (especially urban soils) as a result of airborne dispersion and could become re-suspended into the air.

Because lead is slowly excreted by the human body, exposures to small amounts of lead from a variety of sources could accumulate to harmful levels. Effects from inhalation of lead above the level of the AAQS may include impaired blood formation and nerve conduction. Lead can adversely affect the nervous, reproductive, digestive, immune, and blood-forming systems. Symptoms could include fatigue, anxiety, short-term memory loss, depression, weakness in the extremities, and learning disabilities in children. Lead also causes cancer.

Sulfates

Sulfates are the fully oxidized ionic form of sulfur and are colorless gases. Sulfates occur in combination with metal and/or hydrogen ions. In California, emissions of sulfur compounds occur primarily from the combustion of petroleum-derived fuels (e.g., gasoline and diesel fuel) that contain sulfur. The sulfur is oxidized to SO_2 during the combustion process and subsequently converted to sulfate compounds in the atmosphere. The conversion of SO_2 to sulfates takes place comparatively rapidly and completely in urban areas of California due to regional meteorological features.

The sulfates standard established by CARB is designed to prevent aggravation of respiratory symptoms. Effects of sulfate exposure at levels above the standard include a decrease in ventilatory function, aggravation of asthmatic symptoms, and an increased risk of cardio-pulmonary disease. Sulfates are particularly effective in degrading visibility, and, because they are usually acidic, can harm ecosystems and damage materials and property.

Hydrogen Sulfide

Hydrogen sulfide (H_2S) is associated with geothermal activity, oil and gas production, refining, sewage treatment plants, and confined animal feeding operations. Hydrogen sulfide is extremely hazardous in high concentrations, especially in enclosed spaces (800 ppm can cause death).

Vinyl Chloride

Vinyl chloride (C_2H_3Cl, also known as VCM) is a colorless gas that does not occur naturally, but is formed when other substances such as trichloroethane, trichloroethylene, and tetrachloro-ethylene are broken down. Vinyl chloride is used to make polyvinyl chloride (PVC) which is used to make a variety of plastic products, including pipes, wire and cable coatings, and packaging materials.

Visibility Reducing Particles

Visibility reducing particles are a mixture of suspended particulate matter consisting of dry solid fragments, solid cores with liquid coatings, and small droplets of liquid. The standard is intended to limit the frequency and severity of visibility impairment due to regional haze and is equivalent to a 10-mile nominal visual range.

Toxic Air Contaminants

In addition to the criteria pollutants discussed above, toxic air contaminants (TACs) are also a category of environmental concern. TACs are present in many types of emissions with varying degrees of toxicity. Public exposure to TACs can result from emissions from normal operations, as well as accidental releases. Common stationary sources of TACs include gasoline stations, dry cleaners, and diesel backup generators, which are subject to PCAPCD stationary source permit requirements. The other, often more significant, common source type is on-road motor vehicles, such as cars and trucks, on freeways and roads, and off-road sources such as construction equipment, ships, and trains.

Fossil fueled combustion engines, including those used in cars, trucks, and some pieces of construction equipment, release at least 40 different TACs. In terms of health risks, the most volatile contaminants are diesel particulate matter (DPM), benzene, formaldehyde, 1,3-butadiene, toluene, xylenes, and acetaldehyde. Gasoline vapors contain several TACs, including benzene, toluene, and xylenes. Diesel engines emit a complex mixture of air pollutants, including both gaseous and solid material. The solid material in diesel exhaust, DPM, is composed of carbon

particles and numerous organic compounds, including over 40 known cancer-causing organic substances. Examples of such chemicals include polycyclic aromatic hydrocarbons, benzene, formaldehyde, acetaldehyde, acrolein, and 1,3-butadiene. Diesel exhaust also contains gaseous pollutants, including ROG and NO_X. Due to the published evidence of a relationship between diesel exhaust exposure and lung cancer and other adverse health effects, the CARB has identified DPM from diesel-fueled engines as a TAC. Although a variety of TACs are emitted by fossil fueled combustion engines, the cancer risk due to DPM exposure represents a more significant risk than the other TACs discussed above.[6]

More than 90 percent of DPM is less than one micrometer in diameter, and, thus, DPM is a subset of $PM_{2.5}$. As a California statewide average, DPM comprises about eight percent of $PM_{2.5}$ in outdoor air, although DPM levels vary regionally due to the non-uniform distribution of sources throughout the State. Most major sources of diesel emissions, such as ships, trains, and trucks, operate in and around ports, rail yards, and heavily-traveled roadways. Such areas are often located near highly populated areas. Thus, elevated DPM levels are mainly an urban problem, with large numbers of people exposed to higher DPM concentrations, resulting in greater health consequences compared to rural areas.

Due to the high levels of diesel activity, high volume freeways, stationary diesel engines, rail yards and facilities attracting heavy and constant diesel vehicle traffic are identified as having the highest associated health risks from DPM. Construction-related activities also have the potential to generate concentrations of DPM from on-road haul trucks and off-road equipment exhaust emissions.

The size of diesel particulates that are of the greatest health concern are fine particles (i.e., $PM_{2.5}$) and UFPs. The small diameter of UFPs imparts the particulates with unique attributes, such as high surface areas and the ability to penetrate deeply into lungs. Once UFPs have been deposited in lungs, the small diameter allows the UFPs to be transferred to the bloodstream. The high surface area of the UFPs also allows for a greater adsorption of other chemicals, which are transported along with the UFPs into the bloodstream of the inhaler, where the chemicals can eventually reach critical organs.[7] The penetration capability of UFPs may contribute to adverse health effects related to heart, lung, and other organ health.[8] UFPs are a subset of DPM and activities that create large amounts of DPM, such as the operations involving heavy diesel-powered engines, also release UFPs. Considering that UFPs are a subset of DPM, and DPM represents a subset of $PM_{2.5}$, estimations of either concentrations or emissions of $PM_{2.5}$ or DPM include UFPs.

Health risks from TACs are a function of both the concentration of emissions and the duration of exposure, which typically are associated with long-term exposure and the associated risk of contracting cancer. Health effects of exposure to TACs other than cancer can include birth defects, neurological damage, and death. Because chronic exposure can result in adverse health effects, TACs are regulated at the regional, State, and federal level. The identification, regulation, and monitoring of TACs is relatively new compared to criteria air pollutants that have established AAQS. TACs are regulated or evaluated on the basis of risk to human health rather than comparison to an AAQS or emission-based threshold.

6 California Air Resources Board. *Reducing Toxic Air Pollutants in California's Communities*. February 6, 2002.
7 Health Effects Institute. *Understanding the Health Effects of Ambient Ultrafine Particles*. January 2013.
8 South Coast Air Quality Management District. *Final 2012 Air Quality Management Plan*. December 2012.

Naturally Occurring Asbestos

Another concern related to air quality is naturally occurring asbestos (NOA). Asbestos is a term used for several types of naturally-occurring fibrous minerals found in many parts of California. The most common type of asbestos is chrysotile, but other types are also found in California. When rock containing asbestos is broken or crushed, asbestos fibers may be released and become airborne. Exposure to asbestos fibers may result in health issues such as lung cancer, mesothelioma (a rare cancer of the thin membranes lining the lungs, chest and abdominal cavity), and asbestosis (a non-cancerous lung disease which causes scarring of the lungs). Because asbestos is a known carcinogen, NOA is considered a TAC. Sources of asbestos emissions include: unpaved roads or driveways surfaced with ultramafic rock; construction activities in ultramafic rock deposits; or rock quarrying activities where ultramafic rock is present.

NOA is typically associated with fault zones, and areas containing serpentinite or contacts between serpentinite and other types of rocks. According to the *Special Report 190: Relative Likelihood for the Presence of Naturally Occurring Asbestos in Placer County, California* prepared by the Department of Conservation, the project site is located within an area categorized as least likely to contain NOA, because faults and serpentinite outcroppings are not known to exist in the project area.[9]

Attainment Status and Regional Air Quality Plans

The Federal Clean Air Act (FCAA) and the California Clean Air Act (CCAA) require all areas of California to be classified as attainment, nonattainment, or unclassified as to their status with regard to the NAAQS and/or CAAQS. The FCAA and CCAA require that the CARB, based on air quality monitoring data, designate portions of the State where the federal or State AAQS are not met as "nonattainment areas." Because of the differences between the national and State standards, the designation of nonattainment areas is different under the federal and State legislation. The CCAA requires local air pollution control districts to prepare air quality attainment plans. These plans must provide for district-wide emission reductions of five percent per year averaged over consecutive three-year periods or, provide for adoption of "all feasible measures on an expeditious schedule."

As presented in Table 5-3, under the CCAA, the MCAB has been designated nonattainment for the State one-hour ozone, State and federal eight-hour ozone, State PM_{10} and federal $PM_{2.5}$ standards. The MCAB is designated attainment or unclassified for all other AAQS. Due to the nonattainment designations, the PCAPCD, along with the other air districts in the MCAB region, is required to develop plans to attain the federal and State standards for ozone and particulate matter. The air quality plans include emissions inventories to measure the sources of air pollutants, to evaluate how well different control measures have worked, and show how air pollution would be reduced. In addition, the plans include the estimated future levels of pollution to ensure that the area would meet air quality goals. Each of the attainment plans currently in effect are discussed in further detail in the Regulatory Context section of this chapter.

Local Air Quality Monitoring

Air quality is monitored by CARB at various locations to determine which air quality standards are being violated, and to direct emission reduction efforts, such as developing attainment plans and rules, incentive programs, etc.

[9] California Department of Conservation, California Geological Survey. *Special Report 190: Relative Likelihood for the Presence of Naturally Occurring Asbestos in Placer County, California*. Published 2006.

Table 5-3
MCAB Attainment Status Designations

Pollutant	Averaging Time	California Standards	Federal Standards
Ozone	1 Hour	**Nonattainment**	Revoked in 2005
	8 Hour	**Nonattainment**	**Nonattainment**
Carbon Monoxide	8 Hour	Unclassified	Unclassified/Attainment
	1 Hour	Unclassified	Unclassified/Attainment
Nitrogen Dioxide	Annual Mean	Attainment	Unclassified/Attainment
	1 Hour	Attainment	Unclassified/Attainment
Sulfur Dioxide	Annual Mean	Attainment	Unclassified/Attainment
	24 Hour	Attainment	Unclassified/Attainment
	3 Hour	Attainment	Unclassified/Attainment
	1 Hour	Attainment	Unclassified/Attainment
Respirable Particulate Matter (PM_{10})	Annual Mean	**Nonattainment**	-
	24 Hour	**Nonattainment**	Unclassified
Fine Particulate Matter ($PM_{2.5}$)	Annual Mean	Unclassified	Unclassified/Attainment
	24 Hour	-	**Nonattainment**
Lead	30 Day Average	Attainment	Unclassified/Attainment
	Calendar Quarter	Attainment	Unclassified/Attainment
	Rolling 3-Month Average	Attainment	Unclassified/Attainment
Sulfates	24 Hour	Attainment	-
Hydrogen Sulfide	1 Hour	Unclassified	-
Visibility Reducing Particles	8 Hour	Unclassified	-

Source: California Air Resources Board. Maps of State and Federal Area Designations. Available at: https://ww2.arb.ca.gov/resources/documents/maps-state-and-federal-area-designations. Accessed November 2022.

The nearest local air quality monitoring station to the project site is the Tahoe City – 221 Fairway Drive station, which is located approximately 5.4 miles southeast of the project site. However, the Tahoe City – 221 Fairway Drive station does not provide data for 24-hour PM_{10} or 1-hour NO_2 concentrations; thus, the next closest station to the project site with such data available was used, which was the Roseville-N Sunrise station, located at 151 North Sunrise Avenue. Although the Roseville-N Sunrise station is located approximately 65 miles southwest of the project site, as stated, the station is the nearest to the project site with such data available and, thus, would be considered the most reasonable representation for the project region. Based on the data available from the aforementioned monitoring stations, Table 5-4 presents the number of days that the State and federal AAQS were exceeded for the three-year period from 2019 to 2021.

Odors

While offensive odors rarely cause physical harm, they can be unpleasant, leading to considerable annoyance and distress among the public and can generate citizen complaints to local governments and air districts. Adverse effects of odors on residential areas and other sensitive receptors warrant the closest scrutiny; but consideration is also given to other land use types where people congregate, such as recreational facilities, worksites, and commercial areas. The potential for an odor impact is dependent on a number of variables including the nature of the odor source, distance between a receptor and an odor source, and local meteorological conditions.

One of the most important factors influencing the potential for an odor impact to occur is the distance between the odor source and receptors, also referred to as a buffer zone or setback.

Table 5-4
Air Quality Data Summary (2019-2021)

Pollutant	Standard	Days Standard Was Exceeded		
		2019	2020	2021
1-Hour Ozone	State	0	1	2
	Federal	0	0	0
8-Hour Ozone	State	0	7	14
	Federal	0	7	12
24-Hour $PM_{2.5}$	Federal	*	*	*
24-Hour PM_{10}	State	2	38	11
	Federal	0	5	1
1-Hour Nitrogen Dioxide	State	0	0	0
	Federal	0	0	0

Notes:
- All measurements are from the Tahoe City – 221 Fairway Drive station, with the exception of the 24-hour PM_{10} and the 1-hour NO_2 measurements, which are from the Roseville-N Sunrise station.
- * indicates that sufficient data was not available to determine the value.

Source: California Air Resources Board. Aerometric Data Analysis and Management (iADAM) System. Available at: http://www.arb.ca.gov/adam/welcome.html. Accessed November 2022.

The greater the distance between an odor source and receptor, the less concentrated the odor emission would be when reaching the receptor. Meteorological conditions also affect the dispersion of odor emissions, which determines the exposure concentration of odiferous compounds at receptors. The predominant wind direction in an area influences which receptors are exposed to the odiferous compounds generated by a nearby source. Receptors located upwind from a large odor source may not be affected due to the produced odiferous compounds being dispersed away from the receptors. Wind speed also influences the degree to which odor emissions are dispersed away from any area.

Odiferous compounds could be generated from a variety of source types including both construction and operational activities. Examples of common land use types that typically generate significant odor impacts include, but are not limited to, wastewater treatment plants, sanitary landfills, composting/green waste facilities, recycling facilities, petroleum refineries, chemical manufacturing plants, painting/coating operations, rendering plants, and food packaging plants.

Sensitive Receptors

Some land uses are considered more sensitive to air pollution than others, due to the types of population groups or activities involved. Children, pregnant women, the elderly, and those with existing health problems are especially vulnerable to the effects of air pollution. Accordingly, land uses that are typically considered to be sensitive receptors include residences, schools, day care centers, playgrounds, and medical facilities. The closest sensitive receptors to the project site are the single-family residences located approximately 550 feet to the southeast of the project site.

Atmospheric Deposition into Lake Tahoe

The Tahoe Regional Planning Agency (TRPA) Bi-State Compact, as revised in 1980, gave TRPA authority to adopt environmental quality standards, called thresholds, and to enforce ordinances designed to achieve the thresholds. In 1982, TRPA adopted various environmental threshold carrying capacities (thresholds), which set environmental standards for the Lake Tahoe basin and indirectly define the capacity of the region to accommodate additional land development.

Among the thresholds adopted in 1982 was threshold AQ14. Threshold AQ14 set a goal of reducing in-basin nitrogen emissions by 10 percent from 1981 levels and benchmarked its performance to total regional VMT. In 1981, increased algal growth because of elevated nutrient inputs (phosphorus and nitrogen) was thought to be the primary driver of Lake Tahoe's clarity loss. The intent of this air quality threshold was to preserve lake clarity by minimizing atmospheric nitrogen deposition (i.e., material landing on the lake surface from the air that contributes nitrogen to the water and therefore also contribute to algal growth). However, since 1982 a number of developments have occurred that have functionally rendered the original intent of the nitrate reduction threshold standard (AQ14) moot (TRPA 2021). First, improvements in tailpipe emissions controls have reduced nitrogen emissions by more than 66 percent, far greater than the 10 percent objective of the adopted standard, functionally accomplishing the goal of the standard. Second, scientific research conducted as part of establishing the Total Maximum Daily Load (TMDL) for Lake Tahoe (a regulatory program focused on restoring lake clarity) established that fine particles were the principal driver of clarity loss rather than nutrient inputs (although nutrient inputs from sources other than atmospheric deposition still remain important). Every four years a Threshold Evaluation Report is prepared providing information on the trends in achieving each threshold. Each of the last four Threshold Evaluation Reports (2001, 2006, 2011, and 2015) has recommended that the 1982 VMT nitrogen deposition threshold standard (AQ14) be reviewed and updated, and in 2021 threshold standard AQ14 was officially replaced with a per capita VMT standard intended to reduce reliance on the automobile, reduce GHG emissions, and promote mobility. There is no longer a VMT threshold directly tied to vehicle emissions and lake clarity.

Part of the reason for replacing threshold AQ14 is because the goals of the threshold have been met; a 10 percent reduction of mobile source nitrogen (i.e., NO_X) emissions from 1981 levels was accomplished more than 25 years ago (i.e., before 2000). Beyond that, mobile source NO_X emissions today are less than a third of what they were in 2000 and are forecast to continue to decline as a result of increasingly clean automobiles, with a projection that in 2030 emissions will be 1/10 of 2000 levels. This means that today the goal of threshold AQ14 has been exceeded by more than 3-fold, and by 2030 the goal will be exceeded by more than 10-fold.

In summary, current evidence indicates that (a) atmospheric nitrogen deposition resulting from vehicle exhaust is not a substantial contributor to losses in lake clarity, and (b) the implementation of stricter vehicle emissions standards at the State and federal levels are sufficient on their own to exceed atmospheric nitrogen deposition objectives.

Vehicle travel (i.e., VMT) can also result in atmospheric mobilization of fine sediment from paved roads (i.e., sediment or dust "kicked up" into the air by vehicle movement). When the Lake Tahoe Total Maximum Daily Load (TMDL) was being prepared, an assessment of the effects of this sediment mobilization mechanism on lake clarity estimated that atmospheric deposition accounted for 16 percent of the annual average fine sediment load to the lake. To restore the lake's historic clarity the TMDL established a target of reducing atmospheric deposition of fine sediments by 55 percent over 65 years. TMDL development considered a number of management

strategies for fine sediment load reduction. Such studies focused on, for example, the primary pathways by which atmospheric deposition of fine sediments to the lake occur. Studies conducted for the TMDL also explored the efficacy of VMT reduction as a strategy to reduce atmospheric fine sediment loading. The studies indicated that VMT reduction would likely not be a cost-effective strategy for fine sediment load reduction via atmospheric deposition (Lahontan RWQCB and NDEP 2008). This understanding was further supported by subsequent work that estimated that, "a 25 percent reduction in VMT would reduce fine sediment loads resulting from atmospheric mobilization by less than half of one percent (Lahontan RWQCB and NDEP 2008)."

Greenhouse Gas Emissions

GHGs are gases that absorb and emit radiation within the thermal infrared range, trapping heat in the earth's atmosphere. Some GHGs occur naturally and are emitted into the atmosphere through both natural processes and human activities. Other GHGs are created and emitted solely through human activities. The principal GHGs that enter the atmosphere due to human activities are carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), and fluorinated carbons. Other common GHGs include water vapor, ozone, and aerosols. The increase in atmospheric concentrations of GHG due to human activities has resulted in more heat being held within the atmosphere, which is the accepted explanation for global climate change.

The primary GHG emitted by human activities is CO_2, with the next largest components being CH_4 and N_2O. A wide variety of human activities result in the emission of CO_2. Some of the largest sources of CO_2 include the burning of fossil fuels for transportation and electricity, industrial processes including fertilizer production, agricultural processing, and cement production. The primary sources of CH_4 emissions include domestic livestock sources, decomposition of wastes in landfills, releases from natural gas systems, coal mine seepage, and manure management. The main human activities producing N_2O are agricultural soil management, fuel combustion in motor vehicles, nitric acid production, manure management, and stationary fuel combustion. Emissions of GHG by economic sector indicate that energy-related activities account for the majority of U.S. emissions. Electricity generation is the largest single-source of GHG emissions, and transportation is the second largest source, followed by industrial activities. The agricultural, commercial, and residential sectors account for the remainder of GHG emission sources.[10]

Emissions of GHG are partially offset by uptake of carbon and sequestration in trees, agricultural soils, landfilled yard trimmings and food scraps, and absorption of CO_2 by the Earth's oceans. Additional emission reduction measures for GHG could include, but are not limited to, compliance with local, State, or federal plans or strategies for GHG reductions, on-site and off-site mitigation, and project design features. Attainment concentration standards for GHGs have not been established by the federal or State government.

Global Warming Potential

Global Warming Potential (GWP) is one type of simplified index (based upon radiative properties) that can be used to estimate the potential future impacts of emissions of various gases. According to the USEPA, the GWP of a gas, or aerosol, to trap heat in the atmosphere is the "cumulative radiative forcing effects of a gas over a specified time horizon resulting from the emission of a unit mass of gas relative to a reference gas." The reference gas for comparison is CO_2. GWP is based on a number of factors, including the heat-absorbing ability of each gas relative to that of CO_2, as

[10] U.S. Environmental Protection Agency. *Sources of Greenhouse Gas Emissions*. Available at: https://19january2017snapshot.epa.gov/ghgemissions/sources-greenhouse-gas-emissions_.html. Accessed November 2022.

well as the decay rate of each gas relative to that of CO_2. Each gas's GWP is determined by comparing the radiative forcing associated with emissions of that gas versus the radiative forcing associated with emissions of the same mass of CO_2, for which the GWP is set at one. Methane gas, for example, is estimated by the USEPA to have a comparative global warming potential 25 times greater than that of CO_2, as shown in Table 5-5.

As shown in the table, at the extreme end of the scale, sulfur hexafluoride is estimated to have a comparative GWP 22,800 times that of CO_2. The atmospheric lifetimes of such GHGs are estimated by the USEPA to vary from 50 to 200 years for CO_2, to 50,000 years for CF_4. Longer atmospheric lifetimes allow GHG to buildup in the atmosphere; therefore, longer lifetimes correlate with the GWP of a gas. The common indicator for GHG is expressed in terms of metric tons of CO_2 equivalents ($MTCO_2e$), which is calculated based on the GWP for each pollutant.

Table 5-5
GWPs and Atmospheric Lifetimes of Select GHGs

Gas	Atmospheric Lifetime (years)	GWP (100-year time horizon)
Carbon Dioxide (CO_2)	See footnote[1]	1
Methane (CH_4)	12	25
Nitrous Oxide (N_2O)	114	298
HFC-23	270	14,800
HFC-134a	14	1,430
HFC-152a	1.4	124
PFC: Tetrafluoromethane (CF_4)	50,000	7,390
PFC: Hexafluoroethane (C_2F_6)	10,000	12,200
Sulfur Hexafluoride (SF_6)	3,200	22,800

[1] For a given amount of CO_2 emitted, some fraction of the atmospheric increase in concentration is quickly absorbed by the oceans and terrestrial vegetation, some fraction of the atmospheric increase will only slowly decrease over a number of years, and a small portion of the increase will remain for many centuries or more.

Source: USEPA. Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2019 [Table 1-2]. April 14, 2021.

Effects of Global Climate Change

Globally, climate change has the potential to affect numerous environmental resources through uncertain impacts related to future air temperatures and precipitation patterns. The Intergovernmental Panel on Climate Change's (IPCC) *Climate Change 2021: The Physical Science Basis* report indicated that warming of the climate system is unequivocal, and since the 1950s, many of the observed changes are unprecedented over decades to millennia.[11] Signs that global climate change has occurred include:

- Warming of the atmosphere and ocean;
- Diminished amounts of snow and ice;
- Rising sea levels; and
- Ocean acidification.

[11] Intergovernmental Panel on Climate Change. *Climate Change 2021: The Physical Science Basis Summary for Policymakers*. Available at: https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC_AR6_WGI_SPM.pdf. Accessed November 2022.

Although climate change is driven by global atmospheric conditions, climate change impacts are felt locally. A scientific consensus confirms that climate change is already affecting California. The Office of Environmental Health Hazard Assessment (OEHHA) identified various indicators of climate change in California, which are scientifically based measurements that track trends in various aspects of climate change. Many indicators reveal discernable evidence that climate change is occurring in California and is having significant, measurable impacts in the State.

Changes in the State's climate have been observed, including:

- An increase in annual average air temperature with record warmth from 2012 to 2016;
- More frequent extreme heat events;
- More extreme drought;
- A decline in winter chill; and
- An increase in variability of statewide precipitation.

Warming temperatures and changing precipitation patterns have altered California's physical systems—the ocean, lakes, rivers and snowpack—upon which the State depends. Winter snowpack and spring snowmelt runoff from the Sierra Nevada and southern Cascade Mountains provide approximately one-third of the State's annual water supply. Impacts of climate on physical systems have been observed, such as high variability of snow-water content (i.e., amount of water stored in snowpack), decrease in snowmelt runoff, glacier change (loss in area), rise in sea levels, increase in average lake water temperature and coastal ocean temperature, and a decrease in dissolved oxygen in coastal waters. Impacts of climate change on biological systems, including humans, wildlife, and vegetation, have also been observed, including climate change impacts on terrestrial, marine, and freshwater ecosystems.

In Placer County, specifically, effects of climate change will be more localized. Such hazards include agriculture and forestry pests and diseases, avalanche, drought, extreme heat, flooding, fog, human health hazards, landslides, severe weather, severe winter weather, and wildfire. Some hazards, such as wildfire and drought, relate directly to the occurrence of other hazards, such as agriculture and forestry pests and diseases, landslides, and flooding. Placer County is currently experiencing some of the aforementioned changes, and others may not occur for several decades.[12]

Energy

California is one of the highest energy demanding states within the nation. Activities such as heating and cooling structures, lighting, the movement of goods, agricultural production, and countless other facets of daily life consume a variety of energy sources. Energy within the state is provided primarily by the combustion of fossil fuels such as natural gas, motor gasoline, diesel, jet fuel, and, to a lesser extent, coal. In addition to the fossil fuel-based energy sources, the state is ranked second in the nation in renewable energy generation, which includes solar, geothermal, wind, and biomass resources. In fact, California leads the nation in solar thermal electricity capacity, with 73 percent of the nation's total solar thermal capacity installed within the State.[13]

[12] Placer County Community Development Resource Agency. *Placer County Sustainability Plan: A Greenhouse Gas Emission Reduction Plan and Adaptation Strategy* [pg. 14]. January 28, 2020.

[13] U.S. Energy Information Administration. *California: State Profile and Energy Estimates*. Available at: https://www.eia.gov/state/index.php?sid=CA. Accessed November 2022.

Energy within the State is provided primarily to consumers through a mix of sources including natural gas, hydroelectric, non-hydroelectric renewable sources, nuclear, coal, and petroleum. California is the nation's top producer of electricity from solar, geothermal, and biomass energy. In 2019, the state was also the nation's second-largest producer of electricity from conventional hydroelectric power and the fifth largest from wind energy. Renewable resources, including hydropower and small-scale (less than 1-megawatt), customer-sited solar photovoltaic (PV) systems, supplied more than half of California's in-state electricity generation, and natural gas-fired power plants provided two-fifths.

Figure 5-1 presents energy consumption within California for the most recent year for which data is available, 2019. As shown in the figure, transportation-related activity consumes the largest single share of energy within the State. Within the transportation sector, motor gasoline is the dominant form of energy, with jet fuel, diesel, natural gas, and electricity supplying the remaining portions of California's transportation sector energy demand. However, when considered together, energy demand from the built-environment including the residential, commercial, and industrial sectors, represents the greatest share of total statewide energy demand.

In the year 2020, the entire State consumed approximately 279,510.01 gigawatt hours (GWh) of electricity. Of the total electricity consumed by the State, Placer County consumed approximately 2,996.21 GWh, which constitutes approximately 1.07 percent of the total energy consumed within the State.[14]

Energy Use in Placer County

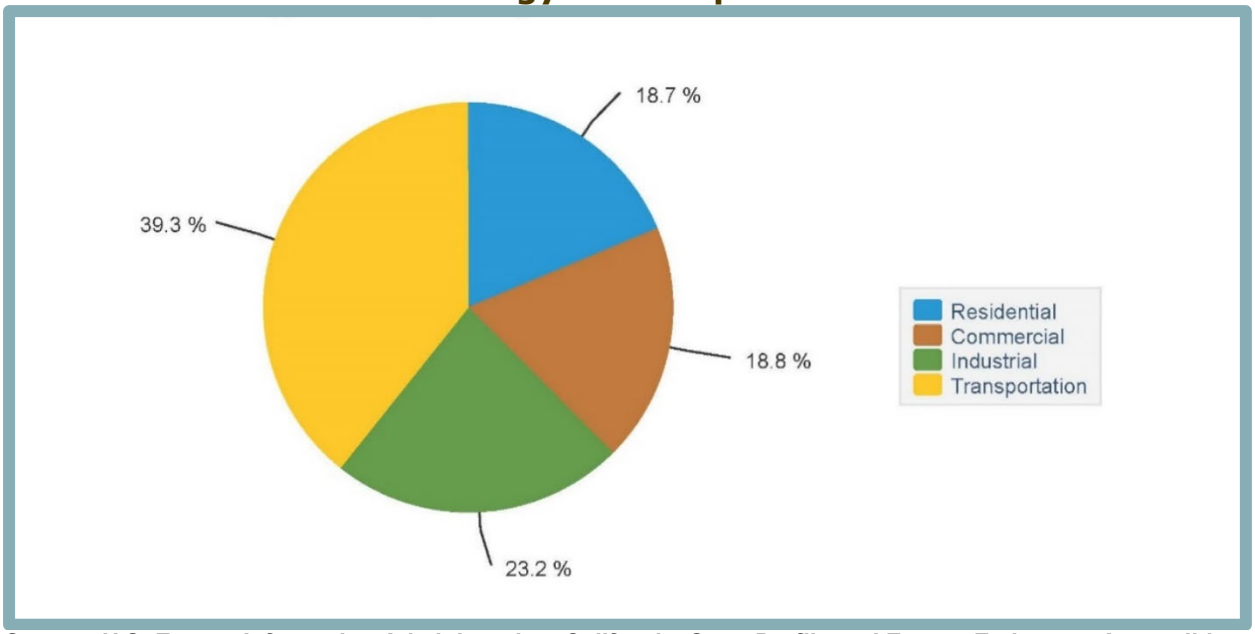
In 2020, the Placer County Board of Supervisors adopted the Placer County Sustainability Plan (PCSP), which establishes goals and policies for energy efficiency.[15] As a result, the PCSP is considered the local plan for renewable energy and efficiency. However, the County first began programs to improve municipal building energy efficiency and resource conservation in 2005. For example, the Placer County Government Center Master Plan represents an effort to update the County's Dewitt Center. The Master Plan includes strategies for significant reductions in energy and water use, and efforts to reduce GHG emissions associated with commuting. The Master Plan also calls for on-site housing and commercial uses, in addition to water efficiency improvements and efforts to reduce employee commute trips and support alternative fuel vehicles.

The County has also encouraged increases in electric vehicle infrastructure at four County buildings, supported greater use of battery electric and plug-in hybrid vehicles in the County fleet, and installed solar panels on County buildings in Auburn and Roseville. Placer County is also involved in the Middle Fork Project hydroelectric generations, and the Pioneer Community Energy project, both of which are discussed in further detail below.

[14] California Energy Commission. *Electricity Consumption by County*. Available at: http://ecdms.energy.ca.gov/elecbycounty.aspx. Accessed November 2022.

[15] Placer County Community Development Resource Agency. *Placer County Sustainability Plan: A Greenhouse Gas Emission Reduction Plan and Adaptation Strategy.* January 28, 2020.

Figure 5-1
California Energy Consumption Per Sector



Source: U.S. Energy Information Administration. California: State Profile and Energy Estimates. Accessible at: https://www.eia.gov/state/index.php?sid=CA. Accessed November 2022.

Middle Fork Project

The Placer County Water Agency, with Placer County as a partner, has operated the Middle Fork Project for over 50 years as a multipurpose project to benefit the people of Placer County. The Middle Fork Project is designed to store and release water to meet consumptive demands within western Placer County and to generate hydroelectric power for the California electrical grid. Hydroelectric power from the Middle Fork Project has a combined generating capacity of approximately 224 megawatts, with an average of 1,030,000 MWh/yr.

Pioneer Community Energy

Placer County and the cities of Auburn, Colfax, Lincoln, Loomis and Rocklin have established a joint powers authority called Pioneer Community Energy (Pioneer). Currently, Pioneer provides a Community Choice Aggregation (CCA) program, which acts as an alternative electricity supplier to PG&E. The electric power is transmitted over PG&E transmission and delivery infrastructure. Pioneer's CCA program currently serves ninety percent of customers within its territory.

Pioneer's CCA program provides local control over matters related to electric rate setting, electric energy procurement and incentives program development, as well as the opportunity to promote the use of locally generated power electricity to serve the needs of participating businesses and residents within its service territory, which includes both incorporated and unincorporated areas of Placer County. As a result, Pioneer provides the opportunity for residents or business-owners to opt into more locally- and renewably-sourced electricity as compared to the grid electricity provided by PG&E.

Energy Consumption at the Project Site

The project site is currently developed with the Olympic Valley Park. As a result, energy is consumed through the use of the on-site lighting and bathroom facilities.

5.3 REGULATORY CONTEXT

Air quality, GHG emissions, and energy are monitored and regulated through the efforts of various international, federal, State, and local government agencies. Agencies work jointly and individually to improve air quality through legislation, regulations, planning, policy-making, education, and a variety of programs. The agencies responsible for regulating and improving the air quality within the project area and monitoring or reducing GHG emissions and energy consumption are discussed below.

Federal Regulations Related to Air Quality

The following discussion provides a summary of the federal regulations relevant to air quality, organized by pollutant type.

Criteria Pollutants

The FCAA, passed in 1970 and last amended in 1990, forms the basis for the national air pollution control effort. The USEPA is responsible for implementing most aspects of the FCAA, including setting NAAQS for major air pollutants; setting hazardous air pollutant standards; approving state attainment plans; setting motor vehicle emission standards; issuing stationary source emission standards and permits; and establishing acid rain control measures, stratospheric ozone protection measures, and enforcement provisions. Under the FCAA, NAAQS are established for the following criteria pollutants: ozone, CO, NO_2, SO_2, PM_{10}, $PM_{2.5}$, and lead.

The NAAQS describe acceptable air quality conditions designed to protect the health and welfare of the citizens of the nation. The NAAQS (other than for ozone, NO_2, SO_2, PM_{10}, $PM_{2.5}$, and those based on annual averages or arithmetic mean) are not to be exceeded more than once per year. NAAQS for ozone, NO_2, SO_2, PM_{10}, $PM_{2.5}$ are based on statistical calculations over one- to three-year periods, depending on the pollutant. The FCAA requires the USEPA to reassess the NAAQS at least every five years to determine whether adopted standards are adequate to protect public health based on current scientific evidence. States with areas that exceed the NAAQS must prepare a state implementation plan that demonstrates how those areas will attain the standards within mandated time frames.

Hazardous Air Pollutants/Toxic Air Contaminants

The 1977 FCAA amendments required the USEPA to identify national emission standards for hazardous air pollutants to protect public health and welfare. Hazardous air pollutants include certain volatile organic chemicals, pesticides, herbicides, and radionuclides that present a tangible hazard, based on scientific studies of exposure to humans and other mammals. Under the 1990 FCAA Amendments, which expanded the control program for hazardous air pollutants, 189 substances and chemical families were identified as hazardous air pollutants.

Federal Regulations Related to GHG Emissions

The following are the federal regulations relevant to GHG emissions.

Federal Vehicle Standards

In 2007, in response to the *Massachusetts v. EPA* U.S. Supreme Court ruling, the Bush Administration issued Executive Order (EO) 13432 directing the USEPA, the Department of Transportation, and the Department of Energy to establish regulations that reduce GHG emissions from motor vehicles, non-road vehicles, and non-road engines by 2008. In 2009, the National Highway Transportation Safety Administration (NHTSA) issued a final rule regulating fuel efficiency and GHG emissions from cars and light-duty trucks for model year 2011; and, in 2010, the USEPA and NHTSA issued a final rule regulating cars and light-duty trucks for model years 2012 through 2016 (75 FR 25324–25728).

In 2010, President Obama issued a memorandum directing the Department of Transportation, Department of Energy, USEPA, and NHTSA to establish additional standards regarding fuel efficiency and GHG reduction, clean fuels, and advanced vehicle infrastructure. In response to this directive, the USEPA and NHTSA proposed stringent, coordinated federal GHG and fuel economy standards for model years 2017 through 2025 light-duty vehicles. The proposed standards were projected to achieve emission rates as low as 163 grams of CO_2 per mile by model year 2025 on an average industry fleet-wide basis, which is equivalent to 54.5 miles per gallon if the foregoing emissions level was achieved solely through fuel efficiency. The final rule was adopted in 2012 for model years 2017 through 2021 (77 FR 62624–63200), and NHTSA intended to set standards for model years 2022 through 2025 in future rulemaking.

In addition to the regulations applicable to cars and light-duty trucks described above, in 2011, the USEPA and NHTSA announced fuel economy and GHG standards for medium- and heavy-duty trucks for model years 2014 through 2018. The standards for CO_2 emissions and fuel consumption are tailored to three main vehicle categories: combination tractors; heavy-duty pickup trucks and vans; and vocational vehicles. According to the USEPA, this regulatory program will reduce GHG emissions and fuel consumption for the affected vehicles by six to 23 percent over the 2010 baselines (76 FR 57106–57513).

In August 2016, the USEPA and NHTSA announced the adoption of the phase two program related to the fuel economy and GHG standards for medium- and heavy-duty trucks. The phase two program would have applied to vehicles with model years 2018 through 2027 for certain trailers, and model years 2021 through 2027 for semi-trucks, large pickup trucks, vans, and all types of sizes of buses and work trucks. The final standards were expected to lower CO_2 emissions by approximately 1.1 billion MT, and reduce oil consumption by up to two billion barrels over the lifetime of the vehicles sold under the program.

In August 2018, the USEPA and NHTSA proposed to amend certain fuel economy and GHG standards for passenger cars and light trucks and establish new, less-stringent standards for model years 2021 through 2026. Compared to maintaining the post-2020 standards that were previously in place, the 2018 proposal would increase U.S. fuel consumption by approximately 0.5 million barrels per day, and would impact the global climate by 3/1000th of 1°C by 2100. California and other states stated their intent to challenge federal actions that would delay or eliminate GHG reduction measures, and committed to cooperating with other countries to implement global climate change initiatives.

On September 27, 2019, the USEPA and NHTSA published the *Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule Part One: One National Program* (84 FR 51,310), which became effective November 26, 2019. The Part One Rule revokes California's authority to set its own GHG

emissions standards and set zero-emission-vehicle mandates in California. On March 31, 2020, the USEPA and NHTSA issued the Part Two Rule, which sets CO_2 emissions standards and corporate average fuel economy standards for passenger vehicles and light-duty trucks for model years 2021 through 2026. On January 20, 2021, President Joe Biden issued an EO on Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis, which includes review of the Part One Rule by April 2021 and review of the Part Two Rule by July 2021. In response to the Part One Rule, in December 2021, the U.S. Department of Transportation withdrew its portions of the "SAFE I" rule. As a result, States are now allowed to issue their own GHG emissions standards and zero-emissions vehicle mandates.[16] In addition, the Part Two Rule was adopted to revise the existing national GHG emission standards for passenger cars and light trucks through model year 2026. These standards are the strongest vehicle emissions standards ever established for the light-duty vehicle sector and will result in avoiding more than 3 billion tons of GHG emissions through 2050.[17]

Federal Regulations Related to Energy

The following are the federal regulations relevant to energy.

Energy Policy and Conservation Act

The Energy Policy and Conservation Act was originally enacted in 1975 with the intention of ensuring that all vehicles sold in the U.S. meet established fuel economy standards. Following congressional establishment of the original set of fuel economy standards, the U.S. Department of Transportation was tasked with establishing additional on-road vehicle standards and making revisions to standards as necessary. Compliance with established standards is based on manufacturer fleet average fuel economy, which originally applied to both passenger cars and light trucks but did not apply to heavy-duty vehicles exceeding 8,500 pounds in gross vehicle weight. The fuel economy program implemented under the Energy Policy and Conservation Act is known as the Corporate Average Fuel Economy (CAFE) Standards. Updates to the CAFE standards since original implementation have increased fuel economy requirements and begun regulation of medium- and heavy-duty vehicles.

Energy Policy Act of 2005

The Energy Policy Act of 2005 addressed energy production in the U.S. from various sources. In particular, the Energy Policy Act of 2005 included tax credits, loans, and grants for the implementation of energy systems that would reduce GHG emissions related to energy production.

State Regulations Related to Air Quality

The following discussion summarizes applicable State regulations related to air quality, organized by pollutant type. Only the most prominent and applicable California air quality-related legislation is included below; however, an exhaustive list and extensive details of California air quality legislation can be found at the CARB website (http://www.arb.ca.gov/html/lawsregs.htm).

[16] National Highway Traffic Safety Administration. *In Removing Major Roadblock to State Action on Emissions Standards, U.S. Department of Transportation Advances Biden-Harris Administration's Climate and Jobs Goals.* Available at: https://www.nhtsa.gov/press-releases/cafe-preemption-final-rule. Accessed November 2022.

[17] U.S. Environmental Protection Agency. *Final Rule to Revise Existing National GHG Emissions Standards for Passenger Cars and Light Trucks Through Model Year 2026*. Available at: https://www.epa.gov/regulations-emissions-vehicles-and-engines/final-rule-revise-existing-national-ghg-emissions. Accessed November 2022.

Criteria Air Pollutants

The FCAA delegates the regulation of air pollution control and the enforcement of the NAAQS to the states. In California, the task of air quality management and regulation has been legislatively granted to CARB, with subsidiary responsibilities assigned to air quality management districts and air pollution control districts at the regional and county levels. CARB, which became part of the California Environmental Protection Agency in 1991, is responsible for ensuring implementation of the CCAA of 1988, responding to the FCAA, and regulating emissions from motor vehicles and consumer products.

CARB has established CAAQS, which are generally more restrictive than the NAAQS. The CAAQS describe adverse conditions; that is, pollution levels must be below these standards before a basin can attain the standard. Air quality is considered "in attainment" if pollutant levels are continuously below the CAAQS and do not violate the standards more than once each year. The CAAQS for ozone, CO, SO_2 (one-hour and 24-hour), NO_2, PM_{10}, $PM_{2.5}$, and visibility-reducing particles are values that are not to be exceeded. All others are not to be equaled or exceeded. The NAAQS and CAAQS are presented in Table 5-2.

Hazardous Air Pollutants/Toxic Air Contaminants

The State Air Toxics Program was established in 1983 under Assembly Bill (AB) 1807 (Tanner), and involved definition of a list of TACs. The California TAC list identifies more than 700 pollutants, of which carcinogenic and noncarcinogenic toxicity criteria have been established for a subset of these pollutants pursuant to the California Health and Safety Code. The State list of TACs includes the federally-designated hazardous air pollutants. In 1987, the Legislature enacted the Air Toxics "Hot Spots" Information and Assessment Act of 1987 (AB 2588) to address public concern over the release of TACs into the atmosphere. AB 2588 law requires facilities emitting toxic substances to provide local air pollution control districts with information that will allow an assessment of the air toxics problem, identification of air toxics emissions sources, location of resulting hot spots, notification of the public exposed to significant risk, and development of effective strategies to reduce potential risks to the public over five years. TAC emissions from individual facilities are quantified and prioritized. "High-priority" facilities are required to perform a health risk assessment, and, if specific thresholds are exceeded, the facility operator is required to communicate the results to the public in the form of notices and public meetings.

CARB Air Quality and Land Use Handbook

CARB's *Air Quality and Land Use Handbook: A Community Health Perspective* (CARB Handbook) addresses the importance of considering health risk issues when siting sensitive land uses, including residential development, in the vicinity of intensive air pollutant emission sources including freeways or high-traffic roads, distribution centers, ports, petroleum refineries, chrome plating operations, dry cleaners, and gasoline dispensing facilities.[18] The CARB Handbook draws upon studies evaluating the health effects of traffic traveling on major interstate highways in metropolitan California centers within Los Angeles (Interstate-405 and Interstate-710), the San Francisco Bay, and San Diego areas. The recommendations identified by CARB, including siting residential uses a minimum distance of 500 feet from freeways or other high-traffic roadways, are consistent with those adopted by the State of California for location of new schools. Specifically, the CARB Handbook recommends, "Avoid siting new sensitive land uses within 500 feet of a freeway, urban roads with 100,000 vehicles/day, or rural roads with 50,000 vehicles/day".[19]

[18] California Air Resources Board. *Air Quality and Land Use Handbook: A Community Health Perspective*. April 2005.
[19] *Ibid.*

Importantly, the Introduction chapter of the CARB Handbook clarifies that the guidelines are strictly advisory, recognizing that: "[l]and use decisions are a local government responsibility. The Air Resources Board Handbook is advisory and these recommendations do not establish regulatory standards of any kind." CARB recognizes that there may be land use objectives as well as meteorological and other site-specific conditions that need to be considered by a governmental jurisdiction relative to the general recommended setbacks, specifically stating, "[t]hese recommendations are advisory. Land use agencies have to balance other considerations, including housing and transportation needs, economic development priorities, and other quality of life issues".[20]

Diesel Particulate Matter

In 2000, CARB approved a comprehensive diesel risk reduction plan to reduce diesel emissions, including DPM, from new and existing diesel-fueled vehicles and engines. The regulation was anticipated to result in an 80 percent decrease in statewide diesel health risk by 2020 compared with the diesel risk in 2000. Additional regulations apply to new trucks and diesel fuel, including the On-Road Heavy Duty Diesel Vehicle (In-Use) Regulation, the On-Road Heavy Duty (New) Vehicle Program, the In-Use Off-Road Diesel Vehicle Regulation, and the New Off-Road Compression-Ignition (Diesel) Engines and Equipment program. The aforementioned regulations and programs have timetables by which manufacturers must comply and existing operators must upgrade their diesel-powered equipment. Several Airborne Toxic Control Measures (ATCMs) exist that reduce diesel emissions, including In-Use Off-Road Diesel-Fueled Fleets (13 California Code of Regulations [CCR] 2449 et seq.) and In-Use On-Road Diesel-Fueled Vehicles (13 CCR 2025).

Heavy-Duty Diesel Truck and Bus Regulation

CARB adopted the final Heavy-Duty Truck and Bus Regulation, Title 13, Division 3, Chapter 1, Section 2025, on December 31, 2014, to reduce DPM and NO_X emissions from heavy-duty diesel vehicles. The rule requires DPM filters be applied to newer heavier trucks and buses by January 1, 2012, with older vehicles required to comply by January 1, 2015. The rule requires nearly all diesel trucks and buses to be compliant with the 2010 model year engine requirement by January 1, 2023. CARB also adopted an ATCM to limit idling of diesel-fueled commercial vehicles on December 12, 2013. The rule requires diesel-fueled vehicles with gross vehicle weights greater than 10,000 pounds to idle no more than five minutes at any location (13 CCR 2485).

California Health and Safety Code Section 41700

Section 41700 of the Health and Safety Code states that a person must not discharge from any source whatsoever quantities of air contaminants or other material that cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public; or that endanger the comfort, repose, health, or safety of any of those persons or the public; or that cause, or have a natural tendency to cause, injury or damage to business or property. Section 41700 also applies to sources of objectionable odors.

[20] California Air Resources Board. *Air Quality and Land Use Handbook: A Community Health Perspective*. April 2005.

Heavy-Duty Vehicle Idling Emission Reduction Program

On October 20, 2005, CARB approved a regulatory measure to reduce emissions of toxics and criteria pollutants by limiting idling of new and in-use sleeper berth equipped diesel trucks.[21] The regulation established new engine and in-use truck requirements and emission performance requirements for technologies used as alternatives to idling the truck's main engine. For example, the regulation requires 2008 and newer model year heavy-duty diesel engines to be equipped with a non-programmable engine shutdown system that automatically shuts down the engine after five minutes of idling, or optionally meet a stringent NO_X emission standard. The regulation also requires operators of both in-state and out-of-state registered sleeper berth equipped trucks to manually shut down their engine when idling more than five minutes at any location within California. Emission producing alternative technologies such as diesel-fueled auxiliary power systems and fuel-fired heaters are also required to meet emission performance requirements that ensure emissions are not exceeding the emissions of a truck engine operating at idle.

In-Use Off-Road Diesel Vehicle Regulation

On July 26, 2007, CARB adopted a regulation to reduce DPM and NO_X emissions from in-use (existing), off-road, heavy-duty diesel vehicles in California.[22] Such vehicles are used in construction, mining, and industrial operations. The regulation is designed to reduce harmful emissions from vehicles by subjecting fleet owners to retrofit or accelerated replacement/repower requirements, imposing idling limitations on owners, operators, renters, or lessees of off-road diesel vehicles. The idling limits require operators of applicable off-road vehicles (self-propelled diesel-fueled vehicles 25 horsepower and up that were not designed to be driven on-road) to limit idling to less than five minutes. The idling requirements are specified in Title 13 of the CCR.

State Regulations Related to GHG Emissions

The statewide GHG emissions regulatory framework is summarized below. The following text describes EOs, legislation, regulations, and other plans and policies that would directly or indirectly reduce GHG emissions and/or address climate change issues. The following discussion does not include an exhaustive list of applicable regulations; rather, only the most prominent and applicable California legislation related to GHG emissions and climate change is included below.

State Climate Change Targets

California has taken a number of actions to address climate change, including EOs, legislation, and CARB plans and requirements, which are summarized below.

EO S-3-05

EO S-3-05 (June 2005) established California's GHG emissions reduction targets and laid out responsibilities among the State agencies for implementing the EO and for reporting on progress toward the targets. The EO established the following targets:

- By 2010, reduce GHG emissions to 2000 levels;
- By 2020, reduce GHG emissions to 1990 levels; and
- By 2050, reduce GHG emissions to 80 percent below 1990 levels.

[21] California Air Resources Board. *Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling*. October 24, 2013. Available at: http://www.arb.ca.gov/msprog/truck-idling/truck-idling.htm. Accessed November 2022.

[22] California Air Resources Board. *In-Use Off-Road Diesel Vehicle Regulation*. December 10, 2014. Available at: http://www.arb.ca.gov/msprog/ordiesel/ordiesel.htm. Accessed November 2022.

EO S-3-05 also directed the California Environmental Protection Agency (CalEPA) to report biannually on progress made toward meeting the GHG targets and the impacts to California due to global warming, including impacts to water supply, public health, agriculture, the coastline, and forestry. The Climate Action Team was formed, which subsequently issued reports from 2006 to 2010.

AB 32

In furtherance of the goals established in EO S-3-05, the Legislature enacted AB 32 (Núñez and Pavley). The bill is referred to as the California Global Warming Solutions Act of 2006 (September 27, 2006). AB 32 provided initial direction on creating a comprehensive, multi-year program to limit California's GHG emissions at 1990 levels by 2020 and initiate the transformations required to achieve the State's long-range climate objectives. AB 32 also required that the CARB prepare a "scoping plan" for achieving the maximum technologically feasible and cost-effective GHG emission reductions by 2020. The CARB's Scoping Plan is described in further detail below.

EO B-30-15

EO B-30-15 (April 2015) identified an interim GHG reduction target in support of targets previously identified under EO S-3-05 and AB 32. EO B-30-15 set an interim target goal of reducing GHG emissions to 40 percent below 1990 levels by 2030 to keep California on its trajectory toward meeting or exceeding the long-term goal of reducing GHG emissions to 80 percent below 1990 levels by 2050 as set forth in EO S-3-05. To facilitate achieving this goal, EO B-30-15 called for an update to the CARB's Climate Change Scoping Plan: A Framework for Change (Scoping Plan) to express the 2030 target in terms of million metric tons of CO_2 equivalents (MMT CO_2e). The CARB's Scoping Plan is discussed in further detail below. The EO also called for State agencies to continue to develop and implement GHG emission reduction programs in support of the reduction targets.

Senate Bill (SB) 32 and AB 197

SB 32 and AB 197 (enacted in 2016) are companion bills. SB 32 codified the 2030 emissions reduction goal of EO B-30-15 by requiring CARB to ensure that statewide GHG emissions are reduced to 40 percent below 1990 levels by 2030. AB 197 established the Joint Legislative Committee on Climate Change Policies, consisting of at least three members of the Senate and three members of the Assembly, to provide ongoing oversight over implementation of the State's climate policies. AB 197 also added two members of the Legislature to the Board as non-voting members; requires CARB to make available and update (at least annually via the CARB's website) emissions data for GHGs, criteria air pollutants, and TACs from reporting facilities; and requires CARB to identify specific information for GHG emissions reduction measures when updating the Scoping Plan.

CARB's Climate Change Scoping Plan

One specific requirement of AB 32 is for CARB to prepare a scoping plan for achieving the maximum technologically feasible and cost-effective GHG emission reductions by 2020 (Health and Safety Code Section 38561[a]), and to update the Scoping Plan at least once every five years. In 2008, CARB approved the first Scoping Plan. The Scoping Plan included a mix of recommended strategies that combined direct regulations, market-based approaches, voluntary measures, policies, and other emission reduction programs calculated to meet the 2020 statewide GHG emission limit and initiate the transformations needed to achieve the State's long-range climate objectives. The key elements of the Scoping Plan include the following:

1. Expanding and strengthening existing energy efficiency programs as well as building and appliance standards;
2. Achieving a statewide renewable energy mix of 33 percent;
3. Developing a California cap-and-trade program that links with other Western Climate Initiative partner programs to create a regional market system and caps sources contributing 85 percent of California's GHG emissions;
4. Establishing targets for transportation-related GHG emissions for regions throughout California, and pursuing policies and incentives to achieve those targets;
5. Adopting and implementing measures pursuant to existing State laws and policies, including California's clean car standards, goods movement measures, and the Low Carbon Fuel Standard (LCFS) (17 CCR, Section 95480 et seq.); and
6. Creating targeted fees, including a public goods charge on water use, fees on high GWP gases, and a fee to fund the administrative costs of the State's long-term commitment to AB 32 implementation.

The Scoping Plan also identified local governments as essential partners in achieving California's goals to reduce GHG emissions because they have broad influence and, in some cases, exclusive authority over activities that contribute to significant direct and indirect GHG emissions through their planning and permitting processes, local ordinances, outreach and education efforts, and municipal operations. Specifically, the Scoping Plan encouraged local governments to adopt a reduction goal for municipal operations and for community emissions to reduce GHGs by approximately 15 percent from 2008 levels by 2020. Many local governments developed community-scale local GHG reduction plans based on this Scoping Plan recommendation.

In 2014, CARB approved the first update to the Scoping Plan. The First Update to the Climate Change Scoping Plan: Building on the Framework (First Update) defined the State's GHG emission reduction priorities for the next five years and laid the groundwork to start the transition to the post-2020 goals set forth in EO S-3-05 and EO B-16-2012. The First Update concluded that California is on track to meet the 2020 target but recommended a 2030 mid-term GHG reduction target be established to ensure a continuation of action to reduce emissions. The First Update recommended a mix of technologies in key economic sectors to reduce emissions through 2050, including energy demand reduction through efficiency and activity changes; large-scale electrification of on-road vehicles, buildings, and industrial machinery; decarbonizing electricity and fuel supplies; and the rapid market penetration of efficient and clean energy technologies. As part of the First Update, CARB recalculated the State's 1990 emissions level using more recent GWPs identified by the IPCC, from 427 MMT CO_2e to 431 MMT CO_2e.

In 2015, as directed by EO B-30-15, CARB began working on an update to the Scoping Plan to incorporate the 2030 target of 40 percent below 1990 levels by 2030 to keep California on a trajectory toward meeting or exceeding the long-term goal of reducing GHG emissions to 80 percent below 1990 levels by 2050, as set forth in EO S-3-05. In summer 2016, the Legislature affirmed the importance of addressing climate change through passage of SB 32 (Pavley, Chapter 249, Statutes of 2016).

In December 2017, CARB adopted California's 2017 Climate Change Scoping Plan (2017 Scoping Plan) for public review and comment. The 2017 Scoping Plan builds on the successful framework established in the initial Scoping Plan and First Update while identifying new, technologically feasible and cost-effective strategies that will serve as the framework to achieve the 2030 GHG target as established by SB 32 and define the State's climate change priorities to 2030 and beyond. Strategies within the 2017 Scoping Plan include implementing renewable

energy and energy efficiency measures, increased stringency of the LCFS, measures identified in the Mobile Source and Freight Strategies, measures identified in the proposed Short-Lived Climate Pollutant (SLCP) Plan, and increased stringency of SB 375 targets (discussed in further detail below). To fill the gap in additional reductions needed to achieve the 2030 target, the 2017 Scoping Plan recommends continuing the Cap-and-Trade Program and a measure to reduce GHGs from refineries by 20 percent.

For local governments, the 2017 Scoping Plan replaced the initial Scoping Plan's 15 percent reduction goal with a recommendation to aim for a community-wide goal of no more than six $MTCO_2e$ per capita by 2030, and no more than two $MTCO_2e$ per capita by 2050, which are consistent with the State's long-term goals. Such goals are also consistent with the Under 2 Memorandum of Understanding (Under 2 Coalition 2019) and the Paris Agreement, which were developed around the scientifically based levels necessary to limit global warming to below an increase of 2°C. The 2017 Scoping Plan recognized the benefits of local government GHG planning (e.g., through Climate Action Plans [CAPs]) and provide more information regarding tools CARB is working on to support those efforts. The 2017 Scoping Plan also recognizes the CEQA streamlining provisions for project-level review where a legally adequate CAP exists.

When discussing project-level GHG emissions reduction actions and thresholds in the context of CEQA, the 2017 Scoping Plan states that "achieving no net additional increase in GHG emissions, resulting in no contribution to GHG impacts, is an appropriate overall objective for new development" for project-level CEQA analysis, but also recognizes that such a standard may not be appropriate or feasible for every development project. The 2017 Scoping Plan further provides that "the inability of a project to mitigate its GHG emissions to net zero does not imply the project results in a substantial contribution to the cumulatively significant environmental impact of climate change under CEQA."

The update to the 2017 Scoping Plan, the Draft 2022 Scoping Plan Update, has been released for public review, but has not yet been adopted by the CARB.[23]

CARB's Regulations for the Mandatory Reporting of GHG Emissions

CARB's Regulation for the Mandatory Reporting of GHG Emissions (17 CCR 95100–95157) incorporated by reference certain requirements that the USEPA promulgated in its Final Rule on Mandatory Reporting of GHGs (40 Code of Federal Regulations [CFR] Part 98). In general, entities subject to the Mandatory Reporting Regulation that emit more than 10,000 $MTCO_2e$ per year are required to report annual GHGs through the California Electronic GHG Reporting Tool. Certain sectors, such as refineries and cement plants, are required to report regardless of emission levels. Entities that emit more than the 25,000 $MTCO_2e$ per year threshold are required to have their GHG emission report verified by a CARB-accredited third party.

SB 1383

SB 1383 establishes specific targets for the reduction of SLCPs (40 percent below 2013 levels by 2030 for CH_4 and HFCs, and 50 percent below 2013 levels by 2030 for anthropogenic black carbon), and provides direction for reductions from dairy and livestock operations and landfills. Accordingly, CARB adopted its SLCP Reduction Strategy in March 2017. The SLCP Reduction

[23] California Air Resources Board. *2022 Scoping Plan Documents*. Available at: https://ww2.arb.ca.gov/our-work/programs/ab-32-climate-change-scoping-plan/2022-scoping-plan-documents. Accessed July 2022.

Strategy establishes a framework for the statewide reduction of emissions of black carbon, CH_4, and fluorinated gases.

EO B-55-18/AB 1279

EO B-55-18 (September 2018) establishes a statewide policy for California to achieve carbon neutrality as soon as possible, and no later than 2045, and achieve and maintain net-negative emissions thereafter. The goal is an addition to the existing statewide targets of reducing the State's GHG emissions. CARB intends to work with relevant State agencies to ensure that future scoping plan updates identify and recommend measures to achieve the carbon neutrality goal. On September 16, 2022, AB 1279, also known as the California Climate Crisis Act, codified the carbon neutrality goal established by EO B-55-18.

Mobile Sources

The following regulations relate to the control of GHG emissions from mobile sources. Mobile sources include both on-road vehicles and off-road equipment.

AB 1493

AB 1493 (Pavley) (July 2002) was enacted in response to the transportation sector accounting for more than half of California's CO_2 emissions. AB 1493 required CARB to set GHG emission standards for passenger vehicles, light-duty trucks, and other vehicles determined by the State board to be vehicles that are primarily used for non-commercial personal transportation in the State. The bill required that CARB set GHG emission standards for motor vehicles manufactured in 2009 and all subsequent model years. CARB adopted the standards in September 2004. When fully phased in, the near-term (2009–2012) standards would result in a reduction of approximately 22 percent of GHG emissions compared to the emissions from the 2002 fleet, and the mid-term (2013–2016) standards would result in a reduction of approximately 30 percent.

SB 375

SB 375 (Steinberg) (September 2008) addresses GHG emissions associated with the transportation sector through regional transportation and sustainability plans. SB 375 requires CARB to adopt regional GHG reduction targets for the automobile and light-truck sector for 2020 and 2035, and to update those targets every eight years. SB 375 requires the State's 18 regional metropolitan planning organizations to prepare a sustainable communities strategy as part of their Regional Transportation Plans that will achieve the GHG reduction targets set by CARB. If a metropolitan planning organization is unable to devise a sustainable communities strategy to achieve the GHG reduction target, the metropolitan planning organization must prepare an alternative planning strategy demonstrating how the GHG reduction target would be achieved through alternative development patterns, infrastructure, or additional transportation measures or policies.

Pursuant to California Government Code Section 65080(b)(2)(K), a sustainable communities strategy does not (1) regulate the use of land, (2) supersede the land use authority of cities and counties, or (3) require that a city's or county's land use policies and regulations, including those in a general plan, be consistent with the sustainable community strategy. Nonetheless, SB 375 makes regional and local planning agencies responsible for developing those strategies as part of the federally required metropolitan transportation planning process and the State-mandated housing element process.

Advanced Clean Cars Program and Zero-Emissions Vehicle Program

The Advanced Clean Cars program (January 2012) is an emissions-control program for model years 2015 through 2025. The program combines the control of smog- and soot-causing pollutants and GHG emissions into a single coordinated package. The package includes elements to reduce smog-forming pollution, reduce GHG emissions, promote clean cars, and provide the fuels for clean cars. To improve air quality, CARB has implemented new emission standards to reduce smog-forming emissions beginning with 2015 model year vehicles. By 2025, implementation of the rule is anticipated to reduce emissions of smog-forming pollution from cars by 75 percent compared to the average new car sold in 2015. To reduce GHG emissions, CARB, in conjunction with the USEPA and NHTSA, adopted GHG standards for model year 2017 to 2025 vehicles; the standards were estimated to reduce GHG emissions by 34 percent by 2025. The zero-emissions vehicle program acts as the focused technology of the Advanced Clean Cars program by requiring manufacturers to produce increasing numbers of zero-emissions vehicles and plug-in hybrid electric vehicles in the 2018 to 2025 model years.

EO B-16-12

EO B-16-12 (March 2012) required that State entities under the governor's direction and control support and facilitate the rapid commercialization of zero-emissions vehicles. The order directed CARB, California Energy Commission (CEC), California Public Utilities Commission (CPUC), and other relevant agencies to work with the Plug-In Electric Vehicle Collaborative and the California Fuel Cell Partnership to establish benchmarks to help achieve goals by 2015, 2020, and 2025. On a statewide basis, EO B-16-12 established a target reduction of GHG emissions from the transportation sector equaling 80 percent less than 1990 levels by 2050. EO B-16-12 did not apply to vehicles that have special performance requirements necessary for the protection of the public safety and welfare.

AB 1236

AB 1236 (October 2015) (Chiu) required a city, county, or city and county to approve an application for the installation of electric-vehicle charging stations, as defined, through the issuance of specified permits unless the city or county makes specified written findings based on substantial evidence in the record that the proposed installation would have a specific, adverse impact upon the public health or safety, and a feasible method to satisfactorily mitigate or avoid the specific, adverse impact does not exist. The bill provided for appeal of that decision to the planning commission, as specified. AB 1236 required electric vehicle charging stations to meet specified standards. The bill required a city, county, or city and county with a population of 200,000 or more residents to adopt an ordinance, by September 30, 2016, that created an expedited and streamlined permitting process for electric vehicle charging stations. The bill also required a city, county, or city and county with a population of less than 200,000 residents to adopt the ordinance by September 30, 2017.

EO N-79-20

EO N-79-20 (September 2020) establishes a Statewide goal that 100 percent of in-state vehicle sales of new passenger cars and trucks shall be zero-emission by the year 2035. The order directed the CARB to develop and propose passenger vehicle and truck regulations requiring increasing volumes of new zero-emission vehicles sold in the State in order to achieve the goal by 2035. In addition, the order required that a Zero-Emissions Vehicle Market Development Strategy be created and updated every three years to ensure coordinated and expeditious implementation of the EO.

Water

The following regulations relate to the conservation of water, which reduces GHG emissions related to electricity demands from the treatment and transportation of water.

EO B-29-15

In response to a drought in California, EO B-29-15 (April 2015) set a goal of achieving a statewide reduction in potable urban water usage of 25 percent relative to water use in 2013. The term of the EO extended through February 28, 2016, although many of the directives subsequently became permanent water-efficiency standards and requirements. The EO includes specific directives that set strict limits on water usage in the State. In response to EO B-29-15, the California Department of Water Resources modified and adopted a revised version of the Model Water Efficient Landscape Ordinance (MWELO) that, among other changes, significantly increases the requirements for landscape water use efficiency, and broadens the applicability of the ordinance to include new development projects with smaller landscape areas.

Solid Waste

The following regulations relate to the generation of solid waste and means to reduce GHG emissions from solid waste produced within the State.

AB 939 and AB 341

In 1989, AB 939, known as the Integrated Waste Management Act (California Public Resources Code [PRC] Sections 40000 et seq.), was passed because of the observed increase in waste stream and the decrease in landfill capacity.

AB 341 (Chapter 476, Statutes of 2011 [Chesbro]) amended the California Integrated Waste Management Act of 1989 to include a provision declaring that the policy goal of the State is that not less than 75 percent of solid waste generated be source-reduced, recycled, or composted by 2020, and annually thereafter. In addition, AB 341 required the California Department of Resources Recycling and Recovery to develop strategies to achieve the State's policy goal.

Other State Actions

The following State regulations are broadly related to GHG emissions.

SB 97

SB 97 (Dutton) (August 2007) directed the Governor's Office of Planning and Research (OPR) to develop guidelines under CEQA for the mitigation of GHG emissions. In 2008, the Governor's OPR issued a technical advisory as interim guidance regarding the analysis of GHG emissions in CEQA documents. The advisory indicated that the lead agency should identify and estimate a project's GHG emissions, including those associated with vehicular traffic, energy consumption, water usage, and construction activities. The advisory further recommended that the lead agency determine the significance of the impacts and impose all mitigation measures necessary to reduce GHG emissions to a level that is less than significant. The California Natural Resource Agency (CNRA) adopted the CEQA Guidelines amendments in December 2009, and the amended CEQA Guidelines became effective in March 2010.

Under the amended CEQA Guidelines, a lead agency has the discretion to determine whether to use a quantitative or qualitative analysis, or apply performance standards to determine the significance of GHG emissions resulting from a particular project (14 CCR 15064.4[a]). The CEQA Guidelines require a lead agency to consider the extent to which the project complies with

regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions (14 CCR 15064.4[b]). The CEQA Guidelines also allow a lead agency to consider feasible means of mitigating the significant effects of GHG emissions, including reductions in emissions through the implementation of project features or off-site measures. The adopted amendments do not establish a GHG emission threshold, instead allowing a lead agency to develop, adopt, and apply the lead agency's own thresholds of significance or those developed by other agencies or experts. CNRA acknowledges that a lead agency may consider compliance with regulations or requirements implementing AB 32 in determining the significance of a project's GHG emissions.

With respect to GHG emissions, the CEQA Guidelines state that lead agencies should "make a good faith effort, to the extent possible on scientific and factual data, to describe, calculate or estimate" GHG emissions (14 CCR 15064.4[a]). The CEQA Guidelines note that an agency may identify emissions by either selecting a "model or methodology" to quantify the emissions or by relying on "qualitative analysis or other performance based standards" (14 CCR 15064.4[a]). Section 15064.4(b) states that the lead agency should consider the following when assessing the significance of impacts from GHG emissions on the environment: (1) the extent to which a project may increase or reduce GHG emissions as compared to the existing environmental setting; (2) whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project; and (3) the extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions (14 CCR 15064.4[b]).

EO S-13-08

EO S-13-08 (November 2008) is intended to hasten California's response to the impacts of global climate change, particularly sea-level rise. Therefore, the EO directs State agencies to take specified actions to assess and plan for such impacts. The final 2009 California Climate Adaptation Strategy report was issued in December 2009, and an update, Safeguarding California: Reducing Climate Risk, followed in July 2014. To assess the State's vulnerability, the report summarizes key climate change impacts to the State for the following areas: agriculture, biodiversity and habitat, emergency management, energy, forestry, ocean and coastal ecosystems and resources, public health, transportation, and water. Issuance of the Safeguarding California: Implementation Action Plans followed in March 2016. In January 2018, the CNRA released the Safeguarding California Plan: 2018 Update, which communicates current and needed actions that the State government should take to build climate change resiliency.

State Regulations Related to Energy

The State has adopted various regulations aimed at reducing energy consumption, increasing energy efficiency, and mandating sourcing requirements for electricity production.

Building Energy

The following regulations relate to energy efficiency and energy use reductions in the built environment.

Title 24, Part 6

Title 24 of the CCR was established in 1978 and serves to enhance and regulate California's building standards. While not initially promulgated to reduce GHG emissions, Part 6 of Title 24 specifically established Building Energy Efficiency Standards that are designed to ensure new and existing buildings in California achieve energy efficiency and preserve outdoor and indoor

environmental quality. These energy efficiency standards are reviewed periodically, and revised if necessary, by the California Building Standards Commission and CEC (PRC Section 25402[b][1]). The regulations receive input from members of industry, as well as the public, with the goal of "reducing of wasteful, uneconomic, inefficient, or unnecessary consumption of energy" (PRC Section 25402). The regulations are scrutinized and analyzed for technological and economic feasibility (PRC Section 25402[d]) and cost effectiveness (PRC Sections 25402[b][2] and [b][3]). As a result, the standards save energy, increase electricity supply reliability, increase indoor comfort, avoid the need to construct new power plants, and help preserve the environment.

The 2019 Title 24 standards are the currently applicable building energy efficiency standards and became effective on January 1, 2020. The 2019 Title 24 Building Energy Efficiency Standards reduced energy used and associated GHG emissions compared to the previous 2016 Title 24 standards. In general, single-family residences built to the 2019 standards are anticipated to use approximately seven percent less energy due to energy efficiency measures than those built to the 2016 standards; once rooftop solar electricity generation is factored in, single-family residences built under the 2019 standards use approximately 53 percent less energy than those under the 2016 standards.[24] Nonresidential buildings built to the 2019 standards use an estimated 30 percent less energy than those built to the 2016 standards.

It should be noted that the 2022 Building Energy Efficiency Standards will become effective on January 1, 2023. The 2022 Building Energy Efficiency Standards will include requirements that encourage efficient electric heat pumps, establish electric-ready requirements for new homes, expand solar photovoltaic and battery storage standards, and strengthen ventilation standards. Therefore, projects built under the 2022 Building Energy Efficiency Standards are expected to be more energy efficient than those built under the 2019 standards.

Title 24, Part 11

In addition to the CEC's efforts, in 2008, the California Building Standards Commission adopted the nation's first green building standards. The California Green Building Standards Code (Part 11 of Title 24) is commonly referred to as CALGreen, and establishes minimum mandatory standards and voluntary standards pertaining to the planning and design of sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and interior air quality. The CALGreen standards took effect in January 2011 and instituted mandatory minimum environmental performance standards for all ground-up, new construction of commercial, low-rise residential and State-owned buildings and schools and hospitals. The original CALGreen standards have been updated several times. The CALGreen 2019 standards, which are the current standards, improved upon the 2016 CALGreen standards, and went into effect on January 1, 2020. The mandatory standards require the following:

- Mandatory reduction in indoor water use through compliance with specified flow rates for plumbing fixtures and fittings;
- Mandatory reduction in outdoor water use through compliance with a local water efficient landscaping ordinance or the California Department of Water Resources' MWELO;
- 65 percent of construction and demolition waste must be diverted from landfills;
- Mandatory inspections of energy systems to ensure optimal working efficiency;

[24] California Energy Commission. *2019 Building Energy Efficiency Standards – Frequently Asked Questions.* March 2018.

- Inclusion of electric vehicle charging stations or designated spaces capable of supporting future charging stations; and
- Low-pollutant-emitting exterior and interior finish materials, such as paints, carpets, vinyl flooring, and particle boards.

The CALGreen standards also include voluntary efficiency measures that are provided at two tiers and implemented at the discretion of local agencies and applicants. CALGreen's Tier 1 standards call for a 15 percent improvement in energy requirements, stricter water conservation, 65 percent diversion of construction and demolition waste, 10 percent recycled content in building materials, 20 percent permeable paving, 20 percent cement reduction, and cool/solar-reflective roofs. CALGreen's more rigorous Tier 2 standards call for a 30 percent improvement in energy requirements, stricter water conservation, 80 percent diversion of construction and demolition waste, 15 percent recycled content in building materials, 30 percent permeable paving, 25 percent cement reduction, and cool/solar-reflective roofs.

Title 20

Title 20 of the CCR requires manufacturers of appliances to meet State and federal standards for energy and water efficiency. The CEC certifies an appliance based on a manufacturer's demonstration that the appliance meets the standards. New appliances regulated under Title 20 include refrigerators, refrigerator-freezers, and freezers; room air conditioners and room air-conditioning heat pumps; central air conditioners; spot air conditioners; vented gas space heaters; gas pool heaters; plumbing fittings and plumbing fixtures; fluorescent lamp ballasts; lamps; emergency lighting; traffic signal modules; dishwaters; clothes washers and dryers; cooking products; electric motors; low-voltage dry-type distribution transformers; power supplies; televisions and consumer audio and video equipment; and battery charger systems. Title 20 presents protocols for testing each type of appliance covered under the regulations, and appliances must meet the standards for energy performance, energy design, water performance, and water design. Title 20 contains three types of standards for appliances: federal and State standards for federally regulated appliances, State standards for federally regulated appliances, and State standards for non-federally regulated appliances.

SB 1

SB 1 (Murray) (August 2006) established a $3 billion rebate program to support the goal of the State to install rooftop solar energy systems with a generation capacity of 3,000 megawatts through 2016. SB 1 added sections to the PRC, including Chapter 8.8 (California Solar Initiative), that require building projects applying for ratepayer-funded incentives for photovoltaic systems to meet minimum energy efficiency levels and performance requirements. Section 25780 established that it is a goal of the State to establish a self-sufficient solar industry. The goals included establishing solar energy systems as a viable mainstream option for homes and businesses within 10 years of adoption, and placing solar energy systems on 50 percent of new homes within 13 years of adoption. SB 1, also termed "Go Solar California," was previously titled "Million Solar Roofs."

AB 1470

AB 1470 established the Solar Water Heating and Efficiency Act of 2007. The bill made findings and declarations of the Legislature relating to the promotion of solar water heating systems and other technologies that reduce natural gas demand. AB 1470 required the CEC to evaluate the data available from a specified pilot program, and, if the CEC made a specified determination, to

design and implement a program of incentives for the installation of 200,000 solar water heating systems in homes and businesses throughout the State by 2017.

AB 1109

Enacted in 2007, AB 1109 required the CEC to adopt minimum energy efficiency standards for general-purpose lighting to reduce electricity consumption by 50 percent for indoor residential lighting and by 25 percent for indoor commercial lighting.

Renewable Energy and Energy Procurement

The following regulations relate to the source of electricity provided to consumers within the State, as well as standards related to the generation of electricity within the State.

Renewable Portfolio Standard (RPS) and SB 100

Established in 2002 under SB 1078, accelerated in 2006 under SB 107, and expanded in 2011 under SB 2, California's RPS is one of the most ambitious renewable energy standards in the country. The RPS program requires investor-owned utilities, electric service providers, and community choice aggregators to increase procurement from eligible renewable energy resources to 33 percent of total procurement by 2020.

Since the inception of the RPS program, the program has been extended and enhanced multiple times. In 2015, SB 350 extended the State's RPS program by requiring that publicly owned utilities procure 50 percent of their electricity from renewable energy sources by 2030. The requirements of SB 350 were expanded and intensified in 2018 through the adoption of SB 100, which mandated that all electricity generated within the State by publicly owned utilities be generated through carbon-free sources by 2045. In addition, SB 100 increased the previous renewable energy requirement for the year 2030 by 10 percent; thus, requiring that 60 percent of electricity generated by publicly owned utilities originate from renewable sources by the year 2030.

Local Regulations

The most prominent local regulations related to air quality, GHG emissions, and energy are established by the PCAPCD and the Placer County General Plan and are discussed in further detail below.

Placer County Air Pollution Control District

The PCAPCD regulates many sources of pollutants in the ambient air as well as GHG emissions, and is responsible for implementing certain programs and regulations for controlling air pollutant and GHG emissions to improve air quality in order to attain federal and State AAQS and reduce GHG emissions in compliance with State goals.

Air Quality Attainment Plan

As a part of the MCAB federal ozone nonattainment area, the PCAPCD works with the other local air districts within the Sacramento area to develop a regional air quality management plan under the FCAA requirement. The regional air quality management plan is called the State Implementation Plan (SIP) which describes and demonstrates how Placer County, as well as the Sacramento nonattainment area, would attain the required federal ozone standard by the proposed attainment deadline. In accordance with the requirements of the FCAA, the PCAPCD, along with the other air districts in the region, prepared the *Sacramento Regional 8-Hour Ozone Attainment and Reasonable Further Progress Plan* (Ozone Attainment Plan), adopted by the

PCAPCD on February 19, 2009. The CARB determined that the Ozone Attainment Plan met federal Clean Air Act requirements and approved the Plan on March 26, 2009 as a revision to the SIP. Revisions to the Placer County portion of the SIP or Ozone Attainment Plan were made and adopted on August 11, 2011. An update to the plan, *2013 Revisions to the Sacramento Regional 8-Hour Ozone Attainment and Reasonable Further Progress Plan* (2013 Ozone Attainment Plan), was adopted on September 26, 2013, and approved by CARB as a revision to the SIP on November 21, 2013. The 2013 Ozone Attainment Plan was approved by the USEPA on January 9, 2015. In addition, another update was prepared in 2017. The *2017 Sacramento Regional 2008 NAAQS 8-Hour Ozone Attainment and Reasonable Further Progress Plan* (2017 Ozone Attainment Plan) demonstrates how the region will attain the 2008 ozone NAAQS, and includes an updated emissions inventory, sets motor vehicle emissions budgets, and documents the modeling used to support the attainment demonstration.

It should be noted that in addition to strengthening the 8-hour ozone NAAQS, the USEPA also strengthened the secondary 8-hour ozone NAAQS, making the secondary standard identical to the primary standard. The MCAB remains classified as a severe nonattainment area for ozone with an attainment deadline of 2027. On October 26, 2015, the USEPA released a final implementation rule for the revised NAAQS for ozone to address the requirements for reasonable further progress, modeling and attainment demonstrations, and reasonably available control measures (RACM) and reasonably available control technology (RACT). On April 30, 2018, the USEPA published designations for areas in attainment/unclassifiable for the 2015 ozone standards. The USEPA identified the portions of Placer County within the MCAB as nonattainment for the 2015 ozone standards.[25]

PCAPCD Rules and Regulations

All projects under the jurisdiction of the PCAPCD are required to comply with all applicable PCAPCD rules and regulations. In addition, PCAPCD permit requirements apply to many commercial activities (e.g., print shops, drycleaners, gasoline stations), and other miscellaneous activities (e.g., demolition of buildings containing asbestos). The proposed project is required to comply with all applicable PCAPCD rules and regulations, which shall be noted on County-approved construction plans. The PCAPCD regulations and rules include, but are not limited to, the following:

Regulation 2 – Prohibitions

Regulation 2 is comprised of prohibitory rules that are written to achieve emission reductions from specific source categories. The rules are applicable to existing sources as well as new sources. Examples of prohibitory rules include Visible Emissions (Rule 202), Nuisance (Rule 205), Cutback and Emulsified Asphalt Paving Materials (Rule 217), Architectural Coatings (Rule 218), Wood Burning Appliances (Rule 225), and Fugitive Dust (Rule 228).

Regulation 5 – Permits

Regulation 5 is intended to provide an orderly procedure for the review of new sources, and modification and operation of existing sources, of air pollution through the issuance of permits. Regulation 5 primarily deals with permitting major emission sources and includes, but is not limited to, rules such as General Permit Requirements (Rule 501), New Source Review (Rule

[25] U.S. Environmental Protection Agency. *Nonattainment and Unclassifiable Area Designations for the 2015 Ozone Standards*. April 30, 2018.

502), Emission Statement (Rule 503), Emission Reduction Credits (Rule 504), and Toxics New Source Review (Rule 513).

Placer County General Plan

The following goals and policies related to air quality are from the Placer County General Plan:

Air Quality – General

Goal 6.F To protect and improve air quality in Placer County.

Policy 6.F.2 The County shall develop mitigation measures to minimize stationary source and area source emissions.

Policy 6.F.3 The County shall support the Placer County Air Pollution Control District (PCAPCD) in its development of improved ambient air quality monitoring capabilities and the establishment of standards, thresholds, and rules to more adequately address the air quality impacts of new development.

Policy 6.F.4 The County shall solicit and consider comments from local and regional agencies on proposed projects that may affect regional air quality.

Policy 6.F.5 The County shall encourage project proponents to consult early in the planning process with the County regarding the applicability of Countywide indirect and areawide source programs and transportation control measures (TCM) programs. Project review shall also address energy-efficient building and site designs and proper storage, use, and disposal of hazardous materials.

Policy 6.F.6 The County shall require project-level environmental review to include identification of potential air quality impacts and designation of design and other appropriate mitigation measures or offset fees to reduce impacts. The County shall dedicate staff to work with project proponents and other agencies in identifying, ensuring the implementation of, and monitoring the success of mitigation measures.

Policy 6.F.7 The County shall encourage development to be located and designed to minimize direct and indirect air pollutants.

Policy 6.F.8 The County shall submit development proposals to the PCAPCD for review and comment in compliance with CEQA prior to consideration by the appropriate decision-making body.

Policy 6.F.9 In reviewing project applications, the County shall consider alternatives or amendments that reduce emissions of air pollutants.

Policy 6.F.10 The County may require new development projects to submit an air quality analysis for review and approval. Based on this analysis, the

County shall require appropriate mitigation measures consistent with the PCAPCD's 1991 Air Quality Attainment Plan (or updated edition).

Air Quality – Transportation/Circulation

Goal 6.G To integrate air quality planning with the land use and transportation planning process.

Policy 6.G.1 The County shall require new development to be planned to result in smooth flowing traffic conditions for major roadways. This includes traffic signals and traffic signal coordination, parallel roadways, and intra- and inter-neighborhood connections where significant reductions in overall emissions can be achieved.

Policy 6.G.2 The County shall continue and, where appropriate, expand the use of synchronized traffic signals on roadways susceptible to emissions improvement through approach control.

Policy 6.G.3 The County shall encourage the use of alternative modes of transportation by incorporating public transit, bicycle, and pedestrian modes in County transportation planning and by requiring new development to provide adequate pedestrian and bikeway facilities.

Policy 6.G.5 The County shall endeavor to secure adequate funding for transit services so that transit is a viable transportation alternative. New development shall pay its fair share of the cost of transit equipment and facilities required to serve new projects.

Transportation – Non-Motorized Transportation

Goal 3.D To provide a safe, comprehensive, and integrated system of facilities for non-motorized transportation.

Policy 3.D.5 The County shall continue to require developers to finance and install pedestrian walkways, equestrian trails, and multi-purpose paths in new development, as appropriate.

Policy 3.D.7 The County shall, where appropriate, require new development to provide sheltered public transit stops, with turnouts.

Policy 3.D.9 Consider Complete Streets infrastructure and design features in street design and construction to create safe and inviting environments for all users consistent with the land uses to be served.

Placer County Sustainability Plan

The PCSP, adopted by the Placer County Board of Supervisors on January 28, 2020, includes goals and policies for energy efficiency and the reduction of GHGs.[26] The PCSP is a planning document that outlines the programs and policies that are recommended for implementation by the community and the County to achieve the most significant GHG emission reductions in unincorporated County. In addition to reducing GHG emissions, implementation of the PCSP is intended to help achieve multiple community-wide goals, such as lowering energy costs, reducing air and water pollution, supporting local economic development, and improving public health and quality of life within Placer County.

5.4 IMPACTS AND MITIGATION MEASURES

The standards of significance and methodology used to analyze and determine the proposed project's potential project-specific impacts related to air quality, GHG emissions, and energy are described below. In addition, a discussion of the project's impacts, as well as mitigation measures where necessary, is also presented.

Standards of Significance

Based on the recommendations of PCAPCD and in coordination with the County, consistent with Appendix G of the CEQA Guidelines, the effects of a project are evaluated to determine if they would result in a significant adverse impact on the environment. For the purposes of this EIR, an impact related to air quality, GHG emissions, or energy is considered significant if the proposed project would:

- Conflict with or obstruct implementation of the applicable air quality plan;
- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in nonattainment under an applicable federal or State ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors);
- Expose sensitive receptors to substantial pollutant concentrations (including localized CO concentrations and TAC emissions);
- Result in other emissions (such as those leading to odors) affecting a substantial number of people;
- Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment;
- Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of GHGs;
- Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation; or
- Conflict with or obstruct a State or local plan for renewable energy or energy efficiency.

Issues Not Discussed Further

The Initial Study prepared for the proposed project (see Appendix A) determined that development of the proposed project would result in a less-than-significant impact related to the following:

[26] Placer County Community Development Resource Agency. *Placer County Sustainability Plan: A Greenhouse Gas Emission Reduction Plan and Adaptation Strategy.* January 28, 2020.

- Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation.

For the reasons cited in the Initial Study (Section VI, Energy), the potential impacts associated with the above are not analyzed further in this EIR.

Criteria Pollutant Emissions and Toxic Air Contaminant Emissions

In order to evaluate criteria air pollutant emissions from development projects, the PCAPCD has established significance thresholds for emissions of ROG, NO_X, and PM_{10}. The significance thresholds, expressed in pounds per day (lbs/day), serve as air quality standards in the evaluation of air quality impacts associated with proposed development projects. The PCAPCD's recommended thresholds of significance are listed in Table 5-6.

Table 5-6
PCAPCD Thresholds of Significance

Pollutant	Construction Threshold (lbs/day)	Operational/Cumulative Threshold (lbs/day)
ROG	82	55
NO_X	82	55
PM_{10}	82	82

Source: Placer County Air Pollution Control District. Placer County Air Pollution Control District Policy. Review of Land Use Projects Under CEQA. October 13, 2016.

Therefore, if the proposed project's emissions exceed the PCAPCD's pollutant thresholds presented in Table 5-6, the project could have a significant effect on air quality, the attainment of federal and State AAQS, and could conflict with or obstruct implementation of the applicable air quality plan or result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment.

Additionally, the PCAPCD has developed screening criteria for determining whether a project would cause substantial localized CO emissions at a given intersection. If the project would result in CO emissions from vehicle operations in excess of 550 lbs/day and either of the following conditions are met, the project could potentially result in substantial concentrations of localized CO and further analysis would be required:

- Degrade the peak hour level of service (LOS) on one or more streets or at one or more intersections (both signalized and non-signalized) in the project vicinity from an acceptable LOS (i.e., LOS A, B, C, or D) to an unacceptable LOS (i.e., LOS E or F); or
- Substantially worsen (i.e., increase delay by 10 seconds or more when project-generated traffic is included) an already existing unacceptable peak hour LOS on one or more streets or at one or more intersections in the project vicinity.[27]

However, considering that the law has changed with respect to how transportation-related impacts must be addressed under CEQA such that unacceptable LOS is no longer considered a significant impact on the environment under CEQA, this analysis relies on the 550 lbs/day of CO emissions screening criterion only.

[27] Placer County Air Pollution Control District. *CEQA Air Quality Handbook* [pg. 38]. November 21, 2017.

For evaluating TAC emissions, if a project would introduce a new source of TAC or a new sensitive receptor near an existing source of TAC that would not meet the CARB's minimum recommended setback, a detailed health risk assessment may be required. The PCAPCD considers an increase in cancer risk levels of more than 10 in one million persons or a non-cancer hazard index greater than 1.0 to be a significant impact related to TACs. The foregoing cancer risk level and non-cancer hazard index are typically applied to individual stationary sources of TACs; however, the PCAPCD does note that the cancer risk and hazard index thresholds may also be applied to activities that are non-stationary, such as diesel delivery trucks and off-road construction equipment.

With regard to other cumulative emissions, such as the cumulative emissions of criteria air pollutants, the PCAPCD directs lead agencies to use the region's existing attainment plans as a basis for analysis of cumulative emissions. If a project would interfere with an adopted attainment plan, the project would inhibit the future attainment of AAQS, and thus result in a significant incremental contribution to cumulative emissions. As discussed throughout this Chapter, the PCAPCD's recommended thresholds of significance for ozone precursors and PM_{10} are based on attainment plans for the region. Thus, the PCAPCD concluded that if a project's ozone precursor and PM_{10} emissions would be less than PCAPCD project-level thresholds, the project would not be expected to conflict with any relevant attainment plans, and would not result in a cumulatively considerable contribution to a significant cumulative impact. As a result, the operational phase cumulative-level emissions thresholds established by PCAPCD are identical to the project-level operational emissions thresholds; the operational/cumulative thresholds are presented in Table 5-6. [28]

GHG Emissions

Nearly all development projects in the region have the potential to generate air pollutants that may increase global climate change. On October 13, 2016, the PCAPCD adopted GHG emissions thresholds. The thresholds were designed to analyze a project's compliance with applicable State laws including AB 32 and SB 32.[29] As discussed in the PCAPCD's Justification Report for the thresholds, the PCAPCD relied on a review of historical CEQA projects within the County during the 13-year period from 2003 to 2015. The PCAPCD modeled emissions from 688 approved projects for the model year 2020, and used the modeled emissions to determine a reasonable level to establish emissions thresholds. The PCAPCD found that with a threshold of 10,000 MT CO_2e/yr, 11 percent of projects would exceed the threshold, and those projects contribute approximately 82 percent of total GHG emissions of the 688 projects built-out. In addition to modeling past projects within Placer County, the PCAPCD modeled a range of potential future residential and commercial projects to provide additional County-specific evidence in developing the PCAPCD's thresholds.[30]

The GHG thresholds include a bright-line threshold for the construction and operational phases of land use projects and stationary source projects, a screening level threshold for the operational phase of land use projects, and efficiency thresholds for the operational phase of land use projects that result in GHG emissions that fall between the bright-line threshold and the screening level threshold.

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28 Placer County Air Pollution Control District. *CEQA Air Quality Handbook* [pg. 40]. November 21, 2017.

29 Placer County Air Pollution Control District. *California Environmental Quality Act Thresholds of Significance: Justification Report*. October 2016.

30 *Ibid.*

The bright-line threshold of 10,000 $MTCO_2e$/yr represents the level at which a project's GHG emissions would be substantially large enough to contribute to cumulative impacts and mitigation to lessen the emissions would be mandatory. The PCAPCD further recommends use of the 10,000 $MTCO_2e$/yr for analysis of construction-related GHG emissions for land use projects. Any project with GHG emissions below the screening level threshold of 1,100 $MTCO_2e$/yr is considered by the PCAPCD as having a less-than-significant impact related to GHG emissions, and would not conflict with any State or regional GHG emissions reduction goals. Projects that would result in GHG emissions above the 1,100 $MTCO_2e$/yr screening level threshold, but below the bright-line threshold of 10,000 $MTCO_2e$/yr, must result in GHG emissions below the efficiency thresholds in order to be considered to result in a less-than-significant impact related to GHG emissions and not conflict with any State or regional GHG emission reduction goals. The GHG efficiency thresholds, which are in units of $MTCO_2e$/yr per capita or per square-foot, are presented in Table 5-7.

Table 5-7
PCAPCD Operational GHG Efficiency Thresholds of Significance

Residential ($MTCO_2e$/capita)		Non-Residential ($MTCO_2e$/1,000 sf)	
Urban	**Rural**	**Urban**	**Rural**
4.5	5.5	26.5	27.3

Source: ***Placer County Air Pollution Control District. Placer County Air Pollution Control District Policy. Review of Land Use Projects Under CEQA. October 13, 2016.***

In accordance with CARB and PCAPCD recommendations, the County, as lead agency, uses the currently adopted PCAPCD GHG thresholds of significance as presented above. Therefore, if the proposed project results in construction GHG emissions in excess of 10,000 $MTCO_2e$/yr, and/or operational GHG emissions in excess of 1,100 $MTCO_2e$/yr and is unable to show that emissions would achieve the efficiency thresholds presented in Table 5-7, the project would be considered to result in a cumulatively considerable contribution to global climate change.

Method of Analysis

The analysis protocol and guidance provided by the PCAPCD's *CEQA Air Quality Handbook*, including screening criteria and pollutant thresholds of significance, was used to analyze the proposed project's air quality impacts.

Construction Emissions

The proposed project's short-term construction emissions were estimated using the California Emissions Estimator Model (CalEEMod) version 2020.4.0 software, which is a statewide model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify air quality emissions from land use projects. The model applies inherent default values for various land uses, including trip generation rates based on the Institute of Transportation Engineers (ITE) Manual, vehicle mix, trip length, average speed, etc. However, where project-specific data was available, such data was input into the model. CalEEMod was used to estimate emissions associated with construction of all on-site structures, as well as on-site demolition, site preparation, and grading. Based on applicant-provided information, construction was assumed to commence in May of 2023 and occur over an approximately one-year period. The grading phase of construction would involve the export of approximately 1,200 cubic yards of soil.

In addition, the Sacramento Metropolitan Air Quality Management District's (SMAQMD's) RoadMod, Version 9.0.0 was used to calculate the emissions associated with the construction of a sanitary sewer force main along Olympic Valley Road. While the project site is not located within the jurisdiction of SMAQMD, RoadMod is an industry standard tool for evaluating emissions associated with linear construction projects (i.e., new roadway construction, road widening, utility installations, etc.) throughout the State. RoadMod requires the user to input information related to the area of disturbance, the length of time a project would occur, and, for linear non-roadway projects, a list of equipment that would be used during project construction. Based on applicant-provided information, modeling of the proposed sanitary sewer force main included the following assumptions:

- Construction start year – 2023;
- Project construction time – five days;
- Project length – 0.14 mile;
- Total project area – 0.10 acre;
- Maximum area disturbed per day – 0.10 acre;
- No water trucks used; and
- Haul trip length – 15 miles.

The results of construction emissions estimations were compared to the standards of significance discussed above in order to determine the associated level of impact. All modeling results are included in Appendix C to this EIR.

Operational Emissions

The proposed project's operational emissions were estimated using CalEEMod. For this analysis, the proposed project was assumed to be fully operational by 2024. The modeling performed for the proposed project included compliance with PCAPCD rules and regulations (i.e., low-VOC [volatile organic compounds] paints and low-VOC cleaning supplies), as well as with the 2019 California Building Energy Efficiency Standards Code, and the MWELO. The proposed project's compliance with such would be verified as part of the County's building permit application review process. LSC Transportation Consultants provided project-specific trip generation rates and VMT, which were applied to the project modeling.[31] In addition, the proposed project would include the use of propane, rather than natural gas. CalEEMod does not include the ability to model propane emissions. As such, an off-model analysis of propane emissions generated by the proposed project was conducted and included in the emissions presented below. The non-electrical energy demand in British thermal units (BTUs) was derived from the CalEEMod defaults for the proposed land use, and the emission factors for the combustion of propane were provided in the USEPA's Emission Factor Documentation for AP-42 Section 1.5 Liquefied Petroleum Gas Combustion.[32]

The results of operational emissions estimations were compared to the standards of significance discussed above in order to determine the associated level of impact. All CalEEMod modeling results and off-model calculations are included in Appendix C to this EIR.

[31] LSC Transportation Consultants, Inc. *SNOW Sports Museum – Trip Generation at Site Driveway; SNOW Sports Museum – VMT Impacts*. 2022.

[32] U.S. Environmental Protection Agency. *Emission Factor Documentation for AP-42 Section 1.5 Liquefied Petroleum Gas Combustion.* April 1993 [updated July 2008].

Project-Specific Impacts and Mitigation Measures

The following discussion of impacts is based on implementation of the proposed project in comparison with the standards of significance identified above. It should be noted that GHG emissions are inherently cumulative; thus, the discussion of associated GHG impacts is included under the Cumulative Impacts and Mitigation Measures section below.

5-1 Conflict with or obstruct implementation of the applicable air quality plan during project construction. Based on the analysis below, the impact is *less than significant*.

During construction of the project, various types of equipment and vehicles would temporarily operate on the project site. Construction-related emissions would be generated from construction equipment, vegetation clearing and earth movement activities, construction workers' commute, and construction material hauling for the entire construction period. The aforementioned activities would involve the use of diesel- and gasoline-powered equipment that would generate emissions of criteria pollutants. Project construction activities also represent sources of fugitive dust, which includes PM emissions. As construction of the proposed project would generate emissions of criteria air pollutants, including ROG, NO_X, and PM_{10}, intermittently within the site and in the vicinity of the site, until all construction has been completed, construction is a potential concern, as the proposed project is located in a nonattainment area for ozone and PM.

Estimated unmitigated construction-related emissions associated with the proposed project are presented in Table 5-8.

Table 5-8
Maximum Unmitigated Construction Emissions (lbs/day)

	ROG	NO_X	PM_{10}
CalEEMod Project Emissions	37.81	12.28	6.09
RoadMod Project Emissions	2.42	16.61	3.08
Total Project Emissions	*40.23*	*28.89*	*9.17*
PCAPCD Significance Threshold	**82.0**	**82.0**	**82.0**
Exceeds Threshold?	**NO**	**NO**	**NO**

Sources: CalEEMod, April 2022; RoadMod, January 2022 (see Appendix C).

As shown in the table above, the project's maximum construction-related emissions would be below the applicable PCAPCD thresholds of significance for ROG, NO_X, and PM_{10}.

It should be noted that construction activity related to implementation of the proposed project would be subject to PCAPCD Rule 228. Rule 228 requires projects involving earth-disturbing activities to implement various dust control measures, such as minimizing track-out on to paved public roadways, limiting vehicle travel on unpaved surfaces to 15 miles per hour, and stabilization of storage piles and disturbed areas. Furthermore, standard Placer County conditions of approval for proposed projects within the County include various requirements that would result in additional reductions of emissions related to implementation of the proposed project from what has been estimated and presented above in Table 5-8. The County's standard conditions of approval are listed below:

- The applicant shall submit a Dust Control Plan to the Placer County Air Pollution Control District (APCD) when the project area to be disturbed is greater than one acre. The Dust Control Plan shall be submitted to the APCD a minimum of 21 days before construction activity is scheduled to commence. The Dust Control Plan can be submitted online via a fill-in form: http://www.placerair.org/dustcontrolrequirements/dustcontrolform.
- With submittal of the Dust Control Plan, the contractor shall submit to the APCD a comprehensive equipment inventory (e.g., make, model, year, emission rating) of all the heavy-duty off-road equipment (50 horsepower of greater) that will be used in aggregate of 40 or more hours. If any new equipment is added after submission of the inventory, the contractor shall notify the APCD prior to the new equipment being utilized. At least three business days prior to the use of subject heavy-duty off-road equipment, the project representative shall provide the APCD with the anticipated construction timeline including start date, name, and phone number of the property owner, project manager, and on-site foreman.
- With submittal of the equipment inventory, the contractor shall provide a written calculation to the APCD for approval demonstrating that the heavy-duty (> 50 horsepower) off-road vehicles to be used in the construction project, including owned, leased and subcontractor vehicles, will achieve a project-wide fleet-average of 20 percent NO_X reduction and 45 percent particulate reduction comparing with the statewide fleet averages. Acceptable options for reducing emissions may include the use of late model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, and/or other options as they become available. The following link shall be used to calculate compliance with this condition and shall be submitted to the APCD as described above: http://www.airquality.org/businesses/ceqa-land-use-planning/mitigation (click on the current "Construction Mitigation Tool" spreadsheet under Step 1).

Moreover, the County's standard conditions of approval require Grading Plans for the proposed project to include the following notes:

- Prior to construction activity, a Dust Control Plan or Asbestos Dust Mitigation Plan shall be submitted to the Placer County Air Pollution Control District (APCD) when the project area to be disturbed is greater than one acre. The Dust Control Plan shall be submitted to the APCD a minimum of 21 days before construction activity is scheduled to commence. The Dust Control Plan can be submitted online via the fill-in form: http://www.placerair.org/dustcontrolrequirements/dustcontrolform.
- Construction equipment exhaust emissions shall not exceed the APCD Rule 202 Visible Emissions limitations. Operators of vehicles and equipment found to exceed opacity limits are to be immediately notified by the APCD to cease operations, and the equipment must be repaired within 72 hours.
- Dry mechanical sweeping is prohibited. Watering of a construction site shall be carried out to mitigate visible emissions. (Based on APCD Rule 228 / Section 301).
- The contractor shall not discharge into the atmosphere volatile organic compounds caused by the use or manufacture of Cutback or Emulsified asphalts for paving, road construction or road maintenance unless such manufacture or use complies with the provisions of Rule 217 Cutback and Emulsified Asphalt Paving Materials.

- The contractor shall utilize existing power sources (e.g., power poles) or clean fuel (e.g., gasoline, biodiesel, natural gas) generators rather than temporary diesel power generators.
- The contractor shall minimize idling time to a maximum of five minutes for all diesel-powered equipment. (Placer County Code Chapter 10, Article 10.14).
- Idling of construction-related equipment and construction-related vehicles shall be minimized within 1,000 feet of any sensitive receptor (i.e., house, hospital, or school).
- The contractor shall suspend all grading operations when fugitive dust exceeds the APCD Rule 228 (Fugitive Dust) limitations. Fugitive dust is not to exceed 40 percent opacity, nor go beyond the property boundary at any time. Lime or other drying agents utilized to dry out wet grading areas shall not exceed APCD Rule 228 limitations. (Based on APCD Rule 228 / section 302 & 401.4)
- The prime contractor shall be responsible for keeping adjacent public thoroughfares clean by keeping dust, silt, mud, dirt and debris from being released or tracked offsite. Wet broom or other methods can be deployed as control and as approved by the individual jurisdiction. (Based on APCD Rule 228 / section 401.5)
- During construction activity, traffic speeds on all unpaved surfaces shall be limited to 15 miles per hour or less unless the road surface and surrounding area is sufficiently stabilized to prevent vehicles and equipment traveling more than 15 miles per hour from emitting dust or visible emissions from crossing the project boundary line. (Based on APCD Rule 228 / section 401.2)
- The contractor shall apply methods such as surface stabilization, the establishment of a vegetative cover, paving, (or use another method to control dust as approved by the individual jurisdiction) to minimize wind-driven dust.
- The contractor shall apply water or use methods to control dust impacts offsite. Construction vehicles leaving the site shall be cleaned to prevent dust, silt, mud, and dirt from being released or tracked off-site. (Based on APCD Rule 228 / section 304)
- The contractor shall suspend all grading operations when wind speeds (including instantaneous gusts) are high enough to result in dust emissions crossing the boundary line, despite the application of dust mitigation measures. (Based on APCD Rule 228 / section 401.6)
- In order to minimize wind driven dust during construction, the prime contractor shall apply methods such as surface stabilization, establishment of a vegetative cover, paving (or use of another method to control dust as approved by Placer County). (Based on APCD Rule 228 / section 402)
- Any device or process that discharges 2 pounds per day or more of air contaminants into the atmosphere, as defined by Health and Safety Code Section 39013, may require an APCD permit. Developers/contractors should contact the APCD prior to construction and obtain any necessary permits prior to the issuance of a Building Permit. (APCD Rule 501)

Conclusion

Because the proposed project's estimated unmitigated construction emissions would be below the applicable PCAPCD thresholds of significance, construction activities associated with development of the proposed project would not substantially contribute to the PCAPCD's nonattainment status for ozone or PM. Accordingly, construction of the

proposed project would not conflict with or obstruct implementation of the applicable air quality plan, and a ***less-than-significant*** impact would occur.

Mitigation Measure(s)
None required.

5-2 Conflict with or obstruct implementation of the applicable air quality plan during project operation. Based on the analysis below, the impact is *less than significant*.

As discussed above, due to the nonattainment designations of the area, the PCAPCD has developed plans to attain the State and federal standards for ozone and particulate matter. The currently applicable air quality plan is the 2013 Ozone Attainment Plan. Adopted PCAPCD rules and regulations, as well as the thresholds of significance, have been developed with the intent to ensure continued attainment of AAQS, or to work towards attainment of AAQS for which the area is currently designated nonattainment, consistent with the applicable air quality plan. Thus, if a project's operational emissions exceed the PCAPCD's mass emission thresholds, a project would be considered to conflict with or obstruct implementation of the PCAPCD's air quality planning efforts.

Emissions of ROG, NO_X, and PM_{10} would be generated during operations of the proposed project from both mobile and stationary sources. Emissions related to operation of the proposed project would include sources such as architectural coatings, landscape maintenance equipment exhaust, and consumer products (e.g., deodorants, detergents, cleaning products, spray paint, insecticides, floor finishes, polishes, etc.). However, the most significant source of emissions related to the proposed project would be from mobile sources. As discussed in the Method of Analysis section above, to capture the potential emissions related to mobile sources from the proposed project, the project-specific trip generation rates prepared by LSC Transportation Consultants were applied to the project modeling.

The maximum unmitigated operational emissions for the proposed project are presented in Table 5-9 below.

Table 5-9
Maximum Unmitigated Operational Emissions (lbs/day)

	ROG	NO_X	PM_{10}
Project Emissions	1.41	1.57	1.93
PCAPCD Significance Threshold	**55**	**55**	**82**
Exceeds Threshold?	**NO**	**NO**	**NO**

Note: Project emissions include emissions estimated using CalEEMod, as well as emissions from the combustion of propane calculated off-model.

Source: CalEEMod, April 2022 (see Appendix C).

As shown in the table, unmitigated operational emissions would be below the PCAPCD's thresholds of significance for ROG, NO_X, and PM_{10}. Accordingly, operations of the proposed project would not violate any AAQS or contribute substantially to an existing or projected air quality violation. Therefore, operations of the proposed project would not

conflict with or obstruct implementation of the applicable air quality plan, and a ***less-than-significant*** impact would occur.

Mitigation Measure(s)

None required.

5-3 Expose sensitive receptors to substantial pollutant concentrations. Based on the analysis below, the impact is *less than significant*.

The major pollutant concentrations of concern are localized CO emissions, TAC emissions, and criteria pollutant emissions, which are addressed below.

Localized CO Emissions

Localized concentrations of CO are related to the levels of traffic and congestion along streets and at intersections. Implementation of the proposed project would increase traffic volumes on streets near the project site; therefore, the project would be expected to increase local CO concentrations. Concentrations of CO approaching the AAQS are only expected where background levels are high, and traffic volumes and congestion levels are high.[33] As noted previously, the PCAPCD has established screening methodology for localized CO emissions. According to the PCAPCD's screening methodology, if the project would result in vehicle operations producing more than 550 lbs/day of CO emissions, then a potentially significant adverse health impact related to localized CO emissions could occur.

According to the air quality analysis performed for the proposed project, operation of the project would result in maximum mobile source CO emissions of 8.98 lbs/day (see Appendix C). Consequently, CO emissions related to operation of the proposed project would be far below the 550 lbs/day screening threshold used by PCAPCD. Therefore, according to the PCAPCD's screening methodology for localized CO emissions, the proposed project would not be expected to generate localized CO emissions that would contribute to an exceedance of AAQS, and the proposed project would not expose sensitive receptors to substantial concentrations of localized CO.

TAC Emissions

As stated above, if a project would introduce a new source of TACs, a detailed health risk assessment may be required. The PCAPCD considers an increase in cancer risk levels of more than 10 in one million persons or a non-cancer hazard index greater than 1.0 to be a significant impact related to TACs. Activities related to the construction and operation of the proposed project are considered herein to determine whether the proposed project would expose nearby sensitive receptors to substantial TAC emissions. The closest sensitive receptors to the project site are the single-family residences located approximately 550 feet to the southeast of the project site.

Operational-related emissions of TACs are typically associated with stationary diesel engines or land uses that involve heavy truck traffic or idling. The proposed museum would not involve long-term or frequent operations of any stationary diesel engines and, as a

[33] University of California, Davis. *Transportation Project-Level Carbon Monoxide Protocol*. December 1997.

result, operations of the proposed project are not anticipated to result in substantial emissions of TACs.

It is noted that, following implementation of the proposed project, an increased number of buses may operate in the project vicinity as compared to existing conditions. Buses generally result in greater emissions of TACs compared to single-passenger motor vehicles. However, Sections 2449 and 2485 of Title 13 of the CCR limit idling of buses to five minutes. All buses associated with operations of the proposed project would be subject to such idling limitations. In addition, the vehicle fleet mix that is used within CalEEMod for estimating mobile-sourced emissions considers a wide range of vehicle types. As such, emissions from bus exhaust were already accounted for in the modeling presented above. Furthermore, the use of buses typically results in a decrease in regional VMT as each bus trip effectively replaces multiple single-passenger vehicle trips. By reducing VMT, mobile-sourced emissions of TACs would be correspondingly reduced. Overall, emissions of TACs associated with buses would not cause a substantial adverse impact on sensitive receptors in the project vicinity.

Construction-related activities have the potential to generate concentrations of TACs, specifically DPM, from on-road haul trucks and off-road equipment exhaust emissions. The construction period would be temporary and would occur over a relatively short duration in comparison to the operational lifetime of the proposed project. While methodologies for conducting health risk assessments are associated with long-term exposure periods (e.g., over a 30-year period or longer), construction activities associated with the proposed project were estimated to occur over an approximately five-month period. Only portions of the site would be disturbed at any given time throughout the construction period, with operation of construction equipment occurring intermittently throughout the course of a day rather than continuously at any one location on the project site. In addition, all construction equipment and operation thereof would be regulated per the In-Use Off-Road Diesel Vehicle Regulation. The In-Use Off-Road Diesel Vehicle Regulation includes emissions reducing requirements such as limitations on vehicle idling, disclosure, reporting, and labeling requirements for existing vehicles, as well as standards relating to fleet average emissions and the use of Best Available Control Technologies. As discussed above, through standard conditions of approval, Placer County requires off-road equipment used within the County to achieve lower than State-average emissions of NO_X and PM. Thus, on-site emissions of PM would be reduced, which would result in a proportional reduction in DPM emissions and exposure of nearby residences to DPM. Project construction would also be required to comply with all applicable PCAPCD rules and regulations, including Rule 501 related to General Permit Requirements.

Considering the intermittent nature of construction equipment operating within an influential distance to the nearest sensitive receptors, the duration of construction activities in comparison to the operational lifetime of the project, the typical long-term exposure periods associated with conducting health risk assessments, and compliance with regulations, the likelihood that any one nearby sensitive receptor would be exposed to high concentrations of DPM for any extended period of time would be low.

As discussed above, the proposed project's construction-related emissions would be below the applicable mass emissions thresholds of significance for PM_{10}, which includes DPM and fugitive dust related to construction. The PCAPCD's Handbook advises that if construction-related emissions have been quantified and are below the thresholds of

significance, the project would result in a less-than-significant impact regarding PM emissions.[34] Considering that PM_{10} emissions, which include emissions of DPM, would be below the PCAPCD's thresholds of significance, construction of the proposed project would not be expected to generate substantial DPM emissions such that an increase in cancer risk levels of more than 10 in one million persons or a non-cancer hazard index greater than 1.0 would occur.

Naturally Occurring Asbestos

According to the *Special Report 190: Relative Likelihood for the Presence of Naturally Occurring Asbestos in Placer County, California*, prepared by the Department of Conservation, the project site is located within an area categorized as least likely to contain NOA, because faults and serpentinite outcroppings are not known to be in the project area.[35] Consequently, NOA is not anticipated to be present on the project site.

Criteria Pollutants

As noted in Table 5-1, exposure to criteria air pollutants can result in adverse health effects. The AAQS presented in Table 5-2 are health-based standards designed to ensure safe levels of criteria pollutants that avoid specific adverse health effects. Because the MCAB is designated as nonattainment for State and federal eight-hour ozone and State PM_{10} standards, the PCAPCD, along with other air districts in the MCAB region, has adopted federal and State attainment plans to demonstrate progress towards attainment of the AAQS. Full implementation of the attainment plans would ensure that the AAQS are attained and sensitive receptors within the MCAB are not exposed to excess concentrations of criteria pollutants. The PCAPCD's thresholds of significance were established with consideration given to the health-based air quality standards established by the AAQS, and are designed to aid the district in implementing the applicable attainment plans to achieve attainment of the AAQS.[36] Thus, if a project's criteria pollutant emissions exceed the PCAPCD's mass emission thresholds of significance, a project would be considered to conflict with or obstruct implementation of the PCAPCD's air quality planning efforts, thereby delaying attainment of the AAQS. Because the AAQSs are representative of safe levels that avoid specific adverse health effects, a project's hinderance of attainment of the AAQS could be considered to contribute towards regional health effects associated with the existing nonattainment status of ozone and PM_{10} standards.

However, as discussed in Impacts 5-1 and 5-2, the proposed project would not result in emissions that exceed the PCAPCD's thresholds of significance. Consequently, implementation of the proposed project would not conflict with the PCAPCD's adopted attainment plans nor would the proposed project inhibit attainment of regional AAQS. Therefore, implementation of the proposed project would not contribute towards regional health effects associated with the existing nonattainment status of ozone and PM_{10} standards.

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34 Placer County Air Pollution Control District. *CEQA Air Quality Handbook* [pg. 31 and 32]. November 21, 2017.
35 California Department of Conservation, California Geological Survey. *Special Report 190: Relative Likelihood for the Presence of Naturally Occurring Asbestos in Placer County, California*. Published 2006.
36 Placer County Air Pollution Control District. *CEQA Air Quality Handbook* [pg. 20]. November 21, 2017.

Conclusion

Based on the above analysis, the proposed land uses would not be anticipated to result in the production of substantial concentrations of pollutants such as TACs (including DPM), localized CO, or criteria pollutants. In addition, the likelihood of NOA being present on the project site is low. Therefore, the proposed project would not result in the exposure of sensitive receptors to substantial pollutant concentrations, and a ***less-than-significant*** impact would occur.

Mitigation Measure(s)

None required.

5-4 Result in other emissions (such as those leading to odors) affecting a substantial number of people. Based on the analysis below, the impact is *less than significant*.

Emissions of pollutants have the potential to adversely affect sensitive receptors within the project area. Pollutants of principal concern include emissions leading to odors, visible emission (including dust), or emissions considered to constitute air pollutants. Air pollutants have been discussed in Impacts 5-1 through 5-3 above. Therefore, the following discussion focuses on emissions of odors, visible emissions, and emissions that have the potential to affect the clarity of Lake Tahoe.

Odors

Odors are generally regarded as an annoyance rather than a health hazard. Due to the subjective nature of odor impacts, the number of variables that can influence the potential for an odor impact, and the variety of odor sources, quantitative methodologies to determine the presence of a significant odor impact are difficult. Certain land uses such as wastewater treatment and conveyance facilities, landfills, confined animal facilities, composting operations, food manufacturing plants, refineries, and chemical plants have the potential to generate considerable odors. The proposed project would include the construction and operation of a sewer lift station, which would be located north of the project site, near the project driveway, within the Olympic Valley Road right-of-way. The proposed sewer lift station would have the potential to result in odors within the project area. Apart from the proposed sewer lift station, operations of the proposed project would not be anticipated to result in the creation of substantial odors.

This analysis is appropriately limited to the potential effects that the proposed project, specifically the sewer lift station, may have on the surrounding environment, and not future on-site visitors, pursuant to California Building Industry Association case law.[37] The nearest outdoor activity area associated with the existing park would be the pickleball courts located approximately 215 feet southeast of the lift station.

[37] Pursuant to the *California Building Industry Association v. Bay Area Air Quality Management District* (2015) 62 Cal.4th 369, the California Supreme Court held that "agencies subject to CEQA generally are not required to analyze the impact of existing environmental conditions on a project's future users or residents. But when a proposed project risks exacerbating those environmental hazards or conditions that already exist, an agency must analyze the potential impact of such hazards on future residents or users. In those specific instances, it is the project's impact on the environment – and not the environment's impact on the project – that compels an evaluation of how future residents or users could be affected by exacerbated conditions." (Id. at pp. 377-378.).

Placer County maintains a Pump Station Design Manual, which provides design and engineering criteria that must be met for approval of proposed sewer lift stations.[38] The County, through the Design Manual, reserves the right to require that odor control facilities be included in sewer lift station design. In order to determine whether a proposed sewer lift station would require the inclusion of odor control facilities, County staff reviews project Improvement Plans for several factors. In particular, the potential for sewer lift stations to result in odors is largely dependent upon the size of the area serviced by the proposed lift station and if the lift station receives sewerage flows from other lift stations. Sewer lift stations that service large sewer shed areas or receive flows from other lift stations can have a heightened potential for creating odors, because sewage collected over large areas or transported over large distances is exposed to anaerobic conditions where odors can be generated. In addition to the consideration of the potential for a proposed lift station to result in the generation of odors, County staff considers the distance between the proposed lift station and the nearest receptors, as well as the site conditions surrounding the lift station.

In the case of the proposed lift station, the sewer shed serviced by the station would be limited to that of the project site, as well as an existing vault toilet located within the Olympic Valley Park. Therefore, the proposed lift station would not service a large sewer shed area and sewage directed to the proposed lift station would not be conducive to anaerobic conditions over large distances. Furthermore, the proposed lift station would not receive flows from other upstream lift stations, and, thus, the proposed lift station would not handle sewage from off-site areas that had been transported over long distances. Due to the small sewer shed area and lack of connections to other upstream sewer lift stations, operations of the on-site sewer lift station are not anticipated to result in substantial odors. Moreover, the nearest off-site receptor to the proposed sewer lift station would be approximately 215 feet away from the lift station, which would provide ample distance for the minimal odors to dissipate. For the purposes of avoiding impacts related to operations of sewer lift stations, the County considers a setback distance of 50 feet or more to be sufficient to avoid impacts. The nearest off-site receptors would be well outside of the 50-foot setback.

Considering the above, odor control facilities are not anticipated to be required, as minimal odors would result from operation of the lift station and all off-site receptors would be sufficiently separated from the proposed lift station. Consequently, operation of the proposed lift station would not result in the exposure of sensitive receptors to substantial odors. Nevertheless, the County maintains the discretion to require the inclusion of odor control facilities, such as air filters/scrubbers, in the design of the sewer lift station. The final determination with regard to the inclusion of odor control facilities would occur prior to approval of Improvement Plans for the project. Because odor control facilities would be considered primarily for the benefit of future on-site receptors, any potential need for inclusion of odor control facilities would not be within the purview of CEQA and would not be considered mitigation for the purpose of avoiding a significant environmental impact.

Diesel fumes from construction equipment are often found to be objectionable; however, construction is temporary, and operation of equipment is regulated by federal, State, and local standards, including PCAPCD rules and regulations. Buildout of the proposed project would involve construction activity in different areas of the site and within off-site

[38] Placer County Environmental Engineering. *Pump Station Design Manual*. June 30, 2016.

improvement areas throughout the construction period. Therefore, construction equipment would operate at varying distances from existing sensitive receptors, and potential odors from such equipment would not expose any single receptor to odors for a substantial period of time. Furthermore, construction activity would be restricted to certain hours of the day per the Placer County Code, Section 9.36.030(A)(7), which would limit the times of day during which construction related odors would potentially be emitted. Development of the proposed project would be required to comply with all applicable PCAPCD rules and regulations, which would help to control construction-related odorous emissions. Due to the temporary duration of construction and the regulated nature of construction equipment, project-related construction activity would not be anticipated to result in the creation of substantial odors.

In addition to the regulations discussed above, PCAPCD Rule 205, Nuisance, addresses the exposure of "nuisance or annoyance" air contaminant discharges, which would include odors, and provides enforcement of nuisance control. Rule 205 is complaint-based, where if public complaints are sufficient to cause the emission source to be considered a public nuisance, then the PCAPCD is required to investigate the identified source, as well as determine and ensure a solution for the source of the complaint, which could include operational modifications to correct the nuisance condition. Thus, although not anticipated, if odor complaints are made during project construction or operations, the PCAPCD would be required (per PCAPCD Rule 205) to ensure that such complaints are addressed and mitigated, as necessary.

Considering the above, construction equipment and the proposed sewer lift station would be unlikely to result in the creation of substantial odors. Consequently, implementation of the proposed project would not be anticipated to result in a significant impact related to the emission of compounds, such as those leading to odors.

Visible Emissions

As defined in PCAPCD Rule 202, visible emissions may be smoke, dust, or any other substance that obscures an observer's view based on standardized scales of opacity. Visible emissions may result from the use of internal combustion engines, such as smoke from diesel fueled equipment, the burning of vegetation, or the upset and release of soil as dust.

PCAPCD Rule 202 specifically prohibits any person from discharging visible emissions of any air contaminant for a period or periods aggregating to more than three minutes in any one-hour time. Operation of the proposed land uses would not be anticipated to result in any visible emissions that would have the potential of violating Rule 202. Construction equipment on-site would be required to meet the visible emissions standards of Rule 202, and, considering the regulated nature of construction equipment, as well as the temporary use of such equipment on-site, would not be anticipated to result in substantial visible emissions. Additionally, PCAPCD Rule 228 requires implementation of dust control measures, such as minimizing track-out on to paved public roadways, limiting vehicle travel on unpaved surfaces to 15 miles per hour, and stabilization of storage piles and disturbed areas. Following project construction, vehicles operating within the project site would be limited to paved areas of the site, which would not have the potential to create substantial dust emissions.

Considering the above, implementation of the proposed project would not be anticipated to result in substantial visible emissions during project construction or operations.

Particle Deposition on Lake Tahoe

In the recent court case *Sierra Watch v. Placer County,* 69 Cal.App.5th 86 and 69 Cal.App.5th 1 (2021), the court determined that CEQA evaluations for projects near Lake Tahoe must address the project's potential environmental effects on the lake, including the potential for emissions to influence water clarity. As discussed above, Lake Tahoe is located approximately four miles southeast of the project site. Due to the regional significance of the lake, a discussion of the proposed project's potential effects on lake clarity is presented below.

As described above, current evidence indicates that (a) atmospheric nitrogen deposition resulting from vehicle exhaust is not a substantial contributor to losses in lake clarity, and (b) the implementation of stricter vehicle emissions standards at the State and federal levels are sufficient on their own to exceed TRPA's atmospheric nitrogen deposition objectives. In addition, as will be demonstrated below, emissions of PM_{10}, ROG, and NO_X attributable to project-generated VMT in the Lake Tahoe Basin would be well below the PCACPD's threshold of 55 lbs/day or ROG and NO_X and 82 lbs/day for PM_{10}.

Based on a VMT analysis prepared for the proposed project by LSC Transportation Consultants, Inc., the project would generate approximately 175 annual average daily trips (AADT).[39] Approximately 62 percent of trips generated by the proposed project would originate from the Sacramento/Roseville area, Olympic Valley, or Truckee, and would travel eastward to the project site, which, as noted previously, is located approximately four miles from the western shoreline of Lake Tahoe. Furthermore, the prevailing wind direction in the project area is most often from the east.[40] Therefore, any particulate emissions generated by visitors of the proposed project would primarily be carried towards the west, away from the lake.

Based on trip distribution data provided by LSC Transportation Consultants, approximately 639 daily VMT would originate within the areas located near the lake's shore.[41] According to Caltrans, the roads within the California area of the Tahoe Regional Planning Agency (TRPA) boundaries, which includes the portions of Placer and El Dorado counties near Lake Tahoe, had an estimated daily VMT of 937,268 in 2019.[42] The project's generation of approximately 639 daily VMT within the areas located near the lake's shore would represent a small fraction of VMT estimated to occur within the California area of the TRPA boundaries. In addition, monthly VMT in the Tahoe region can fluctuate by almost 1,000,000 between the peak summer months and the winter months, as more visitors travel to the region in the summer.[43] The additional 639 daily VMT (19,170 monthly VMT)

[39] LSC Transportation Consultants, Inc. *Squaw Valley Olympic Museum Transportation Impact Analysis*. February 21, 2020.
[40] Weather Spark. *Average Weather in Squaw Valley California, United States*. Available at: https://weatherspark.com/y/1503/Average-Weather-in-Squaw-Valley-California-United-States-Year-Round. Accessed November 2022.
[41] LSC Transportation Consultants, Inc. *Squaw Valley Olympic Museum Transportation Impact Analysis*. February 21, 2020.
[42] California Department of Transportation. *California Public Road Data 2019* [Table 9]. December 2020.
[43] Tahoe Regional Planning Agency. *VMT Threshold Update: Standard Recommendation and Implementation* [Figure 3]. April 18, 2021.

resulting from trips generated by the proposed project are expected to be within the normal seasonal fluctuations in the context of the seasonal VMT that is typically generated by the Lake Tahoe region. Thus, the VMT generated by the proposed project would not represent a notable change as compared to existing conditions. Furthermore, as shown in Table 5-10, unmitigated criteria pollutant emissions in the Lake Tahoe Basin from an increase in VMT associated with the proposed project are considerably below the applicable PCAPCD thresholds of significance. Because vehicle emissions within the Lake Tahoe Basin attributable to VMT associated with the proposed project would be well below the applicable PCAPCD thresholds, such emissions would not have a significant adverse effect on air quality within the Lake Tahoe Basin, and, as a result, are not anticipated to result in impacts to the lake's clarity.

Table 5-10
Maximum Unmitigated Vehicle Trip Emissions within the Lake Tahoe Region (lbs/day)

	ROG	NO_X	PM_{10}
Project Vehicle Trip Emissions	0.61	0.59	0.61
PCAPCD Significance Threshold	**55**	**55**	**82**
Exceeds Threshold?	**NO**	**NO**	**NO**

Source: CalEEMod, April 2023 (see Appendix C).

Conclusion

For the aforementioned reasons, project construction and operations would not result in substantial emissions of visible pollutants or other emissions, such as those leading to odors or substantial particle deposition on Lake Tahoe. Accordingly, implementation of the proposed project would not result in emissions that could adversely affect a substantial number of people, and a ***less-than-significant*** impact would occur.

Mitigation Measure(s)

None required.

5-5 Conflict with or obstruct a State or local plan for renewable energy or energy efficiency. Based on the analysis below, the impact is *less than significant*.

The PCSP, adopted by the Placer County Board of Supervisors on January 28, 2020, includes goals and policies for energy efficiency.[44] As a result, the PCSP is considered the local plan for renewable energy and efficiency. The PCSP contains community-wide and municipal energy efficiency and GHG mitigation strategies that can be applied to discretionary projects, as feasible, when the applicable project-level thresholds are exceeded. For example, the following strategies from the PCSP represent measures that could be applicable to the proposed project.

- ***Strategy E-1:*** Facilitate a transition to electricity as the primary energy source for residential, mixed-use, commercial, and office buildings;

[44] Placer County Community Development Resource Agency. *Placer County Sustainability Plan: A Greenhouse Gas Emission Reduction Plan and Adaptation Strategy.* January 28, 2020.

- ***Strategy E-4:*** Encourage new residential, office, and commercial development, as mitigation for discretionary projects exceeding applicable CEQA GHG thresholds, to implement CALGreen Tier 1 standards and accelerate Zero Net Energy (ZNE) in new construction;
- ***Strategy E-7:*** Create incentives to construct new nonresidential buildings to ZNE energy efficiency standards in advance of the 2030 mandate, and a second class of incentives to support new nonresidential construction that does not achieve ZNE but exceeds minimum standards.
- ***Strategy E-17:*** Promote onsite renewable energy generation and energy storage for new small- and medium-sized nonresidential structures.
- ***Strategy WW-2:*** Encourage new development projects, as mitigation for discretionary projects exceeding applicable GHG thresholds, to exceed minimum State water efficiency requirements for new water fixtures.

Under the PCSP, the County uses the PCAPCD-recommended GHG threshold of 1,100 $MTCO_2e$ per year to determine whether PCSP emission reduction measures are required. Because the proposed project's operational GHG emissions would be below the applicable GHG thresholds (see Table 5-12), implementation of the GHG reduction measures included in the PCSP is not required. As a result, the project would not conflict with or obstruct a local plan for renewable energy or energy efficiency, and the impact would be ***less than significant***.

Mitigation Measure(s)

None required.

Cumulative Impacts and Mitigation Measures

As defined in Section 15355 of the CEQA Guidelines, "cumulative impacts" refers to two or more individual effects which, when considered together, are considerable, compound, or increase other environmental impacts. The individual effects may be changes resulting from a single project or a number of separate projects. The cumulative impact from several projects is the change in the environment that results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects.

A project's emissions may be individually limited, but cumulatively considerable when taken in combination with past, present, and future development projects. The geographic context for the cumulative air quality analysis includes Placer County and surrounding areas within the portion of the MCAB that is designated nonattainment for ozone and PM_{10}.

As mentioned above, global climate change is, by nature, a cumulative impact. Emissions of GHG contribute, on a cumulative basis, to the significant adverse environmental impacts of global climate change (e.g., sea level rise, impacts to water supply and water quality, public health impacts, impacts to ecosystems, impacts to agriculture, and other environmental impacts). A single project could not generate enough GHG emissions to contribute noticeably to a change in the global average temperature. However, the combination of GHG emissions from a project in combination with other past, present, and future projects could contribute substantially to the world-wide phenomenon of global climate change and the associated environmental impacts. Although the geographical context for global climate change is the Earth, for analysis purposes under CEQA, and due to the regulatory context pertaining to GHG emissions and global climate

change applicable to the proposed project, the geographical context for global climate change in this EIR is limited to the State of California.

5-6 Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or State ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors). Based on the analysis below, the project's incremental contribution to this significant cumulative impact is *less than cumulatively considerable*.

The proposed project is within a nonattainment area for ozone and PM_{10}. By nature, air pollution is largely a cumulative impact. The population growth and vehicle usage within the nonattainment area from the proposed project, in combination with other past, present, and reasonably foreseeable projects within Placer County and surrounding areas, contributes to the region's adverse air quality impacts on a cumulative basis, and could either delay attainment of AAQS or require the adoption of additional controls on existing and future air pollution sources to offset emission increases. Thus, the project's emissions of criteria air pollutants would contribute to cumulative regional air quality effects.

As noted in the Standards of Significance section above, the PCAPCD directs lead agencies to use the region's existing attainment plans as a basis for analysis of cumulative emissions. A project's interference with such plans may be determined through the use of the PCAPCD's recommended thresholds of significance for ozone precursors and PM_{10}. The PCAPCD's recommended cumulative thresholds are identical to the operational thresholds, both of which are presented in Table 5-6. Accordingly, if the proposed project would result in an increase of ROG, NO_X or PM_{10} in excess of PCAPCD's operational phase cumulative-level emissions thresholds, which are identical to PCAPCD's project-level operational emissions thresholds, the project could potentially result in a significant incremental contribution towards cumulative air quality impacts.

As discussed under Impact 5-2, and demonstrated in Table 5-9, operational criteria pollutant emissions associated with the proposed project would be below the applicable PCAPCD thresholds of significance.

Therefore, implementation of the proposed project would not result in a significant incremental contribution to a cumulative violation of any air quality standards, contribute substantially to an existing or projected air quality violation, or conflict with and/or obstruct implementation of the PCAPCD's air quality planning efforts. As such, the proposed project's incremental contribution to regional air quality impacts would be ***less than cumulatively considerable***.

Mitigation Measure(s)

None required.

5-7 Generation of GHG emissions that may have a significant impact on the environment or conflict with an applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of GHGs. Based on the analysis below, the project's incremental contribution to this significant cumulative impact is *less than cumulatively considerable*.

Buildout of the proposed project would contribute to increases of GHG emissions that are associated with global climate change during construction and operation.

Construction GHG Emissions

The estimated unmitigated maximum construction-related GHG emissions from the proposed project are presented in Table 5-11. As shown in the table, the maximum construction-related GHG emissions would be well below the PCAPCD's bright-line threshold of 10,000 $MTCO_2e$/yr.

Table 5-11
Unmitigated On-site Construction GHG Emissions

Model	GHG Emissions ($MTCO_2e$/yr)	Threshold of Significance ($MTCO_2e$/yr)
On-site Construction Emissions	76.33	10,000
Off-site Sewer Pipeline Emissions	624.26	
Project Total Construction Emissions	*700.59*	
Exceeds Threshold?		**NO**

Source: CalEEMod, April 2022; RoadMod, January 2022 (see Appendix C).

Long-Term Operational GHG Emissions

The modeling assumptions for the GHG emissions related to operations of the proposed project are discussed in the Method of Analysis section above. The estimated unmitigated operational GHG emissions at full buildout (2024) are presented in Table 5-12.

Table 5-12
Unmitigated Project Operational GHG Emissions ($MTCO_2e$/yr)

Emission Source	GHG Emissions
Area	0.00
Energy[1]	157.33
Mobile	256.56
Solid Waste	9.35
Water	20.13
TOTAL ANNUAL GHG EMISSIONS	**443.38[2]**
PCAPCD Screening Level Threshold	**1,100**
Exceeds Thresholds?	**NO**

[1] Energy emissions represent the sum of electricity-related emissions estimated using CalEEMod and propone-related emissions calculated off-model.
[2] Rounding may result in small differences in summation.

Source: CalEEMod, April 2022 (see Appendix C).

As shown in the table, the proposed project would result in operational GHG emissions below the 1,100 $MTCO_2e$/yr operational threshold of significance. Accordingly, further evaluation in comparison with the efficiency thresholds presented in Table 5-7 is not required.

Consistency with Placer County Sustainability Plan

The CARB encourages local governments to adopt a reduction goal for municipal operations emissions and move toward establishing similar goals for community emissions that parallel the State's commitment to reducing GHG emissions. As noted previously, Placer County adopted the PCSP in January, 2020.[45] The PCSP includes an inventory of baseline emissions from the year 2005 and forecasted emissions in 2020, 2030, and 2050. In addition, the PCSP establishes a target of reducing the County's GHG emissions to 15 percent below 2005 levels by 2020 and achieving the State-wide per capita efficiency target of six $MTCO_2e$ per person by 2030. The GHG reductions presented within the PCSP are designed to achieve the State's adopted AB 32 and SB 32 reduction targets. The PCSP would not be applicable to projects that have been previously analyzed under a certified EIR, which are consistent with such analysis, and addresses the most recent GHG regulatory requirements.

As noted above, because the proposed project's operational GHG emissions would be below the applicable thresholds (see Table 5-12), implementation of the GHG reduction measures included in the PCSP is not required. Therefore, the proposed project would not conflict with implementation of the PCSP.

Conclusion

Based on the above, the proposed project would not be considered to generate GHG emissions, either directly or indirectly, that would have a significant impact on the environment, or conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs. Consequently, the project would not result in a cumulatively considerable incremental contribution to impacts related to GHG emissions or climate change and the project's impact would be ***less than cumulatively considerable***.

Mitigation Measure(s)

None required.

[45] Placer County Community Development Resource Agency. *Placer County Sustainability Plan: A Greenhouse Gas Emission Reduction Plan and Adaptation Strategy.* January 28, 2020.

6. Noise

6. NOISE

6.1 INTRODUCTION

The Noise chapter of the EIR describes the existing noise environment in the project vicinity, and identifies potential impacts and mitigation measures related to noise and vibration associated with construction and operation of the proposed project. The method by which the potential impacts are analyzed is discussed, followed by the identification of potential impacts and the recommended mitigation measures designed to reduce significant noise and vibration impacts to less-than-significant levels, if required. The Noise chapter is primarily based on the Environmental Noise Assessment prepared for the proposed project by Saxelby Acoustics (see Appendix D),[1] as well as the Placer County General Plan,[2] the Placer County General Plan EIR,[3] and the Squaw Valley General Plan and Land Use Ordinance.[4]

6.2 EXISTING ENVIRONMENTAL SETTING

The Existing Environmental Setting section provides background information on noise and vibration, a discussion of acoustical terminology and the effects of noise on people, existing sensitive receptors in the project vicinity, existing sources and noise levels in the project vicinity, and groundborne vibration.

Fundamentals of Acoustics

Decibels (dB) are logarithmic units that compare the wide range of sound intensities to which the human ear is sensitive. The perceived loudness of sounds is dependent upon many factors, including sound pressure level and frequency content. However, within the typical range of environmental noise levels, perception of loudness is relatively predictable and can be approximated by filtering the frequency response of a sound level meter by means of the standardized A-weighting network. A-weighting of sound levels best reflects the human ear's reduced sensitivity to low frequencies, and the use of A-weighted sound level, expressed as dBA, has become the standard tool of environmental noise assessment. Table 6-1 lists several examples of the noise levels associated with common situations.

Community Noise Equivalent Level (CNEL), which can be used to compare the noise level of neighborhoods, is the weighted average noise level over time, presented in dB. Community noise is also commonly described in terms of the ambient noise level, which is defined as the overall noise level associated with a given environment. A common statistical tool to measure the ambient noise level is the average, or equivalent, sound level (L_{eq}). The L_{eq} is the foundation of the day-night average noise descriptor, or L_{dn}, and represents a correlation with community response to noise.

The day/night average level (DNL or L_{dn}) is based on the average noise level over 24 hours, with an additional 10 dB weighting applied to noise that occurs during nighttime hours (10:00 PM to

[1] Saxelby Acoustics. *Environmental Noise Assessment – SNOW Museum Project.* November 21, 2022.
[2] Placer County. *Countywide General Plan Policy Document.* August 1994 (Updated May 2013).
[3] Placer County. *Countywide General Plan EIR*. July 1994.
[4] Placer County. *1983 Squaw Valley General Plan and Land Use Ordinance*. October 6, 1983.

7:00 AM). The 10 dB nighttime penalty is applied to account for the assumption that people are more sensitive to nighttime noise exposures as compared to daytime noise exposures.

Table 6-1
Typical Noise Levels

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
N/A	110	Rock Band
Jet Fly-over at 300 meters (1,000 feet)	100	N/A
Gas Lawn Mower at 1 meter (3 feet)	90	N/A
Diesel Truck at 15 meters (50 feet), at 80 km/hr. (50 mph)	80	Food Blender at 1 meter (3 feet) Garbage Disposal at 1 meter (3 feet)
Noisy Urban Area, Daytime Gas Lawn Mower, 30 meters (100 feet)	70	Vacuum Cleaner at 3 meters (10 feet)
Commercial Area Heavy Traffic at 90 meters (300 feet)	60	Normal Speech at 1 meter (3 feet)
Quiet Urban Daytime	50	Large Business Office Dishwasher in Next Room
Quiet Urban Nighttime	40	Theater, Large Conference Room (Background)
Quiet Suburban Nighttime	30	Library
Quiet Rural Nighttime	20	Bedroom at Night, Concert Hall (Background)
N/A	10	Broadcast/Recording Studio
Lowest Threshold of Human Hearing	0	Lowest Threshold of Human Hearing

Source: Caltrans, Technical Noise Supplement, Traffic Noise Analysis Protocol. September 2013.

Stationary sources of noise, including construction equipment, attenuate at a rate of approximately six dB per doubling of distance from the source depending on ground absorption. Physical barriers located between a noise source and the noise receptor, such as berms or sound walls, increase the efficacy of noise attenuation that occurs by distance alone.

Vibration is similar to noise in that both involve a source, a transmission path, and a receiver. However, while noise is generally considered to be pressure waves transmitted through air, vibration is usually associated with transmission through the ground or structures. As with noise, vibration consists of an amplitude and frequency.

A person's perception to the vibration depends on their individual sensitivity to vibration, as well as the amplitude and frequency of the source and the response of the system which is vibrating. Vibration can be measured in terms of acceleration, velocity, or displacement. A common practice is to monitor vibration levels in terms of peak particle velocities (PPV) in inches per second (in/sec). Standards pertaining to perception as well as damage to structures have been developed for vibration levels defined in terms of peak particle velocities.

Existing Sensitive Receptors

Certain land uses are more sensitive to ambient noise levels than others due to the amount of noise exposure (in terms of both exposure time and shielding from noise sources) and the type

of activities typically involved. Noise sensitive land uses typically include residences, schools, childcare centers, hospitals, long-term health care facilities, convalescent centers, retirement homes, and recreation areas. Sensitive noise receptors may also include threatened or endangered noise sensitive biological species; however, many jurisdictions have not adopted noise standards for wildlife areas. Noise sensitive land uses are typically given special attention in order to achieve protection from excessive noise. The closest sensitive receptors to the project site are the single-family residences located approximately 550 feet to the southeast of the project site, across State Route (SR) 89. The off-site sewer pipe alignment and associated work area on the south side of Olympic Valley Road are located in closer proximity to residential receptors, such as the Tavern Inn Condominiums, located approximately 70 feet south of the sewer pipe alignment.

Existing Noise Sources and Ambient Noise Levels

The existing ambient noise environment in the project vicinity is primarily defined by traffic on SR 89. To quantify the existing ambient noise environment in the project vicinity, Saxelby Acoustics conducted continuous (24-hour) noise level measurements at three locations within the project vicinity. Noise measurement locations are shown on Figure 6-1. A summary of the noise level measurement survey results is provided in Table 6-2.

The maximum value, denoted L_{max}, represents the highest noise level measured. The average value, denoted L_{eq}, represents the energy average of all of the noise received by the sound level meter microphone during the monitoring period. The median value, denoted L_{50}, represents the sound level exceeded 50 percent of the time during the monitoring period.

Existing Vibration Sources

The existing recreational uses associated with the Olympic Valley Park are not typical sources of vibration. As a result, sources of vibration are not present within the project vicinity.

6.3 REGULATORY CONTEXT

In order to limit exposure to physically and/or psychologically damaging noise levels, the State of California, various county governments, and most municipalities in the State have established standards and ordinances to control noise. Applicable federal laws or regulations pertaining to noise or vibration that would directly apply to the proposed project do not exist. The following provides a general overview of the existing State and local regulations that are relevant to the proposed project.

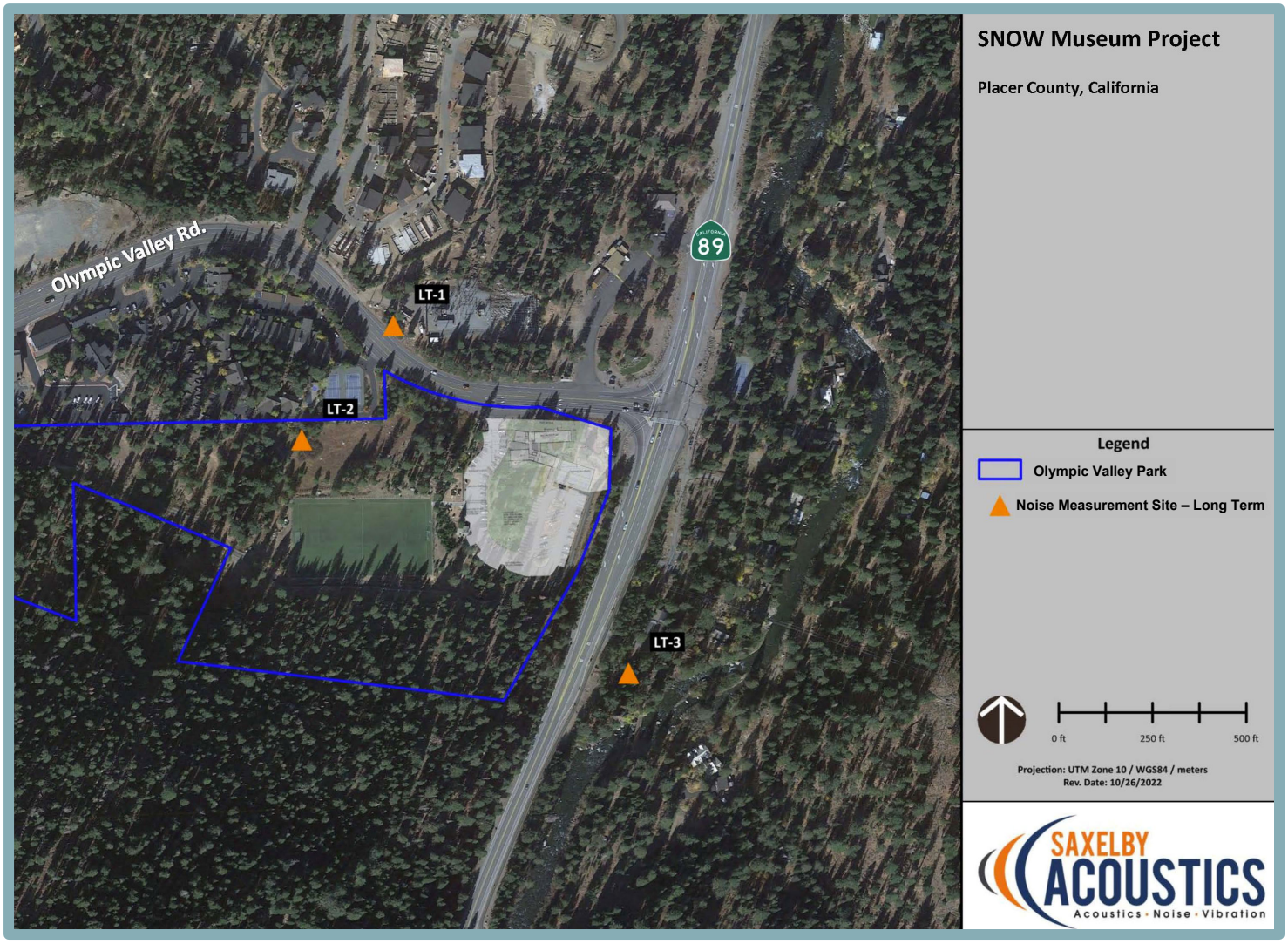
State Regulations

The following are the State environmental laws and policies relevant to noise.

California Building Code

The California Building Code (Title 24, Part 2 of the California Code of Regulations [CCR]) establishes uniform minimum noise insulation performance standards to protect persons within new buildings that house people, including hotels, motels, dormitories, apartment houses, and dwellings other than single-family dwellings. Title 24 mandates that interior noise levels attributable to exterior sources shall not exceed 45 dB L_{dn} or CNEL in any habitable room. Title 24 also requires that for structures containing noise-sensitive uses to be located where the L_{dn} or CNEL exceeds 60 dB, an acoustical analysis must be prepared to identify mechanisms for limiting exterior noise to the prescribed allowable interior levels.

Figure 6-1
Noise Measurement Locations



Source: Saxelby Acoustics, 2022.

Table 6-2
Summary of Existing Background Noise Measurement Data

Location	Date	L_{dn}	Daytime L_{eq}	Daytime L_{50}	Daytime L_{max}	Nighttime L_{eq}	Nighttime L_{50}	Nighttime L_{max}
LT-1: 770 ft. to CL of SR 89.	5/5/22	64	62	55	77	57	46	74
	5/6/22	64	63	57	77	55	45	75
	5/7/22	63	62	55	79	54	44	73
	5/8/22	63	63	52	78	54	42	71
	5/9/22	61	63	50	78	47	37	67
	5/10/22	61	62	51	78	50	36	71
	5/11/22	61	61	53	79	52	39	68
	Average	*63*	*62*	*54*	*78*	*54*	*43*	*72*
LT-2: 900 ft. to CL of SR 89.	5/5/22	54	51	49	64	47	44	58
	5/6/22	52	49	47	62	46	43	58
	5/7/22	50	57	45	63	43	41	56
	5/8/22	49	47	43	61	42	38	57
	5/9/22	45	44	39	62	36	32	51
	5/10/22	45	44	39	62	36	32	51
	5/11/22	45	45	42	60	36	31	50
	Average	*50*	*51*	*45*	*62*	*43*	*40*	*56*
LT-3: 140 ft. to CL of SR 89.	5/5/22	63	59	58	70	56	56	65
	5/6/22	63	59	58	71	57	56	66
	5/7/22	63	58	56	68	56	56	67
	5/8/22	62	57	55	67	55	54	68
	5/9/22	60	56	53	68	53	52	63
	5/10/22	57	54	52	67	50	50	58
	5/11/22	60	57	55	68	52	51	62
	Average	*62*	*57*	*56*	*69*	*55*	*54*	*65*

Notes:
- All values shown in dBA
- Daytime hours: 7:00 AM to 10:00 PM
- Nighttime Hours: 10:00 PM to 7:00 AM

Source: Saxelby Acoustics, 2022.

If the interior allowable noise levels are met by requiring that windows be kept closed, the design for the structure must also specify a ventilation or air conditioning system to provide a habitable interior environment.

Local Regulations

The following are the local environmental goals and policies relevant to noise and vibration.

Placer County General Plan

The following goals and policies from the Placer County General Plan related to noise and vibration are applicable to the proposed project.

Goal 9.A To protect County residents from the harmful and annoying effects of exposure to excessive noise.

Policy 9.A.1 The County shall not allow development of new noise-sensitive uses where the noise level due to non-transportation noise sources will exceed the noise level standards of Table 9-1 [see Table 6-3 included herein] as measured immediately within the property line of the new development, unless effective noise mitigation measures have been incorporated into the development design to achieve the standards specified in Table 9-1 [see Table 6-3].

Policy 9.A.2 Noise created by new proposed non-transportation noise sources shall be mitigated so as not to exceed the noise level standards of Table 9-1 [see Table 6-3] as measured immediately within the property line of lands designated for noise-sensitive uses: provided, however, the noise created by occasional events occurring within a stadium on land zoned for university purposes may temporarily exceed these standards as provided in an approved Specific Plan.

Policy 9.A.5 Where proposed non-residential land uses are likely to produce noise levels exceeding the performance standards of Table 9-1 [see Table 6-3] at existing or planned noise-sensitive uses, the County shall require submission of an acoustical analysis as part of the environmental review process so that noise mitigation may be included in the project design.

Policy 9.A.6 The feasibility of proposed projects with respect to existing and future transportation noise levels shall be evaluated by comparison to Table 9-3 [see Table 6-4 included herein].

Policy 9.A.8 New development of noise-sensitive land uses shall not be permitted in areas exposed to existing or projected levels of noise from transportation noise sources, including airports, which exceed the levels specified in Table 9-3 [see Table 6-4], unless the project design includes effective mitigation measures

to reduce noise in outdoor activity areas and interior spaces to the levels specified in Table 9-3 [see Table 6-4].

Table 6-3
Allowable L_{dn} Noise Levels Within Specified Zone Districts Applicable to New Projects Affected by or Including Non-Transportation Noise Sources[1]

Zone District of Receptor	Property Line of Receiving Use (L_{dn}, dB)	Interior Spaces[2]
Residential Adjacent to Industrial[3]	60	45
Other Residential[4]	50	45
Office/Professional	70	45
Transient Lodging	65	45
Neighborhood Commercial	70	45
General Commercial	70	45
Heavy Commercial	75	45
Limited Industrial	75	45
Highway Service	75	45
Shopping Center	70	45
Industrial	---	45
Industrial Park	75	45
Industrial Reserve	---	---
Airport	---	45
Unclassified	---	---
Farm	---[6]	---
Agriculture Exclusive	---[6]	---
Forestry	---	---
Timberland Preserve	---	---
Recreation & Forestry	70	---
Open Space	---	---
Mineral Reserve	---	---

Notes:

- Except where noted otherwise, noise exposures will be those which occur at the property line of the receiving use.
- Where existing transportation noise levels exceed the standards of this table, the allowable L_{dn} shall be raised to the same level as that of the ambient level.
- If the noise source generated by, or affecting, the uses shown above consists primarily of speech or music, or if the noise source is impulsive in nature, the noise standards shown above shall be decreased by 5 dB.
- Where a use permit has established noise level standards for an existing use, those standards shall supersede the levels specified in Table 9-1 and Table 9-3 (see Table 6-3 and see Table 6-4). Similarly, where an existing use which is not subject to a use permit causes noise in excess of the allowable levels in Tables 9-1 and 9-3 (see Table 6-3 and see Table 6-4), said excess noise shall be considered the allowable level. If a new development is proposed which will be affected by noise from such an existing use, it will ordinarily be assumed that the noise levels already existing or those levels allowed by the existing use permit, whichever are greater, are those levels actually produced by the existing use.
- Existing industry located in industrial zones will be given the benefit of the doubt in being allowed to emit increased noise consistent with the state of the art[5] at the time of expansion. In no case will expansion of an existing industrial operation because to decrease allowable noise emission limits. Increased emissions above those normally allowable should be limited to a one-time 5 dB increase at the discretion of the decision-making body.
- The noise level standards applicable to land uses containing incidental residential uses, such as caretaker dwellings at industrial facilities and homes on agriculturally zoned land, shall be the standards applicable to the zone district, not those applicable to residential uses.

(Continued on next page)

Table 6-3
Allowable L_{dn} Noise Levels Within Specified Zone Districts Applicable to New Projects Affected by or Including Non-Transportation Noise Sources[1]

- Where no noise level standards have been provided for a specific zone district, it is assumed that the interior and/or exterior spaces of these uses are effectively insensitive to noise.

1 Overriding policy on interpretation of allowable noise levels: Industrial-zoned properties are confined to unique areas of the County, and are irreplaceable. Industries which provide primary wage-earner jobs in the County, if forced to relocate, will likely be forced to leave the County. For this reason, industries operating upon industrial zoned properties must be afforded reasonable opportunity to exercise the rights/privileges conferred upon them be their zoning. Whenever the allowable noise levels herein fall subject to interpretation relative to industrial activities, the benefit of the doubt shall be afforded to the industrial use. Where an industrial use is subject to infrequent and unplanned upset or breakdown of operations resulting in increased noise emissions, where such upsets and breakdowns are reasonable considering the type of industry, and where the industrial use exercises due diligence in preventing as well as correcting such upsets and breakdowns, noise generated during such upsets and breakdowns shall not be included in calculations to determine conformance with allowable noise levels.

2 Interior spaces are defined as any locations where some degree of noise-sensitivity exists. Examples include all habitable rooms of residences, and areas where communication and speech intelligibility are essential, such as classrooms and offices.

3 Noise from industrial operations may be difficult to mitigate in a cost-effective manner. In recognition of this fact, the exterior noise standards for residential zone districts immediately adjacent to industrial, limited industrial, industrial park, and industrial reserve zone districts have been increased by 10 dB as compared to residential districts adjacent to other land uses. For purposes of the Noise Element, residential zone districts are defined to include the following zoning classifications: AR, R-1, R-2, R-3, FR, RP, TR-1, TR-2, TR-3, and TR-4.

4 Where a residential zone district is located within an -SP combining district, the exterior noise level standards are applied at the outer boundary of the -SP district. If an existing industrial operation within an -SP district is expanded or modified, the noise level standards at the outer boundary of the -SP district may be increased as described above in these standards. Where a new residential use is proposed in an -SP zone, an Administrative Review Permit is required, which may require mitigation measures at the residence for noise levels existing and/or allowed by use permit as described under "NOTES," above, in these standards.

5 State of the art should include the use of modern equipment with lower noise emissions, site design, and plant orientation to mitigate offsite noise impacts, and similar methodology.

6 Normally, agricultural uses are noise insensitive and will be treated in this way. However, conflicts with agricultural noise emissions can occur where single-family residences exist within agricultural zone districts. Therefore, where effects of agricultural noise upon residences located in these agricultural zones is a concern, an L_{dn} of 70 dBA will be considered acceptable outdoor exposure at a residence.

Source: Placer County General Plan, 2013.

Table 6-4
Maximum Allowable Noise Exposure for Transportation Noise Sources

Noise Sensitive Land Uses	Outdoor Activity Area[1]	Interior Spaces	
	L_{dn}, dB	L_{dn}/CNEL, dB	L_{eq}, dB[2]
Residential	60[3]	45	--
Transient Lodging	60[3]	45	--
Hospitals, Nursing Homes	60[3]	45	--
Theaters, Auditoriums, Music Halls	--	--	35
Churches, Meeting Halls	60[3]	--	40
Office Buildings	--	--	45
Schools, Libraries, Museums	--	--	45
Playgrounds, Neighborhood Parks	70	--	--

(Continued on next page)

Table 6-4
Maximum Allowable Noise Exposure for Transportation Noise Sources

Notes:
1 Where the location of outdoor activity areas is unknown, the exterior noise level standard shall be applied to the property line of the receiving land use.
2 As determined for a typical worst-case hour during periods of use.
3 Where it is not possible to reduce noise in outdoor activity areas to 60 dB L_{dn}/CNEL or less using a practical application of the best-available noise reduction measures, an exterior noise level of up to 65 dB L_{dn}/CNEL may be allowed provided that available exterior noise level reduction measures have been implemented and interior noise levels are in compliance with this table.

Source: Placer County General Plan, 2013.

Policy 9.A.9 Noise created by new transportation noise sources, including roadway improvement projects, shall be mitigated so as not to exceed the levels specified in Table 9-3 [see Table 6-4] or the performance standards in Table 9-3 [see Table 6-4] at outdoor activity areas or interior spaces of existing noise sensitive land uses.

Policy 9.A.11 The County shall require one or more of the following mitigation measures where existing noise levels significantly impact existing noise-sensitive land uses, or where the cumulative increase in noise levels resulting from new development significantly impacts noise-sensitive land uses:

a. Rerouting traffic onto streets that have available traffic capacity and that do not adjoin noise-sensitive land uses;
b. Lowering speed limits, if feasible and practical;
c. Programs to pay for noise mitigation such as low cost loans to owners of noise-impacted property or establishment of developer fees;
d. Acoustical treatment of buildings; or
e. Construction of noise barriers.

Policy 9.A.12 Where noise mitigation measures are required to achieve the standards of Tables 9-1 and 9-3 [see Table 6-3 and Table 6-4], the emphasis of such measure shall be placed upon site planning and project design. The use of noise barriers shall be considered as a means of achieving the noise standards only after all other practical design-related noise mitigation measures have been integrated into the project.

Placer County Code

The applicable regulations from the Placer County Code are presented below.

Placer County Noise Ordinance

Section 9.36.060 of the Placer County Code establishes non-transportation noise level standards for noise-sensitive receptors. The purpose of the Noise Ordinance is to implement the noise level

standards identified in the Placer County General Plan. The specific language of Section 9.36.060 is provided below:

A. It is unlawful for any person at any location to create any sound, or to allow the creation of any sound, on property owned, leased, occupied or otherwise controlled by such person that:

1. Causes the exterior sound levels when measured at the property line of any affected sensitive receptor to exceed the ambient sound level by five (5) dBA or

2. Exceeds the sound level standards as set forth in Table 1 [see Table 6-5 herein], whichever is the greater.

Table 6-5
Noise Level Standards for Non-Transportation Noise Sources

Sound Level Descriptor	Daytime (7 AM to 10 PM)	Nighttime (10 PM to 7 AM)
Hourly L_{eq}, dB	55	45
L_{max}, dB	70	65

Source*: *Placer County Noise Ordinance.

B. Each of the sound level standards specified in Table 1 (see Table 6-5) shall be reduced by five (5) dB for simple tone noises, consisting of speech and music. However, in no case shall the sound level standard be lower than the ambient sound level plus five (5) dB.

C. If the intruding sound source is continuous and cannot reasonably be discontinued or stopped for a time period whereby the ambient sound level can be measured, the sound level measured while the source is in operation shall be compared directly to the sound level standards of Table 1 [see Table 6-5].

Pursuant to Section 9.36.030 of the Placer County Code (Exemptions), sound or noise emanating from construction activities between the hours of 6:00 AM and 8:00 PM Monday through Friday, and between the hours of 8:00 AM and 8:00 PM Saturday and Sunday, is exempt from Section 9.36.060 of the Placer County Code Noise Ordinance, provided that all construction equipment is fitted with factory installed muffling devices and that all construction equipment is maintained in good working order. However, the hours of construction were modified in the Planning Commission revisions to the Placer County Board of Supervisors Minute Order 90-08 and, thus, the following standards are applicable to the proposed project:

Construction noise emanating from any construction activities for which a Grading or Building Permit is required is prohibited on Sundays and Federal Holidays, and shall only occur: a) Monday through Friday, 6:00 a.m. to 8:00 p.m. (during daylight savings) b) Monday through Friday, 7:00 a.m. to 8:00 p.m. (during standard time) c) Saturdays, 8:00 a.m. to 6:00 p.m.

In addition, temporary signs shall be located throughout the project, as determined by the Development Review Committee, at key intersections depicting the above construction hour limitations.

6.4 IMPACTS AND MITIGATION MEASURES

The following section describes the standards of significance and methodology used to analyze and determine the proposed project's potential impacts related to noise and vibration. In addition, a discussion of the project's impacts, as well as mitigation measures where necessary, is also presented.

Standards of Significance

Consistent with Appendix G of the CEQA Guidelines, and Placer County's Environmental Checklist, the effects of a project are evaluated to determine if they would result in a significant adverse impact on the environment. For the purposes of this EIR, an impact is considered significant if the proposed project would result in any of the following:

- 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;
- Generation of excessive groundborne vibration or groundborne noise levels; or
- 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.

The Initial Study prepared for the proposed project (see Appendix A) determined that development of the proposed project would result in no impact related to the following:

- 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.

For the reasons cited in the Initial Study, the potential impacts associated with the above are not analyzed further in this EIR.

Summary of Applicable Noise Standards

Applicable noise level standards from the Placer County General Plan and the Placer County Code are summarized below.

Stationary Noise Criteria

The project may not generate noise levels greater than 55 dBA L_{eq} during daytime hours (7:00 AM to 10:00 AM) and 45 dBA L_{eq} during nighttime hours (10:00 PM to 7:00 AM) at the property line of any affected sensitive receptor, or exceed the ambient sound level by five dBA, whichever is greater. Additionally, the County establishes maximum noise level standards of 70 dBA L_{max} and 65 dBA L_{max} during daytime and nighttime hours, respectively.

Construction Noise Criteria

Placer County does not have a specific threshold for evaluating noise increases due to short-term construction projects. As discussed above, pursuant to Section 9.36.030 of the Placer County Code, sound or noise emanating from construction activities is exempt from Section 9.36.060 of the Placer County Code Noise Ordinance, provided that construction occurs Monday through Friday, 6:00 AM to 8:00 PM during daylight savings, Monday through Friday, 7:00 AM to 8:00 PM

during standard time, or Saturdays, 8:00 AM to 6:00 PM, and that all construction equipment is fitted with factory-installed muffling devices and that all construction equipment is maintained in good working order. Construction on Sundays and Federal Holidays is prohibited. Nonetheless, for the purposes of the analysis included herein, a 5.0 dBA increase threshold was used for evaluating construction-related noise increases. A 5.0 dBA increase threshold is consistent with the Placer County Code (9.36.060), which limits noise increases to 5.0 dBA over ambient conditions; though as noted above, this section of the Code does not pertain to construction noise sources, but rather other non-construction stationary noise sources.

Transportation Noise

The Placer County General Plan Noise Element applies 60 dB L_{dn}/CNEL exterior and 45 dB L_{dn}/CNEL interior noise level standards for residential uses affected by transportation noise sources. The County may conditionally allow exterior noise levels between 60 and 65 dB L_{dn} for residential uses, provided that practical noise reduction measures have been implemented and interior noise levels remain in compliance with the 45 dB L_{dn} interior standard.

Substantial Increase Criteria

Generally, a project may have a significant effect on the environment if it will substantially increase the ambient noise levels for adjoining areas or expose people to measurably severe noise levels. In practice, a noise impact may be considered significant if it would generate noise that would conflict with local project criteria or ordinances, or substantially increase noise levels at noise sensitive land uses. The potential increase in transportation noise associated with the proposed project is a factor in determining significance.

Placer County, like many jurisdictions, does not have an adopted policy regarding significant increases in ambient traffic noise. A common practice in many jurisdictions is to use a 3.0 to 5.0 dB increase as a threshold of significance. However, a limitation of using a single noise level increase value to evaluate noise impacts is that it fails to account for pre-project noise conditions.

The following table was developed by the Federal Interagency Committee on Noise (FICON) as a means of developing thresholds for identifying project-related noise level increases. The rationale for the graduated scales is that test subject's reactions to increases in noise levels varied depending on the starting level of noise. Specifically, with lower ambient noise environments, such as those below 60 dB L_{dn}, a larger increase in noise levels was required to achieve a negative reaction than was necessary in environments where noise levels were already elevated. Therefore, because the County does not have defined thresholds for what would be considered a substantial increase in traffic noise levels, information from Table 6-6 is used. The approach to assessing the significance of increases in off-site traffic noise attributable to the proposed project is also consistent with other recent Placer County EIRs and the industry-standard approach in general.

Table 6-6
Significance of Changes in Cumulative Noise Exposure

Ambient Noise Level Without Project, dB	Increase Required for Significant Impact
<60	+5.0 dB or more
60-65	+3.0 dB or more
>65	+1.5 dB or more

Vibration

Placer County does not have specific policies or standards pertaining to vibration levels. However, vibration levels associated with construction activities and project operations are addressed as potential vibration impacts associated with project implementation. Human and structural response to different vibration levels is influenced by a number of factors, including ground type, distance between source and receptor, duration, and the number of perceived vibration events.

Construction operations have the potential to result in varying degrees of temporary ground vibration depending on the specific construction equipment used and operations involved. Table 6-7 indicates that per California Department of Transportation (Caltrans) standards, the threshold for architectural damage to structures is 0.2 peak particle velocity in inches per second (in/sec PPV) and continuous vibrations of 0.1 in/sec PPV, or greater, would likely cause annoyance to sensitive receptors.

Table 6-7
Effects of Vibration on People and Buildings

PPV		Human Reaction	Effect on Buildings
mm/sec	in/sec		
0.15 - 0.30	0.006 - 0.019	Threshold of perception; possibility of intrusion	Vibrations unlikely to cause damage of any type
2.0	0.08	Vibrations readily perceptible	Recommended upper level of the vibration to which ruins and ancient monuments should be subjected
2.5	0.10	Level at which continuous vibrations begin to annoy people	Virtually no risk of "architectural" damage to normal buildings
5.0	0.20	Vibrations annoying to people in buildings (this agrees with the levels established for people standing on bridges and subjected to relative short periods of vibrations)	Threshold at which there is a risk of "architectural" damage to normal dwelling - houses with plastered walls and ceilings. Special types of finish such as lining of walls, flexible ceiling treatment, etc., would minimize "architectural" damage
10 - 15	0.4 - 0.6	Vibrations considered unpleasant by people subjected to continuous vibrations and unacceptable to some people walking on bridges	Vibrations at a greater level than normally expected from traffic, but would cause "architectural" damage and possibly minor structural damage

Source: California Department of Transportation, 2002.

Method of Analysis

Below are descriptions of the methodologies used to measure background and ambient noise and estimate future traffic noise, construction noise, and vibration associated with the project. Further modeling details and calculations are provided in Appendix D to this EIR. The results of the noise and vibration impact analyses were compared to the standards of significance discussed above in order to determine the associated level of impact.

Larson Davis Laboratories (LDL) model 820 integrating sound level meters were used for the ambient noise level measurement survey. The meters were calibrated before and after use with a CAL 200 acoustical calibrator to ensure the accuracy of the measurements. The equipment used meets all pertinent specifications of the American National Standards Institute for Type 1

sound level meters (ANSI S1.4). The sound level meters were programmed to record the maximum, median, and average noise levels at each site during the survey.

To predict existing noise levels due to traffic, Saxelby Acoustics used the Federal Highway Administration Highway Traffic Noise Prediction Model (FHWA RD-77-108). The model is based upon the Calveno reference noise factors for automobiles, medium trucks and heavy trucks, with consideration given to vehicle volume, speed, roadway configuration, distance to the receiver, and the acoustical characteristics of the site. The FHWA model was used in conjunction with traffic volumes provided by LSC Transportation Consultants to analyze the potential impact of the proposed project and project-generated traffic under Existing Plus Project conditions and future Cumulative Plus Project conditions.

The FHWA Roadway Construction Noise Model (RCNM) was used to predict noise levels for standard construction equipment used for roadway improvement projects. The assessment of potential significant noise effects due to construction is based on the standards and procedures described in the Federal Transit Authority (FTA) guidance manual and FHWA's RCNM. The RCNM is a Windows-based noise prediction model that enables the prediction of construction noise levels for a variety of construction equipment based on a compilation of empirical data and the application of acoustical propagation formulas. The RCNM enables the calculation of construction noise levels in more detail than the manual methods, which eliminates the need to collect extensive amounts of project-specific input data. RCNM allows for the modeling of multiple pieces of construction equipment working either independently or simultaneously, the character of noise emission, and the usage factors for each piece of equipment. Noise sources in the RCNM database include actual noise levels and equipment usage percentages.

To predict noise levels from operational noise, Saxelby Acoustics used the SoundPLAN noise prediction model. Inputs to the model included loading docks, parking lot noise generation, event noise, and pickleball activity. These predictions are made in accordance with International Organization for Standardization (ISO) standard 9613-2:1996 (Acoustics – Attenuation of sound during propagation outdoors). ISO 9613 is the most commonly used method for calculating exterior noise propagation. The following data was applied in SoundPLAN to calculate operational noise levels.

- Loading Dock and Truck Circulation Noise – Saxelby Acoustics assumed activities during the peak hour of loading dock activities included truck arrival/departures, truck idling, truck backing, and air brake release. To determine typical noise levels associated with the proposed loading docks, noise level measurement data from a Wal-Mart loading dock was utilized. This data is conservative considering that the Walmart loading dock supports a much larger facility than the proposed project. As such, the noise analysis completed for the loading dock noise is considered a worst-case scenario.

  The noise level measurements were conducted at a distance of 100 feet from the center of the two-bay loading dock and circulation area. The noise analysis assumed that the proposed loading docks would operate at a high level of activity only during daytime hours (7:00 AM to 10:00 PM). Based upon noise measurements conducted of the truck operations, a busy hour generated an average noise level of 61 dBA L_{eq} at a distance of 100 feet from the center of the loading dock truck maneuvering lanes.

- Parking Lot Circulation – Saxelby Acoustics assumed a peak hour movement of 41 vehicles on site, based on the trip generation data provided by LSC Transportation

Consultants. Based upon noise measurements conducted of vehicle movements in parking lots, the sound exposure level (SEL) for a single passenger vehicle is 71 dBA at a distance of 50 feet.

- Event Space – Saxelby Acoustics assumed 100 people vocalizing at "conversational" level during the daytime hours of 7:00 AM to 10:00 PM. Saxelby Acoustics assumed 100 people vocalizing at "conversational" level would produce a noise level of 60 dBA L_{eq} at 6 feet.

- Pickleball – Saxelby Acoustics assumed that the pickleball courts would be used during daytime (7:00 AM to 10:00 PM) hour. The pickleball court is anticipated to produce noise levels of approximately 58 dBA L_{eq} at 25 feet from the edge of the court. It should be noted that, although the pickleball courts are an existing use and would not be modified as part of the proposed project, the courts were not in use during the ambient noise level measurements. Therefore, data collected by Saxelby Acoustics from similar operations was used in the analysis.

Project-Specific Impacts and Mitigation Measures

The following discussion of impacts is based on implementation of the proposed project in comparison with the baseline and standards of significance identified above.

6-1 Generation of a substantial temporary 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. Based on the analysis below and with implementation of mitigation, the impact is *less than significant.*

Construction activities associated with the proposed project, including off-site improvements, would require the use of numerous pieces of noise-generating equipment, such as excavating machinery (e.g., backhoes, bulldozers, excavators, front loaders) and other construction equipment (e.g., compactors, scrapers, graders). Construction worker traffic and construction-related material haul trips would raise ambient noise levels along local haul routes, depending on the number of haul trips made and types of vehicles used.

The noise levels generated by construction equipment would vary greatly depending upon factors such as the type and specific model of the equipment, the operation being performed, the condition of the equipment and the prevailing wind direction. As shown in Table 6-8, maximum noise levels generated by various types of construction equipment used during project construction would range from 77 to 90 dBA L_{max} at 50 feet, and the hourly average noise levels during construction would range from 75 dBA L_{eq} during architectural coating, to 87 dBA L_{eq} during demolition and construction of the off-site sewer line. In addition, Figure 6-2 shows the predicted construction noise contours based on the data presented in Table 6-8.

Figure 6-2
Project Construction Noise Level Contours (dBA L_{eq})

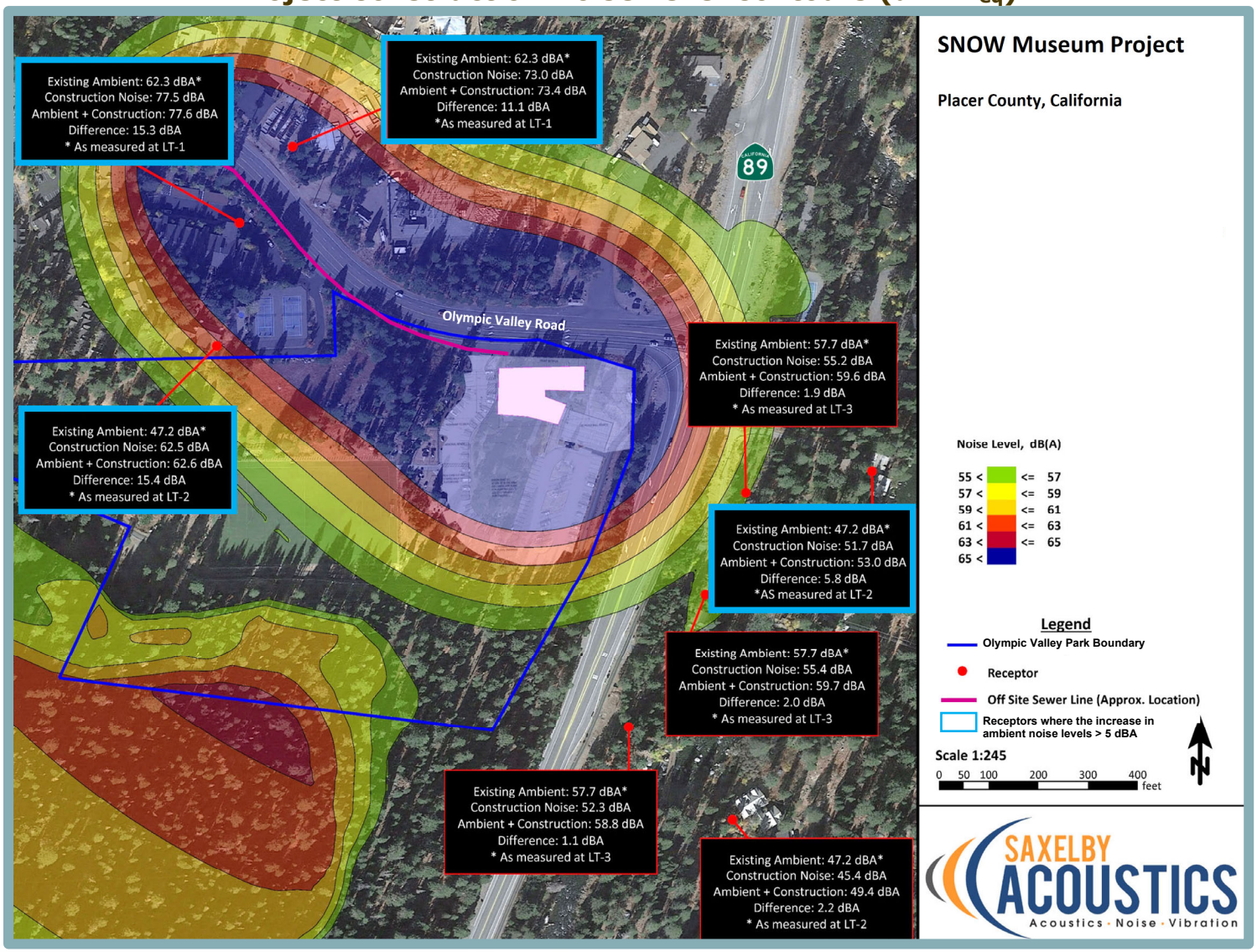


Table 6-8
Typical Construction Equipment Noise

Equipment	Quantity	Usage (%)	Maximum (L_{max}) dBA at 50 feet	Hourly Average (L_{eq}) dBA at 50 feet
Demolition/Off-Site Sewer				
Concrete Saw	1	20	90	83
Dozer	1	40	82	78
Tractor/Loader/ Backhoe	2	40	84	83
			Total:	**87**
Site Preparation				
Grader	1	40	85	81
Tractor/Loader/ Backhoe	1	40	84	80
			Total:	**84**
Grading				
Grader	1	40	85	81
Dozer	1	40	82	78
Tractor/Loader/ Backhoe	1	40	84	80
			Total:	**85**
Building Construction				
Crane	1	16	81	73
Fork Lift	2	40	83	82
Tractor/Loader/ Backhoe	2	40	84	83
			Total:	**86**
Paving				
Concrete Mixer Truck	4	40	79	81
Paver	1	50	77	74
Roller	1	20	80	73
Tractor/Loader/ Backhoe	1	40	84	80
			Total:	**84**
Architectural Coating				
Air Compressor	1	40	79	75
			Total:	**75**

Source: Saxelby Acoustics, 2022.

Based on Figure 6-2, the proposed project is predicted to generate construction noise levels ranging between 45.4 to 77.5 dBA L_{eq} at the nearest noise-sensitive receptors. Average daytime (L_{eq}) ambient noise levels were found to be between approximately 47.2 to 62.3 dBA L_{eq} in the vicinity of the noise sensitive receptors. Therefore, the proposed project construction could result in periods of typical construction noise of up to 15.3 dBA higher than ambient noise in the project area.

The Placer County Code limits hours of construction activities when construction is located 500 feet or closer to a residential zone. Construction is limited to between the hours of

6:00 AM and 8:00 PM Monday through Friday, and between the hours of 8:00 AM and 8:00 PM Saturday. Construction on Sundays and Federal Holidays is prohibited.

Construction activities could result in periods of noise which exceed existing noise levels by up to 15 dBA, which exceeds the five dBA increase criteria recommended for the evaluation of short-term noise increases due to construction activity. The nearest receptor locations where construction activities are expected to result in a temporary increase in ambient noise levels in excess of five dBA are identified in Figure 6-2.

Although construction activities are temporary in nature and would occur during normal daytime working hours, construction-related noise including off-site sewer improvements, could result in disturbance to existing noise-sensitive land uses in the project vicinity. Therefore, impacts resulting from noise levels temporarily exceeding the threshold of significance due to construction could be considered ***significant***.

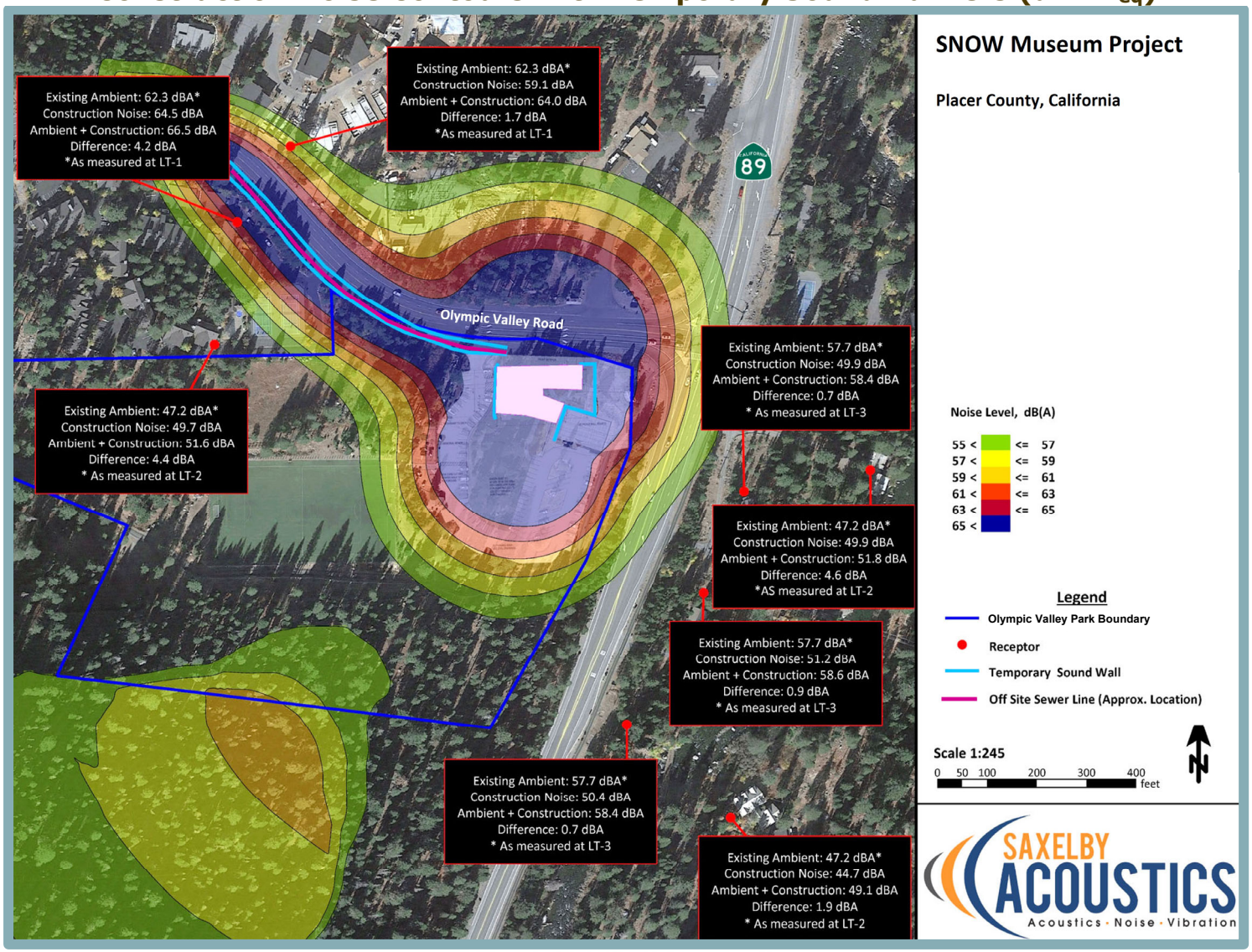
Mitigation Measure(s)

Additional noise control measures would be required to limit the noise increase during construction to five dBA, or less. In order to reduce construction noise levels, evaluation of the use of temporary noise barriers was modeled. The results of the construction noise analysis are shown graphically on Figure 6-3. The Figure 6-3 data indicate that use of temporary noise barriers would limit construction noise increases to less than five dBA at sensitive receptors located around the project site. As a result, implementation of the following mitigation measure would reduce the above potential impact to a *less-than-significant* level.

6-1 *Prior to issuance of a grading permit, the project applicant shall prepare a construction noise management plan that identifies measures to be taken to minimize construction noise on surrounding sensitive land uses and include specific noise management measures to be included within the project plans and specifications, subject to review and approval by the Placer County Community Development Resource Agency. The project applicant shall demonstrate, to the satisfaction of the County that the project complies with the following:*

- *Noise-generating construction activities (e.g., construction, alteration, or repair activities), including truck traffic coming to and from the project site for any purpose, shall be limited to the hours outlined in Placer County Board of Supervisors Minute Order 90-08; specifically, a) Monday through Friday, 6:00 AM to 8:00 PM (during daylight savings); b) Monday through Friday, 7:00 AM to 8:00 PM (during standard time); and c) Saturdays, 8:00 AM to 6:00 PM.*
- *All heavy construction equipment used on the proposed project shall be maintained in good operating condition, with all internal combustion, engine-driven equipment fitted with intake and exhaust mufflers that are in good condition.*
- *All mobile or fixed noise producing equipment used on the proposed project that is regulated for noise output by a local, state, or federal agency shall comply with such regulations while in the source of project activity.*

Figure 6-3
Construction Noise Contours with Temporary Sound Barriers (dBA L_{eq})



- *Where feasible, electrically-powered equipment shall be used instead of pneumatic or internal combustion powered equipment.*
- *All stationary noise-generating equipment shall be located as far away as possible from neighboring property lines.*
- *Signs prohibiting unnecessary idling of internal combustion engines shall be posted.*
- *The use of noise-producing signals, including horns, whistles, alarms and bells shall be for safety warning purposes only.*
- *The proposed project shall incorporate the use of eight-foot-tall temporary sound barriers along the west and east boundaries of the construction site. The approximate locations of the sound walls are shown on Figure 6-3. The sound barrier fencing shall consist of 0.5-inch plywood or minimum STC 27 sound curtains placed to shield nearby sensitive receptors. The plywood barrier shall be free from gaps, openings, or penetrations to ensure maximum performance.*
- *The proposed project shall incorporate the use of six-foot-tall temporary sound barriers along the north and south sides of the off-site sewer improvement route. The approximate locations of the temporary construction sound walls are shown on Figure 6-3. The sound barrier fencing shall consist of 0.5-inch plywood or minimum STC 27 sound curtains placed to shield nearby sensitive receptors. The plywood barrier shall be free from gaps, openings, or penetrations to ensure maximum performance. The temporary sound walls along the off-site sewer pipe alignment shall be removed within 24 hours of completing the sewer pipe improvement.*

6-2 Generation of a substantial 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. Based on the analysis below, the impact is *less than significant.*

The primary sources of noise associated with the proposed project would be traffic noise associated with traffic on local roadways, as well as operational noise associated with the loading dock and truck circulation, parking lot circulation, and event space.

Traffic Noise

Using the methodology described above in the Method of Analysis section, traffic noise levels under Existing and Existing Plus Project conditions were estimated as part of the Environmental Noise and Vibration Assessment and are shown in Table 6-9. Traffic noise levels were predicted at the sensitive receptors located at the closest typical setback distance along each project-area roadway segment. Predicted traffic noise levels were then compared to the FICON noise level increase significance criteria presented in Table 6-6.

Table 6-9
Project-Related Traffic Noise Level Increases

Roadway	Segment	Predicted Exterior Noise Level at Closest Sensitive Receptors (dBA L_{dn})		
		Existing No Project	Existing + Project	Change
SR 89	North of Squaw Valley	57.2	57.2	0.0
SR 89	South of Squaw Valley	58.2	58.2	0.0

Source: Saxelby Acoustics, 2022.

As shown in Table 6-9, the proposed project would not result in an increase in traffic noise levels under Existing Plus Project conditions at the closest sensitive receptors. Therefore, the increase in traffic noise levels at existing sensitive receptors due to the proposed project would be considered less than significant.

Operational Noise

As discussed above, operational noise associated with the proposed project would include noise generated from the loading dock and delivery truck circulation, parking lot circulation, and from 100 people vocalizing at "conversational" level within the proposed event space. In addition, existing noise from the pickleball court located directly east of the project site would contribute to the noise environment of the project area.

Using the methodology described in the Method of Analysis section, operational noise levels generated by the proposed project were estimated by Saxelby Acoustics, and are shown in Figure 6-4 and Figure 6-5. As presented therein, daytime noise levels at the nearest sensitive receptors to the east of the project site, including the contribution of noise generated from project operations, would be 40 and 42 dBA L_{eq}.

In addition, day/night average noise levels, including noise generated from project operations, at the nearest sensitive receptors would be 39 and 41 dBA $L_{dn.}$ It should be noted that the Tavern Inn Condominiums are located approximately 600 feet from the project site.

However, given that the outdoor activity areas of the Condominiums would be located further from the project site than the nearest sensitive receptors, noise levels at the Tavern Inn Condominiums are anticipated to be below the noise levels presented above. As a result, the proposed project is predicted to comply with the County's daytime 55 dBA L_{eq}, and non-transportation day/night average 45 dBA L_{dn} noise level standards. Therefore, the increase in noise levels at existing sensitive receptors due to operations of the proposed project would be considered less than significant.

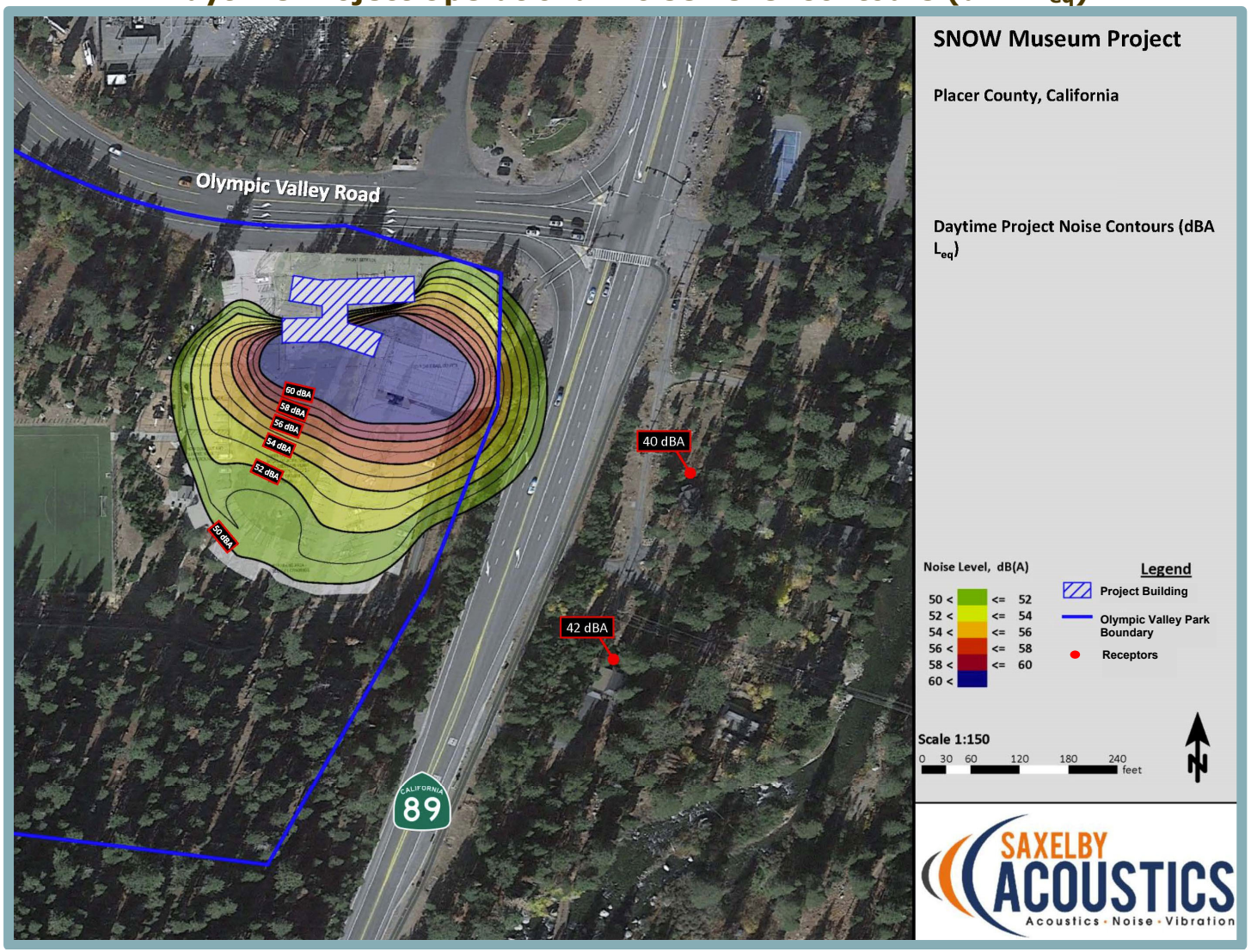
Conclusion

Based on the above, the proposed project would not result in the generation of a substantial 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. Therefore, a ***less-than-significant*** impact would occur.

Mitigation Measure(s)

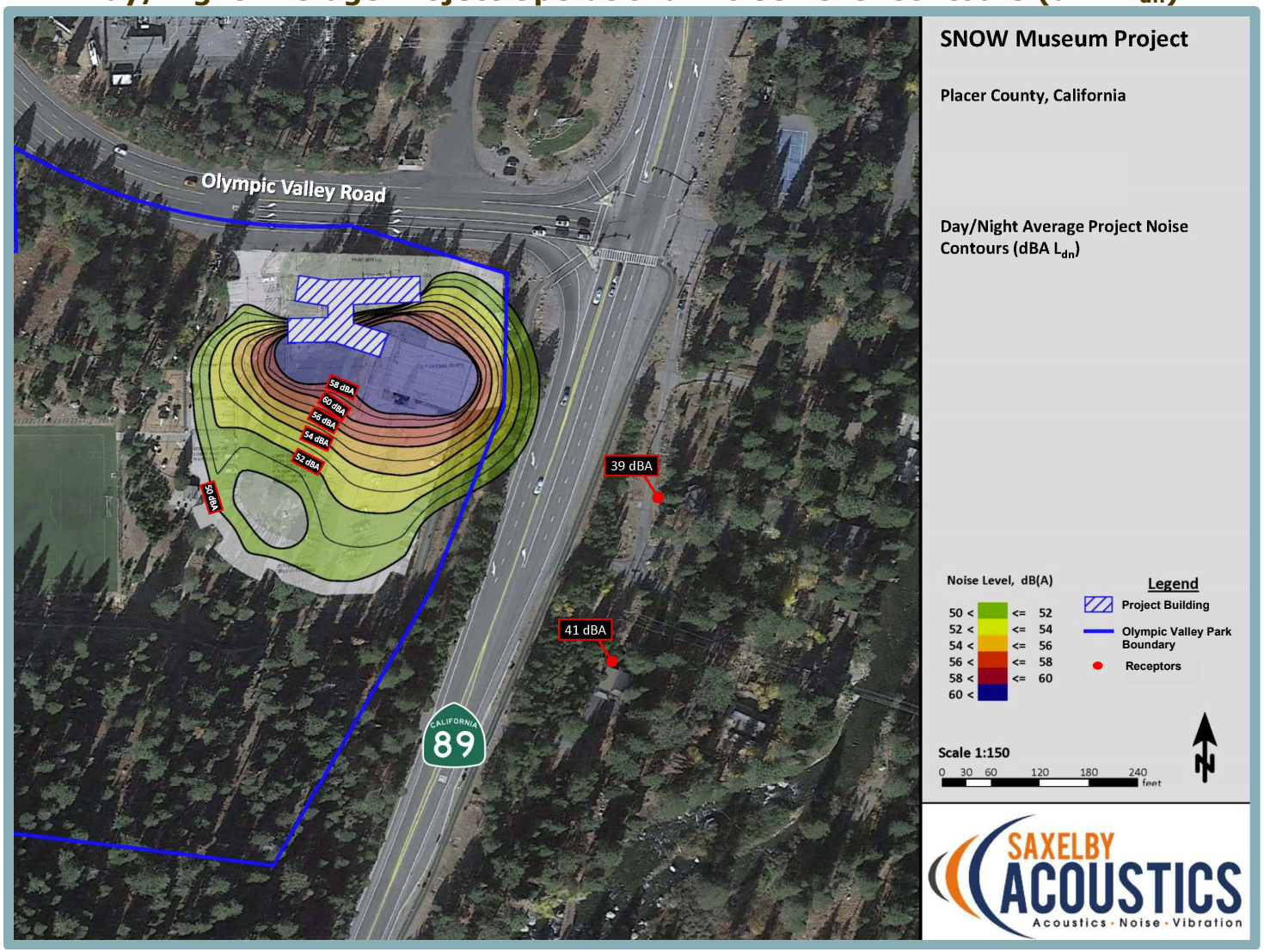
None required.

Figure 6-4
Daytime Project Operational Noise Level Contours (dBA L_{eq})



Source: Saxelby Acoustics, 2022.

Figure 6-5
Day/Night Average Project Operational Noise Level Contours (dBA L_{dn})



Source: Saxelby Acoustics, 2022.

6-3 Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels. Based on the analysis below, the impact is *less than significant*.

Construction activity associated with the proposed project would have the potential to result in varying degrees of temporary ground vibration depending on the specific construction equipment used and operations involved. Project construction would use typical construction equipment and would not require significant sources of vibration such as pile driving or blasting. Table 6-10 below shows the typical vibration levels produced by construction equipment.

Table 6-10
Vibration Levels for Various Construction Equipment

Type of Equipment	PPV at 25 feet (in/sec)	PPV at 50 feet (in/sec)	PPV at 100 feet (in/sec)
Large Bulldozer	0.089	0.029	0.011
Loaded Trucks	0.076	0.025	0.010
Small Bulldozer	0.003	0.000	0.000
Auger/drill Rigs	0.089	0.029	0.011
Jackhammer	0.035	0.011	0.004
Vibratory Hammer	0.070	0.023	0.009
Vibratory Compactor/roller	0.210	0.070	0.026

Source: Federal Transit Administration, Transit Noise and Vibration Impact Assessment Guidelines, May 2006.

As shown in Table 6-10, construction vibration levels anticipated for the proposed project are less than the 0.2 in/sec PPV threshold of damage to buildings and less than the 0.1 in/sec threshold of annoyance criteria at distances of 100 feet. On-site construction activities would occur at a distance of 550 feet or greater from the nearest existing residences. In addition, the Tower of Nations structure and SR 89 are located more than 100 feet from the areas of the site where construction activities would occur. Therefore, construction vibrations are not expected to cause any damage to existing structures or cause annoyance to sensitive receptors.

Based on the construction equipment to be used and the distance from construction activities to the nearest structures, vibration from the project would not be a concern. Additionally, construction activities would be temporary in nature. Therefore, the proposed project would not result in the generation of excessive groundborne vibration or groundborne noise levels, and a ***less-than-significant*** impact would occur.

Mitigation Measure(s)

None required.

Cumulative Impacts and Mitigation Measures

As defined in Section 15355 of the CEQA Guidelines, “cumulative impacts” refers to two or more individual effects which, when considered together, are considerable, compound, or increase other environmental impacts. The individual effects may be changes resulting from a single project or a number of separate projects. The cumulative impact from several projects is the

change in the environment that results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects.

For further detail related to the cumulative setting of the proposed project, refer to Chapter 9, Statutorily Required Sections of this EIR.

6-4 Generation of a substantial permanent increase in ambient noise levels associated with development of the proposed project in combination with future development. Based on the analysis below, the project's incremental contribution to this significant cumulative impact is *less than cumulatively considerable*.

Future development projects within the project area, including the proposed project, would incrementally affect the future cumulative ambient noise environment. To assess noise impacts due to project-related traffic increases on the existing local roadway network, noise levels have been calculated for the Cumulative Plus Project Condition at the existing sensitive receptors located along area roadways.

The predicted noise level estimates at the nearest existing sensitive receptors for Cumulative No Project and Cumulative Plus Project conditions are presented in Table 6-11. As shown in the table, the proposed project would not result in an increase in traffic noise levels under Cumulative Plus Project conditions and, as a result, an impact related to cumulative traffic noise would not occur.

Conceptual planning for future improvements to Olympic Valley Park include the potential development of the following recreational amenities: an additional pickleball court, a basketball halfcourt; horseshoe pits; a running track around the existing field; a picnic pavilion, and a bocci ball court. Such facilities would contribute to the cumulative noise environment during the Cumulative Plus Project Conditions. However, traffic noise generated by the future improvements to Olympic Valley Park have been included in the cumulative noise analysis presented herein. In addition, the potential future facilities are not expected to generate substantial noise levels during operations beyond the current noise levels generated by the existing Olympic Valley Park facilities.

Table 6-11
Cumulative Traffic Noise Level Increases

Roadway	Segment	Predicted Exterior Noise Level at Closest Sensitive Receptors (dBA L_{dn})		
		Cumulative No Project	Cumulative + Project	Change
SR 89	North of Squaw Valley	59.4	59.4	0.0
SR 89	South of Squaw Valley	60.2	60.2	0.0

Source: Saxelby Acoustics, 2022.

Based on the above, the proposed project would not result in a substantial 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. The project's incremental contribution to cumulative noise impacts would be ***less than cumulatively considerable***.

Mitigation Measure(s)

None required.

7. TRANSPORTATION

7. TRANSPORTATION

7.1 INTRODUCTION

The Transportation chapter of the EIR discusses the existing transportation facilities within the project vicinity, as well as applicable policies and guidelines used to evaluate operation of such facilities. Where development of the proposed project would conflict with applicable policies or guidelines, mitigation measures are identified. The information contained within this chapter is primarily based on the Transportation Impact Analysis (TIA), Squaw SNOW Museum Technical Memorandum (Trip Generation Memorandum), and Vehicle Miles Traveled Memorandum (VMT Memorandum) prepared for the proposed project by LSC Transportation Consultants, Inc. (see Appendices E, F, and G of this EIR).[1,2,3] Other sources of information used in this chapter include the Placer County General Plan and associated Placer County General Plan EIR,[4,5] as well as the Squaw Valley General Plan and Land Use Ordinance.[6]

Currently, the California Environmental Quality Act (CEQA) Guidelines require lead agencies such as Placer County to transition from using "level of service" (LOS) to "Vehicle Miles Traveled" (VMT) as the metric for assessing transportation impacts under CEQA (see Section 15064.3). The State's requirement to transition from LOS to VMT is aimed at promoting infill development, public health through active transportation, and a reduction in greenhouse gas (GHG) emissions. Pursuant to the CEQA Guidelines, any project that did not initiate CEQA public review prior to July 1, 2020 must use VMT rather than LOS as the metric to analyze transportation impacts. LOS will still be used by the County for purposes of determining consistency with general plan and community plan goals and policies but is no longer used for determining significant impacts under CEQA.

Consistent with the County of Placer Transportation Study Guidelines (November 2020), both a VMT analysis and TIA were prepared for the proposed project. Pursuant to CEQA Guidelines Section 15064.3, impact significance in this chapter is based upon VMT, whereas the results of the TIA are used to address consistency with Placer County General Plan goals and policies related to transportation, including adopted LOS policies.

7.2 EXISTING ENVIRONMENTAL SETTING

The section below describes the physical and operational characteristics of the existing transportation system within the study area, including the surrounding roadway network, transit, bicycle and pedestrian facilities.

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1 LSC Transportation Consultants, Inc. *Squaw Valley Olympic Museum Transportation Impact Analysis*. February 21, 2020.
2 LSC Transportation Consultants, Inc. *Memorandum: Squaw S.N.O.W. Museum – Trip Generation, Level of Service and Roadway Capacity*. January 29, 2021.
3 LSC Transportation Consultants, Inc. *Memorandum: Squaw S.N.O.W. Museum – Vehicle Miles Traveled*. March 16, 2021.
4 Placer County. *Countywide General Plan Policy Document.* August 1994 (Updated May 2013).
5 Placer County. *Countywide General Plan EIR*. July 1994.
6 Placer County. *1983 Squaw Valley General Plan and Land Use Ordinance*. October 6, 1983.

Study Intersections and Roadway Segments

The following section provides a list of the study intersections and roadway segments within the project area. The existing and future study intersections and roadways were identified based on the proposed project and conversations with Placer County's Public Works Department.[7] The study intersections are listed below, and depicted in Figure 7-1:

1. State Route (SR) 89/Olympic Valley Road;
2. Olympic Valley Road/Site Driveway (site access intersection); and
3. Olympic Valley Road/7-Eleven Driveway (analyzed for queuing only).

The study roadway segments are listed below:

1. SR 89, north of Olympic Valley Road; and
2. SR 89, south of Olympic Valley Road.

SR 89

SR 89 is a two-lane roadway under the jurisdiction of the California Department of Transportation (Caltrans) that connects the Town of Truckee and the Interstate 80 (I-80) corridor to the north with the unincorporated communities of Olympic Valley/Alpine Meadows and Tahoe City to the south. Traffic volumes along SR 89 exhibit strong seasonal variation, with congestion occurring during winter peak demand periods when adverse weather and ski area activity create higher volumes of traffic. Caltrans reports that the peak month average daily traffic (ADT) on SR 89 in the project vicinity is 15,000 vehicles per day to the north of the SR 89/Olympic Valley Road intersection and 13,300 vehicles per day to the south of Olympic Valley Road. The posted speed limit along SR 89 north of the road's intersection with Olympic Valley Road is 55 miles per hour (mph). The posted speed limit is reduced to 45 mph immediately south of the SR 89/Olympic Valley Road intersection.

Olympic Valley Road

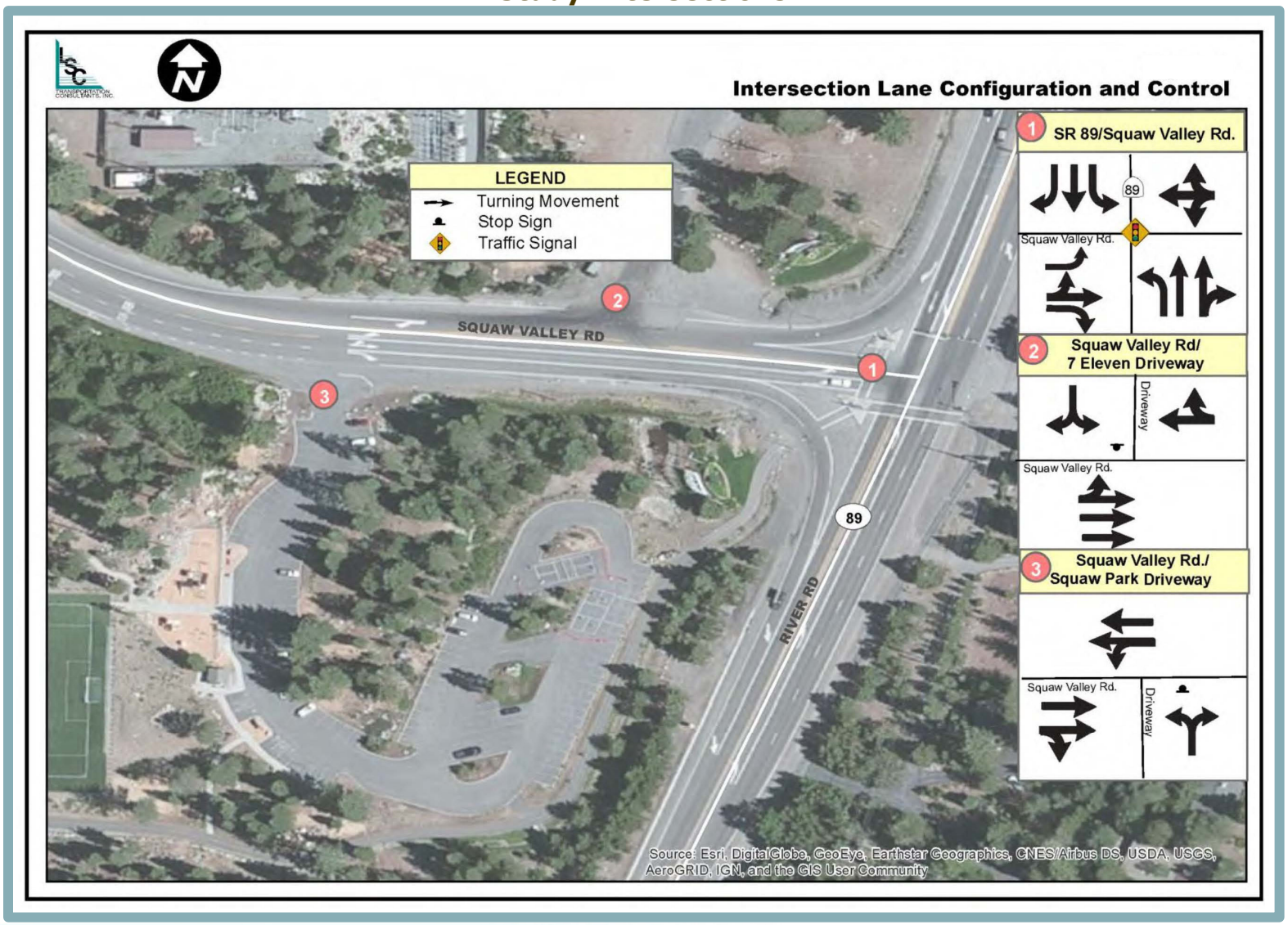
Olympic Valley Road is an arterial roadway connecting SR 89 to the east to the Palisades Tahoe ski resort and associated residential, commercial, and resort areas to the west. Within the project vicinity, Olympic Valley Road provides two westbound travel lanes and two eastbound travel lanes. From Squaw Creek Road to Palisades Tahoe, the roadway is a two-lane roadway, with various segments also providing a center turning lane. The posted speed limit along Olympic Valley Road is 35 mph. Intersections with residential streets along the roadway are controlled by stop signs on the side-street approaches. A traffic management program conducted by Palisades Tahoe is in place on peak days of winter traffic.

Existing Driver Sight Distance

A designated left-turn lane is not provided on Olympic Valley Road for vehicles entering the project site. The intersection sight distance for drivers in the westbound travel lane on Olympic Valley Road making a left turn into the site is approximately 425 feet, due to the existing trees along the north side of the roadway and the road's horizontal curvature.

[7] It should be noted that Olympic Valley Road was previously named Squaw Valley Road at the time of the TIA's preparation. However, the Placer County Board of Supervisors voted on February 22, 2022 to rename the three County-maintained roads that contained the word "Squaw." For the purposes of this EIR chapter, the road is referred to as its current name, Olympic Valley Road. The two other renamed County roads are Shirley Canyon Road and Marmot Way, which were previously Squaw Peak Road and Squaw Peak Way, respectively. In addition, references in the TIA to the "Squaw Valley" area are updated in this chapter to refer to the area as "Olympic Valley."

Figure 7-1
Study Intersections



Existing Conditions

Due to fluctuations in traffic volumes caused by seasonal peak periods associated with Palisades Tahoe ski resort and commercial and resort areas west of SR 89, LSC Transportation Consultants determined existing traffic volumes at study intersections and roadway segments for the following scenarios, which are summarized in Table 7-1 and Table 7-2, respectively, and shown in Figure 7-2:

- Winter Sunday PM Peak Hour;
- Summer Friday PM Peak Hour; and
- Summer Weekend Mid-Day Peak Hour.

Table 7-1
Existing Peak Hour Traffic Volumes at Study Intersections

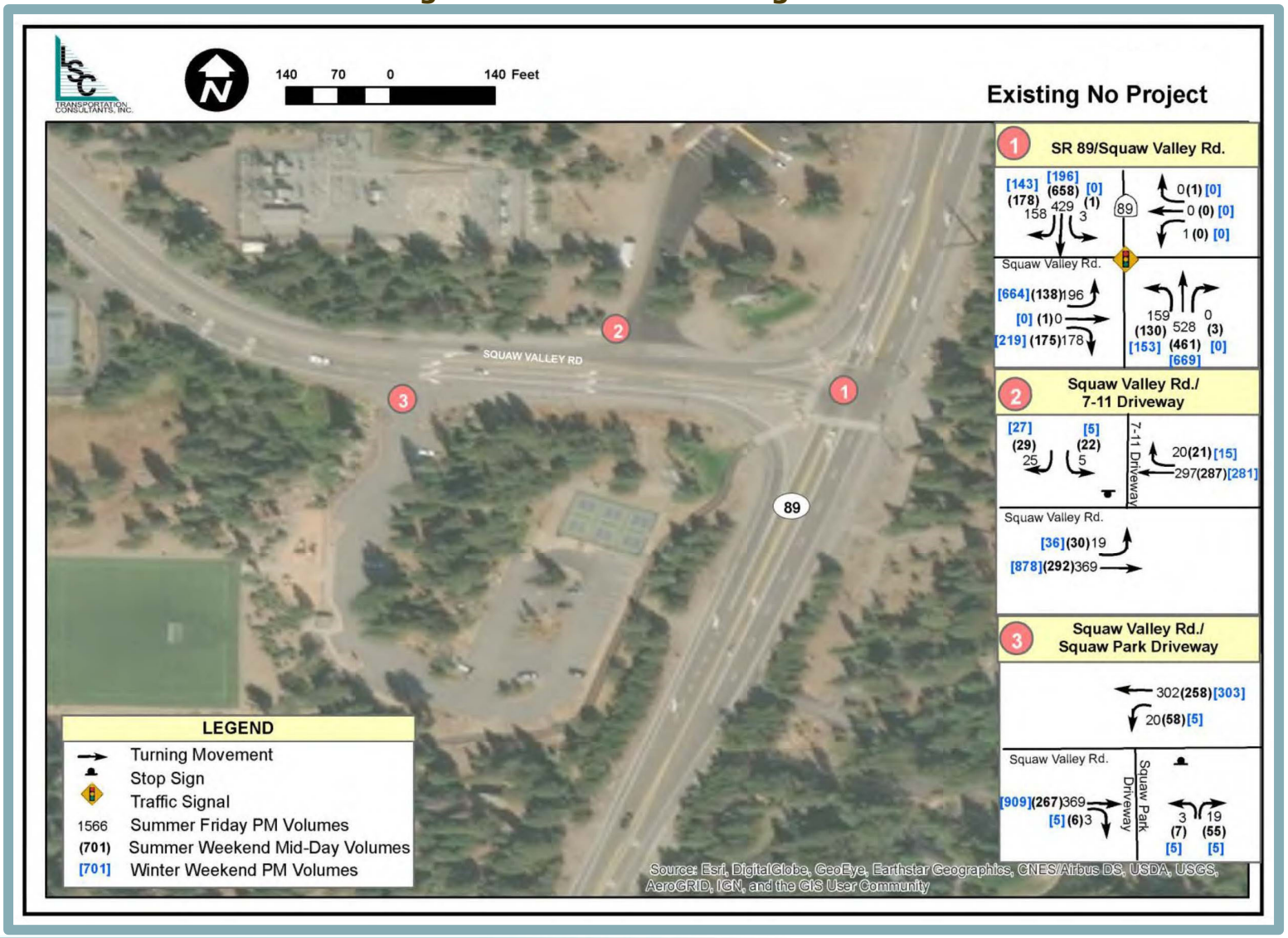
Intersection	Traffic Volume
Winter Sunday PM Peak Hour	
SR 89/Olympic Valley Road	2,044
Olympic Valley Road/Site Driveway	1,232
Summer Friday PM Peak Hour	
SR 89/Olympic Valley Road	1,652
Olympic Valley Road/Site Driveway	716
Summer Weekend Mid-Day Peak Hour	
SR 89/Olympic Valley Road	1,746
Olympic Valley Road/Site Driveway	651
Source: LSC Transportation Consultants, Inc., 2020.	

Table 7-2
Existing Peak Hour Traffic Volumes along Study Road Segments

Roadway	Traffic Volume
Winter Sunday PM Peak Hour	
SR 89, North of Olympic Valley Road	1,702
SR 89, South of Olympic Valley Road	1,267
Summer Friday PM Peak Hour	
SR 89, North of Olympic Valley Road	1,314
SR 89, South of Olympic Valley Road	1,295
Summer Weekend Mid-Day Peak Hour	
SR 89, North of Olympic Valley Road	1,437
SR 89, South of Olympic Valley Road	1,427
Source: LSC Transportation Consultants, Inc., 2021.	

The winter peak hour is defined as the 30th-highest hour of travel demand during the ski season. The 30th-highest winter hour generally corresponds to busy (but not the busiest) weekend days during ski season during the hours that ski areas are opening and closing, respectively, and skiers arriving and departing ski areas mix with local and inter-regional traffic. A review of Caltrans hourly traffic count data along SR 89 at a point between Olympic Valley Road and Pole Creek to the north on Fridays, Saturdays, and Sundays in July 2019 indicated that the summer peak-hour traffic volumes on SR 89 are highest on weekends. Sundays have the highest total two-way volume; however, the peak-hour volumes on Friday, Saturday, and Sunday are within three percent of each other. The Friday PM peak hour typically occurs from 3:00 PM to 4:00 PM. The peak hour on Saturday and Sunday typically occurs from 11:00 AM to 12:00 PM.

Figure 7-2
Existing Traffic Volumes During Peak Hours



Vehicle Miles Traveled

Pursuant to CEQA Guidelines Section 15064.3, VMT is the primary metric used to identify transportation impacts under CEQA. VMT is a metric that accounts for the number of vehicle trips generated and the length or distance of those trips. VMT does not directly measure traffic operations; instead, VMT is a measure of transportation network use and efficiency, especially when expressed as a function of population (i.e., VMT per capita).

VMT tends to increase as land use density decreases and travel becomes more reliant on the use of single-passenger vehicles. Subsequent to the passage of Senate Bill (SB) 743, which updated the CEQA Guidelines to include new transportation metrics, Placer County published the County of Placer Transportation Study Guidelines (Transportation Study Guidelines) in November 2020, which are discussed further in the Regulatory Context section of this chapter. Pursuant to the Transportation Study Guidelines, the average vehicle trip length in Eastern Placer County is 12.95 miles, which represents a longer average trip length relative to the more urbanized areas of Western Placer County. In general, trip lengths are longer in Eastern Placer County, because the existing land uses and recreational opportunities draw visitors from greater distances. Additionally, many local employees commute to the region from other areas with lower housing costs.

Excluding the Tahoe Basin, the unincorporated portions of the County generate approximately 5.6 million VMT on a typical weekday, according to the Sacramento Area Council of Governments (SACOG) travel forecasting model. In comparison, the SACOG region generates approximately 123 million VMT per day. For the greater Tahoe region, the Tahoe Regional Planning Agency (TRPA) has compilated recent data from the Federal Highway Administration (FHWA) Highway Performance Monitoring System (HPMS). In addition, according to Caltrans, the roads within the California area of the Tahoe Regional Planning Agency (TRPA) boundaries, which includes the portions of Placer and El Dorado counties near Lake Tahoe, had an estimated daily VMT of 937,268 in 2019[8].

Pedestrian, Bicycle, and Transit Facilities

The sections below describe the existing pedestrian, bicycle, and transit facilities located within the vicinity of the project site.

Pedestrian and Bicycle Facilities

The Placer County Regional Bikeway Plan provides information regarding the regional system of bikeways for transportation and recreation purposes. The regional bikeway plan was approved by the Placer County Transportation Planning Agency (PCTPA) Board in 2018 and subsequently adopted by the Placer County Board of Supervisors. The Placer County Regional Bikeway Plan includes the following system classifications:

- Class I Bikeway (Bike Path) provides a completely separated facility designed for the exclusive use of cycles and pedestrians.
- Class II Bikeway (Bike Lane) provides on-road striped lanes with signs and pavement markings and legends with restricted travel to motor vehicles and pedestrians. Through travel by motor vehicles or pedestrians is prohibited, but crossflows by pedestrians and motorists is permitted.

[8] California Department of Transportation. *California Public Road Data 2019* [Table 9]. December 2020.

- Class III Bikeway (Bike Route) provides on-street routes designated by signs or permanent markings and shared with pedestrians and motorists.
- Class IV Bikeway (Separated Bikeway) is a bikeway for the exclusive use of bicycles similar to a Class II facility, but includes a separation between the bike facility and through vehicular traffic. Separation facilities may include flexible posts, inflexible physical barriers or on-street parking. Class IV facilities also allow for two-way bicycle traffic.

The Tahoe City Public Utility District's Class I Truckee River Trail is located parallel to the east of SR 89, between Tahoe City and Olympic Valley Road. At the SR 89/Olympic Valley Road intersection, the trail crosses Olympic Valley Road at grade by way of a crosswalk on the intersection's south leg. After proceeding south along the project site's eastern boundary, the trail extends westward, along the project site's southern boundary, and continues westward towards the Olympic Valley Fire Department (OVFD). From Squaw Creek Road to The Village at Palisades Tahoe parking lot, the trail proceeds through the Olympic Valley area, parallel to the south of Olympic Valley Road. The trail consists of a paved Class I facility that accommodates both bicyclists and pedestrians. This effort is known as the Truckee River Recreational Access Plan.

Additionally, a portion of Olympic Valley Road between SR 89 and Squaw Creek Road, including along the project frontage, is striped as a Class II facility. Currently, a Class II bicycle lane is also located along the SR 89 corridor, between Olympic Valley and Truckee. Placer County is actively pursuing construction of a Class I facility along the latter corridor.

Public Transit System and Private Transit Services

Public transit stops are currently provided on both sides of Olympic Valley Road, adjacent to the project site. The bus stop on the north side of the road provides a shelter and a bus pullout. The following publicly operated or funded transit programs serve the Olympic Valley/Alpine Meadows area:

- Tahoe Truckee Area Regional Transit (TART) is operated by the Placer County Department of Public Works and serves bus stops along SR 89, including along Olympic Valley Road and at The Village at Palisades Tahoe. The bus stops are located on TART's SR 89 route, which runs between Tahoe City and Truckee. The SR 89 route is operated in both directions, each hour, from 6:00 AM to 7:00 PM. TART services are free to passengers.
- The Truckee North Tahoe Transportation Management Association (TNT/TMA) operates the "Night Rider" shuttle, which provides hourly evening service from TART stops to the Olympic Valley and Tahoe City areas, as late as 2:00 AM during the summer and winter seasons.

Additionally, the following private transit services are provided in the project vicinity:

- Palisades Tahoe operates a shuttle service that runs every 20 minutes during periods of ski lift operations between the base areas of Palisades Tahoe and Palisades Tahoe at Alpine Meadows.
- The Resort at Squaw Creek operates a shuttle service between the ski resort and The Village at Palisades Tahoe throughout the year.
- The Squaw Alpine Transit Company (SATCo), a nonprofit with the goal of reducing in-valley trips within the Olympic Valley/Alpine Meadows area, provides the Mountaineer shuttle service. Mountaineer provides free transportation for residents and guests visiting

the Olympic Valley/Alpine Meadows area through a smartphone app and operates during the winter ski season (typically from mid-December to mid-April) with the following hours:

  - Olympic Valley: 7:00 AM to 10:30 PM, daily.
  - Alpine Meadows: 8:00 AM to 5:00 PM, Saturday and Sunday.
  - Additional Alpine Meadows dates: December 26, 27, and 31, January 20, and February 17.

From December 1, 2018 to April 30, 2019, the Mountaineer service had over 81,000 passengers. Of the rides in Olympic Valley, approximately 40 percent originated in The Village at Palisades Tahoe area and the remainder were, in general, evenly disbursed throughout the valley. For destinations, roughly 40 percent of rides ended in The Village at Palisades Tahoe area, 12 percent ended at the Resort at Squaw Creek, and the remainder were, in general, evenly disbursed throughout the valley.

- The North Lake Tahoe Express is a shuttle service that connects the North Tahoe area (including Olympic Valley) with the Reno-Tahoe International Airport and provides an opportunity for visitors to the area to access the Olympic Valley/Alpine Meadows area without the need of a personal vehicle. The service operates four runs per day in each direction during the summer and winter seasons, and three runs per day in the spring and fall.

7.3 REGULATORY CONTEXT

Existing transportation policies, laws, and regulations that would apply to the proposed project are summarized below and provide a context for the impact discussion related to the project's consistency with the applicable regulatory conditions. Federal plans, policies, regulations, or laws related to transportation are not directly applicable to the proposed project. Rather, the analysis presented herein focuses on State and local regulations, which govern the regulatory environment related to transportation at the project level.

State Regulations

The following are the transportation regulations pertinent to the proposed project at the State level, organized chronologically.

Senate Bill 743

In 2013, SB 743 was passed to amend Sections 65088.1 and 65088.4 of the Government Code, amend Sections 21181, 21183, 21186, 21187, 21189.1, and 21189.3 of the Public Resources Code (PRC), to add Section 21155.4 to the PRC, to add Chapter 2.7 (commencing with Section 21099) to Division 13 of the PRC, to add and repeal Section 21168.6.6 of the PRC, and to repeal and add Section 21185 of the PRC, relating to environmental quality. In response to SB 743, the Governor's Office of Planning and Research (OPR) updated the CEQA Guidelines to include new transportation-related evaluation metrics. In December 2018, the California Natural Resources Agency certified and adopted the CEQA Guidelines update package along with an updated Technical Advisory on Evaluating Transportation Impacts in CEQA (Technical Advisory). Full compliance with the Guidelines became effective July 2020. As a result of SB 743, and Section 15064.3 of the CEQA Guidelines, as discussed in further detail below, local jurisdictions may no longer rely on vehicle LOS and similar measures related to delay as the basis for determining the significance of transportation impacts under CEQA, and instead a VMT metric should be evaluated.

Technical Advisory on Evaluating Transportation Impacts in CEQA

In December of 2018, the OPR published the Technical Advisory, which is a guidance document to provide advice and recommendations regarding assessment of VMT, thresholds of significance, and mitigation measures. The Technical Advisory is intended to be a resource for the public to use at their discretion, and the OPR does not enforce any part of the recommendations contained therein. The Technical Advisory includes recommendations regarding methodology, screening thresholds, and recommended thresholds per land use type. Pursuant to the Technical Advisory, with respect to land use projects, residential, office, and retail projects tend to have the greatest influence on VMT. Strategies and projects that decrease local VMT but increase total VMT should be avoided. The Technical Advisory recommends that lead agencies consider whether their actions encourage development in a less travel-efficient location by limiting development in travel-efficient locations.

Vehicle Miles Traveled-Focused Transportation Impact Study Guide

In May of 2020, Caltrans adopted the Vehicle Miles Traveled-Focused Transportation Impact Study Guide (TISG) to provide direction to lead agencies regarding compliance with SB 743. The TISG replaces the Caltrans' 2002 Guide for the Preparation of Traffic Impact Studies and is for use with local land use projects, not for transportation projects on the State Highway System. The objectives of the TISG are to provide:[9]

a) Guidance in determining when a lead agency for a land use project or plan should analyze possible impacts to the State Highway System, including its users.
b) An update to the Guide for the Preparation of Traffic Impact Studies (Caltrans, 2002) that is consistent with SB 743 and the CEQA Guidelines adopted on December 28, 2018.
c) Guidance for Caltrans land use review that supports state land use goals, state planning priorities, and GHG emission reduction goals.
d) Statewide consistency in identifying land use projects' possible transportation impacts, to the State Highway System, and to identify potential non-capacity increasing mitigation measures.
e) Recommendations for early coordination during the planning phase of a land use project to reduce the time, cost, and/or frequency of preparing a Transportation Impact Study or other indicated analysis.

Caltrans has jurisdiction over State highways. Therefore, Caltrans controls all construction, modification, and maintenance of State highways, such as SR 89. Any improvements to such roadways require Caltrans approval.

Local Regulations

Local rules and regulations applicable to the proposed project are discussed below.

Placer County General Plan

The following goals and policies set forth in the Transportation and Circulation Element of the Placer County General Plan are applicable to the proposed project:

Goal 3.A To provide for the long-range planning and development of the County's roadway system to ensure the safe and efficient movement of people and goods.

[9] Caltrans. *Vehicle Miles Traveled-Focused Transportation Impact Study Guide*. May 20, 2020.

Policy 3.A.1	The County shall plan, design, and regulate roadways in accordance with the functional classification system described in Part I of this Policy Document and reflected in the Circulation Plan Diagram.
Policy 3.A.2	Streets and roads shall be dedicated, widened, and constructed according to the roadway design and access standards generally defined in Section I of this Policy Document and, more specifically in community plans, specific plans, and the County's Highway Deficiencies Report (SCR 93). Exceptions to these standards may be considered due to environmental, geographical, historical, or other similar limiting factors. An exception may be permitted only upon determination by the Public Works Director that safe and adequate public access and circulation are preserved.
Policy 3.A.3	The County shall require that roadway rights-of-way be wide enough to accommodate the travel lanes needed to carry long-range forecasted traffic volumes (beyond 2010), as well as any planned bikeways and required drainage, utilities, landscaping, and suitable separations. Minimum right-of-way criteria for each class of roadway in the County are specific in Part I of this Policy Document.
Policy 3.A.4	On arterial roadways and thoroughfares, intersection spacing should be maximized. Driveway encroachments along collector and arterial roadways shall be minimized. Access control restrictions for each class of roadway in the County are specified in Part I of this Policy Document.
Policy 3.A.6	The County shall require all new development to provide off-street parking for the required number of parking spaces, either on-site or in consolidated lots or structures.
Policy 3.A.11	The County shall require an analysis of the effects of traffic from all land development projects. Each such project shall construct or fund improvements necessary to mitigate the effects of traffic from the project consistent with Policy 3.A.7. Such improvements may include a fair share of improvements that provide benefits to others.
Policy 3.A.13	The County shall assess fees on new development sufficient to cover the fair share portion of that development's impacts on the local and regional transportation system. Exceptions may be made when new development generates significant public benefits (e.g., low income housing, needed health facilities) and when alternative sources of funding can be identified to offset foregone revenues.

Goal 3.B To promote a safe and efficient mass transit system, including both rail and bus, to reduce congestion, improve the environment, and provide viable non-automotive means of transportation in and through Placer County.

Policy 3.B.1 The County shall work with transit providers to plan and implement additional transit services within and to the County that are timely, cost-effective, and responsive to growth patterns and existing and future transit demand.

Goal 3.C To maximize the efficient use of transportation facilities so as to: 1) reduce travel demand on the County's roadway system; 2) reduce the amount of investment required in new or expanded facilities; 3) reduce the quantity of emissions of pollutants from automobiles; and 4) increase the energy-efficiency of the transportation system.

Policy 3.C.1 The County shall promote the use of transportation systems management (TSM) programs that divert automobile commute trips to transit, walking, and bicycling.

Policy 3.C.2 The County shall promote the use, by both the public and private sectors, of TSM programs that increase the average occupancy of vehicles.

Policy 3.C.4 During the development review process, the County shall require that proposed projects meet adopted Trip Reduction Ordinance (TRO) requirements.

Goal 3.D To provide a safe, comprehensive, and integrated system of facilities for non-motorized transportation.

Policy 3.D.5 The County shall continue to require developers to finance and install pedestrian walkways, equestrian trails, and multi-purpose paths in new development, as appropriate.

Policy 3.D.8 The CDRA Engineering and Surveying Division and the Department of Public Works shall view all transportation improvements as opportunities to improve safety, access, and mobility for all travelers and recognize cycling, pedestrian, and transit modes as integral elements of the transportation system.

Policy 3.D.11 The County shall work to achieve equality of convenience and choice among all modes of transportation – pedestrian, cycling, transit and motor vehicles, through a balanced and interconnected transportation system.

Squaw Valley General Plan and Land Use Ordinance

The Squaw Valley General Plan (SVGP) was adopted by the Placer County Board of Supervisors in June 1983 (last revised in 1997) and is the community plan for the approximately 4,700-acre

unincorporated area of Placer County that includes Olympic Valley. The implementing Ordinance, the Squaw Valley Land Use Ordinance (Chapter 40, Placer County Code), was adopted in June 1983; and modified on September 13, 1983; February 11, 1986 (ZTA-278); April 16, 1985 (GPA-250, REA-843); August 14, 1986 (GPA-312, REA-857). The proposed project would be subject to all policies, objectives, recommendations, and standards contained in the Plan Text and Land Use Ordinance, which guides future development of Olympic Valley.

The SVGP Community Development Element provides that in order to fund capital improvement projects to ensure traffic congestion in Olympic Valley is reduced to the extent feasible, development impact fees should be assessed on new development projects to ensure developers pay a fair share for cost of roadway improvements. For commercial uses, the development impact fee is assessed at $750 per 1,000 square feet (sf) of gross floor area.

County of Placer Transportation Study Guidelines

The Transportation Study Guidelines were published in November 2020 and are intended to provide a clear and consistent technical approach to preparing Transportation Studies in Placer County. They establish analysis techniques for transportation studies based on the current state-of-the-practice in transportation planning and engineering.

For example, the Transportation Study Guidelines set forth a number of thresholds for use in analyses within the County, including VMT thresholds per region. The significance thresholds for Western Placer County and recommended VMT metric used to measure VMT are described by land use type.

VMT thresholds for East Placer County (unincorporated areas from Donner Summit to the east, including the Tahoe Basin) were adopted by Placer County on June 22, 2021. Thresholds for residential, office, tourist accommodations, campgrounds, and public service are based on the sub-regional (i.e., East Placer) average VMT. Projects in the aforementioned land use categories evaluated under CEQA in East Placer, including the Tahoe Basin, are measured against a threshold of 15 percent below the East Placer average based on an efficiency metric of VMT per resident, VMT per Tourist Accommodation Unit, VMT per employee, and other applicable VMT metrics by land use. Thresholds for commercial/retail, recreation, and transportation uses are measured against a threshold of no net increase of the total VMT for East Placer.

Placer County Transportation Planning Agency

The PCTPA is the State-designated Regional Transportation Planning Agency for Placer County and is responsible for making decisions about the County's transportation system. In addition to developing and adopting the regional transportation plans and strategies, the PCTPA also allocates the local transportation funds and has entered into a Memorandum of Understanding with Caltrans and SACOG to govern federal transportation planning and programming in Placer County. The PCTPA has also been involved in preparation of the following transportation planning documents.

Placer County Regional Bikeway Plan

In June 2018, Placer County adopted the Regional Bikeway Plan 2018 Update (Regional Bikeway Plan). The Regional Bikeway Plan identifies a vision and goals for bicycling, a network of bikeways to connect the County, and supportive programs and practices to encourage bicycling. The vision

statement for the Regional Bikeway Plan is to promote safe, convenient, and enjoyable bicycling by establishing a comprehensive system of bikeways that link the communities of Placer County.[10]

The Regional Bikeway Plan develops a regional system of bikeways that connects the six incorporated cities and numerous unincorporated community areas. As shared-use paths are expanded across the County, they will continue to provide scenic recreational routes as well as key longer-distance regional connections.

Systems Plan Update for the Tahoe Truckee Area Regional Transit in Eastern Placer County

In April 2016, the County adopted the Systems Plan Update for the Tahoe Truckee Area Regional Transit in Eastern Placer County (SPU), which serves as the final systems plan for TART.[11] The SPU is intended to focus specifically on transit program enhancements consistent with the "Transit Vision" effort led by the North Lake Tahoe Resort Association (NLTRA) and the TNT/TMA since 2012. Beginning at such time, the NLTRA and TNT/TMA spearheaded a regional effort to expand public transit in the North Lake Tahoe region to match the quality of service provided in many similar mountain resort areas. The resulting effort to develop a Transit Vision has included a series of transit-focused summits and technical analyses of operational strategies, financial strategies, and economic benefits. The Transit Vision focuses on improvements in service frequency, expansion of hours of service, and elimination of transit fares. The scope of the SPU includes: (1) a concise review of existing service area characteristics; (2) a summary and evaluation of existing transit services, including the results of an onboard passenger survey; and (3) a short-range (five years) service, capital, management, and financial plan for the TART program.

Funding Sources/Fee Programs

In April 1996, the Placer County Board of Supervisors adopted the Countywide Traffic Impact Fee Program, which requires new development within the County to mitigate impacts to the roadway system by paying traffic impact fees. The fees collected through the program, in addition to other funding sources, make it possible for the County to construct roads and other transportation facilities and improvements needed to accommodate new development. The fee was last updated in July of 2021. The County's fee program and Capital Improvement Program (CIP) are divided into eleven districts. The project site is included in the Tahoe District.

7.4 IMPACTS AND MITIGATION MEASURES

This section describes the standards of significance and methodology utilized to analyze and determine the proposed project's potential impacts related to transportation and circulation.

Standards of Significance

Consistent with Appendix G of the CEQA Guidelines, the proposed project would be considered to result in a significant adverse impact on the environment in relation to transportation if the project would result in any of the following:

- Conflict with a program, plan, ordinance, or policy, except LOS, addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities;

[10] Placer County. *Placer County Regional Bikeway Plan 2018 Update*. June 29, 2018.
[11] Placer County. *Systems Plan Update for the Tahoe Truckee Area Regional Transit in Eastern Placer County*. April 22, 2016.

- Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b);
- Substantially increase hazards to vehicle safety due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment); or
- Result in inadequate emergency access.

Issues Not Discussed Further

It should be noted that the Initial Study prepared for the proposed project (see Appendix A of this EIR) determined that development of the proposed project would result in no impact or a less-than-significant impact related to the following impacts:

- Result in insufficient parking capacity on-site or off-site.

As detailed therein, the County has determined that the proposed project would provide for sufficient on-site parking in accordance with Placer County Code Section 17.54.060. Furthermore, the County would require the preparation of a Parking Management Plan as part of the proposed project to ensure that the various uses within Olympic Valley Park would be coordinated such that on-site parking would be adequate to accommodate visitors of the park. Therefore, the proposed project would not result in insufficient parking capacity on-site or off-site, and such impacts are not discussed further in this EIR.

Method of Analysis

The analysis methodology provided in the TIA, Trip Generation Memorandum, and VMT Memorandum prepared for the proposed project by LSC is discussed below, as appropriate for the CEQA analysis (e.g., LOS methodology is not included).

Project Trip Generation

The number of automobile trips that would be generated by the proposed project was estimated through application of various assumptions. While standard trip generation rates for a museum are provided in the Institute of Transportation Engineers (ITE) Trip Generation Manual – 11th Edition (Trip Generation Manual), the rates are based on data collected at only one museum. In order to provide a more accurate estimate of site-generated traffic, LSC determined the proposed project's vehicular trip generation based on the number of reasonably anticipated employees, visitors, and service vehicles that would be associated with the project during operations, factored by expected travel modes and vehicle occupancy rates. The following assumptions were applied:

- A portion of visitors would make trips to/from the project site by way of alternative modes of transportation, such as transit trips. Considering the site's location along the TART transit route and the winter Mountaineer shuttle service, approximately five percent of visitor trips to/from the project site during the winter would be made by alternative modes of transportation. Given that the site is also served by a Class I bike path in the summer, approximately 15 percent of visitor trips on a summer day is assumed to be made by way of alternative modes of transportation;
- About five percent of employee trips would be made by way of alternative modes of transportation during the winter and summer;
- An average vehicle occupancy rate of 2.1 visitors per vehicle was assumed, consistent with other recent studies. Museum employees traveling by way of private automobile were assumed to have an average vehicle occupancy rate of one employee per vehicle to provide a conservative estimate;

- About half of the employees would make one round-trip off the project site during the workday for lunch, errands, etc.; and
- Approximately two service/delivery vehicles would visit the project site over the course of a busy day.

It should be noted that the TIA and Trip Generation Memorandum do not include analysis of potential trip generation during the AM peak hour, given that the proposed project is anticipated to operate daily from 10:00 AM to 6:00 PM. According to LSC's research conducted as part of the TIA's preparation, the winter AM peak hour on Olympic Valley Road occurs from 8:30 AM to 9:30 AM, prior to the start of the anticipated daily business hours for the proposed project. In addition, as both existing traffic volumes and expected project traffic activity are greater in the PM peak hour on summer weekdays, the TIA and Trip Generation Memorandum focus on PM peak-hour conditions. Finally, the summer weekend peak period is included, because summer peak-hour volumes at the SR 89/Olympic Valley Road intersection and at the Olympic Valley Park are typically highest on weekends, with the peak hour occurring between 11:00 AM and 1:00 PM. As such, the TIA does not include evaluation of trip generation during the AM peak hour during summer weekend conditions.

The anticipated trip generation that would result from development of the proposed project is shown in Table 7-3, followed by further discussions of the project's trip generation at the site driveway, trip generation during special events, and pass-by trips compared to new trips.

Table 7-3
Trip Generation at Project Site Driveway[1]

Vehicle Trips at Site Driveway[2]				% Daily Trips by Visitors	Pass-by Reduction	Pass-by Trips	New Trips
Daily	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total				
Winter Sunday PM Peak Hour							
292	8	32	40	93	25	68	224
Summer Friday PM Peak Hour							
203	6	22	28	90	20	36	167
Summer Saturday Mid-Day Peak Hour							
268	7	30	37	92	20	49	219

1 The estimates exclude trip generation during special events that would occur at the proposed project. The trip generation rates used to determine the project trip generation are based on a person-trip analysis, as the Trip Generation Manual does not have sufficient data.

2 Not all of the vehicle trips at the project site driveway would be new trips, as a portion of the trips associated with the museum are expected to be "pass-by" trips, or trips attracted from traffic passing the site on SR 89 or Olympic Valley Road. Pass-by trips would generate traffic on the access driveway, but do not add new traffic on regional roadways, as they are made by vehicles already passing by the site that would divert to the new land use as part of a longer trip.

Source: LSC Transportation Consultants, Inc., 2021.

Trip Generation at Site Driveway

The Trip Generation Memorandum determined the number of one-way vehicle trips generated at the site driveway through multiplying the number of person-trips by the auto mode split and dividing by the average vehicle occupancy rate. Adding the visitor, employee, and service/delivery vehicle trips yielded a total of approximately 292 daily one-way vehicle trips on a winter Sunday, 203 daily trips on a summer Friday, and 268 daily trips on a summer Saturday. The

aforementioned daily trip numbers are not all 'new' trips on the surrounding roadway network, as discussed below.

To estimate the portion of total daily trips that occur during the PM peak hours, the Trip Generation Memorandum applied an average "PM-to-daily" trip factor of approximately 13.7 percent. The factor is derived from a review of PM-to-daily factors for similar land use types in the Trip Generation Manual.

Trip Generation During Special Events

Museum staff indicated that special events are planned to occur in the evening, beginning at or after the normal daily closing hour of 6:00 PM. The project will be allowed to have up to six special events per year. To account for such conditions, LSC applied the following assumptions:

- A special event would have 100 guests and about 10 staff members;
- Considering that special events would occur in the evening and that guests could be arriving from outside of the Olympic Valley/Alpine Meadows area, all guests were assumed to arrive by way of automobile. About five percent of event staff trips were assumed to be made through alternative modes of transportation; and
- An additional two service/delivery vehicles were assumed to be associated with a special event.

The Trip Generation Memorandum yielded the number of one-way vehicle trips generated at the site driveway through multiplying the number of person-trips by the auto mode split and dividing by the average vehicle occupancy rate. Adding the guest, staff, and service/delivery vehicle trips yielded a total of approximately 119 daily one-way vehicle trips generated at the site driveway by a special event.

Pass-by Versus New Trips

A portion of trips associated with the museum are expected to be "pass-by" trips, or trips attracted from traffic passing the site on SR 89 or Olympic Valley Road. Pass-by trips generate traffic on the site access driveway, but do not add new traffic on regional roadways, as they are made by vehicles already passing by the project site that would divert to the proposed project as part of a longer trip. For example, tourists passing by the project site along SR 89 might decide to stop at the site, thereby generating new trips on Olympic Valley Road and the site access driveway, but not generating new trips along SR 89. Such a phenomenon is technically called a "diverted-link" trip, given that the project site driveway does not front the highway. For simplicity, the Trip Generation Memorandum refers to diverted-link trips as pass-by trips.

The ITE Trip Generation Manual does not publish data on the proportion of pass-by trips expected of a museum land use. Accounting for the square footage of the proposed project, the project site's proximity to ski resorts, and the nature of summer visits to the project region, which includes multiple stops as part of a day trip to explore the area, the Trip Generation Memorandum estimated pass-by trips through the following assumptions:

- Over the course of a busy winter day, the total portion of museum trips on adjacent roadways (pass-by) is estimated to be 25 percent. Of the percentage, 34 percent would be generated by vehicles passing by on SR 89 (proceeding straight through the SR 89/Olympic Valley Road intersection), while 66 percent would be generated by vehicles passing by on Olympic Valley Road; and

- Over the course of a busy summer day, the total proportion of pass-by trips is estimated to be slightly lower at 20 percent, reflecting that a smaller proportion of summer travelers have an interest in winter sports. Reflecting the relatively low traffic activity on Olympic Valley Road in the summer, as compared to the winter season, 62 percent of pass-by activity would be generated by travelers passing by on SR 89, and 38 percent would be generated by those on Olympic Valley Road.

As shown in Table 7-3, applying the aforementioned percentages to the proportion of daily trips generated by visitors yields the daily pass-by trips for the three peak-hour scenarios.

Project Vehicle Miles Traveled

The Placer County Transportation Study Guidelines present direction for assessing VMT impacts for land development projects within Placer County in compliance with CEQA Guidelines Section 15064.3 and TRPA requirements, including the use of screening criteria. Screening criteria are intended to quickly identify when a project should be expected to cause a less-than-significant VMT impact without conducting a detailed study. Pursuant to the Transportation Study Guidelines, a project that meets at least one of several screening criteria can be presumed to have a less-than-significant VMT impact:

- Small Projects;
- Affordable Housing;
- Local-Serving Non-Residential Development;
- Projects in Low VMT-Generating Area;
- Recreational Amenities;
- Seasonal Recreation; and
- Active Transportation and Transit.

Local-serving non-residential development is defined in the Transportation Study Guidelines as projects consisting of local-serving non-residential uses, unless substantial evidence indicates the project would generate a potentially significant level of VMT. Such development projects in Eastern Placer County are generally less than 20,000 sf except for grocery stores and medical uses which are generally less than 40,000 sf.

Impact 7-3 provides substantial evidence that the proposed project can be considered local-serving and a recreational amenity. For informational purposes, it is also noted that LSC estimated annual average daily trips for the project. The results indicated 175 “new” daily trips on an annual average day (with 224 on a peak winter day and 219 on a peak summer day).

Project-Specific Impacts and Mitigation Measures

The proposed project impacts on the transportation system are evaluated in this section based on the thresholds of significance and methodology described above. Each impact is followed by recommended mitigation, if necessary, to reduce the identified impacts. In the case of traffic operations, specifically intersection and roadway level of service, such an analysis is not required pursuant to CEQA Guidelines Section 15064.3(a), because congestion and intersection operations no longer constitute a transportation impact under CEQA. Placer County staff will separately review LOS for the project’s consistency with Placer County General Plan and SVGP and Land Use Ordinance LOS policies.

7-1 Conflict with a program, plan, ordinance, or policy, except LOS, addressing the circulation system during construction activities. Based on the analysis below and with implementation of mitigation, the impact is *less than significant*.

Construction of the project, including site preparation, grading, construction, and delivery activities, would generate vehicle trips on local roadways, including vehicles removing or delivering fill material, bulldozers, and other heavy machinery, as well as building materials delivery, and construction worker commutes. In addition, the proposed project would construct a sanitary sewer force main along Olympic Valley Road, beginning at the intersection of Olympic Valley Road and the project driveway and running northwest approximately 760 feet to connect to the existing sanitary sewer manhole east of the Tavern Inn Condominiums. Additionally, a wet well and sanitary sewer lift station would be constructed north of the project site in an existing manhole, near the project driveway, within the Olympic Valley Road right-of-way (ROW). As such, construction of the proposed on-site and off-site improvements could temporarily impede traffic along project vicinity roadways.

Construction workers typically arrive before the morning peak hour and leave before the evening peak hour of the traditional commute time periods. Deliveries of building materials (lumber, concrete, asphalt, etc.) would also normally occur outside of the traditional commute time periods. Construction access to the project site would be from Olympic Valley Road and SR 89. Any truck traffic to the site would follow designated truck routes, including I-80 and SR 89, and project construction would likely stage any large vehicles (e.g., earth-moving equipment, cranes) on the site prior to beginning site work and remove such vehicles at project completion. However, detailed information related to the overall construction schedule during site development, or a construction management plan, is not available. As a result, construction activities could include disruptions to the transportation network near the project site.

In particular, the Noise chapter of this EIR requires implementation of a temporary sound wall along both sides of the off-site sewer pipe alignment to ensure that construction of the off-site sewer pipe does not cause significant noise impacts to nearby sensitive receptors. The sewer pipe work area, including temporary sound walls, would extend along the south side of Olympic Valley Road for approximately 760 feet, from the project's driveway toward the northwest. These temporary construction activities may require temporary lane closure in Olympic Valley Road and obstruction of the southernmost driveway to the Tavern Inn Condominiums. Importantly, the Tavern Inn Condominiums have another driveway off Olympic Valley Road, which is located further west, and would not be obstructed by the sewer pipeline construction. It is estimated that total construction time for the off-site sewer pipe improvement would be five days. Therefore, disruption of Olympic Valley Road traffic and the southerly Tavern Inn Condominiums driveway would be minimal.

Nevertheless, based on the above, without proper planning of construction activities, construction traffic and temporary sound walls along the off-site sewer pipe alignment could interfere with existing roadway operations during the construction phase, which could result in a risk to public safety. Therefore, project traffic related to construction activities could result in a ***significant*** impact.

Mitigation Measure(s)

Implementation of the following mitigation measure would reduce the above potential impact to a *less-than-significant* level.

7-1 *The Improvement Plans shall include a striping and signage plan and shall include all on- and off-site traffic control devices. Prior to the commencement of construction, a construction signage and traffic control plan shall be provided to the Engineering and Surveying Division for review and approval. The construction signage and traffic control plan shall include (but not be limited to) items such as:*

- *Guidance on the number and size of trucks per day entering and leaving the project site;*
- *Identification of arrival/departure times that would minimize traffic impacts;*
- *Approved truck circulation patterns;*
- *Locations of staging areas;*
- *Locations of employee parking and methods to encourage carpooling and use of alternative transportation;*
- *Methods for partial/complete street closures (e.g., timing, signage, location and duration restrictions);*
- *The temporary sound walls along the off-site sewer pipe alignment shall be removed within 24 hours of completing the sewer pipe improvement;*
- *Criteria for use of flaggers and other traffic controls;*
- *Preservation of safe and convenient passage for bicyclists and pedestrians through/around construction areas;*
- *Monitoring for roadbed damage and timing for completing repairs;*
- *Limitations on construction activity during peak/holiday weekends and special events;*
- *Preservation of emergency vehicle access;*
- *Coordination of construction activities with construction of other projects that occur concurrently in Olympic Valley to minimize potential additive construction traffic disruptions, avoid duplicative efforts (e.g., multiple occurrences of similar signage), and maximize effectiveness of traffic mitigation measures (e.g., joint employee alternative transportation programs);*
- *Removing traffic obstructions during emergency evacuation events; and*
- *Providing a point of contact for Olympic Valley residents and guests to obtain construction information, have questions answered, and convey complaints.*

The construction signing and traffic control plan shall be developed such that the following minimum set of performance standards is achieved throughout project construction. It is anticipated that additional performance standards would be developed once details of project construction are better known.

- *All construction employees shall park in designated lots owned by the project applicant or on private lots otherwise arranged for by the project applicant; and*
- *Roadways shall be maintained clear of debris (e.g., rocks) that could otherwise impede travel and impact public safety.*

7-2 Conflict with a program, plan, ordinance or policy addressing transit, bicycle and pedestrian facilities. Based on the analysis below, the impact is *less than significant*.

The following discussion evaluates whether the proposed project would result in impacts to existing or planned pedestrian facilities, bicycle facilities, or transit facilities and services within the project area.

Bicycle and Pedestrian Facilities

As discussed above, the project site is in the vicinity of existing bicycle and pedestrian facilities. The Tahoe City Public Utility District's Class I Truckee River Trail is located parallel to the east of SR 89, between Tahoe City and Olympic Valley Road. At the SR 89/Olympic Valley Road intersection, the trail crosses Olympic Valley Road at grade by way of a crosswalk on the intersection's south leg. After proceeding south along the project site's eastern boundary, the trail extends westward, along the project site's southern boundary, and continues westward towards the OVFD. The trail continues through the Olympic Valley area along Olympic Valley Road towards The Village at Palisades Tahoe parking lot. As a Class I bike path, the Truckee River Trail provides a completely separated facility designed for the exclusive use of bicyclists and pedestrians. In addition, a portion of Olympic Valley Road, between SR 89 and Squaw Creek Road, including along the project frontage, is striped as a Class II facility. A Class II bicycle lane is also located along the SR 89 corridor, between Olympic Valley and Truckee. Based on the above, existing bicycle and pedestrian facilities are located in the immediate vicinity of the project site and would be available to future visitors of the proposed project.

The Regional Bikeway Plan identifies proposed bicycle and pedestrian facilities that the County intends to develop in Eastern Placer County in Figure 3. The previously discussed Class I facility (i.e., Truckee River Recreational Access Plan) that would be located along SR 89, between Olympic Valley and Truckee, is depicted. However, the Regional Bikeway Plan does not identify proposed facilities that would be located within or immediately adjacent to the project site. Therefore, the proposed project would not conflict with the Regional Bikeway Plan. In addition, Figure 22 of the Regional Bikeway Plan identifies recommended focus areas and corridors for bikeway improvements. A focus area is identified west of the project site at The Village at Palisades Tahoe area; however, the project site is not located within a recommended focus area for bikeway improvements. Therefore, development of the proposed project would not conflict with or preclude the development of any planned bicycle or pedestrian facilities identified in adopted plans.

Finally, the proposed project would consist of new pedestrian facilities and improvements to existing facilities, which would serve to bolster pedestrian circulation through the project site. Six-foot-wide concrete walkways would be included throughout the site to provide pedestrian and bicycle access to the proposed building from the existing parking lot and Olympic Valley Road. In addition, a six-foot-wide concrete ramp would be constructed at

the building entry point behind a rolled curb and gutter to meet Americans with Disabilities Act (ADA) requirements. Improvements to existing pedestrian facilities would consist of a crosswalk connecting the sidewalk in front of the building to the playground to the sports field west of the building. The proposed project would also construct a walking path, which would bisect the proposed V-shaped garden and lead from the building to the Tower of Nations structure at the southwest corner of the SR 89/Olympic Valley Road intersection. The aforementioned site improvements would not conflict with existing or planned bicycle and pedestrian facilities in the project vicinity.

Based on the above, development of the proposed project would not conflict with or preclude the development of any planned pedestrian or bicycle facilities identified in adopted plans, and a less-than-significant impact would occur.

Transit System

As previously detailed, transit service in the project vicinity is currently provided by TART. Public transit stops are located on both sides of Olympic Valley Road, adjacent to the project site. The bus stop on the north side of the road provides a shelter and a bus pullout. The south side bus stop is at the project site entrance and does not include a shelter. The bus stops are located on TART's SR 89 route, which runs between Tahoe City and Truckee. The SR 89 route is operated in both directions, each hour, from 6:00 AM to 7:00 PM. TART services are free to passengers. In addition, multiple private transit services are provided by Palisades Tahoe, the Resort at Squaw Creek, SATCo, and the North Lake Tahoe Express.

Pursuant to the Trip Generation Memorandum, a portion of the reasonably assumed visitors to the museum are expected to make trips to and from the project site by way of alternative modes of transportation, such as transit trips. Given the site's location along the TART SR 89 route and the winter season Mountaineer shuttle service, approximately four percent of visitor trips to/from the museum during the winter are assumed to be made by alternative modes of transportation. In addition, considering the Class I Truckee River Trail's location adjacent to the project site, approximately 15 percent of visitor trips to/from the site on a summer day are assumed to be made by alternative modes of transportation. The TIA found that the existing capacity of the TART transit system would be able to accommodate the aforementioned additional riders generated by the project during the proposed daily museum operating hours of 10:00 AM to 6:00 PM. Although the proposed project would add to the existing ridership on TART's SR 89 route, the TIA found that the existing bus stops adjacent to the project site provide convenient access to the site and would not be impacted by development of the project.

Considering the generally consistent level of ridership experienced by the SR 89 route and the small number of project-generated trips that would use public transit to access the project site, the proposed project's minimal contribution to the SR 89 route would not significantly affect the route's available capacity. As a result, the proposed project would not conflict with any planning efforts related to public transit, and a less-than-significant impact would occur.

Conclusion

Based on the above, the proposed project would not conflict with adopted policies, plans, or programs supporting alternative transportation (i.e., bicycle lanes, public transit, pedestrian facilities, etc.). Thus, the project would result in a ***less-than-significant*** impact.

Mitigation Measure(s)

None required.

7-3 Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b). Based on the analysis below, the impact is *less than significant*.

Pursuant to the Placer County Transportation Study Guidelines (TSG), a project that meets at least one of several specified screening criteria can be presumed to have a less-than-significant VMT impact. The criteria that are pertinent to the proposed project are Local-Serving Non-Residential Development and Recreational Amenities.

The Placer County TSG defines local-serving uses in western Placer County as generally less than 50,000 sf of floor area, and in eastern Placer County as generally less than 20,000 sf. The TSG provide examples of local-serving uses that include a range of non-residential, non-employment center uses, including, among others, the following uses:

- Library; or
- Civic center or community center.

Although the proposed museum use is not specifically listed as an example in the TSG's discussion on the Local-Serving Non-Residential Development, the list of examples is not intended to be exhaustive. In addition, Placer County Code Section 17.04.030 contains a single combined land use definition of libraries and museums, defining them as "…permanent public or quasi-public facilities generally of a noncommercial nature which are intended to provide historical, cultural, literary, artistic and/or educational displays and information."

The proposed museum facility, in addition to containing exhibit galleries, would contain a library for storage of archives related to winter sports and the 1960 Winter Olympics, as well as a community room that would be made available to the residents of the Olympic Valley area for community meetings, lectures, and other similar events. Such characteristics demonstrate that the project substantially meets the definition of library and civic center for the purposes of VMT screening criteria.

The definition of "local-serving" uses is also pertinent to the analysis of the project's qualification as a Local-Serving Non-Residential Development. A majority of visitors to the museum would be reasonably assumed to not be residents of the Tahoe/Truckee area, and are, thus, not "locals." However, only three percent of the vehicle trips generated by visitors of the museum would be from beyond the greater local area, as the majority of visitors would be non-residents who are already in the area for other reasons, such as owners of second residences and their guests, as well as overnight visitors who have

traveled to the project region for the purposes of patronizing the ski resorts.[12] A relatively small museum can be expected to be a secondary destination for visitors that are drawn to the region for skiing or accessing the region, in general. As such, the large majority of visitor trips generated by the museum would be local trips with both origin and destination within the Truckee/Tahoe region, therefore, qualifying the proposed project as a "local-serving" development.

The proposed project is a non-residential land use and would consist of a maximum of 20,000 sf of building space. Therefore, the project would meet the Placer County TSG criterion of being under the 20,000-sf criterion for Eastern Placer County. As such, there is substantial evidence to support the determination that all criteria are met to qualify the proposed project as a Local-Serving Non-Residential Development, as described in the Placer County TSG.

The second TSG screening criterion that the project can be found to meet is Recreational Amenities. According to Appendix C of the Placer County TSG, recreational amenities are often, but not required to be, accessory uses to a larger recreational destination, where accessory uses are described as being uses that do not change the character of the larger recreation destination (e.g., ski or beach resort). Further, the TSG state, a recreational amenity "Supplements existing recreational opportunities, without creating significant increased recreational demand. Most patrons are drawn from local homes, hotels, vacation units, etc. Few patrons are exclusively drawn to the recreational amenity from out of the region. If the opportunity did not exist, the resident or visitor would likely substitute a different local recreational opportunity…Recreational amenities do not draw a significant number of new tourists, but rather provide an activity or service to a tourist that traveled here to experience the ski resorts, Lake Tahoe, regional trails, or other recreational destinations."[13]

In the case of the proposed project, the SNOW museum and community cultural center would be located at the entrance to Olympic Valley, a known recreational destination, in winter and summer. In terms of winter sports, Olympic Valley's Palisades Tahoe Resort now has a gondola connecting the Palisades and Alpine sides of the mountain resort. Of the ten resorts in the Lake Tahoe area, with Palisades / Alpine Meadows representing one of the ten, Palisades / Alpine Meadows commanded almost a quarter of the overall Lake Tahoe area market in the 2007-2017 ski seasons.[14] Summer destination activities in Olympic Valley include lodging, hiking regional trails, such as the Granite Chief Trail at the end of the Valley, and large events such as music festivals and athletic competitions. The proposed project would not change the character of the recreation destination of Olympic Valley, nor the greater north Lake Tahoe recreation destinations, but would rather provide an amenity to tourists who have traveled to the area to experience the ski resorts in the

[12] LSC Transportation Consultants, Inc. *Memorandum: Squaw S.N.O.W. Museum – Vehicle Miles Traveled*. March 16, 2021. Note that this memo identifies Local-Serving Non-Residential Development as less than 50,000 sf based on the then-current Placer County TSG (November 2020). Subsequently, Placer County amended its TSG to include specific VMT screening criteria and thresholds for East Placer, which defined Local-Serving Non-Residential Development for western Placer County as generally less than 50,000 sf, and for eastern Placer County, generally less than 20,000 sf. As noted in the above impact discussion, the proposed project meets both the 50,000 and 20,000 sf criteria.

[13] Placer County. *County of Placer Transportation Study Guidelines*. Revised May 2021. Appendix C, pg. 19.

[14] SE Group and RRC Associates. *Squaw Valley / Alpine Meadows Base-to-Base Gondola Final Visitation and Use Assessment*. February 2018, pg. 14.

winter and regional trails, events, and lodging in the other seasons. Additionally, as discussed above, few patrons (about three percent) would be drawn to the area exclusively to visit the proposed project. As such, the proposed project would also meet the Recreational Amenity screening criterion in Placer County's TSG.

Based on the above, there is substantial evidence to support the determination that the proposed project would meet two VMT screening criteria identified in Placer County's TSG, resulting in a finding that the project would not conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b), and a ***less-than-significant*** impact would occur.

Mitigation Measure(s)
None required.

7-4 Substantially increase hazards to vehicle safety due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment), or result in inadequate emergency access or access to nearby uses. Based on the analysis below, the impact is *less than significant*.

The proposed project would consist of a museum facility featuring a maximum of 20,000 sf of building space, landscaping and on-site utility installation, outdoor gathering spaces and amenities, modifications to the existing parking lot, and off-site infrastructure improvements. With exception of the off-site improvements, all project components would be confined to the project site, and the proposed off-site improvements would be developed in previously disturbed areas and would not permanently alter existing roadways and other transportation facilities such that the use of such facilities would be compromised.

The proposed project would not include any new sharp curves or dangerous intersections. Vehicle access to the proposed project would be provided by the existing driveway from Olympic Valley Road, which currently serves as the entrance to Olympic Valley Park and connects to the existing surface parking lot. The entrance provides full access to the project site, and the width of the existing entrance would not be altered as part of development of the project. Up to 6,000 sf of the driveway and asphalt parking lot would be resurfaced, and the parking area directly fronting the museum would be restriped to include two additional ADA parking spaces. The re-striping of the parking lot would allow space for a bus turnaround for buses up to 40 feet in length in the eastern portion of the parking lot. Additionally, a planting area in the eastern portion of the parking lot would be removed and replaced with eight vehicle parking spaces. To prepare the project site for development, the existing slope would be regraded immediately adjacent to the driveway entrance from Olympic Valley Road to create a level transition from the parking and ADA spaces to the museum entrance. Additional grading would occur adjacent to the western portion of the parking lot to create a level surface for the proposed concrete walkway and for installation of the building foundation.

In addition, as discussed above, a designated left-turn lane is not provided on Olympic Valley Road for vehicles entering the project site. The intersection sight distance for

drivers in the westbound travel lane on Olympic Valley Road making a left turn into the site is approximately 425 feet, due to the existing trees along the north side of the roadway and the road's horizontal curvature. Because left-turning motorists need sufficient sight distance to know when to safely turn left across the lanes used by opposing traffic, the TIA evaluated the intersection sight distance that would be necessary to ensure vehicles turning left into the project site can safely enter. According to the American Association of State Highway Transportation Officials (AASHTO) *A Policy on Geometric Design of Highways and Streets, 7th Edition*, the minimum intersection sight distance value for left turns from Olympic Valley Road, assuming a design speed of 40 mph, is 355 feet. As such, the existing intersection sight distance for left-turning westbound vehicles on Olympic Valley Road meets and exceeds the minimum distance necessary for safely entering the project site.

With respect to potential safety hazards related to queuing, traffic queues at intersections that exceed the storage capacity of turn lanes or ramps, or that block turn movements at important nearby intersections or driveways, can cause operations problems beyond those associated with LOS. As part of the TIA, the 95th percentile traffic queue lengths were reviewed at intersection locations where queuing could potentially interfere with adjacent roads or driveways. The 95th percentile represents the length that is exceeded only five percent of the time during the period of analysis. Pursuant to the TIA's simulation of queues, the two study intersections did not result in queuing concerns under Existing conditions. The only queuing concern under Existing conditions is left turns from the 7-Eleven convenience store driveway onto Olympic Valley Road during the winter PM period, which is currently hindered by eastbound traffic queues forming at the SR 89/Olympic Valley Road intersection. However, the TIA concluded that under Existing Plus Project conditions, hazardous conditions associated with traffic queue lengths during the winter and summer PM peak periods would not be substantially exacerbated relative to Existing conditions.

It is noted that the TIA also evaluated queuing at the site driveway.[15] No westbound queuing issues are expected to occur under existing year conditions with the project. Under future cumulative conditions, no queuing issues are identified during the summer. During winter PM peak periods, the 95th-percentile queues indicate the eastbound traffic would be backed up past the site driveway, which could block westbound left turns into the site; however, the average (50th-percentile) queues would not be expected to block the site driveway. This situation occurs under future winter PM conditions, regardless of whether the proposed project is implemented. The 95th-percentile queue length in the westbound left/through lane is calculated to be only one vehicle, with or without the proposed project. The impact of this queue on westbound through traffic would be negligible.

Finally, several factors determine whether a project has sufficient access for emergency vehicles, including the following:

[15] LSC Transportation Consultants, Inc. *Squaw Valley Olympic Museum Transportation Impact Analysis*. February 21, 2020; LSC Transportation Consultants, Inc. Technical Memorandum *Re: Squaw S.N.O.W. Museum – Trip Generation, Level of Service and Roadway Capacity*. January 29, 2021.

1. Number of access points (both public and emergency access only);
2. Width of access points; and
3. Width of internal roadways.

Emergency vehicles would access the project site by way of the existing roadway network in the project vicinity. As discussed, the proposed project would not alter the widths of the existing driveway entrance or on-site driving lanes. The existing parking lot and driveway entrance were constructed in accordance with all applicable standards set forth in the Placer County Design Guidelines Manual, including Section IV, which contains standards related to parking and circulation. The existing driveway entrance and all internal driving lanes are at least 20 feet in width, which is substantially wide enough to accommodate emergency vehicles. In addition, Impact 8-1, included in Chapter 8, Wildfire, of this EIR, further evaluates emergency vehicle access to the site in the context of wildfire events, up to 6,000 sf of the driveway and asphalt parking lot would be resurfaced, and the parking area directly fronting the museum would be restriped to include two additional parking spaces compliant with ADA requirements. The re-striping of the parking lot would allow space for a bus turnaround for buses up to 40 feet in length in the eastern portion of the parking lot, would aid in the event that evacuation of the project site during a wildfire is necessary, and would allow OVFD vehicles and equipment to safely access the project site. Therefore, the proposed project would not result in inadequate emergency access or access to nearby uses.

Based on the above, the proposed project, including the proposed on-site parking lot improvements, would not substantially increase hazards to vehicle safety due to a geometric design feature or incompatible uses or result in inadequate emergency access or access to nearby uses. Therefore, a ***less-than-significant*** impact would occur.

Mitigation Measure(s)

None required.

Cumulative Impacts and Mitigation Measures

As defined in Section 15355 of the CEQA Guidelines, “cumulative impacts” refers to two or more individual effects which, when considered together, are considerable, compound, or increase other environmental impacts. The individual effects may be changes resulting from a single project or a number of separate projects. The cumulative impact from several projects is the change in the environment that results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects.

It should be noted that increased traffic volumes on local roadway facilities under Cumulative conditions would not substantially alter performance related to bicycle facilities, pedestrian facilities, transit facilities and services, and emergency vehicle access. Rather, impacts to such facilities under Cumulative Plus Project conditions would be identical to those discussed above under Impact 7-2. In addition, construction activities associated with the project would be complete prior to the cumulative analysis year. Therefore, such topics are not discussed further in the cumulative analysis presented herein. Finally, the VMT impact analysis discussed under Impact 7-3 would also apply to Cumulative Plus Project conditions. Pursuant to the County’s Transportation Study Guidelines, the proposed project meets the screening criteria provided for Local-Serving Non-Residential Development. As such, VMT generated by the proposed project

would represent only a less than cumulatively considerable incremental contribution under Cumulative conditions.

For further detail related to the cumulative setting of the proposed project, refer to Chapter 9, Statutorily Required Sections, of this EIR.

7-5 Substantially increase hazards to vehicle safety under Cumulative Plus Project conditions. Based on the analysis below, the impact is *less than cumulatively considerable*.

As detailed under Impact 7-4, the proposed project would not include any new sharp curves or dangerous intersections. The width of the existing driveway entrance would not be altered as part of development of the project, nor would the widths of existing internal driving lanes. Such factors would be the same under Cumulative Plus Project conditions. Therefore, the majority of on-site conditions would not change, and the proposed project would not result in a cumulatively considerable contribution to a significant impact related to increased hazards to vehicle safety due to a geometric design feature or incompatible use or inadequate emergency access or access to nearby uses under Cumulative Plus Project conditions. However, as traffic congestion on the roadway network in the project vicinity would increase under Cumulative conditions, the proposed project's potential safety hazards related to queuing merits discussion.

As discussed above, traffic queues at intersections that exceed the storage capacity of turn lanes or ramps, or block turn movements at important nearby intersections or driveways, can cause operations problems beyond those associated with LOS. Pursuant to the TIA, under Cumulative conditions, eastbound traffic queues on Olympic Valley Road are expected to be notably longer relative to Existing conditions, which could result in a significant cumulative impact. Under such a scenario, left turns from the 7-Eleven convenience store driveway onto Olympic Valley Road would continue to be hindered by queues during the winter season, as well as during summer peak periods. In addition, the 95th percentile queues on eastbound Olympic Valley Road would block turns from the site driveway during winter PM peak periods, as well as westbound traffic attempting left turns into the site. The average (i.e., 50th percentile) queues would not be expected to block the site driveway. The number of vehicles turning left from the project site during peak periods is also anticipated to be relatively low, with an average of less than one vehicle every eight minutes. The TIA also determined that the proposed project would not exacerbate any queuing issues on the SR 89 approaches to Olympic Valley Road under Cumulative conditions. As discussed, the majority of visitors to the proposed project would be by those who are already in the area for other reasons, such as patronizing the ski resorts accessing the region, in general.

Based on the above, although traffic queues on Olympic Valley Road are expected to be notably longer under Cumulative conditions, which could result in a significant cumulative impact, the proposed project's incremental contribution to intersection traffic queues would be minimal. Therefore, the proposed project's incremental contribution to the cumulative significant impact would be ***less than cumulatively considerable***.

Mitigation Measure(s)

None required.

8. WILDFIRE

8. WILDFIRE

8.1 INTRODUCTION

The Wildfire chapter of the EIR summarizes the existing wildfire setting and identifies the wildfire potential within the project area. The chapter describes the fire types that occur in the project region, wildland fire hazards associated with the project site, the fire history of the project region, the fuel treatment projects, such as mechanical thinning and prescribed fire, within the region, and consideration of site-specific factors that may affect the wildfire potential at the project site. The information contained in the analysis is primarily based on an Emergency Preparedness and Evacuation Plan (EPEP) prepared for the proposed project by Atlas Planning Solutions (see Appendix H of this EIR).[1] Further information was sourced from publicly available information provided by the California Department of Forestry and Fire Protection (CAL FIRE), the California Public Utilities Commission (CPUC), the Olympic Valley Fire Department (OVFD), the Placer County General Plan,[2] the Placer County General Plan EIR,[3] the Squaw Valley General Plan (SVGP) and Land Use Ordinance,[4] and the Placer County Conservation Program (PCCP).[5]

8.2 EXISTING ENVIRONMENTAL SETTING

The following section describes the existing wildfire setting in the project region, including the existing fire types, wildland fire hazards, fuel treatment efforts, public safety power shutoffs, fire protection agencies and resources in the project region, and emergency vehicle access.

Fire Types

The following sections describe the three fire types which various areas of Placer County are at risk of experiencing.

Wildfires

Wildfires occur on mountains, hillsides, and grasslands. Vegetation, wind, temperature, humidity, and slope are all factors that affect how wildfires spread. In Placer County, the wildland fire hazard season lasts from early spring through late fall, and native vegetation, such as chaparral, sage, and grassland, provide fuel that allows wildfires to spread easily across large tracts of land. Such plant species are capable of regeneration after a fire, making periodic wildfires a natural part of the local ecology. Placer County is considered a rural/suburban County with wildfire as the most prevalent fire type. The climate of the Placer County region keeps the grass dry, which makes the region's grass more readily combustible during fire season. As discussed in further detail in the Topography and Vegetation subsection, steep slopes bring grass and brush within reach of upward-moving flames, while impeding the access of firefighting equipment. Seasonal drought conditions exacerbate fire hazards.

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1 Atlas Planning Solutions. *Emergency Preparedness and Evacuation Plan*. August 2, 2022.
2 Placer County. *Countywide General Plan Policy Document.* August 1994 (Updated May 2013).
3 Placer County. *Countywide General Plan EIR*. July 1994.
4 Placer County. *1983 Squaw Valley General Plan and Land Use Ordinance*. October 6, 1983.
5 Placer County. *Placer County Conservation Program*. September 1, 2020.

Wildland-Urban Interface Fires

The wildland-urban interface (WUI) zone is an area where buildings and infrastructure (e.g., cell towers, schools, water supply facilities) mix with areas of wildland vegetation susceptible to ignition due to several factors, including topographical features, vegetation fuel types, local weather conditions, and prevailing winds. The interface is sometimes divided into the defense zone (areas near communities, usually about 0.25-mile wide) and threat zones (an approximately 1.25-mile buffer around the defense zone). Wildfires and urban interface fires have occurred within Placer County, especially in the Sierra Nevada region where a majority of parcels are within a Very High Fire Hazard Severity Zone (FHSZ).

In the WUI zone, efforts to prevent ignitions and limit wildfire losses hinge on hardening structures and creating defensible space through a multi-faceted approach, including engineering, enforcement, education, emergency response, and economic incentive. Different strategies in the defense and threat zones of the WUI help to limit the spread of fire and reduce risks to people and property. As discussed in further detail in the Wildfire Classifications subsection, wildfire threat within the County ranges from Moderate to Very High. The highest threat occurs in the Sierra Nevada, which is considered a Very High FHSZ, whereas the County's valley and foothill regions are considered Moderate and High FHSZs.

Structural Fires

Urban fires occur in developed environments, destroying buildings and other humanmade structures. Structural fires are often caused by faulty wiring or mechanical equipment or combustible construction materials, and are able to proliferate due to the absence of fire alarms and sprinkler systems. The fires have been due largely to human accidents, although deliberate fires (arson) may be a cause of some events. Older buildings that lack modern fire safety features may face greater risk of damage from fires. To minimize fire damage and loss, the County's Fire Code, based on the California Fire Code (CFC), sets standards for building and construction. It requires the provision of adequate water supply for firefighting, fire retardant construction, and minimum street widths, among other things. Fire prevention awareness programs and fire drills are conducted to train residents to respond quickly and correctly to reduce injury and losses during fires.

Wildland Fire Hazards

The following section includes a discussion of the potential for wildland fires to occur in the project area and the agencies and resources available for wildland fire suppression.

Wildfire Classifications

With respect to wildland fires, previous significant WUI fires within the State have precipitated the passage of statutes necessitating the classification of wildland fire hazard areas, according to a location's potential for causing ignitions to buildings. Such classifications are referred to as FHSZs and provide the basis for application of various mitigation strategies to reduce risks to buildings associated with wildland fires. The zones also relate to the requirements for building codes designed to reduce the ignition potential to buildings in the WUI zones.

Pursuant to Government Code Section 51178, Very High FHSZs are determined by the Director of Forestry and Fire Protection, based on consistent statewide criteria and the severity of fire hazard that is expected to prevail in such areas. Very high FHSZs are based on fuel loading, slope, fire weather, and other relevant factors, including areas where Santa Ana, Mono, and Diablo winds have been identified by the CAL FIRE as a major cause of wildfire spread. Public

Resources Code (PRC) Sections 4201 through 4204 direct CAL FIRE to map fire hazards within State Responsibility Areas (SRAs), based on relevant factors such as fuels, terrain, and weather. SRAs are recognized by the Board of Forestry and Fire Protection as areas where CAL FIRE is the primary emergency response agency responsible for fire suppression and prevention.

The project site is located within a SRA. Therefore, CAL FIRE is the primary emergency response agency responsible for fire suppression and prevention. Surrounding areas outside of Olympic Valley are located within a Federal Responsibility Area (FRA), which is managed by the U.S. Forest Service. As shown in Figure 8-1, the project site is identified by CAL FIRE as being within a Very High FHSZ area. Pursuant to the Placer County Local Hazard Mitigation Plan (LHMP), Olympic Valley is within a WUI zone.[6]

Topography and Vegetation

Topography, which includes slope and aspect, can play a significant role in wildfire risk. Fires burn faster uphill than downhill, due to fuels above a fire being brought into closer contact with upward moving flames. In addition, the process of heat transfer is influenced by topography, because heat rises (convection) and heat transfer through convection tends to move upward. Furthermore, during wildfires, burning materials on the forest floor also create convection currents that preheat the leaves and branches of shrubs and trees above the fire. Heat transfer, therefore, occurs more rapidly through fuels up a slope, resulting in fire traveling more quickly upslope than downslope.

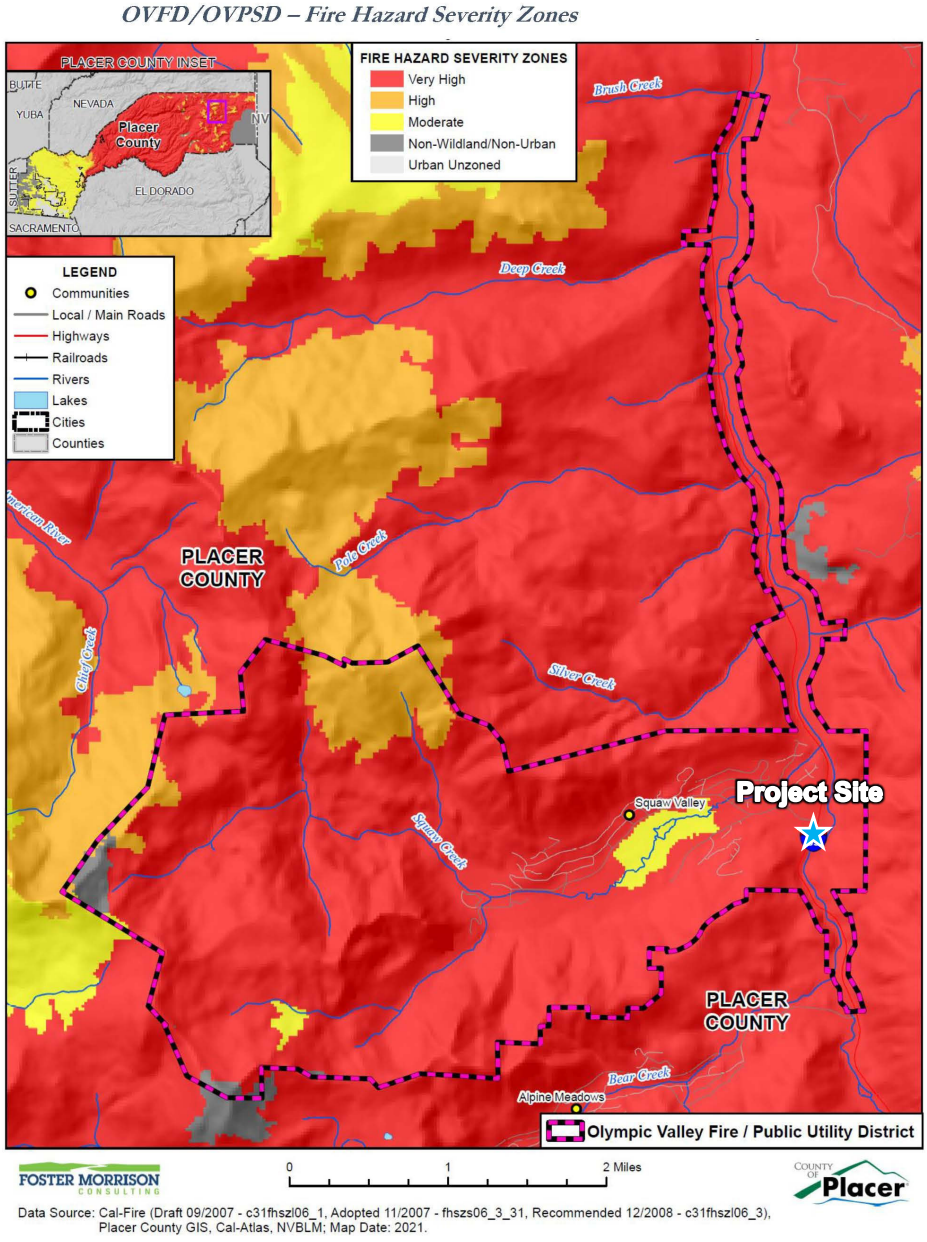
Vertical air currents can also lift burning materials, as floating embers, known as firebrands, can settle in unburned areas ahead of a fire, starting smaller fires. The phenomenon is called spotting and can result in rapid advancement of a fire.

With respect to the project region's topography, Olympic Valley is an alpine valley located northwest of Lake Tahoe in California's Sierra Nevada Mountain range in the Truckee River watershed. The watershed is comprised of approximately 779,350 acres of moderate to steep mountain slopes and gentle sloping meadows, and the valley floor is approximately two miles long and 2,450 feet wide at the widest point. Three major peaks dominate the western edge of Olympic Valley: Granite Chief (9,006 feet), Emigrant Peak (8,797 feet), and Squaw Peak (8,885 feet). The valley floor ranges in elevation from approximately 6,100 feet at the eastern end to approximately 6,200 feet at the western end and is surrounded by steep mountain slopes that rise to peaks over 9,000 feet in elevation. The presence of steep and significant slopes results in wildfire risks related to topography in the project region.

With regard to the project region's vegetation, Olympic Valley is characterized by a flat grass-covered open area traversed by the numerous natural drainage channels of Squaw Creek. The drainage channels converge into one channel at the mouth of the valley to the west before emptying into the Truckee River immediately to the east of the project site across State Route (SR) 89. Riparian vegetation is located along Squaw Creek and the creek's associated tributaries, which bisect the valley in an east-to-west direction. In addition, mixed conifer forest habitat and native vegetation dominate the slopes throughout Olympic Valley. The existing vegetation within the project region provides potential fuel for wildfire.

[6] Placer County. *Annex O Olympic Valley Fire Department/Olympic Valley Public Service District*. Adopted November 16, 2021.

Figure 8-1
Olympic Valley Fire Hazard Severity Zones



Source: Placer County Local Hazard Mitigation Plan Update, Annex O-1, June 2021.

With respect to the project site, the site is located within the Olympic Valley Park, a year-round community park containing a large, relatively flat recreational area with a soccer field, a playground, pickleball courts, and bike trails. The on-site topography is undulating, due to scattered rock outcrops and boulders that create microtopographic variations; however, the site does not contain steep or significant slopes. Elevations range from 6,110 feet in the northwest corner of the project site and increase to 6,136 feet in the site's southwest portion. In regard to vegetation, the site is comprised predominantly of montane coniferous forest, which largely consists of white fir and pine trees native to the area. Patches of willow scrub occur in scattered locations within stormwater detention basins constructed for the Olympic Valley Park. In addition, riprap stone is scattered along the eastern boundary of the project site along the pickleball courts and the site's northwestern corner. A 0.04-acre drainage swale, which was constructed as part of 2004 improvements to Olympic Valley Park, supports wetland vegetation and occurs along the south side of Olympic Valley Road. Overall, considering the lack of steep and significant slopes within the project site, slope would not significantly affect on-site fire behavior, as compared to the mountainous areas in the surrounding environs of Olympic Valley. The on-site coniferous forest and willow scrub within the drainage swale provide potential fuel for wildfire.

Finally, with respect to the topography and vegetation of areas within the surrounding project vicinity, Squaw Creek is located to the north, as well as forested mountain areas that rise to an elevation of 6,755 feet. SR 89 and the Truckee River are located to the east and combine to act as a fuel break from fires originating from the east. A 10-foot-wide paved trail is located to the south of the project site. A wooded area located upslope of the paved trail is maintained as a shaded fuel break by Placer County. The Palisades Tahoe ski resort and associated residential, commercial, and resort areas are located to the west of the project site, south of Olympic Valley Road.

Climate

Olympic Valley is located just east of the crest of the Sierra Nevada range and experiences a montane climate that includes cool, wet winters with an average daytime high of 42 degrees Fahrenheit and mild, dry summers that average daytime highs of 82 degrees Fahrenheit. Average annual wind speeds of four miles per hour from the south are expected. Most of the annual precipitation falls as snow, typically between December and March, while a small percentage falls as rain during the spring and summer seasons. Summer lightning storms are infrequent in the area. Critical fire weather conditions are becoming more frequent in the region starting in July and extending through October each year and are typically associated with very low humidity and strong north winds. The ignition potential and fire spread rates during critical fire weather conditions is high and can easily lead to large wildfires within the project area.

Prevailing Winds

The predominant wind direction at the project site is from the east and west the majority of the year.[7] Easterly winds are most dominant from mid-September to late March. Westerly winds are most dominant from late March to mid-September. The direction of prevailing winds suggests that, during the majority of the year, winds would generally facilitate the spread of fire towards the west or east of the project site, depending on the time of the year.

[7] Weather Spark. *Average Weather in Squaw Valley California, United States*. Available at: https://weatherspark.com/y/1503/Average-Weather-in-Squaw-Valley-California-United-States-Year-Round. Accessed November 2022.

Regional Fire History

In Placer County, the wildland fire hazard season lasts from early spring through late fall. Fire conditions arise from a combination of hot, dry weather, an accumulation of vegetation, and low moisture content in both the air and the fuel sources. The following discussions detail past incidences of wildland fire in the project region, delineated by fires that have occurred within the service area of OVFD and fires occurring outside of the service area boundary.

Within the Olympic Valley Fire Department Service Area

The OVFD serves a 14-square-mile area that includes Olympic Valley and the Truckee River corridor between Alpine Meadows Road and Cabin Creek Road. According to the OVFD, less than two dozen wildland fires have occurred within the OVFD service area in the past 30 years. All were small events, defined as involving an acre or less. None have burned for more than a 24-hour operational period, and all have been extinguished before damaging any structures or facilities. Lightning strikes ignited most of the fires, but a handful of the fires were human-caused fires. The relatively small size of Olympic Valley makes early detection and reporting of wildland fires much easier, as the area is visible from either the community or from SR 89. Many fires, even small ones, are reported by more than one party. The Martis Peak fire lookout, located east of Olympic Valley, can see a considerable portion of the higher terrain surrounding the valley and provides a reliable report and location during the months that the lookout is staffed. Recent communication with Chief Allen Riley of the OVFD indicates that the valley has not been impacted by wildfire in quite some time, which can increase fire risk if vegetation management and brush clearance have not occurred regularly.

Access to fires within the service area is generally very good by road; however, pockets of a few hundred acres do not provide easy access to engines or crew transport vehicles. Fire hydrants provide the primary water source to most of the accessible areas within the valley. Fires in more remote locations may need to rely on other water sources like the Truckee River for tactics like helicopter bucket-drops or water tenders. The rare combination of early detection and good access has made rapid response and fire suppression duties in Olympic Valley reliable. Due to early detection and reporting, a handful of lightning-caused fires in the more remote areas have been handled promptly without much collateral burning or damage. Generally, such fires have been dealt with by an immediate single engine response from OVFD, augmented, when necessary, by a U.S. Forest Service or CAL FIRE team or a helitack crew, when available.

Outside of the Olympic Valley Fire Department Service Area

Large fires have occurred outside of the OVFD service area and have caused concern, due to the potential of fires spreading into Olympic Valley. The 2014 King Fire expanded to within six miles of the southwestern portion of the service area (top of Squaw Peak) as the fire burned in one direction for more than 10 miles during the night. The erratic and extreme behavior of the King Fire, exacerbated by drought conditions, has provided valuable information to fire managers, as the fire behavior deviated from that predicted by the fuel model. Other smaller fires within the Granite Chief Wilderness and lands to the west of the valley have been discovered promptly and either contained and extinguished rapidly or allowed to burn at a low level for resource management purposes. In 2021, the River Fire scorched approximately 2,600 acres within Placer and Nevada Counties, and the Caldor Fire burned over 221,000 acres in the southern portion of the Tahoe Basin (El Dorado National Forest), affecting El Dorado, Amador, and Alpine counties. Since 2016 other significant wildfires have not occurred in areas immediately outside the OVFD service area.

Fuel Treatment Efforts

Fuel treatment efforts have been ongoing within the project region. Forest fuel treatments are used by managers for ecological restoration and reducing fire hazards. Due to past management decisions and long-term fire exclusion, forests are denser and more susceptible to severe wildfires. Fuel treatments aim to reduce the intensity and size of wildfires, increase species diversity, and restore forests to their historical condition. Two common types of treatments include:

- Mechanical thinning: cutting and clearing wood and brush; and
- Prescribed fire: burning existing fuel before more accumulates.

Based on proximity to homes and communities, one treatment may be used over the other. Several research studies show a combination of thinning, followed by burning of surface fuels, is most effective in promoting forest resilience to wildfire.[8]

The Olympic Valley Community Wildfire Protection Plan (CWPP), which is detailed further in the Regulatory Context section of this chapter, identifies a number of fuel management projects for the Olympic Valley area, including, but not limited to, the Alpine Meadows and Olympic Valley Fire Protection Project. The Alpine Meadows and Olympic Valley Fire Protection Project is a 1,080-acre project that will reduce fuel loading and promote forest health on Tahoe National Forest lands surrounding the communities of Alpine Meadows and Olympic Valley (see Figure 8-3).[9] Surveys and analysis are currently in progress and on-the-ground work is scheduled to begin in 2024. In addition, the Olympic Valley CWPP identifies several other projects that, depending upon the securing of funds, would reduce fuels in the region further. For example, the Olympic Valley Community Wildfire Buffer Project (OV-4) would consist of thinning and fuel reduction surrounding the perimeter of homes, buildings, and other structures in Olympic Valley.[10] In the event of an encroaching fire, thinning and fuel reduction activities would provide the community with an additional layer of safety on top of individual lot maintenance. The buffer would be constructed through a combination of hand cut piling and burning, chipping, and mechanical thinning.

Within Placer County, implementation of the PCCP would result in the permanent protection of approximately 50,000 acres in conservation reserves by the year 2060. Preservation of the protected lands require that they are managed to reduce their susceptibility to wildfire. For example, each Reserve System unit would have a fire management component that would describe site-specific conditions and actions required to (1) reduce existing fuel loads, (2) re-introduce fire as a natural process of the ecosystem (if permissible), (3) minimize environmental effects and protect sensitive resources, and (4) enhance and/or restore natural community characteristics.

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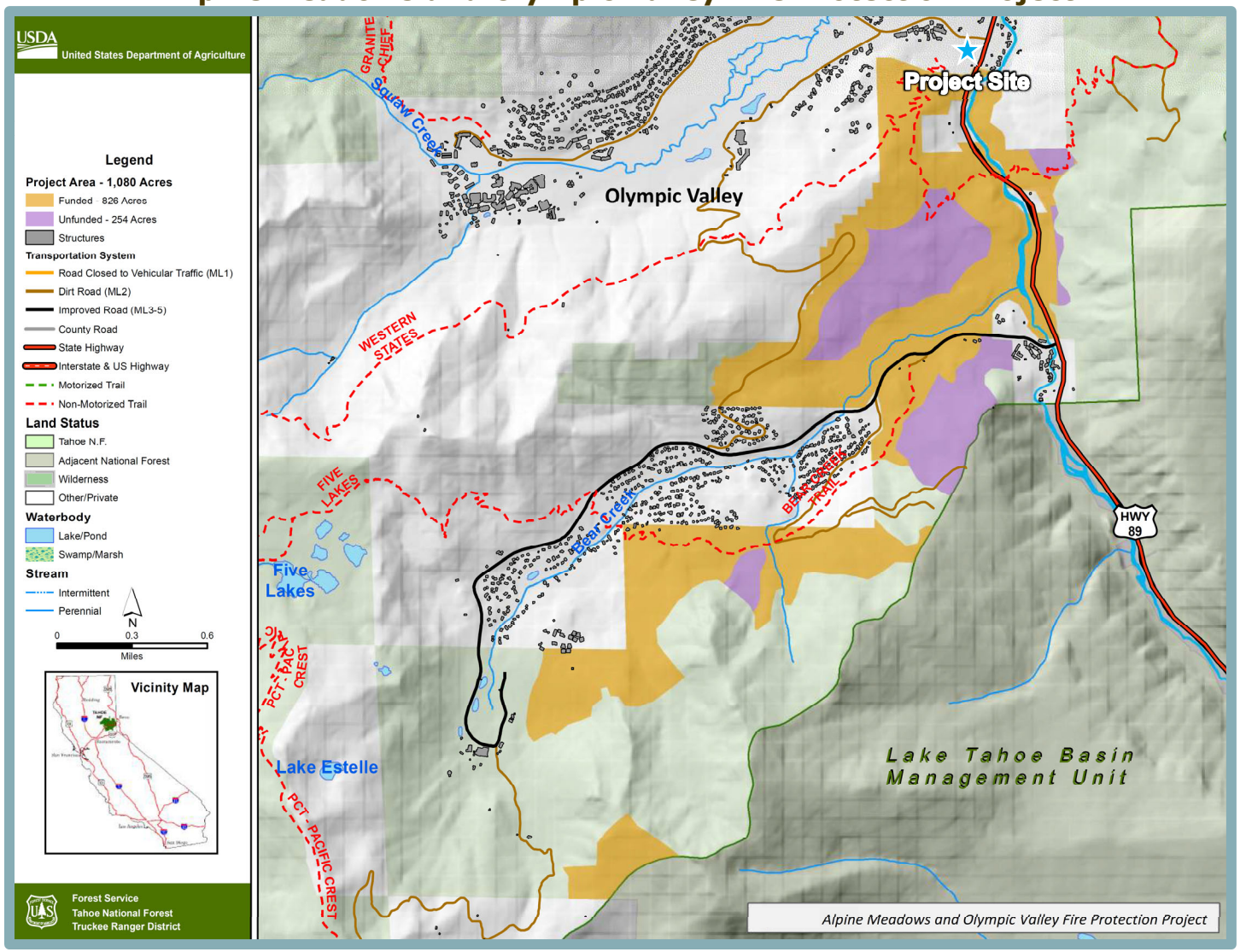
8 For example, see U.S. Department of Agriculture/Forest Service, Rocky Mountain Research Station. *Review of Fuel Treatment Effectiveness in Forests and Rangelands and a Case Study from the 2007 Megafires in Central Idaho USA (General Technical Report RMRS-GTR-252)*. January 2011.

9 Olympic Valley Public Service District, Olympic Valley Fire Department. *Olympic Valley Community Wildfire Protection Plan*. 2022.

10 *Ibid*.

Figure 8-2
Alpine Meadows and Olympic Valley Fire Protection Project



Source: Olympic Valley Community Wildfire Protection Plan, 2022.

In addition, other fuel reduction efforts (i.e., the Chipper Program) and new programs (i.e., the Biomass Box Program) currently underway would accomplish fuel reduction treatment efforts. The Placer County Resource Conservation District's (RCD) Chipper Program provides low-cost brush chipping for residents in Placer County. The Chipper Program continues to be available for local residents seeking to reduce fire hazards and improve defensible space around buildings and structures. The Chipper Program is funded through grants secured through a partnership with the RCD, Placer County Office of Emergency Services (OES), the Placer County Sheriff's Office, the Placer County Air Pollution Control District, and CAL FIRE.[11]

The Placer County Wildfire Protection and Biomass Utilization Program (i.e., the Biomass Box Program) was established in 2006 to help protect residents, communities, forests, and important forest resources from the threat of wildfire and to efficiently manage and use biomass. Many wildfire protection activities and projects involve the cutting of trees and brush to reduce wildfire hazard. Trees large enough to have commercial value as lumber are transported to mills for processing, but brush, small trees, and the limbs and tops of larger trees are excess biomass that has most often been disposed of by open burning to complete the necessary reduction of fire hazard. Placer County has recognized that a better option is to use the excess biomass for generation of energy. As part of the thinning of forested areas, the excess brush, small trees, limbs, and tree tops are ground and then transported by way of haul trucks to a biomass power plant. Using excess biomass for generation of energy provides benefits through offsetting fossil fuel energy generation, reducing air pollution emissions, and increasing support for jobs associated with the biomass utilization. Use of biomass for energy also has potential to help support the economic sustainability of forest management and hazard reduction projects designed to reduce the negative effects of wildfires.[12]

Public Safety Power Shutoffs

In an effort to prevent fires, the electrical services provider for eastern Placer County, Liberty Utilities, may initiate a public safety power shutoff (PSPS) if forecasted weather conditions have been determined to meet or exceed safety thresholds. PSPS events involve Liberty Utilities turning off electrical service during times when the weather is predicted to have a heightened fire risk from gusty winds and dry conditions. Dependent on the fire risks, the power outage events may occur in specific areas or for all Liberty Utilities customers across the County.

The CPUC adopted the High Fire-Threat District Map in 2018, which serves to assist in the public's protection from potential fire hazards associated with overhead powerline facilities and nearby aerial communication facilities by delineating fire-threat areas in the State.[13] Fire-threat areas are designated as Tier 1, 2, or 3, with Tier 1 defined as a High Hazard Zone, Tier 2 as an Elevated Hazard Zone, and Tier 3 as an Extreme Hazard Zone.

The project site is located within a Tier 2 zone, which is an area subject to an elevated risk from wildfires associated with overhead utility powerline facilities, including those that support communication facilities (see Figure 8-3).

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[11] Placer County. *Chipper Program Available for Placer County Residents*. Available at: https://www.placer.ca.gov/483/_1122012. Accessed October 2022.

[12] Placer County Community Development Resource Agency. *Biomass and Wildfire Protection.* Available at: https://www.placer.ca.gov/2881/Biomass-Wildfire-Protection. Accessed October 2022.

[13] California Public Utilities Commission. *Fire-Threat Maps and Fire-Safety Regulations Proceedings*. Available at: https://www.cpuc.ca.gov/industries-and-topics/wildfires/fire-threat-maps-and-fire-safety-rulemaking. Accessed October 2022.

Figure 8-3
High Fire-Threat District Map

Source: California Public Utilities Commission, CPUC High Fire Threat District (HFTD) Map, 2022.

Based on the project site's location within a Tier 2 zone, the site could be subject to PSPS events.[14] Throughout PSPS events, emergency services in Placer County remain functional with back-up power supplies, but many businesses and agencies are not operational, which can result in inadequate access to medical services and exposure to excessive heat or cold.

Fire Agencies and Resources

Several fire agencies provide fire protection services within the project area, including both wildland fire and structural fire response. Responsibility for wildland fire suppression at the project site is the sole responsibility of the State (i.e., CAL FIRE), given that the project site is located within a SRA. Fire and rescue service for the project site is the responsibility of the OVFD. Each agency is discussed further below.

California Department of Forestry and Fire Protection

Wildland fire protection is provided either by the State (through CAL FIRE) or the federal government (through the U.S. Forest Service). The State has direct protection responsibility for all State and private wildlands (or forest lands) in designated areas, and provides support and assistance to local jurisdictions in other areas of the State. CAL FIRE is responsible for wildland fire response at the project site.

The CAL FIRE Nevada-Yuba-Placer Ranger Unit serves the project area. CAL FIRE strives to meet the National Fire Protection Association (NFPA) 1710 guideline for fire department response time of five minutes 90 percent of the time. The nearest CAL FIRE station to the project site is Station No. 50, located at 10277 Truckee Airport Road, approximately 8.3 miles northeast of the project site. The CAL FIRE station is jointly operated with the Truckee Fire Protection District and provides services to the Martis Valley area. Station No. 50 is a full-time staffed station. In addition to legal responsibility for wildland fires in SRAs, where the project site is located, CAL FIRE has mutual and/or automatic aid agreements, and, thus, may assist local fire agencies with structural fires and medical incidents under the closest resource concept.

Olympic Valley Fire Department

As previously discussed, the OVFD serves a 14-square-mile area that includes Olympic Valley and the Truckee River corridor between Alpine Meadows Road and Cabin Creek Road. The OVFD is located at 305 Olympic Valley Road, approximately 0.25-mile west of the project site. The OVFD serves approximately 1,500 full-time residents within the department's service area with a full-time staff of 13 firefighters, with at least four personnel scheduled to be on duty for each shift, each day. Each shift includes a captain, an engineer/paramedic (apparatus driver), and two firefighters/paramedics. The full-time staff is augmented by part-time, paid firefighters and firefighters/paramedics during peak periods. All full-time firefighters are paramedics, and the OVFD provides advanced life support at all times. OVFD personnel are also trained to a hazmat first responder-operations level, and officers typically have the hazmat incident commander certification.

In addition to fire suppression, the OVFD provides up-to-date information to the community regarding fire prevention techniques, defensible space requirements, and other fire safety issues. The OVFD reviews development proposals for projects within Olympic Valley, issues burn permits, and coordinates with the Palisades Tahoe ski resort regarding avalanche control. With

[14] Liberty Utilities. *Public Safety Power Shutoffs.* Available at: https://california.libertyutilities.com/truckee/residential/safety/electrical/public-safety-power-shutoffs.html. Accessed October 2022.

most OVFD emergency calls related to accidents, injuries, or illness, the department also provides emergency medical services (EMS); however, the OVFD does not have an ambulance service. Currently, the closest emergency transport services are provided by the North Tahoe Fire Protection District and Truckee Fire Protection District. Care Flight and CALSTAR provide the closest air ambulance services.

The OVFD's goal for response time to service calls within its service area is to arrive on-site within five minutes of dispatch, 80 percent of the time. The OVFD owns and operates fire apparatus capable of direct attack, fire suppression, and structure protection. The department conducts ongoing professional training, including events such as the California Office of Emergency Services strike team responses statewide and local wildland fire exercises (a large annual wildland-urban interface training exercise that has been held in Olympic Valley for the past several years).

In addition, the OVFD is a member of the Eastern Placer County Joint Powers Authority (JPA), along with the Truckee Fire Protection District, NorthStar Fire Department, North Lake Tahoe Fire Protection District, North Tahoe Fire Protection District, and Meeks Bay Fire Protection District. As part of the department's participation in the JPA, the OVFD is subject to automatic and mutual aid agreements to provide and coordinate emergency response with local government, State, and federal resources when needed. The agreements include:

- Automatic aid, "boundary drop" agreements with North Tahoe Fire Protection District and Truckee Fire Protection District and Northstar Fire Department;
- Lake Tahoe Regional Fire Chiefs' Association mutual aid agreement; and
- Mutual Aid Agreement/Annual Operating Plan with U.S. Forest Service, Tahoe National Forest.

The OVFD is dispatched by the CAL FIRE Grass Valley Emergency Command Center (ECC). The Grass Valley ECC also dispatches other local fire and EMS services, as well as CAL FIRE resources from across the region, and shares the space with the U.S. Forest Service – Tahoe National Forest dispatch. All agencies involved in an active incident are dispatched from the Grass Valley ECC, ensuring that incident response is coordinated to place emergency response resources where needed. Emergency response resources include local, State, and federal engine companies, hand crews, dozers, air tankers, air tactics coordinators, helitack crews, and helicopters/helitankers of various sizes and capacities.

Emergency Vehicle Access

Fire access can be described as the means by which firefighters can enter an area to quickly mitigate a wildfire incident prior to spread to adjacent properties and critical infrastructure at risk. Primary access to the project site would be provided directly from Olympic Valley Road.

The existing roads that would serve as the primary evacuation routes during a wildfire event would include Olympic Valley Road, adjacent to the project site's northern boundary, as well as SR 89. From Olympic Valley, SR 89 is the only means of ingress and egress. The road connects Olympic Valley to the neighboring communities of Truckee to the north and Tahoe City to the south. Evacuation of the Olympic Valley community using Olympic Valley Road and SR 89 could pose some challenges, especially if equipment for fire response uses the roads to access the valley.

8.3 REGULATORY CONTEXT

The following sections provide a summary of the federal, State and local regulations pertaining to wildfire that are applicable to the proposed project.

Federal Regulations

The following are the federal environmental laws relevant to wildfire.

Healthy Forest Reforestation Act

In recognition of widespread declining forest health, the Healthy Forest Restoration Act (HFRA) was passed in 2003 to expedite the development and implementation of hazardous fuel reduction projects on federal land. A key component of the HFRA is the development of CWPPs as a mechanism for public input and prioritization of fuel reduction projects. A CWPP provides background information about a project area, discussion of community values at risk, community base maps, a fire risk assessment, and recommendations that identify treatment areas for reducing fuels and promoting education and awareness about wildland fires, as well as monitoring and assessment strategies. The Olympic Valley CWPP analyzes wildfire hazard across the Olympic Valley region and provides recommendations regarding ways that residents in the area can reduce their collective exposure to wildfire caused losses.[15] The purpose of the Olympic Valley CWPP is to identify and prioritize fuels reduction and wildfire prevention strategy within the OVFD's service area and address issues such as wildfire response, hazard mitigation, community preparedness, home hardening, and structure protection.

State Regulations

The following are the State environmental laws and policies relevant to wildfire.

State Responsibility Area

Pursuant to PRC Sections 4125-4128, the Board of Forestry and Fire Protection classifies all lands in the State for the purposes of determining areas in which the financial responsibility of preventing and suppressing wildfire is primarily the responsibility of the State. The classified lands are termed SRA.

Fire Hazard Severity Zones

FHSZs are geographical areas designated pursuant to California PRC Sections 4201 through 4204 and classified as Very High, High, or Moderate in SRAs or as Local Agency Very High FHSZs designated pursuant to California Government Code Sections 51175 through 51189.

The California Code of Regulations (CCR), Title 14, Section 1280 entitles the maps of the geographical areas as "Maps of the Fire Hazard Severity Zones in the State Responsibility Area of California."

California Public Resources Code Section 4291

California PRC Section 4291 sets forth minimum fire safety standards for development in or adjoining WUI zones, such as mountainous areas and forest-covered lands. Provisions of California PRC Section 4291 for such development include, but are not necessarily limited to, the following:

[15] Olympic Valley Public Service District, Olympic Valley Fire Department. *Olympic Valley Community Wildfire Protection Plan*. 2022.

- Defensible space must be maintained 100 feet from the side, front and rear of a structure, or up to the property line where the property line is less than 100 feet from the structure;
- Any tree, shrub, or other plant adjacent to or overhanging a building must be free of dead or dying wood;
- The roof of any structure must be free of leaves, needles, or other vegetative materials;
- Prior to constructing a new building, the owner shall obtain a certification from the local building official that the dwelling or structure, as proposed to be built, complies with all applicable State and local building standards; and
- Prior to final inspection approval of any building, the fire department must inspect the building and the fire suppression facilities to certify that the fire suppression improvements comply with the California Building Code (CBC) and fire department service requirements.

California Building Code – Chapter 7A (Materials and Construction Methods for Exterior Wildfire Exposure)

Chapter 7A of the CBC (Title 24 CCR, Part 2) includes definitions and standards for building materials, systems, and/or assemblies to be used for the exterior design and construction of new buildings located within a WUI zone, which is defined by the CBC as a geographical area identified by the State as a "Fire Hazard Severity Zone" in accordance with the PRC Sections 4201 through 4204 and Government Code Sections 51175 through 51189, or other areas designated by the enforcing agency to be at a significant risk from wildfires.

Chapter 7A of the CBC is intended to establish minimum standards for the protection of life and property by increasing the ability of a building located in any FHSZ within SRAs or any WUI zone to resist the intrusion of flames or burning embers projected by a vegetation fire and contributes to a systematic reduction in conflagration losses. All new buildings to be located in a FHSZ or WUI zone designated by the enforcing agency for which an application for a building permit is submitted on or after July 1, 2008 are required to comply with Chapter 7A of the CBC. Examples of the Chapter 7A standards include, but are not limited to, use of ignition-resistant materials, fire-intrusion design of roofing and vents, and use of glazed exterior windows and doors. The project site is within in a FHSZ and WUI zone. Thus, the proposed project would be subject to standards set forth by CBC Chapter 7A.

Local Regulations

The following local goals and policies related to wildfire are applicable to the proposed project.

Placer County General Plan

The Placer County Board of Supervisors adopted the 2021 Health and Safety Element Update on November 16, 2021 through Resolution 2021-359. The update includes refinements to the goals, policies, and implementation programs that address potential and existing hazards in the County, including those related to wildfire. The following goals and policies from the Placer County General Plan, including those from the 2021 Health and Safety Element Update, related to wildfire are applicable to the proposed project.

Public Facilities and Services Element

Goal 4.I To protect residents of and visitors to Placer County from injury and loss of life and to protect property and watershed resources from fires.

Policy 4.I.1 The County shall encourage local fire protection agencies in Placer County to maintain the following minimum fire

protection standards (expressed as Insurance Service Organization (ISO) ratings):

a. ISO 4 in urban areas
b. ISO 6 in suburban areas
c. ISO 8 in rural areas

Policy 4.I.2 The County shall encourage local fire protection agencies in the County to maintain the following standards (expressed as average response times to emergency calls):

a. 4 minutes in urban areas
b. 6 minutes in suburban areas
c. 10 minutes in rural areas

Policy 4.I.3 The County shall require new development to develop or fund fire protection facilities, personnel, and operations and maintenance that, at a minimum, maintains the above service level standards.

Policy 4.I.4 The County shall work with local fire protection agencies to identify key fire loss problems and design appropriate fire safety education program to reduce fire incidents and losses.

Policy 4.I.5 The County shall work with local fire protection agencies and implement ordinances to control fire losses and fire protection costs through continued use of automatic fire detection, control, and suppression systems.

Policy 4.I.7 The County shall maintain and strengthen automatic aid agreements to maximize efficient use of available resources.

Policy 4.I.8 The County shall work with local fire protection agencies to maintain a pre-fire planning program with selected high-risk occupancies reviewed at least annually.

Policy 4.I.9 The County shall ensure that all proposed developments are reviewed for compliance with fire safety standards by responsible local fire agencies per the Uniform Fire Code and other County and local ordinances.

Policy 4.I.10 The County shall work with local fire protection agencies to inventory and eliminate structurally unsafe and fire-hazardous housing units that are beyond repair or rehabilitation.

Policy 4.I.11 The County shall encourage local fire protection agencies to provide and maintain advanced levels of emergency medical services (EMS) to the public.

Health and Safety Element

Goal 8.C.1 To minimize the risk of loss of life, injury, and damage to property and watershed resources resulting from unwanted fires.

Policy 8.C.1.1 The County shall require that new development meet State, County, and local fire district standards for fire protection, including the California Building Standards Code, the International Wildland-Urban Interface Code, and the Placer County Municipal Code as applicable.

Policy 8.C.1.2 The County shall refer applicants of development projects in the unincorporated county to the appropriate local fire agencies for review for compliance with fire safety standards. If dual responsibility exists, then both agencies shall review and comment relative to their area of responsibility. If standards are different or conflicting, the more stringent standards shall be applied. All development in high fire hazard areas shall be designed and constructed to minimize the risk from fire hazards.

Policy 8.C.1.3 The County shall ensure that existing and new buildings of public assembly incorporate adequate fire protection measures to reduce the potential loss of life and property in accordance with state and local codes and ordinances.

Policy 8.C.1.4 The County shall encourage and promote installation and maintenance of smoke detectors and fire safety improvements in existing residences and commercial facilities that were constructed prior to the requirement for their installation.

Policy 8.C.1.6 The County shall continue to implement State fire safety standards through enforcement of the applicable standards contained in the Placer County Land Development Manual.

Policy 8.C.1.10 The County shall develop policies and provide updates, as appropriate, that ensure recovery and redevelopment after a large fire reduces future vulnerabilities to fire hazard risks through site preparation, redevelopment layout design, fire-resistant landscape planning, and fire retarding building design and materials.

Policy 8.C.1.14 The County shall encourage fire protection agencies to continue education programs in schools, service clubs, organized groups, industry, utility companies, government

agencies, press, radio, and television to increase public awareness of fire hazards within the county.

Policy 8.C.1.15 The County shall work with local fire protection agencies, CAL FIRE, and the U.S. Forest Service to maintain existing fuel breaks and emergency access routes for effective fire suppression.

Policy 8.C.1.16 The County shall work with local fire agencies to develop high-visibility fire prevention programs, including those offering voluntary home inspections and promoting awareness of home fire prevention measures.

Goal 8.C.2 To manage forests in a sustainable manner that will not endanger urban areas with wildfires.

Policy 8.C.2.1 The County shall continue to work cooperatively with the US Forest Service, CAL FIRE, and local fire protection agencies in managing wildland fire hazards.

Policy 8.C.2.5 The County shall implement the adaptation strategies as contained in the Placer County Sustainability Plan necessary to support forest are managed in a sustainable manner in consultation with federal, state, and local agencies that will not endanger urban areas with wildfires.

Goal 8.E.1 To ensure the maintenance of an Emergency Management Program to effectively prepare for, respond to, recover from, and mitigate the effects of natural, human-made, or technological disasters.

Policy 8.E.1.1 The County shall continue to maintain, periodically update, and test the effectiveness of its Emergency Operations Plan.

Policy 8.E.1.2 The County shall continue to provide promotional programs that inform the general public of emergency preparedness and disaster response procedures.

Policy 8.E.1.3 The County shall maintain an emergency operations center to coordinate emergency response, management, disaster planning, and recovery activities.

Policy 8.E.1.4 The County shall provide alerts about potential, developing, and ongoing emergency situations through extensive alert and warning systems that convey information to all residents, in multiple languages and formats to ensure it is widely accessible.

Policy 8.E.1.6 The County shall continue to coordinate emergency preparedness, response, recovery, and mitigation activities

with special districts, service agencies, voluntary organizations, cities within the County, surrounding cities and counties, and state and federal agencies.

Policy 8.E.1.7 The County shall monitor the effectiveness of public safety, preparedness, and hazard mitigation policies under changing climate conditions. The County shall regularly update all appropriate planning documents, including the Public Health and Safety Element and the Local Hazard Mitigation Plan, to continue to protect the community as local conditions change.

Goal 8.E.3 To ensure that medical and public health systems proactively address human health hazards and inequities in the community.

Policy 8.E.3.1 The County shall establish an evacuation planning program to assist people to evacuate during hazardous events.

Policy 8.E.3.3 The County shall work with local water and wastewater districts to ensure that they have a plan and infrastructure for providing adequate service, treatment ability, and storage capacity as needed during and immediately after an emergency, including a wildfire event.

Placer County Code

The following applicable codes related to wildfire are from the Placer County Code.

Building Code

Buildings constructed within the project site would be subject to the current building standards found in both the CBC and Chapter 15 of the Placer County Code. Placer County Code Section 15.04.680 adopts, as reference, Chapter 7A of the CBC related to development within a WUI, which includes standards pertaining to the use of ignition-resistant materials, fire-intrusion design of roofing and vents, and use of glazed exterior windows and doors. The PFPD enforces standards associated with the installation of automatic fire sprinkler systems and the installation of Class A roofing materials. Both State and local requirements would significantly assist in reducing the threat of a wildfire spreading from undeveloped land to a nearby building.

Fire Code

Placer County has adopted the CFC (Title 24 CCR, Part 9) (Sections 15.04.510 [Fire Code Adopted] and 15.04.520 [Fire Code Amended]). The CFC addresses emergency access, access gates, sprinkler systems, fire alarms within buildings, and construction of access roads to accommodate fire apparatus. The CFC requires that an automatic fire sprinkler and/or fire extinguishing system be installed throughout new one- and two-family dwellings and commercial buildings 3,600 square feet (sf) and larger.

Fire Prevention Code

Chapter 9, Article 9.32, Part 3 of the Placer County Code requires the maintenance of “fire breaks" around structures and the clearing of roofs to prevent structural fires in the WUI. Chapter 9, Article 9.32, Part 4 of the Placer County Code requires that hazardous vegetation be abated on unimproved parcels in the County. Abatement of hazardous fuels is required if the unimproved

parcel is adjacent to an improved parcel where implementation of required defensible space would extend onto the unimproved parcel. Abatement is also required along roads if, in the opinion of the County fire warden, the presence of hazardous fuels constitutes a potential obstacle to emergency access.

Placer County Office of Emergency Services

Placer County's OES provides emergency management services in cooperation with local cities and special districts, including fire agencies. During an active incident, such as fire or flood, the OES helps initiate first responses. The functions of the OES include emergency planning, response, recovery, and mitigation, including preparation of a LHMP. The currently adopted Placer County LHMP, which was adopted on November 16, 2021, is a joint effort between Placer County and five incorporated communities, and 20 special districts, and is intended to guide hazard mitigation planning to reduce the effects of hazard events, including wildfires.[16]

Placer County Local Hazard Mitigation Plan

The 2016 LHMP was prepared pursuant to the requirements of the Disaster Mitigation Act of 2000 so that Placer County would be eligible for the Federal Emergency Management Agency's (FEMA) Pre-Disaster Mitigation and Hazard Mitigation Grant Programs, as well as lower flood insurance premiums. The LHMP is a multi-jurisdictional plan that geographically covers the entire area within Placer County's jurisdictional boundaries. The purpose of the LHMP is to guide hazard mitigation planning and to better protect the people and property of the County from the effects of hazard events. The LHMP demonstrates the community's commitment to reducing risks from hazards and serves as a tool to help decisionmakers direct mitigation activities and resources.

A draft Placer County 2021 LHMP Update was submitted for review to both CalOES and FEMA at the end of June 2021. On September 3, 2021, FEMA transmitted an Approval Pending Adoption letter, which stipulated that the Placer County 2021 LHMP Update met all the regulatory requirements and was eligible for final adoption. The Placer County Board of Supervisors adopted the Placer County 2021 LHMP on November 16, 2021. The goals of the 2021 LHMP are as follows:

- Goal 1: Minimize risk and vulnerability of Placer County to the impacts of natural hazards and protect lives and reduce damages and losses to property, economy, public health and safety, and the environment;
- Goal 2: Provide protection for critical facilities, infrastructure, utilities and services from hazard impacts;
- Goal 3: Improve public awareness, education, communication, and preparedness for all hazards;
- Goal 4: Increase communities' capabilities to mitigate losses and to be prepared for, respond to, and recover from a disaster event;
- Goal 5: Ensure a more resilient County that can adapt to the hazards created or exacerbated by Climate Change;
- Goal 6: Reduce fire severity and mitigate undesirable fire outcomes in Placer County; and
- Goal 7: Maintain FEMA Eligibility/Position the communities for grant funding.

With respect to the Olympic Valley region, Annex O of the LHMP details the hazard mitigation planning elements specific to the OVFD/Olympic Valley Public Service District (OVPSD), which also participated in the preparation of the 2016 LHMP. As detailed therein, the likelihood of future

[16] Placer County. *2021 Local Hazard Mitigation Plan Update*. Adopted November 16, 2021.

wildfire occurrence in the Olympic Valley region is considered highly likely and the level of vulnerability for the region is considered high. Annex O, Section O.7.2, details the mitigation actions that will be implemented as part of the 2021 LHMP to reduce hazard risks in Olympic Valley, including those related to wildfire, such as development of a communitywide emergency notification system, increased fire protection services, maintenance of emergency access, and the purchase of a towable generator for powering OVPSD booster stations during a prolonged power outage.

Placer County and Placer Operational Area Emergency Operations Plan

The Placer County and Placer Operational Area Emergency Operations Plan (EOP) provides the guidelines needed for emergency response planning, preparation, training and execution throughout unincorporated Placer County.[17] The EOP is applicable to any natural disaster or manmade emergency occurring in or in the proximity of Placer County that affects, or may affect, the unincorporated area of the County (or the entire operational area, should response require coordination of the emergency response efforts of multiple agencies or jurisdictions). Emergency events range from minor oil spills, brush fires and minor flooding to severe winter storms, floods, wildland fires, and earthquakes to countywide public health emergencies, all of which have potentially catastrophic long-term public safety, economic, social, and political implications.

Olympic Valley Community Wildfire Protection Plan

The goal of the Olympic Valley CWPP is to aid stakeholders in developing and implementing effective, tactically useful, hazardous-fuel-treatment projects; prioritizing areas for fuel reduction and wildfire-related code enforcement; increasing the wildfire literacy of community members; assisting public agencies in making valid and timely decisions for wildfires and evacuations; and estimating the hazards associated with wildland fire in proximity to the community. The hazard information in the Olympic Valley CWPP, in conjunction with values-at-risk information, defines "areas of concern" for the community and allows prioritization of mitigation efforts and provides community members with information on how best to reduce their exposure to wildfire losses. As part of the CWPP process, the OVPSD hosted three meetings with stakeholders, including the U.S. Forest Service, CAL FIRE, Placer County, peer fire departments, the Washoe Tribe, large landowners, commercial entities, homeowner's associations, Placer County Firewise Community representatives and interested community members.[18]

Placer County Eastside Emergency Evacuation Plan

Placer County adopted an update to the Eastside Emergency Evacuation Plan in March 2015 to address the physical evacuation of one or more communities in unincorporated eastern Placer County. The plan covers the portion of the County from just west of Cisco Grove to the Nevada State line, but does not include areas within the Tahoe National Forest or the Lake Tahoe Basin Management Unit. The plan prescribes specific responsibilities for first responders and other

[17] Placer County Office of Emergency Services. *Placer County and Placer Operational Area Emergency Operations Plan.* Adopted December 14, 2010.

[18] The Placer County Fire Safe Alliance provides community assistance, information, and education programs in an effort to reduce the risks of wildfire danger to life and property in the County and is comprised of various members, including, but not limited to, Placer County; CAL FIRE; U.S. Bureau of Land Management; U.S. Bureau of Reclamation; and the Greater Auburn Area, Foresthill/Iowa Hill, Lincoln, and Placer Sierra FSCs. Through the County's Firewise Communities Program, Placer County is a member community of the NFPA's Firewise USA Program, which is aimed at homeowners and provides specific criteria for communities regarding wildfire preparedness. The program provides resources to help homeowners learn how to adapt to living with wildfire and encourages neighbors to work together to take action to prevent losses.

agencies that would be involved in an emergency evacuation, defines typical evacuation scenarios, establishes incident command responsibilities, and addresses traffic control, transportation, resources and support, communications, care and shelter, and animal services. Multiple public agencies were involved in the development of the plan, including the Placer County OES, Placer County Sheriff's Office, the Nevada County Sheriff's Office, Town of Truckee, five eastern County fire protection districts/departments (including OVFD), California Highway Patrol, the U.S. Forest Service, American Red Cross, and Nevada County OES. The plan identifies evacuation centers within Tahoe City and Truckee that could provide shelter and resources to potential evacuees, the closest to the project site being the Fairway Community Center located at 330 Fairway Center in Tahoe City.

Placer County Sustainability Plan

The County adopted the Placer County Sustainability Plan (PCSP) : A Greenhouse Gas Emission Reduction Plan and Adaptation Strategy on January 28, 2020.[19] The primary goal for the adaptation component of the PCSP is to create a resilient Placer County that can adapt to the hazards created or exacerbated by climate change. To accomplish this goal, the PCSP provides several goals, strategies, and actions that promote coordination among agencies, protection of buildings, and implementation of mitigation measures to reduce wildfire activity in the County. The following PCSP strategies and actions are related to wildfire.

Strategy WF-5

Require all new large development projects in Moderate, High, or Very High Fire Hazard Severity Zones to have multiple points of ingress and egress to improve evacuations and emergency response access.

Strategy WF-7

Explore requiring fire-safe improvements before issuing a building permit or other formal approval for significant retrofits to buildings in identified Very High and High Fire Hazard Severity Zones, including installation of sprinklers and fire-safe exterior materials as feasible.

Action 1

Coordinate with the Placer County Fire Safe Alliance and local Fire Safe Councils to encourage new and existing planned developments in the WUI and other areas with elevated wildfire risk to join the Placer County Firewise Communities program.

Squaw Valley General Plan and Land Use Ordinance

The SVGP was adopted by the Placer County Board of Supervisors in June 1983 (last revised in 1997) and is the community plan for the approximately 4,700-acre unincorporated area of Placer County that includes Olympic Valley. The implementing Ordinance, the Squaw Valley Land Use Ordinance (Chapter 40, Placer County Code), was adopted in June 1983; and modified on September 13, 1983; February 11, 1986 (ZTA-278); April 16, 1985 (GPA-250, REA-843); August 14, 1986 (GPA-312, REA-857). The proposed project would be subject to all policies, objectives, recommendations, and standards contained in the Plan Text and Land Use Ordinance, which guides future development of Olympic Valley.

Pursuant to the SVGP Community Development Element, developers should coordinate with the OVFD early in the project design stage of development projects so that projects incorporate and

[19] Placer County. *2015 Update to the Placer Operational Area Eastside Emergency Evacuation Plan*. November 17, 2015.

accommodate fire protection features and services. In addition, the SVGP provides that in order to offset the increased risks to life and property generated as part of increasing developed uses in the OVFD service area, fair share Fire Protection Fees should be assessed to new development projects. Pursuant to Section 145.14 of the Land Use Ordinance, half of a project's Fire Protection Fee payment must be paid prior to the issuance of building permits and the remaining half paid prior to the issuance of certificates of occupancy. For commercial uses, the payment is $350 per 1,000 sf of gross floor area.

Olympic Valley Fire Department Emergency Preparedness and Evacuation Guide

The OVFD Emergency Preparedness and Evacuation Guide provides individuals and families within Olympic Valley various instructions to ensure that in the event of an emergency, the potential impact is reduced to the extent feasible. The guide is divided into three sections. The first section provides various steps that Olympic Valley residents, employees, and visitors can take to prepare ahead of time for a future emergency. The second section provides checklists to ensure that individuals or families are set for an evacuation or "shelter in place" order in the event of a potentially impending emergency. Finally, the third section provides an evacuation checklist to guide individuals and families in knowing when to leave, where to go, what routes to take, and what possessions to bring in the event of an evacuation.

8.4 IMPACTS AND MITIGATION MEASURES

The following section describes the standards of significance and methodology used to analyze and determine the proposed project's potential impacts related to wildfire. In addition, a discussion of the project's impacts, as well as mitigation measures where necessary, is also presented.

Standards of Significance

Consistent with Appendix G of the CEQA Guidelines, Section XX, Wildfire, and Placer County's Environmental Checklist, determination of significant impacts related to wildfire is based on whether the proposed project would result in the following, if located in or near SRAs or lands classified as Very High FHSZs:

- Substantially impair an adopted emergency response plan or emergency evacuation plan.
- 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.
- 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.
- 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.

Method of Analysis

The impact analysis contained in this chapter is based on information contained in the EPEP prepared for the proposed project by Atlas Planning Solutions (see Appendix H of this EIR). The primary objective of the EPEP is to develop a successful plan to implement effective emergency preparedness and communication/education strategies for visitors and staff of the proposed project. The EPEP identifies roles and responsibilities of future museum staff in the event of an emergency, including those related to wildfire; various communication protocols to alert visitors and staff of emergencies; and the various State and local fire hazard regulations with which the

proposed project would be required to comply to minimize wildfire risk (e.g., defensible space). The EPEP also relies upon information provided directly by the Chief of the OVFD.

Atlas Planning Solutions prepared the EPEP in accordance with the concepts and goals set forth in the SVGP and Land Use Ordinance. The EPEP is intended to be implemented in conjunction with the OVFD Emergency Preparedness and Evacuation Guide and the Placer County Eastside Emergency Evacuation Plan.

Project-Specific Impacts and Mitigation Measures

The following discussion of impacts is based on the implementation of the proposed project in comparison with the standards of significance identified above.

8-1 Substantially impair an adopted emergency response plan or emergency evacuation plan. Based on the analysis below, the impact is *less than significant*.

Emergency events, like wildland fires, are unpredictable. The location of the fire, the time of day an event occurs, the direction of travel, and the rate of spread are unknown. Due to such uncertainty, the use of traditional capacity analysis, such as AM and PM peak hour operations at study intersections, is limited for the analysis of emergency events. Furthermore, while Placer County has an adopted LHMP and EOP, which are both intended to provide emergency resources and plans in response to local hazards, such as wildfires, the County does not have an adopted emergency evacuation plan. However, in the event of an emergency, emergency responders do have measures that can be deployed to aid in the movement of the public from danger. For instance, during evacuation events, State and/or local emergency responders provide active traffic control at intersections, close roads, provide detours for through traffic, and actively manage available travel lanes to facilitate evacuation away from the emergency. Such measures would be initiated in the event that an evacuation is deemed necessary. In addition, the Eastside Emergency Evacuation Plan prescribes specific responsibilities for first responders and other agencies that would be involved in an emergency evacuation, defines typical evacuation scenarios, establishes incident command responsibilities, and addresses traffic control, transportation, resources and support, communications, care and shelter, and animal services.

For the purposes of this analysis, Olympic Valley Road, the existing road adjacent to the project site, and SR 89, east of the project site, would serve as the primary evacuation routes during a wildfire event. The Circulation Plan Diagram in the County's General Plan (Figure 1-8 of the General Plan) depicts the circulation system for the unincorporated portions of the County, with roadways shown by means of a set of roadway classifications. Roadways are classified based on the linkages they provide and their function, both of which reflect their importance to land use patterns, travelers, and the public's general welfare. The County's roadway system classifies roadways into the following hierarchy: local streets, collector roadways, arterial roadways, thoroughfares, and expressways. In general, roadways higher in the hierarchy are meant to collect traffic from roads lower in the order. The Circulation Plan Diagram depicts Olympic Valley Road as a rural arterial and SR 89 as a State Highway arterial.

As discussed in Chapter 7, Transportation, of this EIR, according to the Transportation Impact Analysis (TIA), Trip Generation, Level of Service, and Roadway Capacity Memorandum (Trip Generation Memorandum), and Vehicle Miles Traveled Memorandum (VMT Memorandum) prepared for the proposed project by LSC Transportation Consultants, Inc., Olympic Valley Road provides two westbound travel lanes and two eastbound travel lanes within the project vicinity and connects SR 89 to the east of the project site to the Palisades Tahoe ski resort and associated residential, commercial, and resort areas to the west. From Squaw Creek Road to Palisades Tahoe, the roadway is a two-lane roadway, with various segments also providing a center turning lane. The posted speed limit along Olympic Valley Road is 35 miles per hour (mph). Intersections with residential streets along the roadway are controlled by stop signs on the side-street approaches. A traffic management program conducted by Palisades Tahoe is in place on peak days of winter traffic.

SR 89 is a two-lane roadway connecting the Town of Truckee and the Interstate 80 (I-80) corridor to the north with the unincorporated communities of Olympic Valley/Alpine Meadows and Tahoe City to the south. Traffic volumes along SR 89 exhibit strong seasonal variation, with congestion occurring during winter peak demand periods when adverse weather and ski area activity create higher volumes of traffic. The posted speed limit along SR 89 north of the road's intersection with Olympic Valley Road is 55 mph. The posted speed limit is reduced to 45 mph immediately south of the SR 89/Olympic Valley Road intersection.

Evacuation of the proposed project would involve relocation of visitors and staff from the site to safer locations within the County or elsewhere. Based on the operation parameters used in the EPEP to evaluate the evacuation characteristics of the project (see EPEP pages 11 to 12), the parking demand for the overall Olympic Valley Park parking lot, including museum vehicles, sports field vehicles, and existing parking counts, would consist of the following:

- Peak Winter Day (Saturday): 56 vehicles (2:30 PM to 3:00 PM);[20] and
- Peak Summer Day (Saturday): 115 vehicles (1:00 PM to 1:30 PM).[21]

During the peak summer condition, more than a third of the on-site vehicles (38) are anticipated to be museum visitors. The Trip Generation Memorandum prepared for the proposed project includes an evaluation of roadway and intersection level of service (LOS). LOS represents a qualitative description of the traffic operations experienced by the driver at an intersection or along a roadway segment and ranges from LOS A, which represents the absence of congestion and little delay, to LOS F, which signifies excessive congestion and delays. As detailed in the Trip Generation Memorandum, SR 89 operates within established LOS standards under all Existing condition scenarios (Winter, Summer Friday, and Summer Weekend) and would continue to operate acceptably with respect to LOS under all Existing Plus Projection condition scenarios. Similarly, with respect to intersection LOS, the Trip Generation Memorandum did not identify any study intersections (SR 89/Olympic Valley Road and

[20] Peak Winter Day demand for the proposed project is assumed to be 46 vehicles. Non-project demand is assumed to be 10 parking spaces.

[21] Peak Summer Day demand for the proposed project is assumed to be 38 vehicles. Non-project demand is assumed to be 77 spaces.

Olympic Valley Road/site access) that exceed applicable LOS thresholds under Existing or Existing Plus Project condition scenarios.

As cited in footnote 16 of the EPEP, personal communications conducted as part of the EPEP with the Chief of the OVFD indicate that the proposed project would not impair an emergency response plan or affect evacuation activities.[22] While Special Events that would occur as part of project operation are anticipated to include as many as 58 vehicles, the timing of such events would be between 6:00 PM and 10:00 PM, which would ensure that adequate roadway capacity is available to accommodate the vehicles.

Furthermore, as detailed in the VMT Memorandum prepared for the proposed project, of the total number of trips estimated to occur as part of project operation, a portion would be "pass-by" trips, or trips attracted from traffic passing the site on SR 89 or Olympic Valley Road. Pass-by trips generate traffic on the site access driveway, but do not add new traffic on regional roadways, as they are made by vehicles already passing by the project site that would divert to the proposed project as part of a longer trip. For example, tourists passing by the project site along SR 89 might decide to stop at the site, thereby generating new trips on Olympic Valley Road and the site access driveway, but not generating new trips along SR 89. Of the total trips associated with the project, 25 percent are estimated to be pass-by trips during the winter season and 20 percent would be pass-by trips during the summer season. As such, a portion of the visitor trips generated by the proposed project would be considered local trips with both origin and destination within the Truckee/Tahoe region. Based on such understanding, a portion of the project's traffic could reasonably be considered to already occur in the Olympic Valley area, and, in the event of a wildfire evacuation, would require use of the same roads for evacuation purposes, regardless of the proposed project.

As previously discussed, the OVFD is located approximately 0.25-mile west of the project site and would, therefore, be capable of accessing the project site quickly. During wildfire events, emergency responders would be able to access the project site to combat fires, which would serve to reduce the hazardous conditions that precipitate the need for evacuation of patrons and employees. Vehicle access to the project site is provided by an existing driveway from Olympic Valley Road, which currently serves as the entrance to Olympic Valley Park and connects to the existing surface parking lot. The entrance provides full access to the site. Up to 6,000 sf of the driveway and asphalt parking lot would be resurfaced, and the parking area directly fronting the museum would be restriped to include two additional parking spaces compliant with the Americans with Disabilities Act. The re-striping of the parking lot would allow space for a bus turnaround for buses up to 40 feet in length in the eastern portion of the parking lot. The aforementioned improvements would aid in the event that evacuation of the project site during a wildfire is necessary, and allow OVFD vehicles and equipment to safely access the project site.

The OVFD, in accordance with industry standards, uses the Incident Command System for all incidents involving more than a single unit response. Typically, the first-arriving company's most senior level officer will be assigned as the Incident

[22] Allen Riley, Chief, Olympic Valley Fire Department. Personal Communication [virtual meeting] with Atlas Planning Solutions. October 12, 2021.

Commander and will transfer command to either a higher-ranking officer or a representative of the authority having jurisdiction for the incident upon their arrival at the scene.

The decision to initiate an evacuation order will be made by the Incident Commander and will be implemented by the Placer County Sherriff's Office (PCSO) or other emergency response agency, as determined by the Incident Commander. Upon determination, the PCSO or local emergency authority will manage public notification within Olympic Valley, which would include museum staff and visitors of the proposed project.

During evacuations, the PCSO is the primary agency that supports evacuation proceedings and directs traffic during an emergency incident requiring evacuation. The Emergency Coordinator at the museum or their designee would coordinate with the PCSO, as needed, during an evacuation event. From Olympic Valley, SR 89 is the only means of ingress and egress. The road connects Olympic Valley to the neighboring communities of Truckee to the north and Tahoe City to the south. Evacuation of Olympic Valley using the roadway network could pose some challenges, especially if equipment for fire response uses the roadways to access the valley. Although the existing roadways have some limitations, the OVFD is continually looking for opportunities to identify alternative access points and pathways.

According to page 15-5 of the Highway Capacity Manual (HCM) 2010, the capacity of a two-lane highway under base conditions is 1,700 passenger vehicles per hour in one direction, with a limit of 3,200 passenger vehicles per hour for the total of two directions. As the southbound SR 89 volume is below 1,500, the 1,700 direction volume pertains. The maximum northbound capacity is, therefore, 1,700 vehicles per hour. Based on this capacity, and the peak summer parking demand from the proposed project of 38 vehicles, the proposed project would require 2.2 percent of the SR 89 northbound roadway capacity for wildfire evacuation purposes. Depending on the type and location of an emergency event, a "shelter-in-place" order could be safer, rather than to attempt to evacuate the valley. The OVFD identified the Palisades Tahoe ski resort (located approximately two miles from project site) parking lots as a temporary shelter-in-place location that could be used by Olympic Valley residents/visitors, if necessary, during a hazard event. In addition, discussions with PCSO staff and the OVFD indicate that the proposed project could be used for temporary shelter-in-place activities, if deemed safe by the Incident Commander and/or County.

Pursuant to the EPEP, an Emergency Coordinator would be assigned at the proposed museum, who would notify all museum staff if an emergency evacuation is issued by the Incident Commander. Staff would notify visitors of the information available and would assume that all museum visitors are not registered with the emergency alert systems within the County and would be reliant on the museum facility to act as their intermediary. The EPEP recommends messaging boards/sign throughout the facility to provide emergency preparedness and evacuation information and real-time messages about wildfire events. Additionally, the EPEP recommends installation of an internal public address (PA) system and external speakers/sirens to assist with communications for visitors located within the vicinity of the project site, but not within

the museum building. In addition to the aforementioned recommendations, the EPEP further recommends implementation of the following additional measures:

- A hardwired phone line to accept emergency notifications through Nixle and the Placer Alerts systems;
- External speakers/sirens to assist with communications for visitors located within the vicinity of the project site but not within an on-site building;
- An Emergency Coordinator(s) who would oversee implementation and future updates of the EPEP;
- Annual trainings for museum staff; annual testing and exercise of the EPEP by museum staff to determine if protocols and training require modification; guest education and outreach efforts during high hazard conditions;
- Coordination with emergency service providers to prepare for hazardous incidents during key times of the year; and
- Ticket alerts in the form of information provided to museum visitors provided at the time of purchase and visitation tailored to the different seasons, notifying visitors of the wildfire conditions during the summer and fall seasons, or weather conditions during the winter and spring seasons.

Implementation of the EPEP, including all of the aforementioned measures, would be required through a project condition of approval.

Finally, during project construction, temporary lane closures on Olympic Valley Road could be required; however, as required by Mitigation Measure 7-1 in the Transportation chapter of this EIR, any temporary lane closures would be coordinated with County OES, the Placer County Engineering and Surveying Division, and local emergency services providers. Furthermore, complete closure of Olympic Valley Road is not anticipated.

Based on the above, roadways and intersections in the project vicinity are anticipated to operate acceptably and first responders would be capable of providing service to the project site within acceptable response times. In addition, as stated above, implementation of the EPEP would be required through a project condition of approval. Therefore, the proposed project would not potentially impair an adopted emergency response plan or emergency evacuation plan, and a ***less-than-significant*** impact would occur.

Mitigation Measure(s)

None required.

8-2 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. Based on the analysis below and with implementation of mitigation, the impact is *less than significant*.

The project site is located within Olympic Valley, within the Olympic Valley Park, which contains a large, relatively flat recreational area with a soccer field, a playground,

pickleball courts, and bike trails. The following discussions evaluate the potential impacts associated with the proposed project related to the exacerbation of wildfire risks due to factors such as on-site fuel sources, slope, and prevailing winds.

Wildfire Risks Due to Existing On-Site Fuel Sources

CEQA Guidelines Appendix G indicates that the extent and nature of on-site vegetation, which would serve as fuel for a wildfire, should be evaluated to determine the potential for a project to exacerbate wildfire risk. As previously discussed, the project site has been previously disturbed as part of development of the Olympic Valley Park, which in addition to the park recreational features detailed above, contains an existing surface parking lot. The project development footprint consists of scattered rock outcrops and boulders, as well as a montane conifer forest, which is largely comprised of white fir and pine trees native to the area. In addition, patches of willow scrub occur in scattered locations within stormwater detention basins constructed for the Olympic Valley Park, and a 0.04-acre drainage swale occurs along the south side of Olympic Valley Road and supports wetland vegetation. Implementation of the proposed project would include site clearing activities, which would remove an estimated 109 of the 228 trees currently located on-site. Landscaping improvements would also be provided throughout the project site, as well as along the Olympic Valley Road frontage in the northwest corner of the site. Although the existing willow scrub areas would remain, development of the site with the proposed project would reduce the risk of wildland fire to surrounding areas, because site improvements, such as the irrigated on-site landscaping, would reduce readily combustible vegetation and act as a fuel break. Additionally, wildfire risks would not be anticipated to be exacerbated during project operation, as museum uses typically do not involve operational components that would increase the risk of wildfire.

The proposed project would be required to comply with all applicable State and local standards and regulations associated with prevention of wildfire hazards, including Placer County Code Sections 15.04.510 and 15.04.520, which serve to adopt and amend, as applicable, the CFC. Consistent with the requirements set forth by the CFC, an automatic fire sprinkler and/or fire extinguishing system would be installed throughout the proposed museum. In addition, the proposed project would be composed of ignition- and ember-resistant building materials. Fire flow for the proposed project would be provided by the OVPSD. The OVPSD water system contains a million-gallon water supply (spread amongst multiple tanks and supplied by groundwater wells). Water lines and 199 fire hydrants (spaced approximately 300 feet from each other) are located throughout the valley's developed areas, including the project area. The proposed project would include a new six-inch water service lateral and fire hydrant in the northwest corner of the project site, which would connect to the existing lateral within Olympic Valley Road, adjacent to the proposed building. The water system meets or exceeds NFPA standards for storage, flow, and pressure.

In addition, PRC Section 4291 requires any person who owns, leases, controls, operates, or maintains a building or structure in an adjoining mountainous area; lands covered in forest, brush, or grass; or any land that is covered with flammable material and is within an SRA to create 100 feet of defensible space around the perimeter of all buildings (or to the property line, if less than 100 feet). Because the proposed project is located within areas that require compliance with PRC Section 4291, the project would be required to create defensible space around the perimeter of the

proposed museum. Furthermore, Placer County Code Section 9.32.160 sets forth hazardous vegetation abatement standards for improved parcels, which complements the requirements established by PRC Section 4291 and with which the proposed project would be required to comply. Finally, pursuant to Placer County Code Section 15.75.040, the proposed landscaping would include irrigation scheduling in accordance with the County's Water Efficient Landscape Ordinance (WELO), which would ensure the proposed vegetation is sufficiently watered to not result in excessively dry fuel sources.

Overall, because the proposed project would remove existing fuel sources and would comply with State and local requirements, operation of the project would not exacerbate the risk of a wildfire spreading from undeveloped land to the proposed structures or the potential of fire spreading from the site to surrounding areas. However, during project construction, equipment without appropriate spark arrestors could result in direct flame impingement on combustible materials, such as existing on-site vegetation or building construction supplies. Without proper measures to require equipment used during construction activities to be equipped with CAL FIRE-approved spark arrestors, project construction could result in the ignition of on-site fuel sources, which could exacerbate wildfire risks due to on-site vegetation and building construction supplies, thereby exposing residents in the project vicinity to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire, and a significant impact could occur.

Wildfire Risks Due to Slope

As discussed above, while steep slopes are located throughout Olympic Valley, the project site does not contain steep slopes or significant slopes. The on-site topography is undulating, due to scattered rock outcrops and boulders that create microtopographic variations; however, overall, the site is relatively flat. In addition, SR 89 and the Truckee River are located to the east and combine to act as a fuel break from fires originating from the east. A 10-foot-wide paved trail is located to the south of the project site, with a wooded area located upslope of the trail that is maintained as a shaded fuel break by Placer County.

Based on the existing topography of the project site, slope would not affect on-site fire behavior. Therefore, the proposed project would not exacerbate wildfire risks due to slope, and a less-than-significant impact would occur.

Wildfire Risks Due to Prevailing Winds

With respect to prevailing winds at the project site, as previously discussed, winds from the east and west are the most dominant for the majority of the year. Easterly winds are most dominant from mid-September to late March. Westerly winds are most dominant from late March to mid-September. The predominant direction of prevailing winds suggests that during the majority of the year, winds could be reasonably assumed to facilitate spread of fire towards the west of the site, where montane conifer forest is located, or to the east of the site. However, the risk of easterly fires spreading to the west is reduced by paved areas associated with the Olympic Valley Park's existing surface parking lot, and the risk of westerly fires spreading to the east is reduced by SR 89, which acts as a fuel break.

As discussed above, a portion of the on-site fuel sources would be removed as part of development of the proposed project. In addition, the project would comply with State and local standards and regulations associated with prevention of wildfire hazards, including Placer County Code Sections 15.04.510 and 15.04.520, which serve to adopt and amend, as applicable, the CFC, as well as PRC Section 4291, which necessitates the creation of defensible space around the perimeter of the proposed museum. The removal of on-site vegetation and compliance with applicable standards and regulations would reduce the proposed project's potential of exacerbating wildfire risk due to prevailing winds during project operation.

Conclusion

Based on the above, while the project would not exacerbate wildfire risks due to prevailing winds, slope, and other factors, the project could exacerbate wildfire risks during project construction due to vegetation and, thereby, expose residents in the project vicinity to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. Therefore, a ***significant*** impact could occur.

Mitigation Measure(s)

Implementation of the following mitigation measure would reduce the above potential impact to a *less-than-significant* level.

8-2 *Prior to the approval of Improvement Plans, the plans shall include a note requiring CAL FIRE-approved spark arrestors on all construction equipment with internal combustion engines. The project contractor shall provide proof of compliance with this measure to the Placer County Community Development Resource Agency, prior to initiation of construction activities.*

8-3 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. Based on the analysis below, the impact is *less than significant*.

The proposed project would include installation of various infrastructure components, including resurfacing up to 6,000 sf of the existing driveway and asphalt parking lot, six-foot-wide concrete walkways, a six-foot-wide concrete ramp, a walking path, an underground rainstore retention facility and several infiltration trenches, an off-site sanitary sewer force main along Olympic Valley Road, and other utilities. All potential physical environmental impacts that could result from implementation of the proposed project have been evaluated throughout the technical chapters of this EIR and the Initial Study prepared for the project.

Electricity would be provided to the proposed project by Liberty Utilities. A new propane tank would be provided to the project site by Southwest Gas Corporation, which would be subject to applicable regulations set forth by Placer County Code Article 15.12. As part of such regulations, the proposed project would be required to prepare a liquefied petroleum gas plot plan, which would be submitted at the time of

application and subject to County approval, prior to the filling of the propane tank. In addition, in accordance with Placer County Code Section 15.12.070, the proposed propane tank would be subject to annual safety inspections to confirm that the tank is operating safely.

The proposed project would not require major upgrades to, or extension of, existing infrastructure related to electric, propane, and telecommunication utilities. In compliance with State and local requirements, project operation would include ongoing fuel load management activities in areas close to structures or on borders. Furthermore, structures constructed as part of the proposed project would comply with all applicable standards set forth by the CBC and CFC, including standards set forth in PRC Section 4291, which necessitates the creation and maintenance of a 100-foot defensible space around all proposed structures. Furthermore, Placer County Code Section 15.04.630 sets forth the minimum fire flow requirements. Long-term maintenance and operation of the emergency water supply infrastructure would not involve any activities that would result in an increase in wildfire risk. Therefore, the proposed infrastructure improvements associated with the project would not substantially exacerbate wildfire risk.

While the long-term maintenance of the sidewalks, emergency water supply connections, power lines, and other utilities would not exacerbate fire risks, the activities associated with the initial construction and placement of the utilities and infrastructure could cause a temporary increase in fire risks due to the use of heavy equipment, which would contain combustible materials such as fuels and oils and ignition sources. However, the project contractor would be required to comply with all California Health and Safety Codes and local County ordinances regulating the handling, storage, and transportation of hazardous materials, which would help to minimize the potential for accidental conditions, including fire. Furthermore, the requirements set forth by Mitigation Measure 8-2 provide that, prior to the approval of project improvement plans, a note must be included requiring CAL FIRE-approved spark arrestors on all construction equipment with internal combustion engines. Compliance with Mitigation Measure 8-2 would reduce the fire risk during project construction activities.

Based upon the above, the proposed project would not require the installation or maintenance of associated infrastructure that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment. Therefore, the project would result in a ***less-than-significant*** impact.

Mitigation Measure(s)

None required.

8-4 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. Based on the analysis below, the impact is *less than significant*.

Wildfires alter landscapes and can result in post-event hazards triggered primarily by rainfall. Rainfall that is normally captured and stored by vegetation can run off almost instantly, causing creeks and drainage areas to flood much sooner during a storm and with more water than is expected under unburned conditions. Soils burned at moderate and high severity tend to have reduced infiltration capacity and are more easily eroded. The potential post-fire flooding, soil erosion, and debris flows can impact recreational areas, homes, structures, roads, and other infrastructure within, adjacent to, and downstream from burned areas.

Wildfire-related flooding and increased runoff may continue for several years in a burn area. However, post-fire debris flows do not typically occur beyond the second rainy season. Some of the largest debris-flow events happen during the first post-fire storm season. While multiple factors can affect debris-flow occurrence, post-fire debris flows generally are triggered by one of two processes: surface erosion caused by rainfall runoff; and landsliding caused by rainfall seeping into the ground. Surface erosion runoff processes are by far the most prevalent contributors to debris flows. Landsliding contributes less to fire-related debris flow, but prolonged heavy rains may increase soil moisture even after a wildfire.[23] The wetted soil can then fail, producing infiltration-triggered landslides. The landslides could be shallow or deep-seated (i.e., greater than 10 to 15 feet deep).

As previously discussed, while the terrain of the project site is undulating, due to scattered rock outcrops and boulders that create microtopographic variations, the project site does not feature steep or significant slopes, nor is the site immediately adjacent to such features. Given the project site does not contain such features, the proposed project would not be vulnerable to risks such as post-fire downslope flooding or landslides or post-fire slope instability. Additionally, through development of the proposed project, a portion of the existing on-site vegetation would be removed as part of site improvements, thereby reducing the potential for substantial fire-burned areas to occur on-site.

The project site is located within the overall Squaw Creek watershed. The entire site ultimately drains to the north, across Olympic Valley Road, through a 24-inch Corrugated Metal Pipe (CMP) culvert, and eventually to the Truckee River on the east side of SR 89. As discussed in Section X, Hydrology and Water Quality, of the Initial Study prepared for the project, through incorporation of Mitigation Measure X-1, a final drainage report would be required to be submitted as part of the improvement plan submittal process. The final drainage report would be required to be prepared in conformance with the requirements of Section 5 of the Land Development Manual and the Placer County Stormwater Management Manual that are in effect at the time of

[23] U.S. Geological Survey. *Post-Fire Flooding and Debris Flow*. Available at: https://www.usgs.gov/centers/ca-water/science/post-fire-flooding-and-debris-flow?qt-science_center_objects=0#qt-science_center_objects. Accessed March 2022.

improvement plan submittal and identify water quality protection features and methods to be used during construction, as well as long-term post-construction water quality measures to ensure that the project does not substantially alter the existing drainage pattern of the project area or substantially increase the rate or amount of surface runoff. Additionally, Mitigation Measure X-2 of the Initial Study prepared for the proposed project requires the final drainage report to provide details showing that stormwater runoff peak flows and volumes during post-construction conditions are reduced to pre-project conditions through the installation of detention/retention facilities. Furthermore, as discussed above, the proposed project would be required to comply with all applicable CBC and CFC standards and regulations. Implementation of all of the aforementioned measures and standards would ensure that the proposed project's wildfire risks are reduced to the maximum extent feasible. As such, the proposed project would not significantly alter the existing drainage pattern of the site and would, therefore, not expose people or structures in the project vicinity to risks such as downstream flooding as a result of post-fire drainage changes.

Based on the above, the proposed project would 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. Therefore, a ***less-than-significant*** impact would occur.

Mitigation Measure(s)

None required.

Cumulative Impacts and Mitigation Measures

As defined in Section 15355 of the CEQA Guidelines, "cumulative impacts" refers to two or more individual effects which, when considered together, are considerable, compound, or increase other environmental impacts. The individual effects may be changes resulting from a single project or a number of separate projects. The cumulative impact from several projects is the change in the environment that results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects.

For more details regarding the cumulative setting, refer to Chapter 9, Statutorily Required Sections, of this EIR.

8-5 Increase in wildfire risk attributable to the proposed project, in combination with cumulative development. Based on the analysis below, the cumulative impact is *less than significant*.

The cumulative setting for this chapter includes the past, present, and reasonably foreseeable future projects that could occur within the vicinity of the project site. With respect to Olympic Valley Park, future park improvements are reasonably assumed to include a pickleball court, basketball halfcourt, horseshoe pits, a running track around the existing field, a picnic pavilion, and a bocci ball court. None of the aforementioned improvements would exacerbate wildfire risk, relative to existing conditions.

Future development occurring in Olympic Valley would be required to comply with defensible space standards set forth by PRC Section 4291, as well as building standards set forth in Chapter 7A of the CBC, including, but not limited to, use of ignition-resistant materials, fire-intrusion design of roofing and vents, and use of

glazed exterior windows and doors. All buildings constructed as part of reasonably foreseeable future development would also be required to meet CFC requirements as set forth by the County and the CBC and CFC, which could include fire sprinklers and fire alarms, as determined by the County Fire Marshal at building permit stage, depending upon building and occupancy type. Furthermore, Chapter 9, Article 9.32, Part 3 of the Placer County Code requires the maintenance of "fire breaks" around structures and the clearing of roofs to prevent structural fires in the WUI. Compliance with State and local standards would minimize wildfire risk at future project locations.

In addition, the Trip Generation Memorandum additionally determined that SR 89 would operate acceptably with respect to LOS under all Cumulative condition scenarios, with or without the project. In regard to intersection LOS, the site access intersection on Olympic Valley Road would operate at LOS F during the winter PM peak hour under Cumulative conditions, due to skier traffic exiting the valley. However, according to the County's methodology of assessment for unsignalized intersections, "a project may be considered to exceed the minimum LOS policies if a side-street-controlled intersection which currently operates below the established acceptable LOS policy and meets [Manual of Uniform Traffic Control Devices] traffic signal warrant(s) will experience an increase in delay of 2.5 seconds or more with the project." The Trip Generation Memorandum determined that the peak hour traffic volumes at the intersection would not meet the applicable signal warrant criteria. Thus, the site access intersection during winter PM peak hour Cumulative conditions would not exceed the County's minimum LOS policy.

Finally, the proposed project includes implementation of an EPEP and would be conditioned as such by the County. Compliance with the EPEP would include installation of emergency notification features to alert visitors of the museum of wildfire-related emergencies. As set forth by Mitigation Measure 8-2, the proposed project would be required to use spark arrestors on all construction equipment with internal combustion engines.

Based on the above, the proposed project, in combination with reasonably foreseeable future development, would have a ***less-than-significant*** cumulative impact related to exacerbating wildfire risk.

Mitigation Measure(s)

None required.

9. Statutorily Required Sections

9. STATUTORILY REQUIRED SECTIONS

9.1 INTRODUCTION

The Statutorily Required Sections chapter of the Draft EIR includes discussions regarding those topics that are required to be included in an EIR, pursuant to CEQA Guidelines, Section 15126.2. The chapter includes a discussion of the proposed project's potential to result in growth-inducing impacts; the cumulative setting analyzed in this EIR; and significant irreversible environmental changes.

9.2 GROWTH-INDUCING IMPACTS

State CEQA Guidelines section 15126.2(d) requires an EIR to evaluate the potential growth-inducing impacts of a proposed project. Specifically, an EIR must discuss the ways in which a proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Growth can be induced in a number of ways, including the elimination of obstacles to growth, or by encouraging and/or facilitating other activities that could induce growth. Examples of projects likely to have growth-inducing impacts include extensions or expansions of infrastructure systems beyond what is needed to serve project-specific demand, and development of new residential subdivisions or office complexes in areas that are currently only sparsely developed or are undeveloped.

The CEQA Guidelines are clear that while an analysis of growth-inducing effects is required, it should not be assumed that induced growth is necessarily significant or adverse. This analysis examines the following potential growth-inducing impacts related to implementation of the proposed project and assesses whether these effects are significant and adverse (see *CEQA Guidelines*, Section 15126.2[d]):

1. Foster population and economic growth and construction of housing.
2. Eliminate obstacles to population growth.
3. Affect service levels, facility capacity, or infrastructure demand.
4. Encourage or facilitate other activities that could significantly affect the environment.

Foster Population and Economic Growth and Construction of Housing

As discussed in Section XIV, Population & Housing, of the Initial Study prepared for the proposed project, the proposed museum and community cultural center building would not involve the construction of housing. Construction of the project would provide short-term employment opportunities, which would likely be filled from the local employee base. While the proposed project would create long-term employment opportunities, the employment opportunities would be fairly minimal, and would be expected to be filled by existing residents of the area in order to support the local community and provide opportunities for residents to reside and work in the same community. Therefore, the project would not result in long-term employment growth in the area.

All physical environmental effects of the proposed project have been addressed throughout this EIR and the Initial Study prepared for the proposed project. Overall, the proposed project would

not be expected to generate any new growth-inducing impacts beyond those impacts identified in this EIR.

Eliminate Obstacles to Population Growth

The elimination of either physical or regulatory obstacles to growth is considered to be a growth-inducing effect. A physical obstacle to growth typically involves the lack of public service infrastructure. The extension of public service infrastructure, including roadways, water mains, and sewer lines, into areas that are not currently provided with these services, would be expected to support new development. Similarly, the elimination or change to a regulatory obstacle, including existing growth and development policies, could result in new growth.

While the proposed project would include the development of new infrastructure connections on the project site, such as water mains and sewer lines, such improvements would be sized to only support the proposed project. Because the proposed project is not residential in nature, and is not located in the proximity of currently planned or anticipated residential development, such infrastructure improvements would not be expected to be used for residential use in the future. In addition, the project site is bound by a deed restriction relating to the County's past purchase of the parcel from the U.S. Forest Service (USFS) to Placer County, which occurred in 2000. The Quit Claim Deed conveying the park parcel from the USFS includes the following restriction: "[T]he use of the property for a community park does not include the use of the property for private development of a commercial, residential, or industrial nature." Placer County is currently coordinating with the USFS regarding the deed restriction, and the deed restriction may be removed following an agreed-upon approach. However, even if the deed restriction were to be removed, the project site is not currently zoned for any kind of development beyond park use. Should future development require the site to undergo a rezone or General Plan Amendment in order to allow a commercial, residential, or industrial use, additional environmental review would occur at that time. Therefore, regardless of whether the deed restriction is or is not in place, the proposed project would not eliminate obstacles to growth in a manner that would encourage previously unplanned growth.

Affect Service Levels, Facility Capacity, or Infrastructure Demand

Increases in population that would occur as a result of a proposed project may tax existing community service facilities, requiring construction of new facilities that could cause significant environmental impacts. As discussed in Section XV, Public Services, of the Initial Study, increased demands for fire and police protection services attributable to the proposed project would not necessitate the construction of new or expanded facilities that could cause significant environmental impacts. In addition, as discussed in Section XIX, Utilities & Service Systems, of the Initial Study, wastewater generated by the proposed project could be accommodated by existing wastewater treatment facilities and planned infrastructure.

The landfill that would serve the proposed project has adequate capacity to manage the solid waste generated as result of the project. Furthermore, mitigation measures set forth in Section X, Hydrology & Water Quality, of the Initial Study, would ensure that the proposed project would not create or contribute runoff water that would exceed the capacity of the County's stormwater drainage systems. Therefore, the proposed project would not increase population such that service levels, facility capacity, or infrastructure demand would require construction of new facilities that could cause significant environmental impacts.

Encourage or Facilitate other Activities That Could Significantly Affect the Environment

This EIR and the accompanying Initial Study provide a comprehensive assessment of the potential for environmental impacts associated with implementation of the proposed project. Please refer to Chapters 4 through 8 of this EIR and the Initial Study (see Appendix A of this EIR), which comprehensively address the potential for impacts from development on the project site.

9.3 CUMULATIVE IMPACTS

CEQA Guidelines, Section 15130 requires that an EIR discuss the cumulative and long-term effects of the proposed project that would adversely affect the environment. "Cumulative impacts" are defined as "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts" (CEQA Guidelines, Section 15355). "[I]ndividual effects may be changes resulting from a single project or a number of separate projects" (CEQA Guidelines, Section 15355, subd. [a]). "The cumulative impact from several projects is the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time" (CEQA Guidelines, Section 15355, subd. [b]).

The need for cumulative impact assessment reflects the fact that, although a project may cause an "individually limited" or "individually minor" incremental impact that, by itself, is not significant, the increment may be "cumulatively considerable," and, thus, significant, when viewed together with environmental changes anticipated from past, present, and probable future projects (CEQA Guidelines, Section 15064, subd. [h(1)], Section 15065, subd. [c], and Section 15355, subd. [b]). Accordingly, particular impacts may be less than significant on a project-specific basis but significant on a cumulative basis if their small incremental contribution, viewed against the larger backdrop, is cumulatively considerable. However, it should be noted that CEQA Guidelines, Section 15064, Subdivision (h)(5) states, "[…]the mere existence of significant cumulative impacts caused by other projects alone shall not constitute substantial evidence that the proposed project's incremental effects are cumulatively considerable." Therefore, even where cumulative impacts are significant, any level of incremental contribution is not necessarily deemed cumulatively considerable.

Section 15130(b) of CEQA Guidelines indicates that the level of detail of the cumulative analysis need not be as great as for the project impact analyses, but that analysis should reflect the severity of the impacts and their likelihood of occurrence, and that the analysis should be focused, practical, and reasonable. To be adequate, a discussion of cumulative effects must include the following elements:

> (1) Either (a) a list of past, present and probable future projects, including, if necessary, those outside the agency's control, or (b) a summary of projections contained in an adopted general plan or related planning document, or in a prior certified EIR, which described or evaluated regional or area-wide conditions contributing to the cumulative impact, provide that such documents are reference and made available for public inspection at a specified location;
>
> (2) A summary of the individual projects' environmental effects, with specific reference to additional information and stating where such information is available; and

(3) A reasonable analysis of all of the relevant projects' cumulative impacts, with an examination of reasonable, feasible options for mitigating or avoiding the project's contribution to such effects (Section 15130[b]).

For some projects, the only feasible mitigation measures will involve the adoption of ordinances or regulations, rather than the imposition of conditions on a project-by-project basis (Section 15130[c]). Section 15130(a)(3) states that an EIR may determine that a project's contribution to a significant cumulative impact will be rendered less than cumulatively considerable, and thus not significant, if a project is required to implement or fund the project's fair share of a mitigation measure or measures designed to alleviate the cumulative impact.

A discussion of cumulative impacts is provided within each of the technical chapters of this EIR pursuant to CEQA Guidelines Section 15130.

Cumulative Setting

The lead agency should define the relevant geographic area of inquiry for each impact category (id., Section 15130, subd. [b][3]), and should then identify the universe of "past, present, and probable future projects producing related or cumulative impacts" relevant to the various categories, either through the preparation of a "list" of such projects or through the use of "a summary of projections contained in an adopted general plan or related planning document, or in a prior environmental document which has been adopted or certified, which described or evaluated regional or area wide conditions contributing to the cumulative impact" (id., subd. [b][1]). In accordance with Section 15130(b)(1)(a) and (b) of the CEQA Guidelines, the cumulative analysis in this EIR would be based upon a summary of projections of future development within Olympic Valley, including the Squaw Valley General Plan (SVGP) and Land Use Ordinance, and the Village at Palisades Tahoe Specific Plan, as well as reasonably foreseeable future park improvements, including the following:

- Pickleball court;
- Basketball halfcourt;
- Horseshoe pits;
- Running track around the existing field;
- Picnic pavilion; and
- Bocce ball court.

Geographic Scope of Cumulative Setting Within Each Chapter

Situations exist where the geographic setting differs for various environmental issue areas analyzed under CEQA. The following discussions provide further details on the geographic scope for the cumulative setting for each CEQA topic area evaluated in this EIR.

Aesthetics

The geographic scope for the cumulative aesthetics analysis includes all projects that could potentially exist within identified viewsheds of the project area, which includes views towards the project site from State Route (SR) 89, as well as development associated with the SVGP and Land Use Ordinance, and the Village at Palisades Tahoe Specific Plan. See Chapter 4, Aesthetics, for further details.

Air Quality, Greenhouse Gas Emissions, and Energy

The geographic setting for the cumulative criteria pollutant air quality analysis is the Mountain Counties Air Basin (MCAB).

Global climate change is, by nature, a cumulative impact. Greenhouse gas (GHG) emissions contribute, on a cumulative basis, to the significant adverse environmental impacts of global climate change (e.g., sea level rise, impacts to water supply and water quality, public health impacts, impacts to ecosystems, impacts to agriculture, and other environmental impacts). A single project could not generate enough GHG emissions to contribute noticeably to a change in the global average temperature. However, the GHG emissions from a project in combination with other past, present, and future projects could contribute substantially to the world-wide phenomenon of global climate change and the associated environmental impacts. Although the geographical context for global climate change is the Earth, for analysis purposes under CEQA, and due to the regulatory context pertaining to GHG emissions and global climate change applicable to the proposed project, the geographical context for cumulative global climate change analysis in this EIR is limited to the State of California.

Noise

The geographic scope for the cumulative traffic noise analysis includes buildout of Olympic Valley associated with the SVGP and Land Use Ordinance and the Village at Palisades Tahoe Specific Plan, in addition to the reasonably foreseeable projects associated with the Olympic Valley Park listed above. See Chapter 6, Noise, for further details.

Transportation

The geographic scope for the cumulative transportation analysis includes buildout of Olympic Valley pursuant to the SVGP and Land Use Ordinance, as well as more recent foreseeable projects such as the Village at Palisades Tahoe Specific Plan and the proposed Base-to-Base Gondola Project. The geographic scope for the cumulative transportation analysis also includes passby traffic generated by commuters traveling through Olympic Valley to and from other locations throughout the region. See Chapter 7, Transportation, for further details.

Wildfire

The geographic scope for the cumulative wildfire analysis generally includes the project site, as well as future development within Olympic Valley associated with the SVGP and Land Use Ordinance, and the Village at Palisades Tahoe Specific Plan.

Please refer to the Cumulative Impacts and Mitigation Measures section of each technical chapter for analysis of cumulative impacts for each CEQA topic.

9.4 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES

Per CEQA Guidelines Section 15126.2(d), this EIR is required to include consideration of significant irreversible environmental changes that would be caused by the proposed project, should the project be implemented. An impact would be determined to be a significant and irreversible change in the environment if:

- Buildout of the project area could involve a large commitment of nonrenewable resources;
- The primary and secondary impacts of development could generally commit future generations to similar uses (e.g., a highway provides access to a previously remote area);

- Development of the proposed project could involve uses in which irreversible damage could result from any potential environmental accidents associated with the project; or
- The phasing and eventual development of the project could result in an unjustified consumption of resources (e.g., the wasteful use of energy).

The proposed project would likely result in, or contribute to, the following significant irreversible environmental changes:

- Conversion of vacant land to a fully built-out museum and community center, thus precluding alternative land uses in the future; and
- Irreversible consumption of goods and services, such as wood and steel building products, and fire and police services, associated with project operation; and
- Irreversible consumption of energy and natural resources, such as water, electricity, and natural gas, associated with project operation.

9.5 SIGNIFICANT AND UNAVOIDABLE IMPACTS

According to CEQA Guidelines, an EIR must include a description of those impacts identified as significant and unavoidable should the proposed action be implemented (CEQA Guidelines §15126.2[c]). Such impacts would be considered unavoidable when the determination is made that either mitigation is not feasible or only partial mitigation is feasible such that the impact is not reduced to a level that is less-than-significant. This EIR demonstrates that buildout of the proposed project would not result in any significant and unavoidable impacts.

10. Alternatives Analysis

10. ALTERNATIVES ANALYSIS

10.1 INTRODUCTION

The Alternatives Analysis chapter of the EIR includes consideration and discussion of a range of reasonable alternatives to the proposed project, as required pursuant to CEQA Guidelines Section 15126.6. Generally, the chapter includes discussions of the following: the purpose of an alternatives analysis; alternatives considered but dismissed; a reasonable range of project alternatives and their associated impacts in comparison to the proposed project's impacts; and the environmentally superior alternative.

10.2 PURPOSE OF ALTERNATIVES

The primary intent of the alternatives evaluation in an EIR, as stated in Section 15126.6(a) of the CEQA Guidelines, is to "[…] describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives." In the context of CEQA Guidelines Section 21061.1, "feasible" is defined as:

> ...capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social and technological factors.

Section 15126.6(f) of CEQA Guidelines states, "The range of alternatives required in an EIR is governed by a "rule of reason" that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice." Section 15126.6(f) of CEQA Guidelines further states:

> The alternatives shall be limited to ones that would avoid or substantially lessen any of the significant effects of the project. Of those alternatives, the EIR need examine in detail only the ones that the lead agency determined could feasibly attain most of the basic objectives of the project.

In addition, an EIR is not required to analyze alternatives when the effects of the alternative "cannot be reasonably ascertained and whose implementation is remote and speculative."

The CEQA Guidelines provide the following guidance for discussing alternatives to a proposed project:

- An EIR shall describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project, but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives (CEQA Guidelines Section 15126.6[a]).
- Because an EIR must identify ways to mitigate or avoid the significant effects that a project may have on the environment (Public Resources Code Section 21002.1), the discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these

alternatives would impede to some degree the attainment of the project objectives, or would be more costly (CEQA Guidelines Section 15126.6[b]).

- The EIR should briefly describe the rationale for selecting the alternatives to be discussed. The EIR should also identify any alternatives that were considered by the lead agency but were rejected as infeasible during the scoping process and briefly explain the reasons underlying the lead agency's determination […] Among the factors that may be used to eliminate alternatives from detailed consideration in an EIR are: (i) failure to meet most of the basic project objectives, (ii) infeasibility, or (iii) inability to avoid significant environmental impacts (CEQA Guidelines Section 15126.6[c]).
- The EIR shall include sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the proposed project. A matrix displaying the major characteristics and significant environmental effects of each alternative may be used to summarize the comparison (CEQA Guidelines Section 15126.6[d]).
- If an alternative would cause one or more significant effects in addition to those that would be caused by the project as proposed, the significant effects of the alternative shall be discussed, but in less detail than the significant effects of the project as proposed (CEQA Guidelines Section 15126.6[d]).
- The specific alternative of "no project" shall also be evaluated along with its impact. The purpose of describing and analyzing a no project alternative is to allow decision-makers to compare the impacts of approving the proposed project with the impacts of not approving the proposed project. The no project alternative analysis is not the baseline for determining whether the proposed project's environmental impacts may be significant, unless it is identical to the existing environmental setting analysis which does establish that baseline (CEQA Guidelines Section 15126.6[e][1]).
- If the environmentally superior alternative is the "no project" alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives (CEQA Guidelines Section 15126.6[e][2]).

Project Objectives

Based on the above, reasonable alternatives to the project must be capable of feasibly attaining most of the basic objectives of the project. The proposed project is being pursued with the following objectives:

1. Establish a place where the evolution of winter sports in the Sierra Nevada and the 1960 Winter Olympics can be researched, studied, and displayed in an inspiring, environmentally beautiful building; collect, preserve, archive, and assemble in one place, artifacts and memorabilia relating to the snow sports history presently distributed throughout the community;
2. Ensure consistency with existing and potential future Olympic Valley Park uses;
3. Mitigate environmental and community impacts to the extent feasible;
4. Establish an Olympic Museum to commemorate the events of the 1960 Winter Olympic Games held in Olympic Valley and Lake Tahoe and the ensuing effects on regional and western ski history;
5. Establish a museum of Sierra Nevada ski history beginning with the Washoe Tribe traveling on hand-hewn snowshoes to 19th century gold miners on 14-foot longboards to California and Nevada veterans of the 10th Mountain Division to current World Cup athletes;
6. Establish a place for events that will be available to the residents and visitors to enjoy and participate in exhibits, films, conferences, lectures, dinners, and community events in a

mountain-modern building with state-of-the-art facilities, including a multi-purpose community room and classroom where patrons can reserve a space for events;
7. Establish a visitor center or kiosk that will provide information on recreational activities, hiking and biking trails, lodging, camping, dining, and backcountry winter access;
8. Establish a small café and museum shop as an accessory to the museum;
9. Construct a community multi-purpose room available for local meetings and events, and a classroom for educational programming;
10. Establish a hall of fame to honor winter sports athletes and leaders of the California and Nevada winter sports industry;
11. Construct publicly accessible restrooms for Olympic Valley Park users, and the addition of water and sewer lines for the existing park bathrooms, and a new water fountain for the pickleball courts;
12. Use an available site location that is not fragmented with respect to ownership, easements, or restrictions;
13. Use an available site location that is not owned by a private third party, which could exert control over, diminish, or eliminate future museum operations (sites that have been examined in the vicinity of Palisades Tahoe Resort); and
14. Use an available site location that is not affected by electromagnetic radiation, underground contamination, unacceptable visual impacts, land-use restrictions due to high voltage power lines, or other such environmental limitations (the parcels on the north side of Olympic Valley Road).

Impacts Identified in the EIR and Initial Study

In addition to attaining the majority of project objectives, reasonable alternatives to the project must be capable of reducing the magnitude of, or avoiding, identified significant environmental impacts of the proposed project. The significance level of impacts identified in the EIR and Initial Study (see Appendix A) are presented below.

Less Than Significant or No Impact

The Initial Study prepared for the proposed project during the scoping period includes a detailed environmental checklist addressing a range of technical environmental issues. For each technical environmental issue, the Initial Study identifies the level of impact for the proposed project. The Initial Study identifies the environmental effects as either “no impact,” “less-than-significant,” “less-than-significant with mitigation incorporated,” or “potentially significant.” Impacts identified for the proposed project in the Initial Study and EIR as “no impact” or “less-than-significant” are listed below, and summarized further in Chapter 1, Introduction, of this EIR:

- ***Aesthetics.*** The EIR determined that impacts related to having a substantial adverse effect on a scenic vista and substantially degrading the existing visual character or quality of public views of the project site and/or the site’s surroundings would be less than significant. In addition, all cumulative impacts were determined to be less than cumulatively considerable.

- ***Air Quality, Greenhouse Gas Emissions, and Energy.*** The EIR determined that impacts related to conflicting with or obstructing a State or local plan for renewable energy or energy efficiency, or conflicting with or obstructing implementation of the applicable air quality plan during both project construction and operation, would be less than significant. In addition, the EIR determined that the project would result in a less-than-significant impact related to exposing sensitive receptors to substantial pollutant concentrations or

resulting in other emissions affecting a substantial number of people. With respect to cumulative impacts, all such impacts, including impacts related to the emissions of greenhouse gas (GHG), were determined to be less than cumulatively considerable.

- ***Noise.*** The EIR determined that impacts related to the generation of a substantial 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, as well as impacts related to the exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels, would be less than significant. Cumulative impacts related to the generation of a substantial permanent increase in ambient noise levels associated with cumulative development of the proposed project in combination with future development would be less than cumulatively considerable.

- ***Transportation.*** The EIR determined that a less-than-significant impact would occur related to a conflict with a program, plan, ordinance or policy addressing transit, bicycle, and pedestrian facilities, as well as the project conflicting or being inconsistent with CEQA Guidelines section 15064.3, subdivision (b), or substantially increase hazards to vehicle safety due to inadequate emergency access, hazardous design features, and incompatible uses. In addition, the EIR determined that cumulative impacts related to a substantial increase in hazards to vehicle safety under Cumulative Plus Project conditions would be less than cumulatively considerable.

- ***Wildfire.*** The EIR determined that a less-than-significant impact would occur related to substantially impairing an adopted emergency response plan or emergency evacuation plan, as well as requiring 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. In addition, the EIR determined that a less-than-significant impact would occur related to exposing 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. Furthermore, cumulative impacts related to an increase in wildfire risk attributable to the proposed project in combination with cumulative development was determined to be less than significant.

- ***Initial Study.***
    - ***Aesthetics.*** The Initial Study determined that a less-than-significant impact would occur related to substantially damaging scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings, within a state scenic highway.
    - ***Agricultural and Forest Resources.*** The Initial Study determined that a less-than-significant impact would occur related to the conversion of 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. In addition, the Initial Study determined that the proposed project would have a less-than-significant impact regarding a conflict with existing zoning for agricultural use, a Williamson Act contract, or a Right-to-Farm Policy. Furthermore, the Initial Study determined that the proposed project would not 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)), and a less-than-significant impact would occur. The Initial Study also determined that the proposed project would result in a less-than-significant impact regarding the loss of forest land or conversion of forest land to non-forest use, or 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; thus, a less-than-significant impact would occur. Finally, the Initial Study determined that the proposed project would have a less-than-significant impact regarding a conflict with General Plan or other policies regarding land use buffers for agricultural operations.

- ***Biological Resources.*** The Initial Study determined that a less-than-significant impact would occur related to the proposed project interfering substantially with the movement of any native resident or migratory fish or wildlife species with established native resident or migratory wildlife corridors, or impeding the use of native wildlife nursery sites. The Initial Study also determined that the proposed project would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinances, would 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, and would not have a substantial adverse effect on the environment by converting oak woodlands; thus, no impact would occur.
- ***Cultural Resources.*** The Initial Study determined that a less-than-significant impact would occur related to implementation of the proposed project causing a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines, Section 15064.5. In addition, the Initial Study determined that impacts related to having the potential to cause a physical change which would affect unique ethnic cultural values, or restricting existing religious or sacred uses within the potential impact area would be less than significant.
- ***Energy.*** The Initial Study determined that a less-than-significant impact would occur related to implementation of the proposed project resulting in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation.
- ***Geology and Soils.*** The Initial Study determined that implementation of the proposed project would have no impact related to having soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water.
- ***Hazards and Hazardous Materials.*** The Initial Study determined that implementation of the proposed project would have a less-than-significant impact related to creating a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. In addition, the Initial Study determined that a less-than-significant impact would occur related to emitting hazardous emissions or handling hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. Furthermore, the Initial Study determined that the proposed project would not be 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, and would not result in a safety hazard or excessive noise for people residing or working in the project area; thus, no impact would occur.

- ***Hydrology and Water Quality.*** The Initial Study determined that implementation of the proposed project would have a less-than-significant impact related to violating any water quality standards or waste discharge requirements or otherwise substantially degrade ground water quality, as well as substantially decreasing groundwater supplies or interfering substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin. In addition, the Initial Study determined that the proposed project would have a less-than-significant impact regarding conflicting or obstructing implementation of a water quality control plan or sustainable groundwater management plan. Furthermore, the Initial Study determined that implementation of the proposed project would not place housing or improvements within a 100-year flood hazard area either as mapped on a federal Flood Hazard boundary or Flood Insurance Rate Map or other flood hazard delineation map which would impede or redirect flood flows, expose people or structures to risk of loss, injury, or death involving flooding, or risk release of pollutants due to project inundation, and no impact would occur.
- ***Land Use and Planning.*** The Initial Study determined that a less-than-significant impact would occur related to physically dividing an established community, as well as resulting in the development of incompatible uses and/or the creation of land use conflicts, and causing economic or social changes that would result in significant adverse physical changes to the environment such as urban decay or deterioration.
- ***Mineral Resources.*** The Initial Study determined that implementation of the proposed project would not 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, or 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. Therefore, the Initial Study determined that no impact would occur regarding the aforementioned impacts.
- ***Noise.*** The Initial Study determined that implementation of the proposed project would not be 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, and would not expose people residing or working in the project area to excessive noise levels. Therefore, no impact would occur.
- ***Population and Housing.*** The Initial Study determined that impacts related to inducing substantial unplanned population growth in an area, either directly (i.e., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure) would be less-than-significant. In addition, the Initial Study determined that implementation of the proposed project would not displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere, and no impact would occur.
- ***Public Services.*** The Initial Study determined that implementation of the proposed project would result in a less-than-significant impact related to resulting 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 public services, including fire protection, sheriff protection, schools, parks, other public facilities, and maintenance of public facilities, including roads.

- ***Recreation.*** The Initial Study determined that implementation of the proposed project would have a less-than-significant impact related to increasing 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, as well as including recreational facilities or requiring the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.
- ***Transportation.*** The Initial Study determined that the proposed project would have a less-than-significant impact related to resulting in insufficient parking capacity on- or off-site.
- ***Utilities and Service Systems.*** The Initial Study determined that implementation of the proposed project would have a less-than-significant impact related to requiring or resulting 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. In addition, the Initial Study determined that the proposed project would have a less-than-significant impact regarding having sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years, as well as resulting in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments, generating 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, and complying with federal, state, and local management and reduction statutes and regulations related to solid waste.

Less Than Significant with Mitigation

Environmental impacts (including cumulative impacts) of the proposed project that have been identified in the EIR and the Initial Study as requiring mitigation measures to ensure that the level of significance is ultimately less than significant include the following:

- ***Aesthetics.*** The EIR determined that because the proposed project would increase the amount of light on the project site in the form of light fixtures on the exteriors of the building, spillover light from the interior lighting of the building, and increased motor vehicle traffic within the parking lot, implementation of the proposed project could substantially increase the amount of light and glare generated on-site, which could be visible from residences and roadways in the project vicinity. However, the EIR requires mitigation in order to ensure that the aforementioned impact is reduced to a less-than-significant level.

- ***Noise.*** The EIR determined that implementation of the proposed project could result in a significant impact related to the generation of a substantial temporary increase (i.e., construction) 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. However, the EIR requires mitigation in order to ensure that the aforementioned impact is reduced to a less-than-significant level.

- ***Transportation.*** The EIR determined that implementation of the proposed project could result in a significant impact related to a conflict with a program, plan, ordinance, or policy,

except LOS, addressing the circulation system during construction activities. However, the EIR requires mitigation in order to ensure that the aforementioned impact is reduced to a less-than-significant level.

- ***Wildfire.*** The EIR determined that implementation of the project could have a significant impact due to slope, prevailing winds, and other factors, exacerbating wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. However, the EIR requires mitigation to ensure that the aforementioned impact is reduced to a less-than-significant level.

- ***Initial Study.***
    - ***Biological Resources.*** The Initial Study determined that implementation of the proposed project could 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 & Wildlife, U.S. Fish & Wildlife Service or National Marine Fisheries Service. In addition, the Initial Study determined that the proposed project could have a substantial adverse effect on any riparian habitat or other sensitive natural community, identified in local or regional plans, policies or regulations, or regulated by the California Department of Fish & Wildlife, U.S. Fish & Wildlife Service, U.S. Army Corps of Engineers, or Regional Water Quality Control Board. Furthermore, the Initial Study determined that implementation of the proposed project could have a substantial adverse effect on federal or state protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) or as defined by state statute, through direct removal, filling, hydrological interruption, or other means. However, the Initial Study required mitigation to ensure that the aforementioned impacts are reduced to a less-than-significant level.
    - ***Cultural Resources.*** The Initial Study determined that implementation of the proposed project would have the potential to cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines, Section 15064.5, as well as disturb any human remains, including those interred outside of dedicated cemeteries, and a significant impact could occur. However, the Initial Study required mitigation to ensure that the aforementioned impacts are reduced to a less-than-significant level.
    - ***Geology and Soils.*** The Initial Study determined that implementation of the proposed project would have the potential to result in substantial soil erosion or the loss of topsoil. In addition, the Initial Study determined that the proposed project would have the potential to 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, or be located on expansive soils, as defined in Section 1802.3.2 of the California Building Code (2007), creating substantial direct or indirect risks to life or property. Furthermore, the Initial Study determined that implementation of the proposed project would have the potential to directly or indirectly destroy a unique paleontological resource or unique geologic or physical feature, result in significant disruptions, displacements, compaction or overcrowding of the soil, result in substantial change in topography or ground surface relief features, or result in exposure of people or property to geologic and geomorphological (i.e. Avalanches) hazards such as earthquakes, landslides, mudslides, seismic-related ground

failure, or similar hazards. However, the Initial Study required mitigation to ensure that the aforementioned impacts are reduced to a less-than-significant level.

- ***Hazards and Hazardous Materials.*** The Initial Study determined that implementation of the proposed project would have the potential to 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. However, the Initial Study required mitigation to ensure that the aforementioned impact is reduced to a less-than-significant level.
- ***Hydrology and Water Quality.*** The Initial Study determined that implementation of the proposed project would have the potential to 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 substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite, or would create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems; thus, a significant impact could occur. In addition, the Initial Study determined that implementation of the proposed project could create or contribute runoff water which would include substantial additional sources of polluted runoff or otherwise substantially degrade surface water quality either during construction or in the post-construction condition, and, thus, could result in a significant impact. However, the Initial Study required mitigation to ensure that the aforementioned impacts are reduced to a less-than-significant level.
- ***Tribal Cultural Resources.*** The Initial Study determined that implementation of the proposed project could 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 listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k), or a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe. Although a significant impact could occur, the Initial Study required mitigation to ensure that such impacts are reduced to a less-than-significant level.

The alternatives discussed herein have been chosen based on feasibility to meet most of the project objectives, as well as the ability to reduce one or more significant project impacts identified within this EIR. Thus, as is appropriate pursuant to CEQA, the following evaluation of alternatives focuses on those resource topics regarding which the proposed project would have a significant impact, according to the EIR analysis. As shown above, the EIR (including Initial Study) identified significant project impacts for 10 CEQA topical categories. These 10 categories are the subject of the comparative alternatives analysis that follows, unless otherwise noted. All other project impacts were deemed less than significant, and thus, do not require discussion in the alternatives analysis below.

10.3 SELECTION OF ALTERNATIVES

The requirement that an EIR evaluate alternatives to the proposed project or alternatives to the location of the proposed project is a broad one; the primary intent of the alternatives analysis is to disclose other ways that the objectives of the project could be attained, while reducing the magnitude of, or avoiding, one or more of the significant environmental impacts of the proposed project. Alternatives that are included and evaluated in the EIR must be feasible alternatives. However, the CEQA Guidelines require the EIR to "set forth only those alternatives necessary to permit a reasoned choice." As stated in Section 15126.6(a), an EIR need not consider every conceivable alternative to a project. Rather it must consider a reasonable range of potentially feasible alternatives that will foster informed decision making and public participation. The CEQA Guidelines provide a definition for "a range of reasonable alternatives" and thus limit the number and type of alternatives that may need to be evaluated in a given EIR. According to the CEQA Guidelines Section 15126.6(f):

> The alternatives shall be limited to ones that would avoid or substantially lessen any of the significant effects of the project. Of those alternatives, the EIR need examine in detail only the ones that the lead agency determined could feasibly attain most of the basic objectives of the project.

First and foremost, alternatives in an EIR must be feasible. In the context of CEQA Guidelines Section 21061.1, "feasible" is defined as:

> ...capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social and technological factors.

Finally, an EIR is not required to analyze alternatives when the effects of the alternative "cannot be reasonably ascertained and whose implementation is remote and speculative."

Alternatives Considered But Dismissed From Further Analysis

Consistent with CEQA, primary consideration was given to alternatives that could reduce one or more significant project impacts, while still meeting most of the basic project objectives.

As stated in Guidelines Section 15126.6(c), among the factors that may be used to eliminate alternatives from detailed consideration in an EIR are:

(i) failure to meet most of the basic project objectives,
(ii) infeasibility, or
(iii) inability to avoid significant environmental impacts.

Regarding item (ii), infeasibility, among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries (projects with a regionally significant impact should consider the regional context), and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site (or the site is already owned by the proponent). None of these factors establish a fixed limit on the scope of reasonable alternatives.

The following off-site alternatives were considered but dismissed from detailed analysis in this EIR. The reason(s) for dismissal, within the context of the three above-outlined permissible reasons, are provided below.

Old Fire Station Off-Site Alternative

The possibility of an off-site location was considered as an alternative to the proposed project. The Old Fire Station Off-Site Alternative would be located at 1810 Chamonix Place, west of the proposed project site. The alternative site is currently occupied by two buildings which constitute a fire station. The fire station is only staffed during peak traffic periods within Olympic Valley, such as weekends during the ski season, but is leased out during the off season. Buildout of the Alternative would be similar to the proposed project and would meet most of the project objectives. Because the Old Fire Station Off-Site Alternative would not construct publicly accessible restrooms for Olympic Valley Park users, add water and sewer lines for the existing park bathrooms, or create a new water fountain for the pickleball courts, Project Objective 11 would not be met.

Development of the project at the Old Fire Station Off-Site Alternative would most likely require demolition of the existing on-site buildings, both to make room for the proposed museum, but also to provide sufficient parking space. Because demolition activities are not anticipated as part of the proposed project, the Alternative would most likely result in greater impacts related to air quality and GHG emissions than the proposed project. The Old Fire Station Off-Site Alternative site is located on the western end of Olympic Valley. As such, placing the proposed museum and cultural center at that site would have the potential to increase traffic congestion within the Valley, and in the event of an emergency evacuation, require visitors and staff to travel longer distances on Olympic Valley Road to reach SR 89. Therefore, the Old Fire Station Off-Site Alternative could result in greater impacts related to wildfire and transportation than the proposed project. Because the proposed project site is occupied by willow scrub habitat and a drainage swale, the Old Fire Station Off-Site Alternative would avoid impacts upon biological resources associated with the proposed project, due to the lack of similar features on the alternative site.

As noted above, CEQA Guidelines state that the primary intent of an alternative is to reduce one or more of the significant environmental impacts of the proposed project, while meeting the basic objectives of the proposed project. While the Old Fire Station Off-Site Alternative would eliminate the proposed project's impacts related to biological resources, it is reasonably anticipated that the Alternative would increase impacts related to air quality, transportation, and wildfire. As a result, the Old Fire Station Off-Site Alternative is dismissed from detailed evaluation.

Nevada Pavilion Off-Site Alternative

The Nevada Pavilion Off-Site Alternative would be located at the site of the existing Nevada Pavilion, at 1700 Olympic Valley Road. The Nevada Pavilion is one of the only remaining buildings left from the 1960 Olympics. Buildout of the Alternative would be similar to the proposed project, and, therefore, the majority of the project objectives would be met. Because the Nevada Pavilion Off-Site Alternative site is currently owned by Palisades Tahoe, and because the Alternative would not construct publicly accessible restrooms for Olympic Valley Park users, add water and sewer lines for the existing park bathrooms, or create a new water fountain for the pickleball courts, Project Objectives 11, 12, and 13 would not be met.

With respect to the site's historical significance, an evaluation would be required to determine if the building is on the federal or State Historic Register, or if it is capable of attaining that status. This status could limit how and to what degree the building could be modified. Regardless, the existing structure would require a major investment to remodel, and requires significant structural, mechanical, and environmental evaluation to determine if remodeling is feasible for the intended purpose. In addition, the setting of the building in the center of a parking lot would require a major

investment in site reconfiguration and landscaping to properly compliment the museum's desired aesthetics. Similar to the Old Fire Station Off-Site Alternative, the Nevada Pavilion Off-Site Alternative would be located in the western portion of Olympic Valley, potentially resulting in greater impacts related to wildfire (i.e., emergency evacuation) and transportation, as discussed above. In addition, similar to the Old Fire Station Off-Site Alternative, the Nevada Pavilion Off-Site Alternative would avoid impacts to the willow scrub habitat and drainage swale located on the proposed project site, thus avoiding impacts to biological resources associated with the proposed project.

As noted above, CEQA Guidelines state that the primary intent of an alternative is to reduce one or more of the significant environmental impacts of the proposed project. While the Nevada Pavilion Off-Site Alternative would avoid biological impacts associated with the proposed project, the Alternative could result in increased impacts related to transportation and wildfire, as well as feasibility concerns related to the cost of the site, ability to acquire the site, and necessary modifications to the existing building and surrounding parking lot. For these reasons, the Alternative would not achieve the intent of a feasible alternative under CEQA. As a result, the Nevada Pavilion Off-Site Alternative is dismissed from detailed evaluation.

Olympic Valley Stables Off-Site Alternative

The Olympic Valley Stables Off-Site Alternative would be located at 1525 Olympic Valley Road. The alternative site is currently occupied by the Olympic Valley Stables and associated outbuildings. Buildout of the Alternative would be similar to the proposed project, and, therefore, most of the Project Objectives would be met. Because the Olympic Valley Stables Off-Site Alternative site would need to be purchased from the current owners, and because the Alternative would not construct publicly accessible restrooms for Olympic Valley Park users, add water and sewer lines for the existing park bathrooms, or create a new water fountain for the pickleball courts, Project Objectives 11, 12, and 13 would not be met.

The Olympic Valley Stables Off-Site Alternative site is readily visible and accessible from Olympic Valley Road. Current views of the alternative site consist of stable structures with an immediate backdrop of Olympic Valley meadow and the forested mountains that ring the meadow. Such fairly dramatic views are currently unscreened and would be partially obstructed by the development of the proposed two-story museum and community center. Therefore, the Olympic Valley Stables Off-Site Alternative would be reasonably expected to result in greater aesthetic impacts than the proposed project. In addition, similar to the two Off-Site Alternatives discussed above, the Olympic Valley Stables Off-Site Alternative is located in the western portion of the Olympic Valley and would result in increased traffic congestion within Olympic Valley, thus potentially hindering emergency evacuations, and leading to greater impacts related to wildfire and transportation. The alternative site is also occupied by wetlands, thus creating potential impacts upon water and biological resources. In addition, the existing zoning designation of the site would need to be changed from Forest Reserve to allow the proposed use. Finally, buildout of the proposed museum on the Olympic Valley Stables Off-Site Alternative site would require demolition of the existing on-site structures.

As noted above, CEQA Guidelines state that the primary intent of an alternative is to reduced one or more of the significant environmental impacts of the proposed project. Considering the Olympic Valley Stables Off-Site Alternative is not anticipated to avoid any impacts of the proposed project, and could result in additional impacts related to aesthetics, wildfire, and transportation, and similar impacts to biological resources, the Alternative would not achieve the intent of a feasible

alternative under CEQA. As a result, the Olympic Valley Stables Off-Site Alternative is dismissed from detailed evaluation.

Alternatives Considered in this EIR

The following alternatives are considered and evaluated in this section:

- No Project (No Build) Alternative;
- 7-Eleven Off-Site Alternative; and
- Reduced Project Alternative.

See Table 10-1 at the end of the chapter for a comparison of the environmental impacts resulting from the considered alternatives and the proposed project.

No Project (No Build) Alternative

CEQA requires the evaluation of the comparative impacts of the "No Project" alternative (CEQA Guidelines Section 15126.6[e]). Analysis of the no project alternative shall:

> "… discuss […] existing conditions […] as well as what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services." (*Id.*, subd. [e][2]) "If the project is other than a land use or regulatory plan, for example a development project on identifiable property, the 'no project' alternative is the circumstance under which the project does not proceed. Here the discussion would compare the environmental effects of the property remaining in the property's existing state versus environmental effects that would occur if the project were approved. If disapproval of the project under consideration would result in predictable actions by others, such as the proposal of some other project, this 'no project' consequence should be discussed. In certain instances, the no project alternative means 'no build,' wherein the existing environmental setting is maintained. However, where failure to proceed with the project would not result in preservation of existing environmental conditions, the analysis should identify the practical result of the project's non-approval and not create and analyze a set of artificial assumptions that would be required to preserve the existing physical environment." (*Id.*, subd. [e][3][B]).

The County has decided to evaluate a No Project (No Build) Alternative, which assumes that the project site would remain in its current condition and would not be developed. As described in this EIR, the project site consists predominantly of montane coniferous forest, which largely contains white fir and pine trees native to the area. Patches of willow scrub occur on-site in scattered locations within stormwater detention basins constructed for the Olympic Valley Park, and an existing parking lot is located within the project site. Because development of the site would not occur, land disturbance, and any associated physical environmental impacts related to such land disturbance, would not occur; however, the No Project (No Build) Alternative would not meet any of the project objectives.

Aesthetics

The EIR determined that the proposed project could have a significant impact to nearby sensitive receptors as a result of the introduction of substantial new sources of light and glare. The No Project (No Build) Alternative would consist of the continuation of the existing conditions of the project site. Because the No Project (No Build) Alternative would not introduce any new structures or buildings on the site, creation of substantial new sources of light or glare would not occur. Thus, impacts related to aesthetics would not occur under the No Project (No Build) Alternative.

Noise

The No Project (No Build) Alternative would not generate construction noise, and, thus, the significant construction noise impact identified for the proposed project would not occur, and Mitigation Measure 6-1, which ensures that noise impacts resulting from construction activities are reduced to a less than significant level, would not be required. Thus, impacts related to noise would not occur under the No Project (No Build) Alternative.

Transportation

The No Project (No Build) Alternative would not generate construction traffic on local roadways and, thus, the significant impact identified for the proposed project related to conflicts with a program, plan, ordinance, or policy, except level of service (LOS), addressing the circulation system during construction activities, and Mitigation Measure 7-1, related to the preparation and implementation of a construction signage and traffic control plan, would not be required. Thus, impacts related to transportation would not occur under the No Project (No Build) Alternative.

Wildfire

Given the project site would remain as is under the No Project (No Build) Alternative, impacts due to slope, prevailing winds, and other factors, exacerbating wildfire risks, and thereby exposing project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire, would not occur; thus, Mitigation Measure 8-2 would not be required. Thus, impacts related to wildfire would not occur under the No Project (No Build) Alternative.

Other

The other CEQA topics regarding which the proposed project could have significant impacts, as identified in the Initial Study (biological resources, cultural resources, hazards and hazardous materials, hydrology and water quality, tribal cultural resources), would not be impacted as a result of this alternative, and are not discussed further.

7-Eleven Off-Site Alternative

The 7-Eleven Off-Site Alternative would involve construction of the SNOW Sports Museum and Community Cultural Center, as proposed, on a portion of the 4.6-acre parcel to the north of the site, across Olympic Valley Road, which is partially developed with a 7-Eleven Convenience Store, Tahoe Dave's Ski and Snowboard Rentals, and an associated parking lot; the remainder of the site is occupied primarily by forest. A shallow open drainage ditch is present along the southern and eastern boundaries of the alternative site; this ditch runs north along the western side of SR 89 to a point that is coterminous with the approximate rear of the 7-11 building, at which point the ditch is piped under SR 89, where it then sheet flows into the Truckee River. The alternative location is zoned Entrance Commercial (EC).

The proposed SNOW Sports Museum and Community Cultural Center would require an approximately 10,000 square-foot (sf) building footprint, and an additional 13,000 sf for parking, for a total of approximately 25,000 sf (i.e., an extra 2,000 sf to allow for some design flexibility). The intent would be to locate the museum and cultural center building on the currently disturbed portions of the alternative site to the maximum extent feasible in order to avoid impacts to forested habitat. At an estimated development footprint of 25,000 sf, the 7-Eleven Off-Site Alternative would require demolition of all on-site structures, and likely some disturbance and/or removal of on-site vegetation, though to a lesser extent than the proposed project.

The Alternative would require improvements to the site similar to the improvements proposed for the project, including, but not limited to, construction of a sewer pump station and approximately 1,000 linear feet of force main. In addition, while the 7-Eleven Off-Site Alternative would still require approval of a Text Amendment to Section 12.24.040 of the Placer County Government Code, and Design Review, similar to the proposed project, the Alternative would not require a Rezone, a Conditional Use Permit, or a Potential Minor Land Division to create a new land use district to accommodate the proposed project, allow a museum and community cultural center within the new land use district, and create a new parcel for the proposed project, respectively. Furthermore, while the project site is bound by a deed restriction, which does not allow the use of the property for private development of a commercial, residential, or industrial nature, the alternative location would not be bound by such restrictions.

Because the 7-Eleven Off-Site Alternative would include the development of the SNOW Sports Museum and Community Cultural Center, Project Objective 1, Project Objectives 3 through 10, and Project Objective 14 would be met. However, because the 7-Eleven Off-Site Alternative would not involve development within Olympic Valley Park, Project Objectives 2 and 11 would not be met. In addition, because the 7-Eleven Off-Site Alternative is currently developed with existing structures and is privately-owned, Project Objectives 12 and 13 would not be met.

Aesthetics

The EIR determined that, without mitigation, the proposed project would have a significant impact related to the creation of a new source of substantial light and glare which would adversely affect day or nighttime views of the area. While the proposed project site is primarily undeveloped, the site is located adjacent to a parking lot, which is an existing source of light. Similarly, the 7-Eleven Off-Site Alternative would be constructed on a site that has been previously developed and is subject to existing sources of light. In addition, neither the proposed project site nor the Alternative site is immediately bordered by sensitive light receptors. Rather, in general, both sites are located between major roadways and forest. Therefore, the 7-Eleven Off-Site Alternative would result in similar impacts as the proposed project related to the creation of new sources of substantial light and glare. However, because the types and specific locations of light sources have not yet been determined for the 7-Eleven Off-Site Alternative, Mitigation Measure 4-3 would still be required for the Alternative.

Overall, impacts related to aesthetics could be considered similar under the 7-Eleven Off-Site Alternative compared to the proposed project.

Biological Resources

Although buildout of the 7-Eleven Off-Site Alternative would avoid disturbance of on-site vegetation to the maximum extent feasible, demolition and construction activities could include the removal of on-site trees. Thus, similar to the proposed project, Mitigation Measures IV-1 and IV-2, related to the protection of bat species and migratory birds and raptors, respectively, would still be required. A Biological Resources Assessment prepared for the proposed project identified the potential for wetlands and riparian habitat to be impacted on the project site. While a specific survey has not been conducted for the 7-Eleven Off-Site Alternative site, it is known that an open drainage ditch is present on the southern and eastern boundaries of the alternative site, which is piped underneath SR 89, directly into the Truckee River. In addition, from a review of aerial imagery, it appears that hydrophytic vegetation is present in the northeast corner of the project site, where the open drainage ditch is piped under SR 89. While it may be possible to avoid impacting such vegetation at the northeastern corner of the parcel during design and construction

of the alternative, it cannot be known with certainty at this time whether this can in fact be achieved. In addition, the drainage ditch is culverted under the current driveway into the 7-Eleven store parking lot from SR 89. Construction of the Alternative may require modifying this driveway, which could impact the ditch that flows directly into the Truckee River during storm events. As such, buildout of the 7-Eleven Off-Site Alternative could result in significant impacts upon sensitive habitats, and thus, Mitigation Measures IV-3 and IV-4 would still be required. Overall, impacts related to biological resources would be similar under the 7-Eleven Off-Site Alternative compared to the proposed project.

Cultural Resources

Similar to the proposed project, ground-disturbing activities associated with construction of the 7-Eleven Off-Site Alternative could potentially disturb previously unknown archeological resources or human remains located on the project site. Therefore, Mitigation Measures V-1 and V-2 would still be required. However, because the 7-Eleven Off-Site Alternative site has been subject to significant disturbance, and the development footprint for the alternative would be located within existing disturbed areas to the maximum extent feasible, the potential for the Alternative to result in a significant impact upon cultural resources could be reduced as compared to the proposed project.

Geology and Soils

The total disturbance area associated with the 7-Eleven Off-Site Alternative would be similar to the proposed project. Whereas the proposed project would be developed on a site that is primarily undeveloped, the 7-Eleven Off-Site Alternative would be constructed on a site that has been previously graded and paved. Therefore, impacts related to creating substantial direct or indirect risks to life or property, significant disruptions, displacements, compaction or overcrowding of on-site soils, and/or substantial change in topography or ground surface relief features would be similar or slightly increased under the Alternative. Similarly, impacts related to erosion, unstable geologic units/soils, and expansive soils would be similar or slightly increased compared to the proposed project. Mitigation would continue to be required for the 7-Eleven Off-Site Alternative in order to ensure such impacts are reduced to less-than-significant levels. In addition, while the potential for the alternative site to contain a unique paleontological resource or unique geologic or physical feature is unknown, because the alternative site has been previously disturbed and developed, the probability of the 7-Eleven Off-Site Alternative to result in impacts to such resources is reduced as compared to the proposed project. However, Mitigation Measure VII-4 is required to ensure that impacts to such resources does not occur.

Overall, the 7-Eleven Off-Site Alternative would result in similar or slightly increased impacts to geology and soils as compared to the proposed project.

Hazards and Hazardous Materials

According to the Phase I Environmental Site Assessment (ESA) prepared for the proposed project, the project site contains fill of an unknown origin. As such, the Initial Study included Mitigation Measure IX-1 to require assessment, and if necessary, removal of contaminated soils should they be encountered during construction, in order to reduce impacts related to creating 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. While a Phase I ESA has not been prepared for the 7-Eleven Off-Site Alternative site, because the alternative site has been previously developed and graded, there is a possibility that fill soil of an unknown origin also occurs beneath the alternative site. Therefore, Mitigation Measure IX-1 would

still be required for the 7-Eleven Off-Site Alternative. In addition, the age of the on-site structures is currently unknown; thus, the potential exists for the on-site structures to contain asbestos-containing materials and lead-based paint. The proposed project site does not contain any structures, and as such, there is no potential for asbestos-containing materials or lead-based paint to occur. Overall, the 7-Eleven Off-Site Alternative could result in greater impacts related to hazards and hazardous materials as compared to the proposed project.

Hydrology and Water Quality

Because the proposed project would involve development of a mostly undisturbed site, thus creating more impervious surfaces, the Initial Study determined that the proposed project would have the potential to 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 substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site, or create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems, as well as potentially create or contribute runoff water which would include substantial additional sources of polluted runoff or otherwise substantially degrade surface water quality either during construction or in the post-construction condition. Because the 7-Eleven Off-Site Alternative would require the demolition of all on-site structures on the alternative site, all mitigation measures included in the Initial Study associated with impacts related to hydrology and water quality would still be required. Furthermore, as discussed above, an open drainage ditch is present on the southern and eastern borders of the alternative site, which flows underneath SR 89 and directly into the Truckee River. The drainage ditch is piped underneath the 7-Eleven's access driveway from SR 89. Construction of the 7-Eleven Off-Site Alternative may require improvements to the access road and underlying drainage ditch, which could result in impacts to water quality, including the quality of the Truckee River. Therefore, buildout of the 7-Eleven Off-Site Alternative could result in greater impacts to hydrology and water quality than the proposed project.

Noise

The EIR determined that with implementation of Mitigation Measure 6-1, the proposed project's significant impact related to the generation of a substantial temporary increase in ambient noise levels in the vicinity of the project would be less-than-significant. The construction of the alternative at the 7-Eleven site would involve additional construction activities associated with demolition of the existing buildings. Mitigation Measure 6-1 would still be required to ensure construction noise associated with the development of the alternative is less than significant. Overall, the Alternative may have a greater impact related to the generation of construction noise than the proposed project.

Transportation

Similar to the proposed project, the 7-Eleven Off-Site Alternative would add construction vehicle traffic to area roadways, thereby potentially conflicting with existing traffic patterns. As such, Mitigation Measure 7-1, related to preparation and implementation of a construction signage and traffic control plan, would still be required. Impacts related to conflicting with a program, plan, ordinance, or property addressing the circulation system during construction activities would be similar to the proposed project.

Tribal Cultural Resources

Similar to the Cultural Resources discussion above, ground-disturbing activities associated with construction of the 7-Eleven Off-Site Alternative could potentially disturb previously unknown tribal

cultural resources located on the project site. Therefore, Mitigation Measures XVIII-1, which requires implementation of Mitigation Measures V-1 and V-2, would still be required, and impacts upon tribal cultural resources could be similar to the proposed project. However, because the 7-Eleven Off-Site Alternative site has been subject to significant disturbance, and the development footprint for the alternative would be located within existing disturbed areas to the maximum extent feasible, the potential for the Alternative to result in a significant impact upon tribal cultural resources could be reduced as compared to the proposed project.

Wildfire

The 7-Eleven Off-Site Alternative is located in the immediate vicinity of the proposed project site. Thus, the topography of the alternative site is relatively level, similar to the project site. Because the alternative site, similar to the project site, contains on-site vegetation, impacts related to construction equipment (with internal combustion engines) increasing wildfire risk due to sparks would be similar to the proposed project. Thus, the Alternative would still require the implementation of Mitigation Measure 8-2, requiring utilization of CAL FIRE-approved spark arrestors on all construction equipment with internal combustion engines, and a similar impact would occur related the exposure of project occupants to pollutant concentrations form a wildfire due to slope, prevailing winds, and other factors exacerbating wildfire risks.

Reduced Project Alternative

The Reduced Project Alternative would consist of buildout of the project site with the proposed SNOW Sports Museum; however, development of the Community Cultural Center would not be included as part of the Reduced Project Alternative. As such, the Reduced Project Alternative would result in the development of approximately 1,404 sf less building space than the proposed project. For the proposed project, the Community Cultural Center would be located on the second story of the building, which would be at grade level of the existing Olympic Valley Park parking lot. Therefore, because the Reduced Project Alternative would eliminate the portion of the building's second floor dedicated to the Community Cultural Center, the building would be reduced in scale when viewed from the parking lot. In addition, because the Community Cultural Center would not be developed, after-hours events such as lectures, film screenings, and private parties would not occur as part of project operations. Nonetheless, a text amendment to Section 12.24 of the Placer County Code would still be required to allow for limited museum operations to occur later than specified in the Code. The Reduced Project Alternative would still require all other on- and off-site improvements included as part of the proposed project. Similar to the proposed project, the Alternative would require approval of a Rezone, Conditional Use Permit, Design Review, and Potential Minor Land Division.

Because the Reduced Project Alternative would include development of the SNOW Sports Museum without the Community Cultural Center, the Alternative would not meet Project Objectives 6 or 9. However, the remaining Project Objectives would be met by the Reduced Project Alternative.

Aesthetics

Although the Reduced Project Alternative would involve the development of approximately 1,404 sf less building space than the proposed project, the building design would not be significantly altered, and thus, visual impacts related to public views of the Alternative would be similar to those of the proposed project, which the DEIR determined would be less-than-significant. In addition, although the Reduced Project Alternative would not include after-hours events associated with the Community Cultural Center, the Alternative would still require a text amendment to the Placer

County Code to allow limited museum operations to occur later than specified in the Code. Depending on the time of year, some of these after-hours museum operations could occur during nighttime. Thus, similar to the proposed project, the Reduced Project Alternative would introduce new sources of light to the project vicinity, and the types and specific locations of lighting have not yet been determined for the Alternative. Therefore, the Alternative would have a similar impact related to the introduction of new sources of light and glare in the project vicinity as compared to the proposed project, and Mitigation Measure 4-3 would still be required for the Alternative.

Noise

Because the Reduced Project Alternative would involve similar construction activities as the proposed project, the significant project impact related to construction noise would still occur, and Mitigation Measure 6-1 would still be required. However, because the Alternative would include the construction of 1,404 sf less building space than the proposed project, the duration of noise levels during construction may be reduced as compared to the proposed project. In addition, while not identified as a significant project impact, it is noted that because operations of the Reduced Project Alternative would not include after-hours events associated with the Community Cultural Center, operational noise could be reduced as compared to the proposed project.

Overall, because the Reduced Project Alternative would involve reduced construction activity, the Alternative may result in fewer impacts related to noise as compared to the proposed project.

Transportation

Similar to the proposed project, the Reduced Project Alternative would add construction vehicle traffic to area roadways, thereby potentially conflicting with existing traffic patterns. As such, Mitigation Measure 7-1, related to preparation and implementation of a construction signage and traffic control plan, would still be required, and impacts related to conflicting with a program, plan, ordinance, or property addressing the circulation system during construction activities would be similar to the proposed project.

Wildfire

Because the Reduced Project Alternative would include development of the same parcel as the proposed project, the risks and requirements related to wildfire would be similar to the proposed project. Therefore, Mitigation Measure 8-2 would still be required, and impacts related to wildfire would be similar to the proposed project.

Other

Given that development of the Reduced Project Alternative would involve the same disturbance footprint as the proposed project, the significant impact categories identified in the Initial Study for the proposed project would be anticipated to be similar or lesser in scale under the Reduced Project Alternative, and are therefore not discussed further.

10.4 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

An EIR is required to identify the environmentally superior alternative from among the range of reasonable alternatives that are evaluated. The environmentally superior alternative is generally the alternative that would be expected to generate the least amount of significant impacts. Identification of the environmentally superior alternative is an informational procedure and the alternative selected may not be the alternative that best meets the goals or needs of the County. Section 15126(e)(2) of the CEQA Guidelines requires that an environmentally superior alternative be designated and states, “If the environmentally superior alternative is the ‘no project’ alternative,

the EIR shall also identify an environmentally superior alternative among the other alternatives." In this case, the No Project (No Build) Alternative would be considered the environmentally superior alternative, because the project site is assumed to remain in its current condition under the alternative. Consequently, many of the impacts resulting from the proposed project would not occur under the Alternative, as shown in Table 10-1.

The No Project (No Build) Alternative would not meet any of the project objectives. Both the 7-Eleven Off-Site Alternative and the Reduced Project Alternative would meet most project objectives. As previously noted, the 7-Eleven Off-Site Alternative would not meet Project Objectives 2 and 11-13; the Reduced Project Alternative would not meet Project Objectives 6 and 9.

As discussed throughout this chapter and shown in Table 10-1, the 7-Eleven Off-Site Alternative could result in greater impacts than the proposed project related to hazards and hazardous materials, hydrology and water quality, and construction noise; fewer impacts related to cultural resources and tribal cultural resources, and similar impacts to the proposed project for the remaining topics. However, the Reduced Project Alternative would result in fewer impacts related to construction noise, and similar impacts to the proposed project for the remaining topics.

Based on the above, the Reduced Project Alternative would be considered the environmentally superior alternative to the proposed project.

Table 10-1
Comparison of Environmental Impacts for Project Alternatives

Resource Area	Proposed Project	No Project (No Build) Alternative	7-Eleven Off-Site Alternative	Reduced Project Alternative
Aesthetics	Less-Than-Significant with Mitigation	None	Similar	Similar
Biological Resources	Less-Than-Significant with Mitigation	None	Similar	Similar
Cultural Resources	Less-Than-Significant with Mitigation	None	Fewer	Similar
Geology and Soils	Less-Than-Significant with Mitigation	None	Similar	Similar
Hazards and Hazardous Materials	Less-Than-Significant with Mitigation	None	Greater	Similar
Hydrology and Water Quality	Less-Than-Significant with Mitigation	None	Greater	Similar
Noise	Less-Than-Significant with Mitigation	None	Greater	Fewer
Transportation and Circulation	Less-Than-Significant with Mitigation	None	Similar	Similar
Tribal Cultural Resources	Less-Than-Significant with Mitigation	None	Fewer	Similar
Wildfire	Less-Than-Significant with Mitigation	None	Similar	Similar
Total Fewer:		**4**	**2**	**1**
Total Similar:		**0**	**5**	**9**
Total Greater:		**0**	**3**	**0**

Note: No Impact = “None;” Less than Proposed Project = “Fewer;” Greater than the Proposed Project = “Greater,” and Similar to Proposed Project = “Similar”

11. EIR Authors and Persons Consulted

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APPENDIX A

COMMUNITY DEVELOPMENT/RESOURCE AGENCY
Environmental Coordination Services
County of Placer

DATE: March 18, 2022

TO: California State Clearinghouse
Responsible and Trustee Agencies
Interested Parties and Organizations

SUBJECT: **Notice of Preparation of an Environmental Impact Report for the Proposed SNOW Sports Museum and Community Cultural Center Project**

REVIEW PERIOD: **March 18, 2022 to April 18, 2022**

Placer County is the lead agency for the preparation of an Environmental Impact Report (EIR) for the Sierra Nevada Olympic Winter (SNOW) Sports Museum and Community Cultural Center Project (proposed project) in accordance with the California Environmental Quality Act (CEQA), Section 15082. The purpose of the Notice of Preparation (NOP) is to provide responsible agencies and interested persons with sufficient information in order to enable them to make meaningful comments regarding the scope and content of the EIR. Your timely comments will ensure an appropriate level of environmental review for the project.

Project Location: The project site consists of approximately one (1) acre (with a disturbance area of 0.68-acre) of the 26.8-acre Squaw Valley Community Park[1] site, 101 Olympic Valley Road, southwest of the intersection of Olympic Valley Road and River Road/State Route (SR) 89 in the unincorporated community of Olympic Valley. Squaw Valley Community Park is identified by Assessor's Parcel Numbers (APNs) 096-290-021-000, 096-290-056-000, 096-290-061-000, 096-310-009-000, and 096-310-040-000.

Project Description: The proposed project would include construction of a two-story, U-shaped building celebrating the 1960 Winter Olympics and history of winter sports in the Sierra Nevada. The building would consist of up to 20,000 square feet (sf) with a maximum height of 30 feet, as well as outdoor gathering spaces and amenities. The building would include the following components:

- **Museum of Olympic History and Sierra Nevada Ski History (Museum)**. The museum would commemorate the events of the 1960 Winter Olympic Games held in Olympic Valley and Lake Tahoe and the ensuing effects on regional and western ski history. The museum would also document the ski history of the Sierra Nevada region beginning with the Washoe Tribe to 19th century gold miners, to members of the 10th Mountain Division, to current World Cup athletes;
- **Cultural Community Center**. The cultural community center would offer education and awareness programs in history, culture, sports innovation, and environmental stewardship;
- **Event Space**. The building would include event space for exhibits, films, educational and recreational classes, conferences, lectures, and community events, and small private celebrations (e.g., birthdays, weddings, meetings, etc.);
- **Visitor Center**. A visitor center would be included as part of the building and would be operated in partnership with Placer County and the North Lake Tahoe Resort Association; and
- **Café and Museum Shop**. A small café and museum shop, ancillary to the museum, community cultural center, and visitor center would be provided.

Various associated improvements would be included in the development of the proposed project, including, but not limited to landscaping and utility installation.

The proposed project would require County approval of a Rezone to create a new land use district to accommodate the proposed project, Text Amendment to Section 12.24.040 of the Placer County Government Code, Conditional Use Permit (CUP), Design Review, and potential Minor Land Division to create a new parcel for the proposed project.

[1] At the time of publication, Squaw Valley Community Park is under consideration of a name change. Subsequent documents will reflect the official name of the Park at the time of their publication as the renaming process progresses.

Contact Information: For more information regarding the proposed project, please refer to the following detailed project description or contact Patrick Dobbs, Senior Planner, at (530) 745-3060 or pdobbs@placer.ca.gov. A copy of the NOP is available for review at the Tahoe City and Truckee Libraries, the Placer County Community Development Resource Agency (Tahoe City), and on the Placer County website:

http://www.placer.ca.gov/departments/communitydevelopment/envcoordsvcs/eir

NOP Comment Period: Written comments should be submitted at the earliest possible date, but not later than 5:00 pm on April 18, 2022 to Shirlee Herrington, Environmental Coordination Services, Placer County Community Development Resource Agency, 3091 County Center Drive, Suite 190, Auburn, CA 95603, (530) 745-3132, fax (530) 745-3080, or cdraecs@placer.ca.gov.

NOP Scoping Meeting: In addition to the opportunity to submit written comments, a NOP scoping meeting will be held in person and virtually via zoom to inform interested parties about the proposed project, and to provide agencies and the public with an opportunity to provide comments on the scope and content of the EIR. Further information on the date and time of the scoping meeting is provided below.

EIR Scoping Meeting
on the SNOW Sports Museum and Community Cultural Center Project
Monday, March 28, 2022 | 3:00 to 5:00 PM
In-Person:
Planning Commission Hearing Room
3091 County Center Drive, Auburn
In-Person:
Community Development Resource Agency – Tahoe
775 N. Lake Boulevard, Tahoe City (1st Floor Conference Room)
or
Virtual:
Zoom: https://placer-ca-gov.zoom.us/j/95728719462
Phone: 1+ (877) 853 5247 or 1+ (888) 788 0099 | Webinar ID: 957 2871 9462

1.0 PROJECT DESCRIPTION

1.1 Location and Setting

The project site consists of approximately one acre (with a disturbance area of 0.68-acre) of the 26.8-acre Squaw Valley Community Park site, 101 Olympic Valley Road, southwest of the intersection of Olympic Valley Road and SR 89, in the unincorporated community of Olympic Valley (see Figure 1 and Figure 2). Regional access to the site is provided by Interstate 80 (I-80). Palisades Tahoe (formerly Squaw Valley Ski Resort) and other Olympic Valley ski resorts (e.g., Olympic Village Inn), as well as other recreational and commercial uses are located approximately 1.89 miles southwest of the project site. Lake Tahoe is located five miles southeast of the project site, and the Town of Truckee is located approximately nine miles northwest of the project site.

Squaw Valley Community Park is an approximately 26.8-acre park, consisting of five parcels (APNs 096-310-009-000, 096-310-040-000, 096-290-021-000, 096-290-061-000, and 096-290-056-000), owned and operated by Placer County. The project site is identified by portions of APNs 096-290-021-000 and 096-290-056-000, and would be located between the Squaw Valley Community Park driveway entrance to the parking lot from Olympic Valley Road and the existing pickleball courts. The project site is designated as Conservation Preserve (CP) in the 1983 SVGP and Land Use Ordinance, and the current zoning designation for the site is Forest Recreation (FR).

The project site is situated on undulating topography which runs north to south. The scattered rock outcrops and boulders located on-site create microtopographic variations ranging from 6,115 feet to 6,130 feet above mean sea level. The project site contains areas of vegetation, predominantly montane coniferous forest, which largely consist of white fir and pine trees native to the area. Patches of willow scrub occur in scattered locations within stormwater detention basins constructed for the Squaw Valley Community Park.

Riprap stone is scattered along the eastern boundary of the project site along the pickleball courts and the northwestern corner of the project site. A 0.04-acre drainage swale, which was constructed as part of the 2004 improvements to Squaw Valley Community Park, supports wetland vegetation and occurs along the south side of Olympic Valley Road, flowing from west to east. The Truckee River is located approximately 790 feet east of the project site, across SR 89.

Figure 1
Regional Location

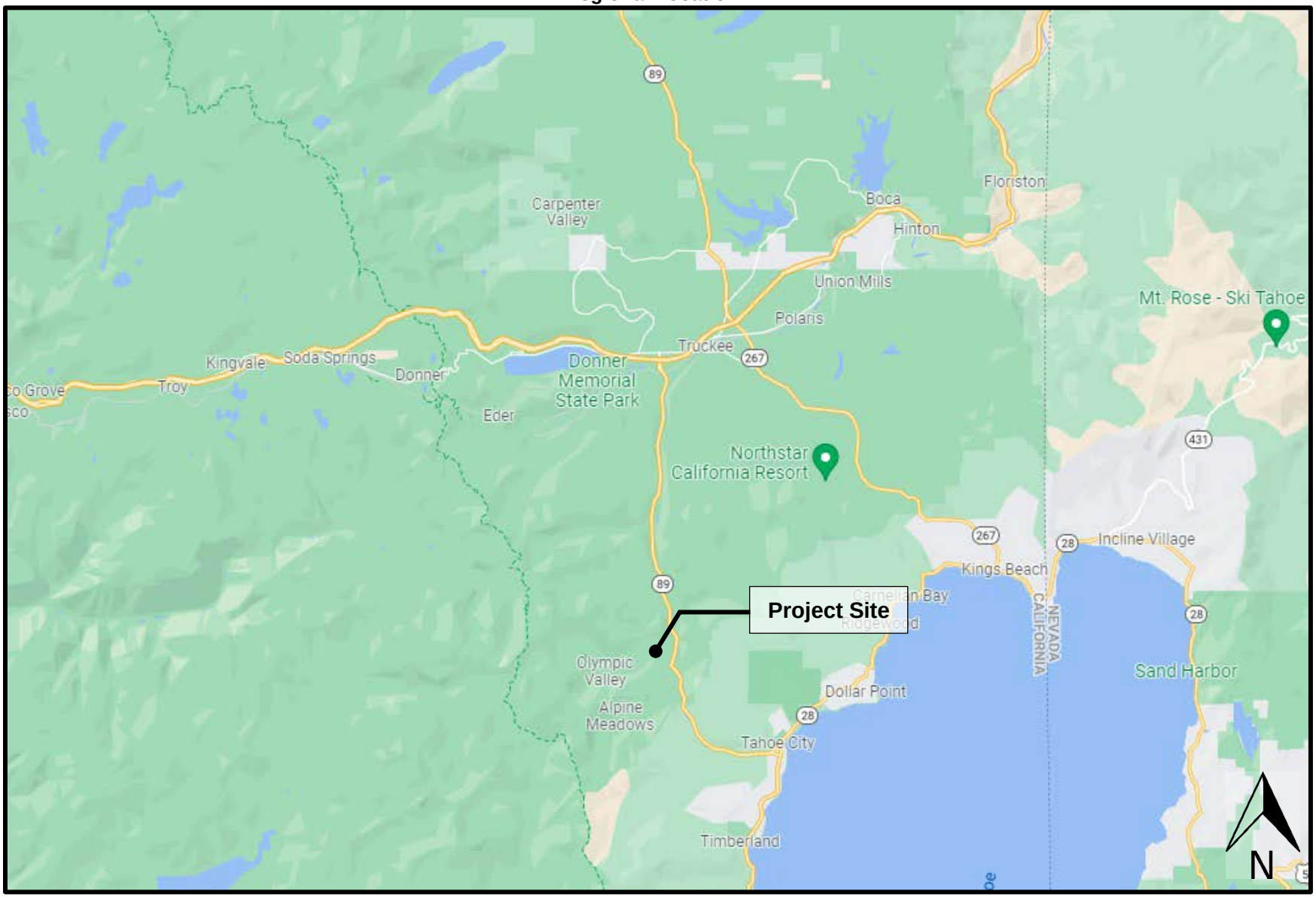
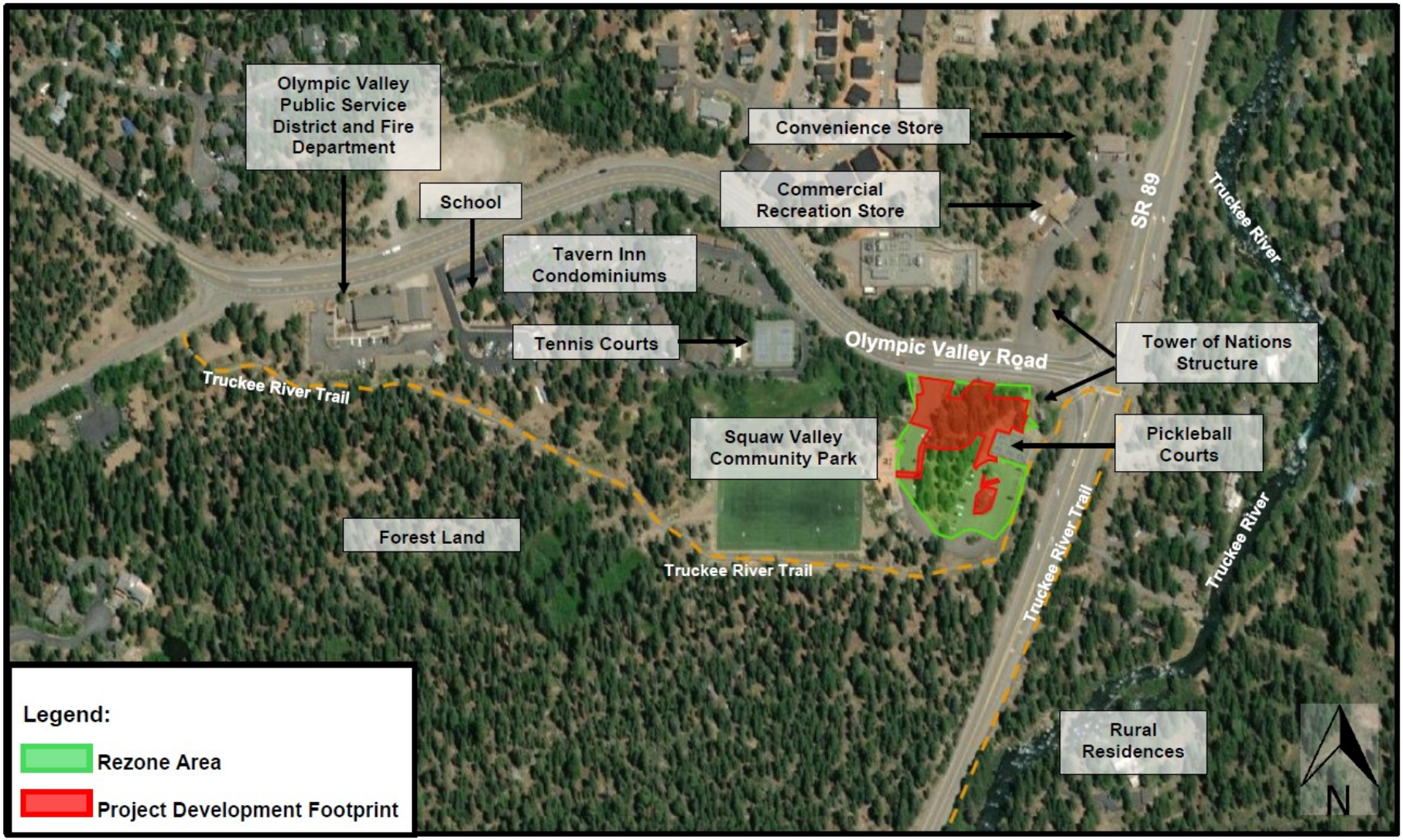


Figure 2
Project Site Boundaries



1.2 Surrounding Land Uses

The project site is bounded by Olympic Valley Road to the north, SR 89 and the Truckee River Trail to the east, and Squaw Valley Community Park facilities to the south and west. The area north of the project site, across Olympic Valley Road, is sparsely developed and is largely occupied by forest and meadow vegetation. However, a commercial recreation store and convenience store (7-Eleven) are located on the west side of SR 89, north of the project site, across Olympic Valley Road. A soccer field and playground are located west of the project site within Squaw Valley Community Park. The Olympic Valley community is located further west, which includes condominiums and single-family residences in the vicinity of the project site to the northwest.

Rural residences are located east of the project site, across SR 89, and the Truckee River is located further east, approximately 790 feet from the project site. The Truckee River Trail and forest land are located south of the project site. The Palisades Tahoe, which contains lodging, ski lifts, a golf course, and associated commercial uses is located further southwest.

1.3 Project Components

The proposed project would include development of a museum and community cultural center building celebrating the 1960 Winter Olympics and history of winter sports in the Sierra Nevada. The proposed development would include the construction of a new, two-story, U-shaped building, various site improvements, and a number of amenities such as event space (see Figure 3). The proposed project would require County approval of a Rezone to create a new land use district to accommodate the proposed project, a Text Amendment to the Placer County Code, Conditional Use Permit, Design Review, and potential Minor Land Division to create a new parcel for the proposed project. The proposed project components, along with all required entitlements and approvals, are described in further detail in the following sections.

Proposed Development

The two-story, U-shaped building would consist of up to 20,000 sf of building space with a maximum height of 30 feet (see Figure 4 through Figure 7). The second/upper floor would serve as the entrance to the building due to the museum having a stepped floor plan. Although not yet determined, the building could also include a mezzanine. Table 1 below outlines the allocated space within the proposed building.

Outdoor gathering spaces and amenities would be provided, such as a plaza deck to be located south of the building and a V-shaped garden to be located east of the building. Various improvements would be included in the development of the proposed project, including, but not limited to, landscaping and utility installation, as well as improvements to the existing facilities at Squaw Valley Community Park. Such improvements are discussed in further detail below. In total, the construction of the building and associated improvements would comprise approximately one acre. However, while a portion of the existing parking lot would be resurfaced, ground disturbance would not occur within this paved area; thus, the proposed project would result in a total disturbance area of approximately 0.68-acre.

The existing Squaw Valley Community Park parking lot has a total of 116 spaces (61 in the upper/western area and 55 in the lower/eastern area). Up to 6,000 sf of the existing parking lot would be resurfaced, and the parking area directly fronting the museum would be restriped to include two additional Americans with Disabilities Act (ADA) parking spaces. A planting area in the eastern portion of the parking lot would be removed and replaced with eight vehicle parking spaces. Including existing and proposed parking, a total of 121 parking spaces (including seven ADA-compliant parking spaces) would be provided on-site in accordance with Section 17.54.060 of the Placer County Code.

Further discussion of the proposed project's operations, access and circulation, grading activities, utilities and public services, landscaping and trails, and off-site improvements is provided below.

Figure 3
Site Plan

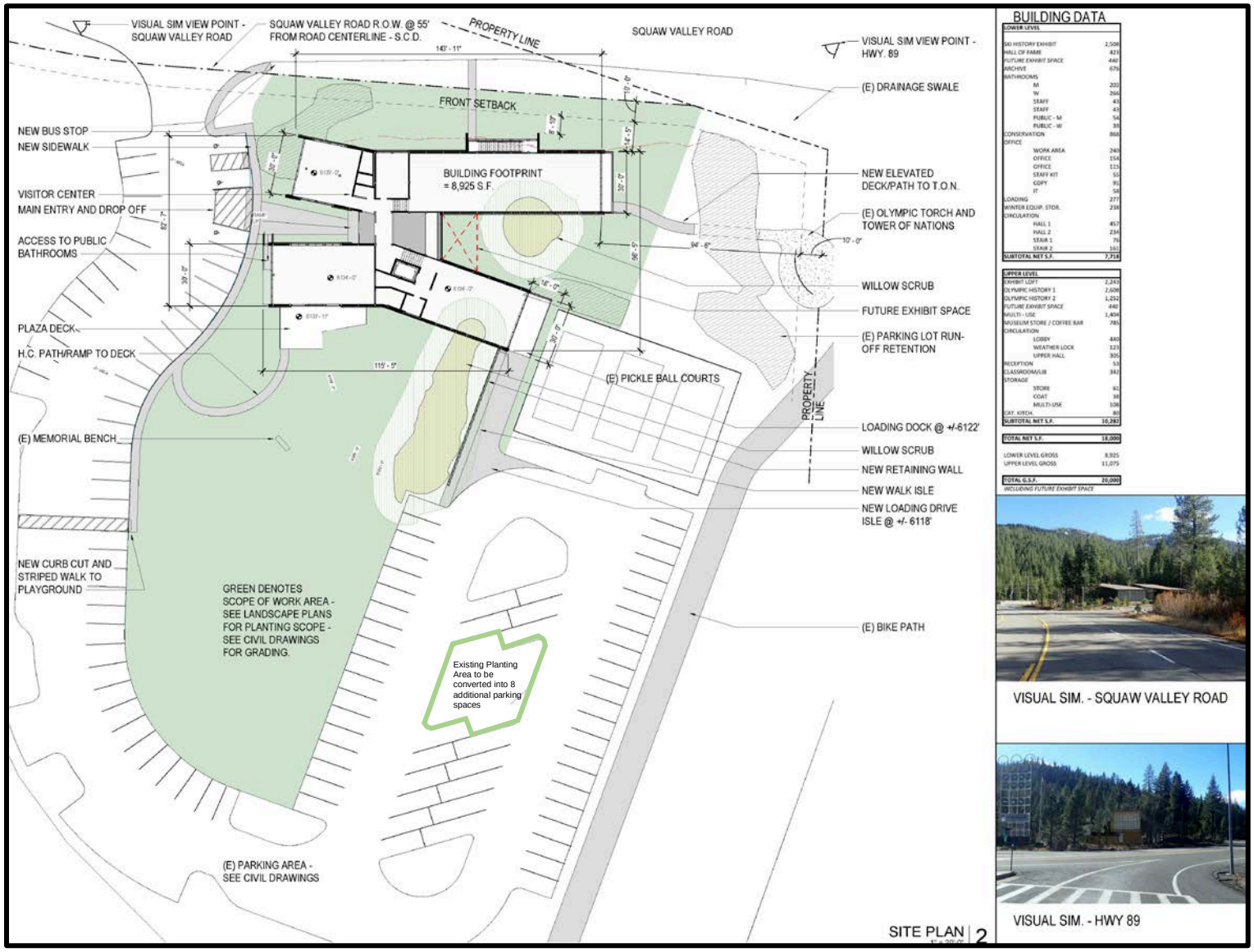


Figure 4
Entry-Level/Second Floor Plan

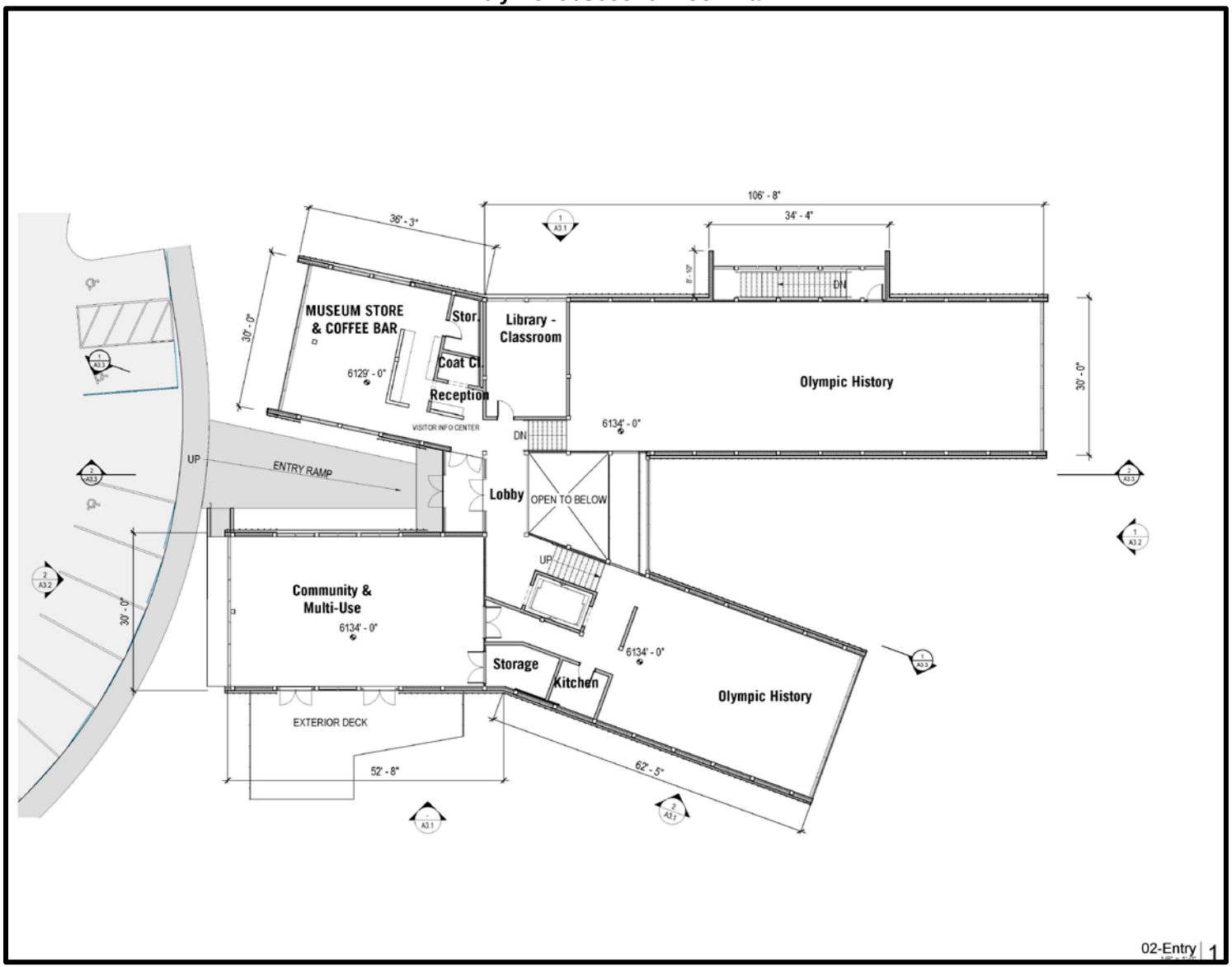


Figure 5
First Floor Plan

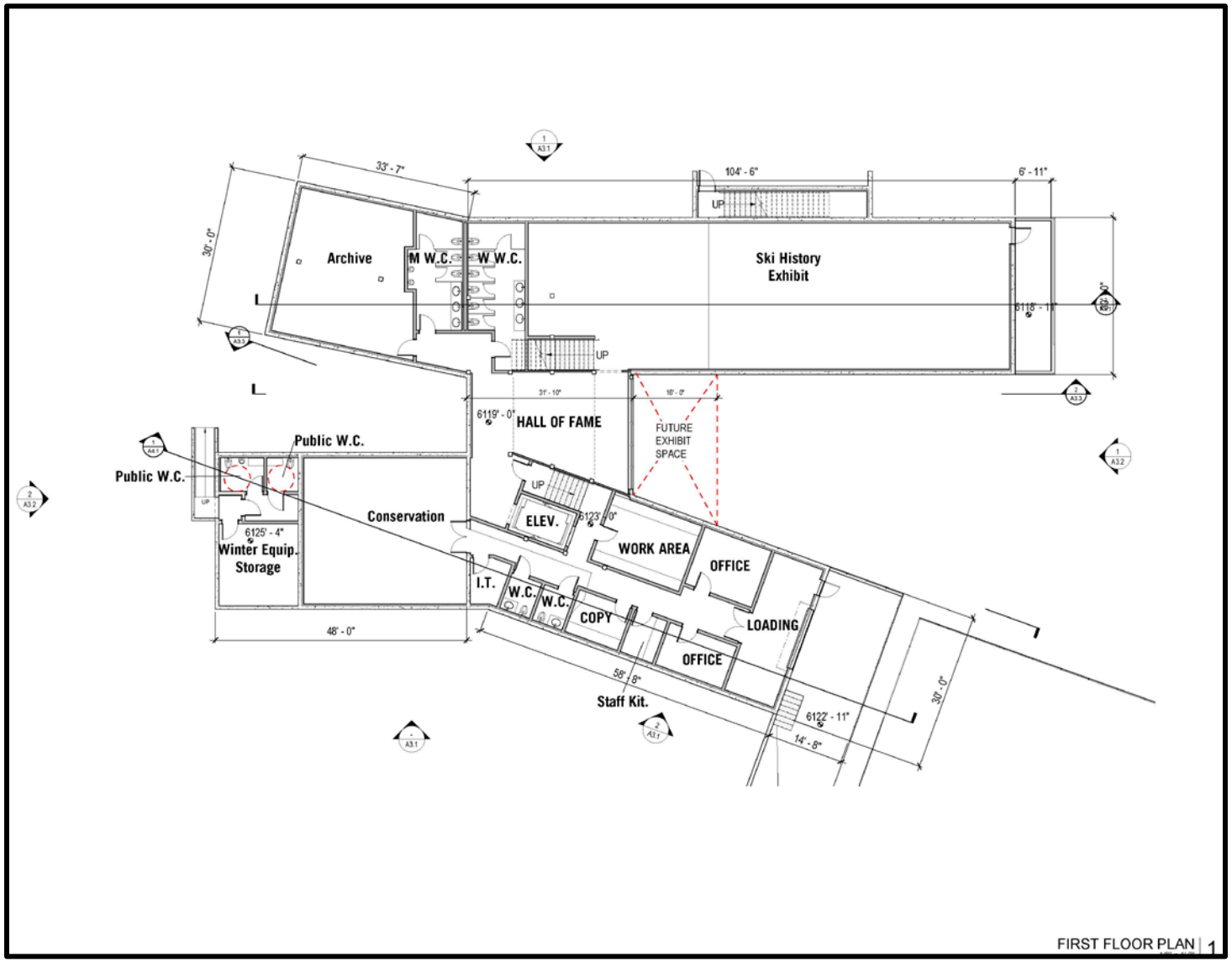


Figure 6
Exterior Building Elevations (South and North)

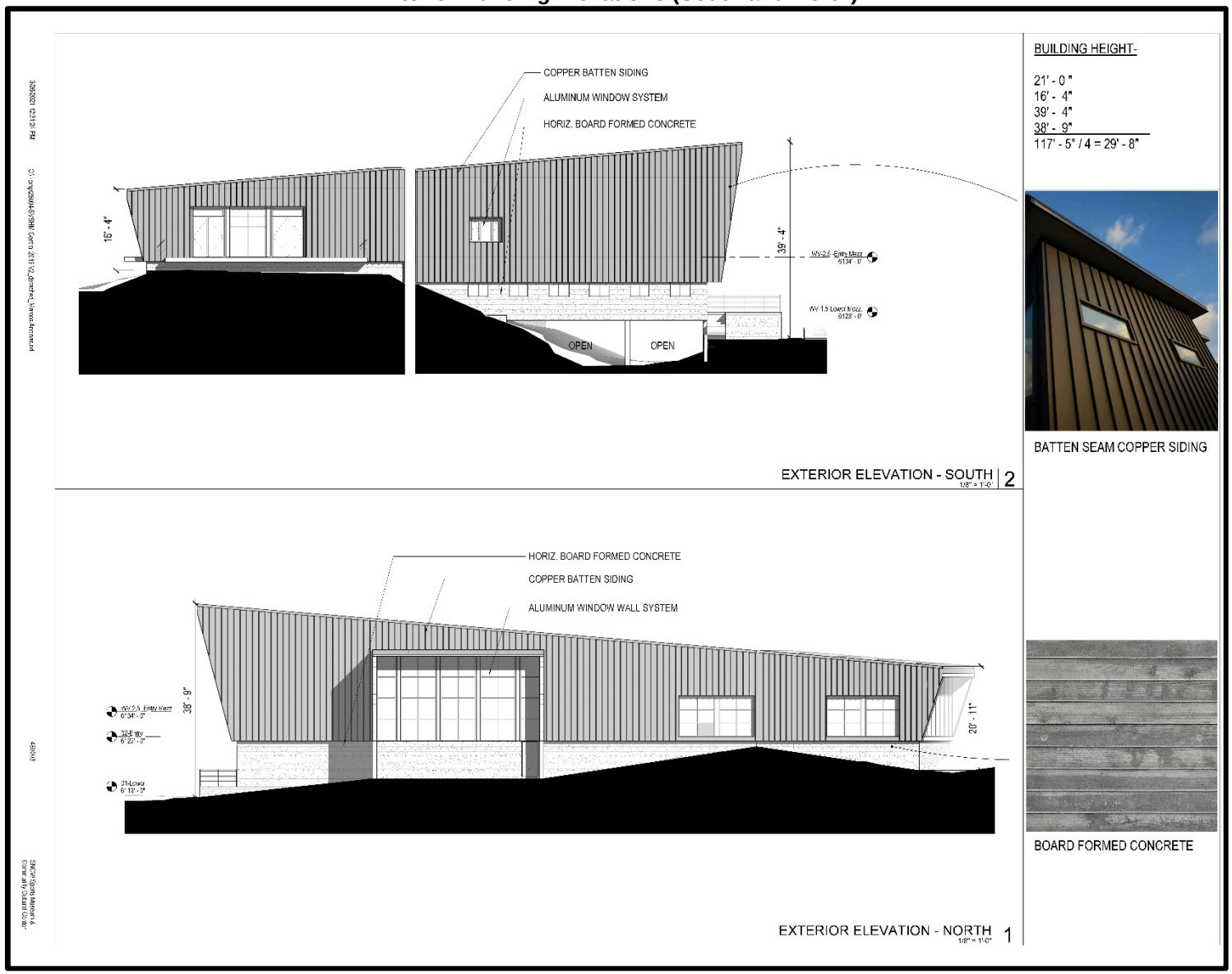
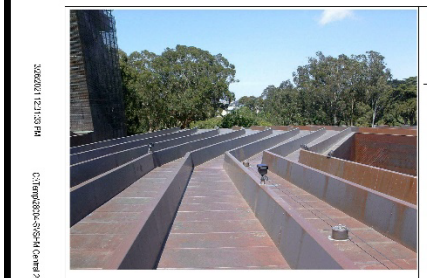
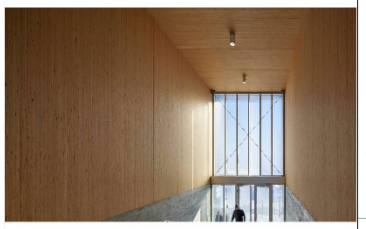


Figure 7
Exterior Building Elevations (South and North)

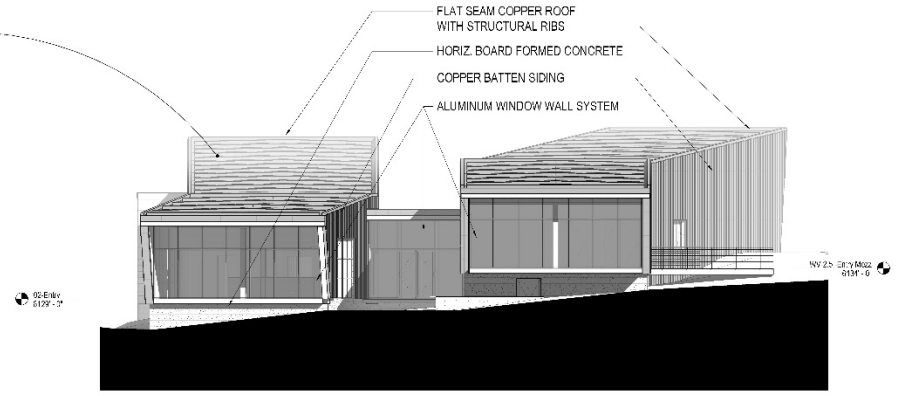


FLAT SEAM RIBBED COPPER ROOF

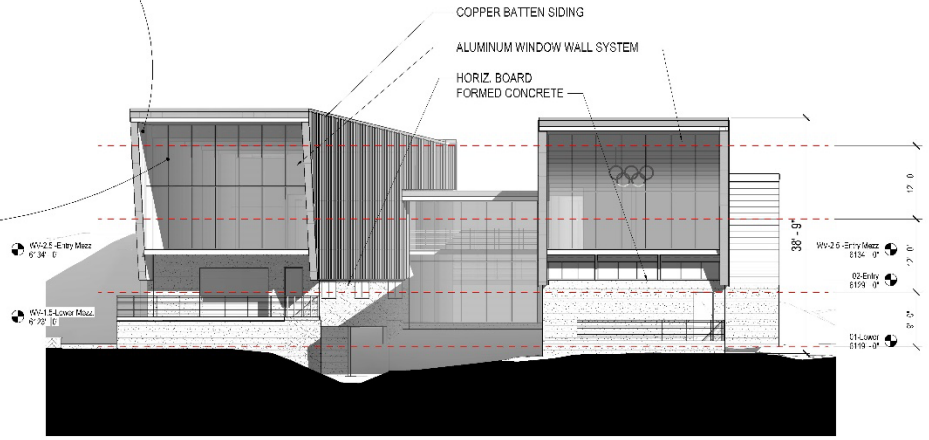


MASS TIMBER WOOD

ALUMINUM STORE FRONT W/ LOW GLARE GLASS



EXTERIOR ELEVATION - WEST 1/8" = 1'-0" 2



EXTERIOR ELEVATION - EAST 1/8" = 1'-0" 1

Table 1 Proposed Building Space and Area	
Building Space	**Area (sf)**
First/Lower Level	
Ski History Exhibit	2,508
Hall of Fame	423
Future Exhibit Space	440
Archive	676
Restrooms – internal	554
Restrooms – accessible from exterior	93
Conservation	868
Office	713
Winter Equipment Storage	238
Loading Dock	277
Circulation	928
Approximate net area (First/Lower Level)	**7,718**
Second/Upper Level	
Exhibit Loft	2,243
Olympic History 1	2,608
Olympic History 2	1,252
Future Exhibit Space	440
Cultural/Community Room	1,404
Museum Shop/Café	785
Circulation	881
Event Space/Classroom/Library	342
Storage	207
Catering Kitchen	80
Plaza Deck	600
Approximate net area (Second/Upper Level)	**10,842**
Note: Room areas are based on current plans, which show a gross building area of 17,285 gross sf and a footprint of 8,925 sf. As building design proceeds to construction design, the final floor area of these rooms may be adjusted. For the purposes of the CEQA analysis, it is anticipated that the building will have a gross area of up to 20,000 sf.	

Project Operations

The SNOW Sports Museum and Community Cultural Center would operate on a year-round schedule with exact hours and admission fees to be determined. Conservatively, the museum is anticipated to operate daily from 10:00 AM to 6:00 PM with some evening events. During the peak visitation season, up to six employees, three full-time and three part-time, would report to the site. In addition to general visitation hours, the museum would also host after-hours events (e.g., fundraisers, community gatherings, etc.)

Similar to the use of rooms in other County community centers, the community room and classroom would be available for recreation, social interactions, and meetings by both the museum and the community. The events may include lectures, film screenings, and private parties renting the museum facilities. Events would typically be held in the evenings so as not to conflict with peak daytime usage of the park by recreational users. The proposed project is estimated to generate 70,000 to 80,000 total annual visitors, including approximately 60,000 to 70,000 museum visitors (assuming approximately 10,000 student visitors), as well as approximately 10,000 visitors for special events/community facilities.

The proposed project operations would also include snow removal, as necessary, which would be managed by the Squaw Valley Ski Museum Foundation (SVSMF) and would involve the removal of snow at the proposed museum and community cultural center only. Placer County would continue to be responsible for snow removal at the existing parking areas. The cost of snow removal would be shared between SVSMF and Placer County whenever possible.

Access and Circulation

Vehicle access to the proposed project would be provided by an existing driveway from Olympic Valley Road, which currently serves as the entrance to Squaw Valley Community Park and connects to the existing surface parking lot. The entrance provides full access to the project site. Up to 6,000 sf of the driveway and asphalt parking lot would be resurfaced, and the parking area directly fronting the museum would be restriped to include two additional ADA parking spaces. The re-striping of the parking lot would allow space for a bus turnaround for buses up to 40 feet in length in the eastern portion of the parking lot. Additionally, a planting area in the eastern portion of the parking lot would be removed and replaced with eight vehicle parking spaces.

The project site would also be accessible to cyclists from the Class III bikeways along SR 89, Class II bikeways along Olympic Valley Road, and the Class I Truckee River Trail along the southern boundary of the project site and along SR 89. Four-foot-wide concrete walkways would be included throughout the site to provide pedestrian and bicycle access to the proposed building from the existing parking lot and Olympic Valley Road. In addition, a six-foot-wide concrete ramp would be constructed at the building entry point behind rolled curb and gutter to meet ADA requirements. Improved pedestrian facilities would include a crosswalk connecting the sidewalk in front of the building to the playground and sports field west of the building. Additionally, the project would construct a walking path, which would bisect the proposed V-shaped garden and lead from the building to the Tower of Nations structure at the southwest corner of the SR 89 and Olympic Valley Road intersection.

The Tahoe Truckee Area Regional Transit (TART) includes a transit stop adjacent to the entrance to Squaw Valley Community Park on the south side of Olympic Valley Road for transit headed toward Tahoe City and Truckee, as well as a second transit stop across Olympic Valley Road for buses headed to the Olympic Valley Village turn-around point. Several other shuttle services provide transportation within Olympic Valley for patrons of nearby ski resorts that also use the nearby stops. During ski season, the Squaw-Alpine shuttle runs continuously between Olympic Valley and Alpine Meadows, and the Mountaineer (micro transit) offers on-demand intra-valley shuttle service. Lastly, the North Lake Tahoe Express, a shuttle transit company providing service between the Reno-Tahoe International Airport and destinations around the Tahoe Basin, services the existing transit stop at Squaw Valley Community Park.

Grading Activities

To prepare the project site for development, the existing slope would be regraded immediately adjacent to the driveway entrance from Olympic Valley Road to create a level transition from the parking and ADA spaces to the museum entrance. Additional grading would occur adjacent to the western portion of the parking lot to create a level surface for the proposed concrete walkway and for installation of the building foundation. In total, grading activities would result in up to approximately 1,500 cubic yards of cut and 300 cubic yards of fill, with the net 1,200 cubic yards of cut earth being hauled off-site for disposal.

Utilities and Public Services

The proposed project would connect to public utilities located within Olympic Valley Road at the project frontage and within Squaw Valley Community Park. Sewer and water services would be provided by the Olympic Valley Public Service District (OVPSD). A six-inch water service lateral, underground electrical conduit, and fire hydrant would be provided in the northwest corner of the project site. The water services extension would connect to the existing lateral adjacent to the proposed building within Olympic Valley Road. All sewer improvements would be consistent with the Placer County “All Districts” Sewer System Master Plan. The museum project will provide sewer service to the existing vault restroom building at the park. This will support the conversion of the restroom building from vault type to flush restrooms. Solid waste would be collected by Truckee Tahoe Sierra Disposal. Electricity would be provided by Liberty Utilities and a new propane tank would be provided on-site.

The proposed on-site stormwater system would consist of installation of an underground rainstore retention facility and several infiltration trenches. The infiltration trenches would be constructed throughout the project

site along the concrete walkways adjacent to the western parking lot, between the western parking lot and the south wing of the building, between the western parking lot and the north wing of the building, between the south wing and the north wing of the building, and north of the pickleball courts. As such, the stormwater drainage from the project site would be directed to the newly construction stormwater infiltration system. The existing stormwater basin located in the northwest corner of the site would remain as-is following project development.

The proposed project would also include minor improvements at the existing pickleball courts, along the eastern boundary of the project site, such as an underground electrical conduit and pull box, and water line for a future drinking fountain.

The proposed project would be served by the Placer County Sheriff's Department, California Highway Patrol (CHP), and Olympic Valley Fire Department (OVFD). Law enforcement would be provided by the Sheriff's Department, while traffic-related enforcement services would be provided by CHP. The Olympic Valley Fire Department station is located at 305 Olympic Valley Road, approximately 1,400 feet northwest of the project driveway entrance.

Landscaping and Trails

A total of 228 trees are currently located on the project site. As part of the proposed project, approximately 55 trees would be removed (see Figure 8). The existing willow scrub areas would remain; however, the existing rock outcrop near the upper entrance to the museum would be removed. Landscaping improvements would be provided throughout the project site, as well as along the Olympic Valley Road frontage in the northwest corner of the site.

A variety of drought-tolerant trees, shrubs, and flowers would be provided along the frontage of Olympic Valley Road, the main entry of the proposed building, at the southwest corner of the pickleball courts, and at the proposed V-shaped garden. The proposed V-shaped garden would be located in the northeastern portion of the project site and would include plantings such as serviceberry, low growing manzanita, blue wildrye, oceanspray, coyote mint, and mountain spirea. All landscaping would comply with the State's Model Water Efficient Landscape Ordinance (MWELO).

Approximately 616 sf of riprap located in the northwest corner of the project site and 760 sf of riprap adjacent to the pickleball courts would be removed in order to construct the building's loading dock. A four-foot-wide raised path is planned for development and would run from the north wing of the building to the relocated Tower of Nations and Olympic Torch located along the northeastern boundary of the site, adjacent to SR 89.

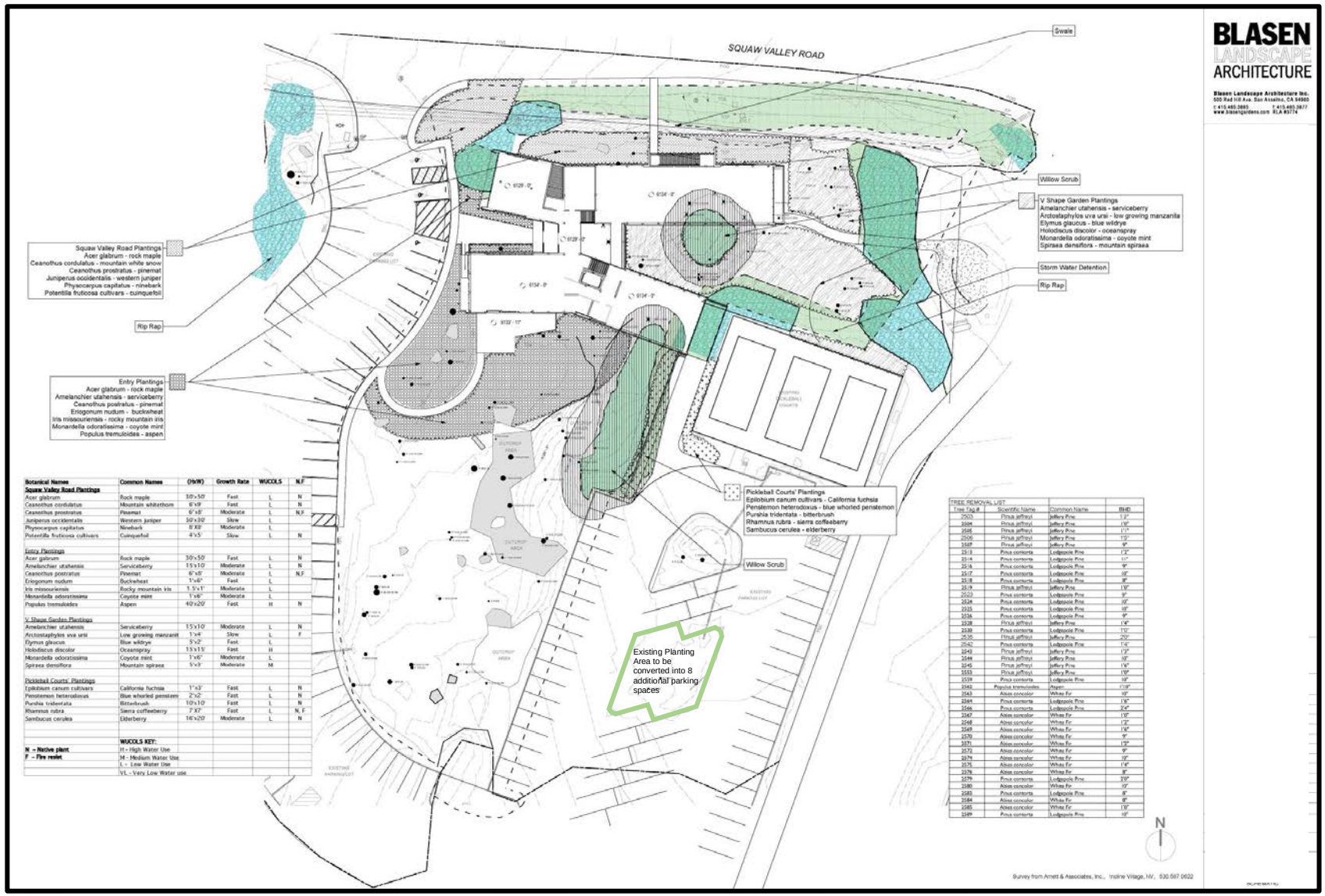
Off-Site Improvements

The proposed project would construct a sanitary sewer force main along Olympic Valley Road. The force main would begin at the intersection of Olympic Valley Road and the project driveway, and run northwest approximately 760 feet along Olympic Valley Road to connect to the existing sanitary sewer manhole located east of the Tavern Inn Condominiums. In addition, a wet well and sanitary sewer lift station would be constructed north of the project site, near the project driveway, within the Olympic Valley Road right-of-way.

Rezone

The Squaw Valley General Plan land use designation for the site is Conservation Preserve (CP) and the current zoning is Forest Recreation (FR). The proposed project would include a Rezone to create a new land use district to accommodate the proposed project. The new land use district would only be applied to the project site. Any future development projects applying for a rezone to the new designation would do so independently of the proposed project, and would be subject to separate environmental review and discretionary approval. Approval of the requested rezone for this project would not commit the County towards any particular course of action regarding future rezones.

Figure 8
Landscaping Plan



Botanical Names	Common Names	(Ht/W)	Growth Rate	WUCOLS	N,F
Squaw Valley Road Plantings					
Acer glabrum	Rock maple	30'x 50'	Fast	L	N
Ceanothus cordulatus	Mountain whitethorn	6'x9'	Fast	L	N
Ceanothus prostratus	Pinemat	6'x8'	Moderate	L	N,F
Juniperus occidentalis	Western juniper	50'x 30'	Slow	L	
Physocarpus capitatus	Ninebark	8' X8'	Moderate	L	
Potentilla fruticosa cultivars	Cuinquefoil	4'x5'	Slow	L	N
Entry Plantings					
Acer glabrum	Rock maple	30'x 50'	Fast	L	N
Amelanchier utahensis	Serviceberry	15'x10'	Moderate	L	N
Ceanothus postratus	Pinemat	6'x8'	Moderate	L	N,F
Eriogonum nudum	Buckwheat	1'x4'	Fast	L	
Iris missouriensis	Rocky mountain iris	1.5'x1'	Moderate	L	
Monardella odoratissima	Coyote mint	1'x6'	Moderate	L	
Populus tremuloides	Aspen	40'x20'	Fast	H	N
V Shape Garden Plantings					
Amelanchier utahensis	Serviceberry	15'x10'	Moderate	L	N
Arctostaphylos uva ursi	Low growing manzanit	1'x4'	Slow	L	F
Elymus glaucus	Blue wildrye	5'x2'	Fast	L	
Holodiscus discolor	Oceanspray	15'x15'	Fast	H	
Monardella odoratissima	Coyote mint	1'x6'	Moderate	L	
Spiraea densiflora	Mountain spiraea	5'x3'	Moderate	M	
Pickleball Courts' Plantings					
Epilobium canum cultivars	California fuchsia	1'x3'	Fast	L	N
Penstemon heterodoxus	Blue whorled penstem	2'x2'	Fast	L	N
Purshia tridentata	Bitterbrush	10'x10'	Fast	L	N
Rhamnus rubra	Sierra coffeeberry	7'X7'	Fast	L	N, F
Sambucus cerulea	Elderberry	16'x20'	Moderate	L	N
		WUCOLS KEY:			
N – Native plant		H - High Water Use			
F – Fire resist.		M - Medium Water Use			
		L - Low Water Use			
		VL - Very Low Water use			

TREE REMOVAL LIST			
Tree Tag #	Scientific Name	Common Name	BHD
2503	Pinus jeffreyi	Jeffery Pine	13"
3504	Pinus jeffreyi	Jeffery Pine	136"
3505	Pinus jeffreyi	Jeffery Pine	11"
3506	Pinus jeffreyi	Jeffery Pine	15"
3507	Pinus jeffreyi	Jeffery Pine	9"
3513	Pinus contorta	Lodgepole Pine	13"
3514	Pinus contorta	Lodgepole Pine	11"
3516	Pinus contorta	Lodgepole Pine	9"
3517	Pinus contorta	Lodgepole Pine	10"
3518	Pinus contorta	Lodgepole Pine	8"
3519	Pinus jeffreyi	Jeffery Pine	136"
3522	Pinus contorta	Lodgepole Pine	9"
3524	Pinus contorta	Lodgepole Pine	10"
3525	Pinus contorta	Lodgepole Pine	10"
3536	Pinus contorta	Lodgepole Pine	9"
3538	Pinus jeffreyi	Jeffery Pine	136"
3539	Pinus contorta	Lodgepole Pine	110"
3540	Pinus jeffreyi	Jeffery Pine	200"
3542	Pinus contorta	Lodgepole Pine	114"
3543	Pinus jeffreyi	Jeffery Pine	113"
3544	Pinus jeffreyi	Jeffery Pine	10"
3545	Pinus jeffreyi	Jeffery Pine	136"
3553	Pinus jeffreyi	Jeffery Pine	139"
3559	Pinus contorta	Lodgepole Pine	10"
3562	Populus tremuloides	Aspen	118"
3563	Abies concolor	White Fir	10"
3564	Pinus contorta	Lodgepole Pine	136"
3566	Pinus contorta	Lodgepole Pine	124"
3567	Abies concolor	White Fir	130"
3568	Abies concolor	White Fir	12"
3569	Abies concolor	White Fir	136"
3570	Abies concolor	White Fir	9"
3571	Abies concolor	White Fir	132"
3572	Abies concolor	White Fir	9"
3574	Abies concolor	White Fir	10"
3575	Abies concolor	White Fir	134"
3576	Abies concolor	White Fir	8"
3579	Pinus contorta	Lodgepole Pine	139"
3580	Abies concolor	White Fir	10"
3583	Pinus contorta	Lodgepole Pine	8"
3584	Abies concolor	White Fir	8"
3585	Abies concolor	White Fir	130"
3589	Pinus contorta	Lodgepole Pine	10"

Survey from Arnett & Associates, Inc., Incline Village, NV, 530 587 0622

Text Amendment to Section 12.24.040, Placer County Government Code

Section 12.24 of the Placer County Code states that County Public Recreation Areas (PRAs) are closed to the public from one-half hour after sunset until one-half hour before sunrise. Section 12.24.040(B) provides exceptions to Section 12.24, which allow for different hours of operation for specific PRAs. The proposed project would include a text amendment to add Section 12.24.040(B)(6) to the Placer County Code which would add the proposed SNOW Sports Museum and Community Cultural Center as an exception to Section 12.24, and allow the proposed museum to remain open later than specified in the County Code in order to accommodate special events and museum operations.

Conditional Use Permit

It is the County's intent that the new land use district to be established as part of the project's entitlements would identify a museum and community cultural center as a conditional use. Therefore, the proposed project would require a CUP to construct the proposed on-site museum, community cultural center, and ancillary uses within the new land use district.

Design Review

Per Section 102.14 of the SVGP and Land Use Ordinance, and Section 17.62.070 of the Placer County Code, the proposed project would be subject to Design Review by the County. Specifically, the site plan would be analyzed based on elements of design, development location, arrangement of all structures, and design in harmony with surrounding facilities. The purpose of the regulations is to allow design review of all developments, signs, buildings, structures, and other facilities in order to further enhance the County's appearance, and the livability and usefulness of properties.

Minor Land Division

The project may include a Minor Land Division to create a separate parcel for the proposed project. This would result in the project being located on a separate parcel from the surrounding Squaw Valley Community Park.

Deed Restriction

In addition to the Placer County regulations, the Squaw Valley Community Park site is bound by a deed restriction relating to the past transfer of the parcel from the U.S. Forest Service (USFS) to Placer County. The Quit Claim Deed conveying the park parcel to Placer County from the USFS includes the following restriction: "[T]he use of the property for a community park does not include the use of the property for private development of a commercial, residential, or industrial nature."

The intention of the museum and community cultural center is to educate visitors on the history of winter sports, particularly the 1960 Winter Olympics, and the museum would have a direct link to Squaw Valley Community Park and the outdoor culture of the Olympic Valley region. Furthermore, the museum's focus on active recreational and athletic pursuits are thematically supportive of the Squaw Valley Community Park's primary purpose of outdoor recreation. Therefore, the museum and community cultural center would be considered a non-commercial use and would not fall within the category of uses expressly prohibited by the Deed Restriction. Although the museum would introduce revenue-generating uses into the park, including a small café, gift shop, and facility rental, such uses and activities would be ancillary to the proposed museum and community cultural center, and all revenues from such activities would be restricted to supporting the museum. The Internal Revenue Code (IRC) and legal precedent allow charitable non-profit organizations enjoying benefits under IRC Section 501(c)(3) to pursue incidental revenue-generating activity without losing their non-profit tax-exempt status.[2] As described above, the ancillary nature and tax

[2] Michael E. Profant, Attorney at Law, Placer County Counsel's Office. Personal Communication [letter] with Eli Ilano, Forest Supervisor, Tahoe National Forest. March 27, 2017.

treatment of the revenue-generating activities proposed would not conflict with the deed restriction described above.

1.4 Requested Entitlements

The proposed project would require County approval of the following:

- Rezone to create a new land use district to accommodate the proposed project;
- Text Amendment to Section 12.24.040 of the Placer County Government Code;
- Conditional Use Permit to allow a museum and community cultural center within the new land use district;
- Design Review; and
- Potential Minor Land Division to create a new parcel for the proposed project.

In addition to the above County approvals, the proposed project could require the following approvals/permits from other responsible and trustee agencies:

- Less than three-acre Conversion Exemption – California Department of Forestry and Fire Protection (CAL FIRE);
- Authority to Construct and Permit to Operate a Sewer Lift Station – Placer County Air Pollution Control District (PCAPCD);
- Section 404 Nationwide Permit (or Letter of Permission) – U.S. Army Corps of Engineers (USACE);
- Section 401 Water Quality Certification – Lahontan Regional Water Quality Control Board (RWQCB); and
- Section 1602 Permit – California Department of Fish and Wildlife (CDFW).

2.0 PROBABLE ENVIRONMENTAL EFFECTS AND SCOPE OF THE EIR

Based upon the Initial Study analysis conducted for the proposed project (see Attachment to this NOP) and consistent with Appendix G of the CEQA Guidelines, the County anticipates that the EIR will contain the following chapters:

- Aesthetics
- Air Quality, Greenhouse Gas Emissions, and Energy
- Noise
- Transportation
- Wildfire
- Statutorily Required Sections
- Alternatives Analysis

Each technical chapter of the EIR will include identification of the thresholds of significance, identification of project-level and cumulative impacts, and the development of mitigation measures and monitoring strategies, as required. The proposed EIR will incorporate by reference SVGP and Land Use Ordinance, Placer County General Plan, and the Placer County General Plan EIR. In addition to these County documents, project-specific technical studies are being prepared by technical experts.

The following paragraphs summarize the anticipated analyses that will be included in the EIR.

Aesthetics. The Aesthetics chapter of the EIR will summarize existing regional and project area aesthetics and visual setting. To the extent applicable, the chapter will describe project-specific aesthetics issues such as scenic vistas, trees, existing visual character or quality of the project area, as well as light and glare. Pursuant to Appendix G of the CEQA Guidelines, the focus of the analysis concerning the project's effects on visual character or quality of the project site and its surroundings will be on whether the proposed project will substantially degrade the existing visual character or quality of public views of the site and its surroundings.

The Aesthetics chapter of the EIR will be based in part on photo simulations showing pre- and post-project views of the project site from key public vantage points. The results of the analysis will be incorporated into the Aesthetics chapter of the EIR to determine whether the proposed project would substantially degrade the visual character or quality of the site and its surroundings.

Air Quality, Greenhouse Gas Emissions, and Energy. The air quality and greenhouse gas (GHG) emissions analysis for the proposed project will be performed using the California Emissions Estimator Model (CalEEMOD) software program and following PCAPCD CEQA Guidelines.

The air quality impact analysis will include a quantitative assessment of short-term (i.e., construction) and long-term (i.e., operational) increases of criteria air pollutant emissions of primary concern (i.e., ROG, NO_X, and PM_{10}). The project's cumulative contribution to regional air quality will be discussed, based in part on the modeling conducted at the project level. The analysis will also address any potential odor impacts that may occur, as well as toxic air contaminant (TAC) emissions.

The GHG emissions analysis will include a quantitative estimate of carbon dioxide equivalent emissions from the proposed project, including indirect emissions (e.g., electricity, propane) and construction emissions. The chapter will include an analysis of the project's consistency with the Placer County Sustainability Plan (PCSP).

The significance of air quality and GHG impacts will be determined in comparison to PCAPCD significance thresholds. PCAPCD-recommended mitigation measures and PCSP strategies will be incorporated, if needed, to reduce any significant air quality impacts, and anticipated reductions in emissions associated with proposed mitigation measures will be quantified.

The Energy portion of the chapter will evaluate whether the proposed project could result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation. The discussion will also evaluate whether the proposed project would conflict with or obstruct a State or local plan for renewable energy. The chapter will review the PCSP to identify energy-related measures that may be applicable to the proposed project.

Noise. The Noise chapter of the EIR will be based on a project-specific Noise Study. The chapter will address potential noise impacts resulting from project construction and operation, including existing and future traffic noise levels on the local roadway network. Noise-sensitive land uses or activities in the project vicinity will be identified and ambient noise and vibration level measurements on, and in the vicinity of, the project site will be conducted to quantify existing background noise and vibration levels for comparison to the predicted project-generated levels. Noise exposure levels will then be compared to applicable significance criteria in the Placer County General Plan Noise Element, the SVGP and Land Use Ordinance, and CEQA. Feasible and appropriate mitigation measures to avoid or reduce adverse impacts will be identified, as needed.

Transportation. The Transportation chapter of the EIR will be based on a Vehicle Miles Traveled (VMT) Analysis prepared specifically for the proposed project. Impact determination for CEQA purposes will be based on VMT, consistent with CEQA Guidelines Section 15064.3, which became effective statewide on July 1, 2020. The VMT Analysis will be prepared consistent with Placer County's current guidance regarding analysis of VMT.

The proposed project's impacts to alternative modes such as pedestrian, bicycle and transit facilities will be assessed based on their significance criteria contained in the adopted Placer County guidelines. The EIR chapter will also include an analysis of the proposed project's potential impacts related to conflicting with applicable programs, policies, and ordinances addressing the circulation system, vehicle safety hazards, and emergency access. Feasible and appropriate mitigation measures to avoid or reduce adverse impacts will be identified, as needed.

Wildfire. The Wildfire chapter of the EIR will be based primarily on an Emergency Preparedness and Evacuation Plan (EPEP) prepared for the proposed project in coordination with the local fire service providers. Recommendations from the EPEP will be incorporated into the EIR, as necessary, to address potential impacts related to wildfire risk consistent with Section XX, Wildfire, of Appendix G of the CEQA Guidelines. Specifically, the proposed project will be evaluated to determine if the project would substantially impair an adopted emergency response plan or emergency evacuation plan. In addition, the chapter will consider whether the proposed project would exacerbate fire risk, as well as whether the project would expose people or structures to significant post-fire risks, including downslope or downstream flooding or landslides. Mapping prepared by CAL FIRE regarding fire hazard severity zones will be reviewed, and if necessary, the analysis will include consultation with CAL FIRE.

Statutorily Required Sections. Pursuant to CEQA Guidelines Section 21100(B)(5), the Statutorily Required Sections chapter of the EIR will address the potential for growth-inducing impacts of the proposed project, focusing on whether removal of any impediments to growth would occur with the proposed project. A summary of the significant and unavoidable impacts identified within the EIR will be included in this chapter, if applicable, as well as a discussion of significant irreversible impacts. The chapter will generally describe the cumulative setting for the proposed project; however, a detailed description of the subject-specific cumulative setting, as well as analysis of the cumulative impacts, will be included in each technical chapter of the EIR.

Alternatives Analysis. In accordance with Section 15126.6(a) of the CEQA Guidelines, the EIR will include an analysis of a range of alternatives, including a No Project Alternative. Consideration will be given to potential off-site locations consistent with CEQA Guidelines, Section 15126.6(f)(2), and such locations will be determined in consultation with County staff. If it is determined that an off-site alternative is not feasible, the EIR will include a discussion describing why such a conclusion was reached. The project alternatives will be selected when more information related to project impacts is available in order to be designed to reduce significant project impacts. The chapter will also include a section of alternatives considered but dismissed, if necessary. The Alternatives Analysis chapter will describe the alternatives and identify the environmentally superior alternative. The alternatives will be analyzed at a level of detail less than that of the proposed project; however, the analyses will include sufficient detail to allow a meaningful comparison of the impacts. Such detail may include conceptual site plans for each alternative, basic quantitative traffic information (e.g., trip generation), as well as a table that will compare the features and the impacts of each alternative.

Attachment

Initial Study

COUNTY OF Placer
COMMUNITY DEVELOPMENT RESOURCE AGENCY

COMMUNITY DEVELOPMENT/RESOURCE AGENCY
Environmental Coordination Services
County of Placer

INITIAL STUDY & CHECKLIST

This Initial Study has been prepared to identify and assess the anticipated environmental impacts of the following described project application. The document may rely on previous environmental documents (see Section D) and site-specific studies (see Section J) prepared to address in detail the effects or impacts associated with the project.

This document has been prepared to satisfy the California Environmental Quality Act (CEQA) (Public Resources Code, Section 21000 et seq.) and the State CEQA Guidelines (14 CCR 15000 et seq.). CEQA requires that all state and local government agencies consider the environmental consequences of projects over which they have discretionary authority before acting on those projects.

The Initial Study is a public document used by the decision-making lead agency to determine whether a project may have a significant effect on the environment. If the lead agency finds substantial evidence that any aspect of the project, either individually or cumulatively, may have a significant effect on the environment, regardless of whether the overall effect of the project is adverse or beneficial, the lead agency is required to prepare an Environmental Impact Report (EIR), use a previously-prepared EIR and supplement that EIR, or prepare a Subsequent EIR to analyze the project at hand. If the agency finds no substantial evidence that the project or any of its aspects may cause a significant effect on the environment, a Negative Declaration shall be prepared. If in the course of analysis, the agency recognizes that the project may have a significant impact on the environment, but that by incorporating specific mitigation measures the impact will be reduced to a less-than-significant effect, a Mitigated Negative Declaration shall be prepared.

Project Title: **SNOW Sports Museum and Community Cultural Center Project**	Project # PLN16-00349
Entitlement(s): Rezone to create a new land use district to accommodate the proposed project, Text Amendment to Section 12.24.040 of the Placer County Government Code, Conditional Use Permit, Design Review, and potential Minor Land Division to create a new parcel for the proposed project.	
Site Area: Approximately one (1) acre (with a disturbance area of 0.68-acre) of the 26.8-acre Squaw Valley Community Park Site.	APNs: 096-290-021-000; 096-290-056-000; 096-290-061-000; 096-310-009-000; 096-310-040-000
Location: Southwest of the intersection of Olympic Valley Road and State Route (SR) 89 in the unincorporated community of Olympic Valley. The project site is located within the Squaw Valley General Plan area.	

A. BACKGROUND:

Project Site (Background/Existing Setting):
The project site consists of approximately one (1) acre of the 26.8-acre area Squaw Valley Community Park[1] site, 101 Olympic Valley Road (with approximately 0.68-acre of site disturbance area), southwest of the intersection of Olympic Valley Road and SR 89, in the unincorporated community of Olympic Valley (see Figure 1 and Figure 2). Regional access to the site is provided by Interstate 80 (I-80). Palisades Tahoe (formerly Squaw Valley Ski Resort) and other Olympic Valley ski resorts (e.g., Olympic Village Inn), as well as other recreational and commercial uses, are located approximately 1.89 miles southwest of the project site. Lake Tahoe is located five miles southeast of the project site, and the Town of Truckee is located approximately nine miles northwest of the project site.

Squaw Valley Community Park is an approximately 26.8-acre park, consisting of five parcels (Assessor's Parcel Numbers [APNs] 096-310-009-000, 096-310-040-000, 096-290-021-000, 096-290-061-000, and 096-290-056-000), owned and operated by Placer County. The project site is identified by portions of APNs 096-290-021-000 and 096-290-056-000, and would be located between the Squaw Valley Community Park driveway entrance to the parking lot from Olympic Valley Road and the existing pickleball courts.

[1] At the time of publication, Squaw Valley Community Park is under consideration of a name change. Subsequent documents will reflect the official name of the Park at the time of their publication as the renaming process progresses.

Figure 1
Regional Project Location

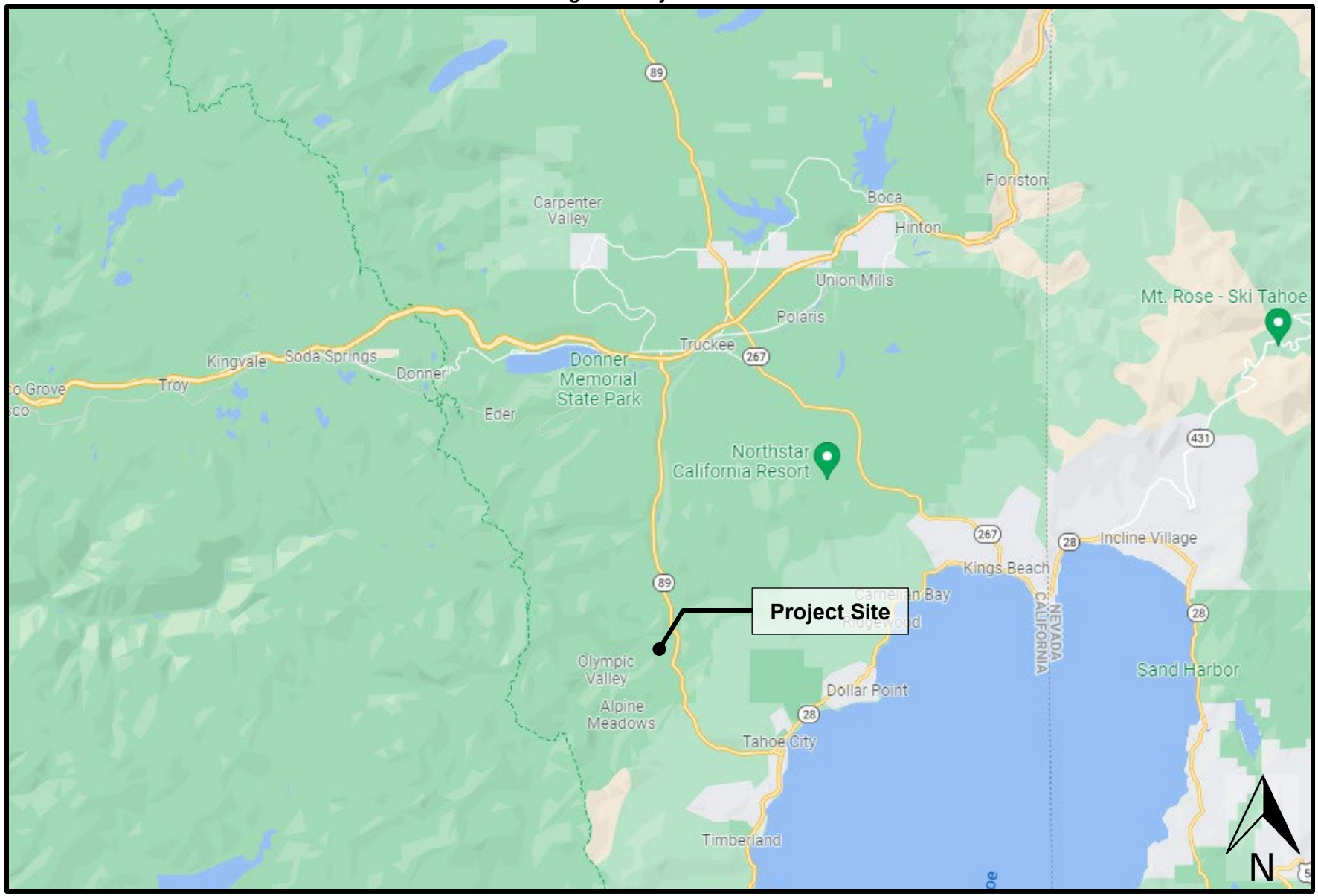
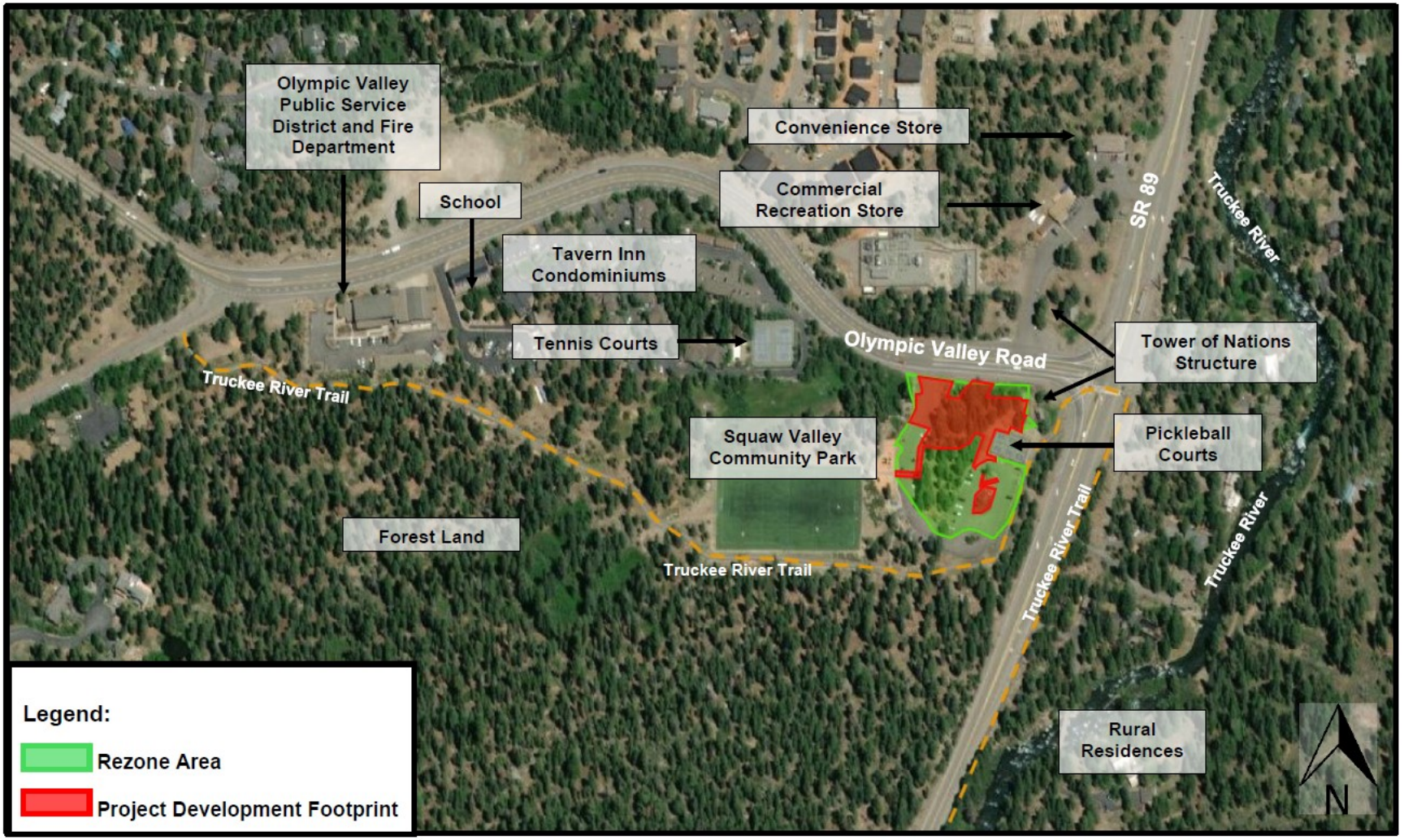


Figure 2
Project Site Boundaries



The project site is designated as Conservation Preserve (CP) in the 1983 SVGP and Land Use Ordinance and the current zoning designation for the site is Forest Recreation (FR).

The project site is situated on undulating topography which runs north to south. The scattered rock outcrops and boulders located on-site create microtopographic variations ranging from 6,115 feet to 6,130 feet above mean sea level.

The project site contains areas of vegetation, predominantly montane coniferous forest, which largely consist of white fir and pine trees native to the area. Patches of willow scrub occur in scattered locations within stormwater detention basins constructed for the Squaw Valley Community Park.

Riprap stone is scattered along the eastern boundary of the project site along the pickleball courts and the northwestern corner of the project site. A 0.04-acre drainage swale, which was constructed as part of the 2004 improvements to Squaw Valley Community Park, supports wetland vegetation and occurs along the south side of Olympic Valley Road, flowing from west to east. The Truckee River is located approximately 790 feet east of the project site, across SR 89.

The project site is bounded by Olympic Valley Road to the north, SR 89 and the Truckee River Trail to the east, and Squaw Valley Community Park facilities to the south and west. The area north of the project site, across Olympic Valley Road, is sparsely developed and is largely occupied by forest and meadow vegetation. However, a commercial recreation store and convenience store (7-Eleven) are located on the west side of SR 89, north of the project site, across Olympic Valley Road. A soccer field and playground are located west of the project site within Squaw Valley Community Park. The Olympic Valley community is located further west, the nearest structures of which include condominiums and single-family residences in the vicinity of the project site to the northwest. The Lake Tahoe Preparatory School is also located northwest of the project site.

Rural residences are located east of the project site, across SR 89, and the Truckee River. The Truckee River Trail and forest land are located south of the project site. Palisades Tahoe, which contains lodging, ski lifts, a golf course, and associated commercial uses is located further southwest.

Project Description:
The Sierra Nevada Olympic Winter (SNOW) Sports Museum and Community Cultural Center Project (proposed project) would include development of a museum and community cultural center building celebrating the 1960 Winter Olympics and history of winter sports in the Sierra Nevada. The proposed development would include the construction of a new, two-story, U-shaped building, various site improvements, and a number of amenities such as event space (see Figure 3). The proposed project would require County approval of a Rezone to create a new land use district to accommodate the proposed project, a Text Amendment to Section 12.24.040 of the Placer County Government Code, Conditional Use Permit (CUP), Design Review, and potential Minor Land Division to create a new parcel for the proposed project. The proposed project components, along with all required entitlements and approvals, are described in further detail in the following sections.

Proposed Development
The two-story, U-shaped building would consist of up to 20,000 sf of building space with a height of 29.8 feet (see Figure 4 through Figure 7). The second/upper floor would serve as the entrance to the building due to the museum having a stepped floor plan. Although not yet determined, the building could also include a mezzanine. Table 1 below outlines the allocated space within the proposed building.

Outdoor gathering spaces and amenities would be provided, such as a plaza deck to be located south of the building and a V-shaped garden to be located east of the building. Various improvements would be included in the development of the proposed project, including, but not limited to, landscaping and utility installation, as well as improvements to the existing facilities at Squaw Valley Community Park. Such improvements are discussed in further detail below. In total, the construction of the building and associated improvements would comprise approximately one acre. However, while a portion of the existing parking lot would be resurfaced, ground disturbance would not occur within this paved area; thus, the proposed project would result in a total disturbance area of approximately 0.68-acre.

Figure 3
Site Plan

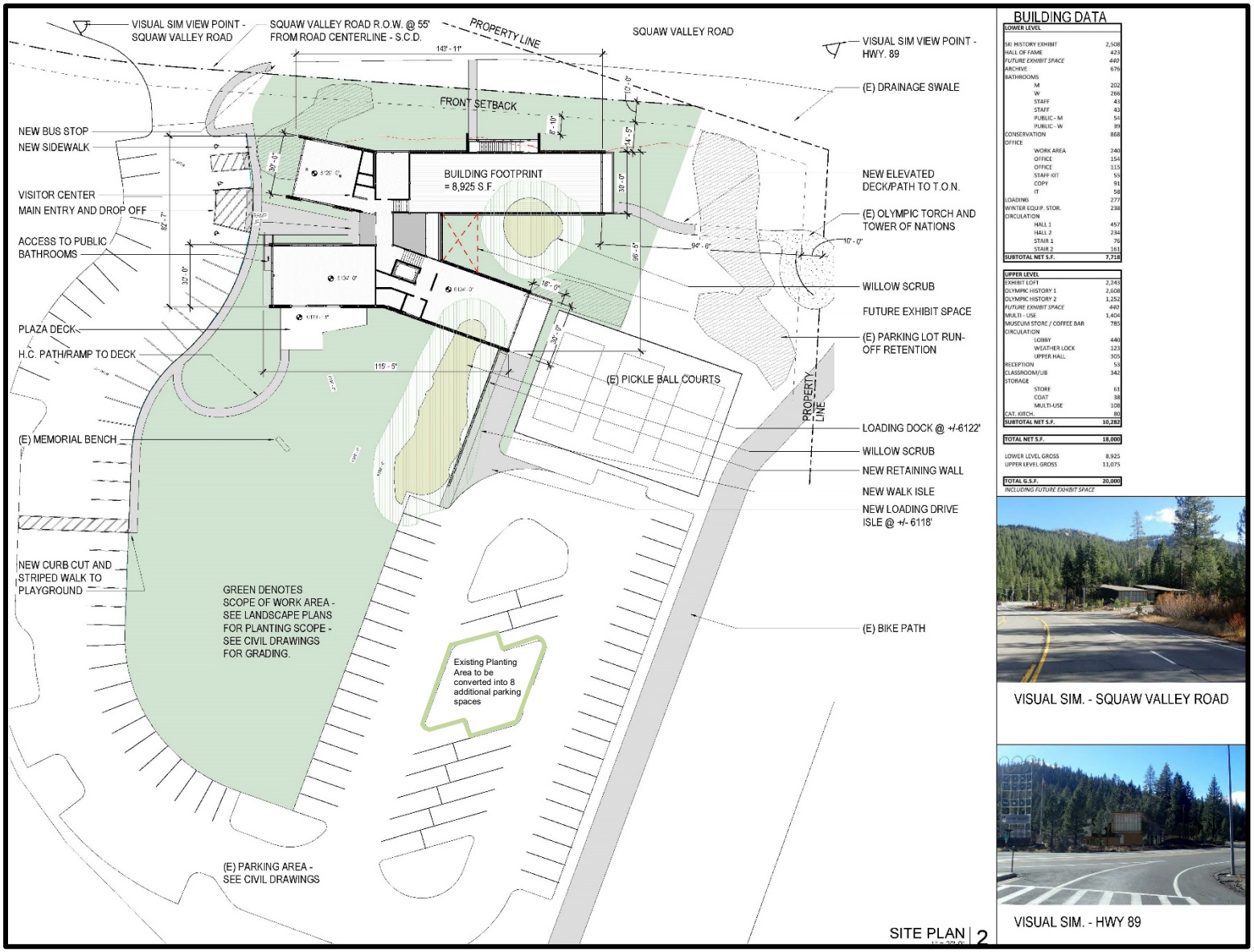


Figure 4
Entry-Level/Second Floor Plan

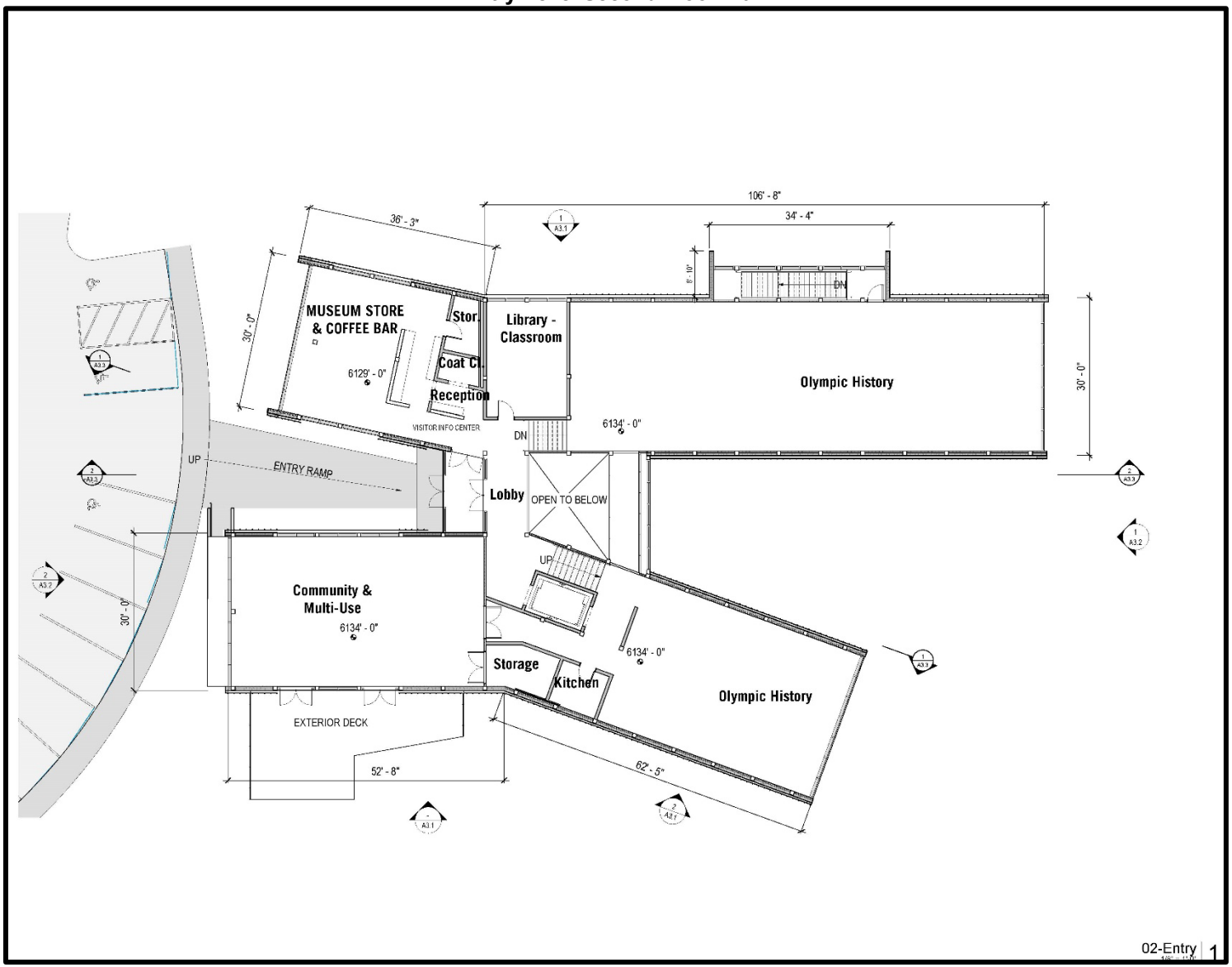


Figure 5
First Floor Plan

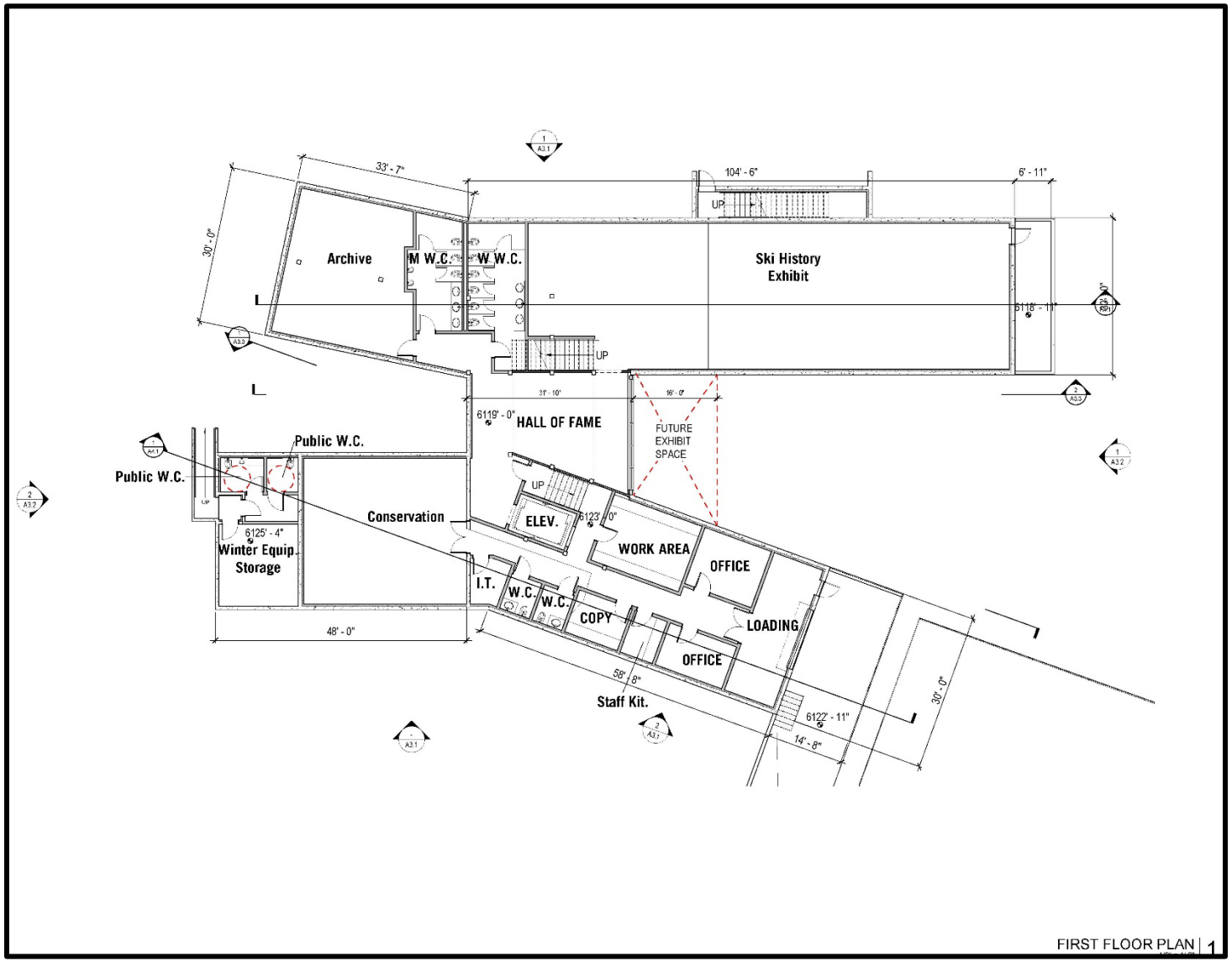


Figure 6
Exterior Building Elevations (South and North)

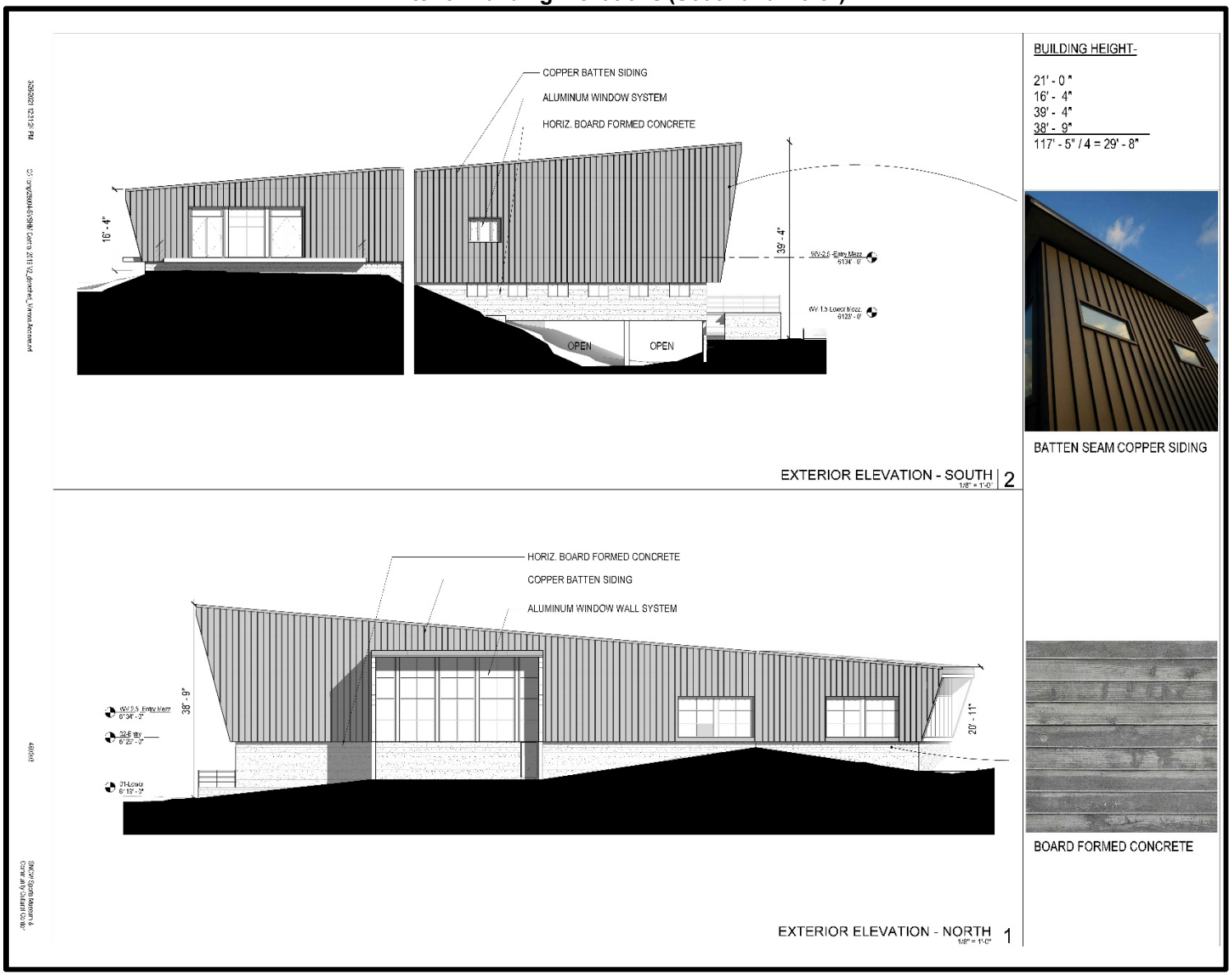


Figure 7
Exterior Building Elevations (South and North)

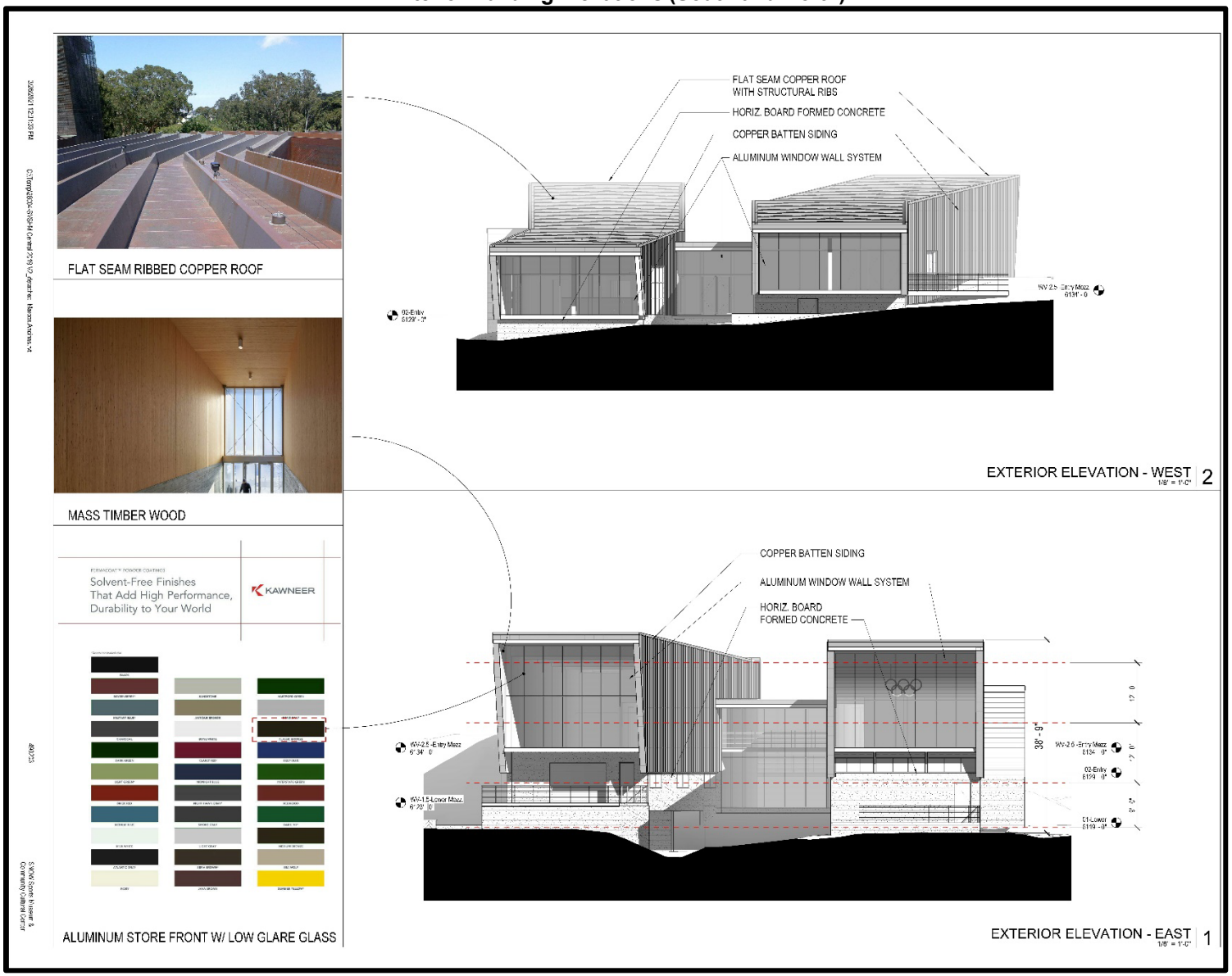


Table 1 Proposed Building Space and Area	
Building Space	**Area (sf)**
First/Lower Level	
Ski History Exhibit	2,508
Hall of Fame	423
Future Exhibit Space	440
Archive	676
Restrooms – internal	554
Restrooms – accessible from exterior	93
Conservation	868
Office	713
Winter Equipment Storage	238
Loading Dock	277
Circulation	928
Approximate net area (First/Lower Level)	**7,718**
Second/Upper Level	
Exhibit Loft	2,243
Olympic History 1	2,608
Olympic History 2	1,252
Future Exhibit Space	440
Cultural/Community Room	1,404
Museum Shop/Café	785
Circulation	881
Event Space/Classroom/Library	342
Storage	207
Catering Kitchen	80
Plaza Deck	600
Approximate net area (Second/Upper Level)	**10,842**
Note: Room areas are based on current plans, which show a gross building area of 17,285 gross sf and a footprint of 8,925 sf. As building design proceeds to construction design, the final floor area of these rooms may be adjusted. For the purposes of the CEQA analysis, it is anticipated that the building will have a gross area of up to 20,000 sf.	

The existing Squaw Valley Community Park parking lot has a total of 116 spaces (61 in the upper/western area and 55 in the lower/eastern area). Up to 6,000 sf of the existing parking lot would be resurfaced and the parking area directly fronting the museum would be restriped to include two additional Americans with Disabilities Act (ADA) parking spaces. A planting area in the eastern portion of the parking lot would be removed and replaced with eight vehicle parking spaces. Including existing and proposed parking, a total of 121 parking spaces (including seven ADA-compliant parking spaces) would be provided on-site in accordance with Section 17.54.060 of the Placer County Code.

Further discussion of the proposed project's operations, access and circulation, grading activities, utilities and public services, landscaping and trails, and off-site improvements is provided below.

Project Operations

The SNOW Sports Museum and Community Cultural Center would operate on a year-round schedule with exact hours and admission fees to be determined. Conservatively, the museum is anticipated to operate daily from 10:00 AM to 6:00 PM with some evening events. During the peak visitation season, up to six employees, three full-time and three part-time, would report to the site. In addition to general visitation hours, the museum would also host after-hours events (e.g., fundraisers, community gatherings, etc.)

Similar to the use of rooms in other County community centers, the community room and classroom would be available for recreation, social interactions, and meetings by both the museum and the community. The events may include lectures, film screenings, and private parties renting the museum facilities. Events would typically be held in the evenings so as not to conflict with peak daytime usage of the park by recreational users. The reservation systems for both the museum and park uses would be coordinated to avoid overcrowding from overlapping events. The proposed project is estimated to generate 70,000 to 80,000 total annual visitors, including approximately 60,000 to 70,000 museum visitors (assuming

approximately 10,000 student visitors), as well as approximately 10,000 visitors for special events/community facilities.

The proposed project operations would also include snow removal, as necessary, which would be managed by the Squaw Valley Ski Museum Foundation (SVSMF) and would involve the removal of snow at the proposed museum and community cultural center only. Placer County would continue to be responsible for snow removal at the existing parking areas. The cost of snow removal in the entry and parking area would be shared between SVSMF and Placer County.

Access and Circulation

Vehicle access to the proposed project would be provided by an existing driveway from Olympic Valley Road, which currently serves as the entrance to Squaw Valley Community Park and connects to the existing surface parking lot. The entrance provides full access to the project site. Up to 6,000 sf of the driveway and asphalt parking lot would be resurfaced, and the parking area directly fronting the museum would be restriped to include two additional ADA parking spaces. The re-striping of the parking lot would allow space for a bus turnaround for buses up to 40 feet in length in the eastern portion of the parking lot. Additionally, a planting area in the eastern portion of the parking lot would be removed and replaced with eight vehicle parking spaces.

The project site would also be accessible to cyclists from the Class III bikeways along SR 89, Class I and II bikeways along Olympic Valley Road, and the Class I Truckee River Trail along the southern boundary of the project site and along SR 89. Six-foot-wide concrete walkways would be included throughout the site to provide pedestrian and bicycle access to the proposed building from the existing parking lot and Olympic Valley Road. In addition, a six-foot-wide concrete ramp would be constructed at the building entry point behind rolled curb and gutter to meet the ADA requirements. Improved pedestrian facilities would include a crosswalk connecting the sidewalk in front of the building to the playground and sports field west of the building. Additionally, the project would construct a walking path, which would bisect the proposed V-shaped garden and lead from the building to the Tower of Nations structure at the southwest corner of the SR 89 and Olympic Valley Road intersection.

The Tahoe Truckee Area Regional Transit (TART) includes a transit stop adjacent to the entrance to Squaw Valley Community Park on the south side of Olympic Valley Road for transit headed toward Tahoe City and Truckee, as well as a second transit stop across Olympic Valley Road for buses headed to the Olympic Valley Village turn-around point. Several other shuttle services provide transportation within Olympic Valley for patrons of nearby ski resorts that also use the nearby stops. During ski season, the Squaw-Alpine shuttle runs continuously between Olympic Valley and Alpine Meadows, and the Mountaineer (micro transit) offers on-demand intra-valley shuttle service. Lastly, the North Lake Tahoe Express, a shuttle transit company providing service between the Reno-Tahoe International Airport and destinations around the Tahoe Basin, services the existing transit stop at Squaw Valley Community Park.

Grading Activities

To prepare the project site for development, the existing slope would be regraded immediately adjacent to the driveway entrance from Olympic Valley Road to create a level transition from the parking and ADA spaces to the museum entrance. Additional grading would occur adjacent to the western portion of the parking lot to create a level surface for the proposed concrete walkway and for installation of the building foundation. In total, grading activities would result in up to approximately 1,500 cubic yards of cut and 300 cubic yards of fill, with the net 1,200 cubic yards of cut earth being hauled off-site for disposal.

Utilities and Public Services

The proposed project would connect to public utilities located within Olympic Valley Road at the project frontage and within Squaw Valley Community Park. Sewer and water services would be provided by the Olympic Valley Public Service District (OVPSD). A six-inch water service lateral, underground electrical conduit, and fire hydrant would be provided in the northwest corner of the project site. The water services extension would connect to the existing lateral adjacent to the proposed building within Olympic Valley Road. All sewer improvements would be consistent with the Placer County “All Districts” Sewer System Master Plan. The museum project will provide sewer service to the existing vault restroom building at the park. This will support the conversion of the restroom building from vault type to flush restrooms. Solid

waste would be collected by Truckee Tahoe Sierra Disposal. Electricity would be provided by Liberty Utilities and a new propane tank would be provided on-site.

The proposed on-site stormwater system would consist of installation of an underground rainstore retention facility and several infiltration trenches. The infiltration trenches would be constructed throughout the project site along the concrete walkways adjacent to the western parking lot, between the western parking lot and the south wing of the building, between the western parking lot and the north wing of the building, between the south wing and the north wing of the building, and north of the pickleball courts. As such, the stormwater drainage from the project site would be directed to the newly constructed stormwater infiltration system. The existing stormwater basin located in the northwest corner of the site would remain as-is following project development.

The proposed project would also include minor improvements at the existing pickleball courts, along the eastern boundary of the project site, such as an underground electrical conduit and pull box, and water line for a new drinking fountain.

The proposed project would be served by the Placer County Sheriff's Department, California Highway Patrol (CHP), and Olympic Valley Fire Department. Law enforcement would be provided by the Sheriff's Department, while traffic-related enforcement services would be provided by CHP. The Olympic Valley Fire Department station is located at 305 Olympic Valley Road, approximately 1,400 feet northwest of the project driveway entrance.

Landscaping and Trails

A total of 228 trees are currently located on the project site. As part of the proposed project, approximately 55 trees would be removed (see Figure 8). The existing willow scrub areas would remain; however, the existing rock outcrop near the upper entrance to the museum would be removed. Landscaping improvements would be provided throughout the project site, as well as along the Olympic Valley Road frontage in the northwest corner of the site.

A variety of drought-tolerant trees, shrubs, and flowers would be provided along the frontage of Olympic Valley Road, the main entry of the proposed building, at the southwest corner of the pickleball courts, and at the proposed V-shaped garden. The proposed V-shaped garden would be located in the northeastern portion of the project site and would include native and naturalized plantings. All landscaping would comply with the State's Model Water Efficient Landscape Ordinance (MWELO).

Approximately 616 sf of riprap located in the northwest corner of the project site and 760 sf of riprap adjacent to the pickleball courts would be removed in order to construct the building's loading dock. A four-foot-wide raised path is planned for development and would run from the north wing of the building to the Olympic Torches located along the northeastern boundary of the site, adjacent to SR 89.

Off-Site Improvements

The proposed project would construct a sanitary sewer force main along Olympic Valley Road. The force main would begin at the intersection of Olympic Valley Road and the project driveway, and run northwest approximately 760 feet along Olympic Valley Road to connect to the existing sanitary sewer manhole located east of the Tavern Inn Condominiums. In addition, a wet well and sanitary sewer lift station would be constructed north of the project site in an existing manhole, near the project driveway, within the Olympic Valley Road right-of-way. These improvements would be sized to provide flush sewer service to the existing vault restroom in the park that currently has a stubbed sewer line to the existing manhole, operated by OVPSD.

Rezone

The Squaw Valley General Plan land use designation for the site is Conservation Preserve (CP) and the current zoning is Forest Recreation (FR). The proposed project would include a Rezone to create a new land use district to accommodate the proposed project. The new land use district would only be applied to the project site. Any future development projects applying for a rezone to the new designation would do so independently of the proposed project, and would be subject to separate environmental review and

discretionary approval. Approval of the requested rezone for this project would not commit the County towards any particular course of action regarding future rezones.

Text Amendment to Section 12.24.040, Placer County Government Code
Section 12.24 of the Placer County Code states that County Public Recreation Areas (PRAs) are closed to the public from one-half hour after sunset until one-half hour before sunrise. Section 12.24.040(B) provides exceptions to Section 12.24, which allow for different hours of operation for specific PRAs. The proposed project would include a text amendment to add Section 12.24.040(B)(6) to the Placer County Code which would add the proposed SNOW Sports Museum as an exception to Section 12.24, and allow the proposed museum to remain open later than specified in the County Code in order to accommodate special events and museum operations.

Conditional Use Permit
It is the County's intent that the new land use district to be established as part of the project's entitlements would identify a museum and community cultural center as a conditional use. Therefore, the proposed project would require a CUP to construct the proposed on-site museum, community cultural center, and ancillary uses within the new land use district.

Design Review
Pursuant to Section 102.14 of the SVGP, and Section 17.62.070 of the Placer County Code, the proposed project would be subject to Design Review by the County. Specifically, the site plan would be analyzed based on elements of design, development location, arrangement of all structures, and design in harmony with surrounding facilities. The purpose of the regulations is to allow design review of all developments, signs, buildings, structures, and other facilities in order to further enhance the County's appearance, and the livability and usefulness of properties.

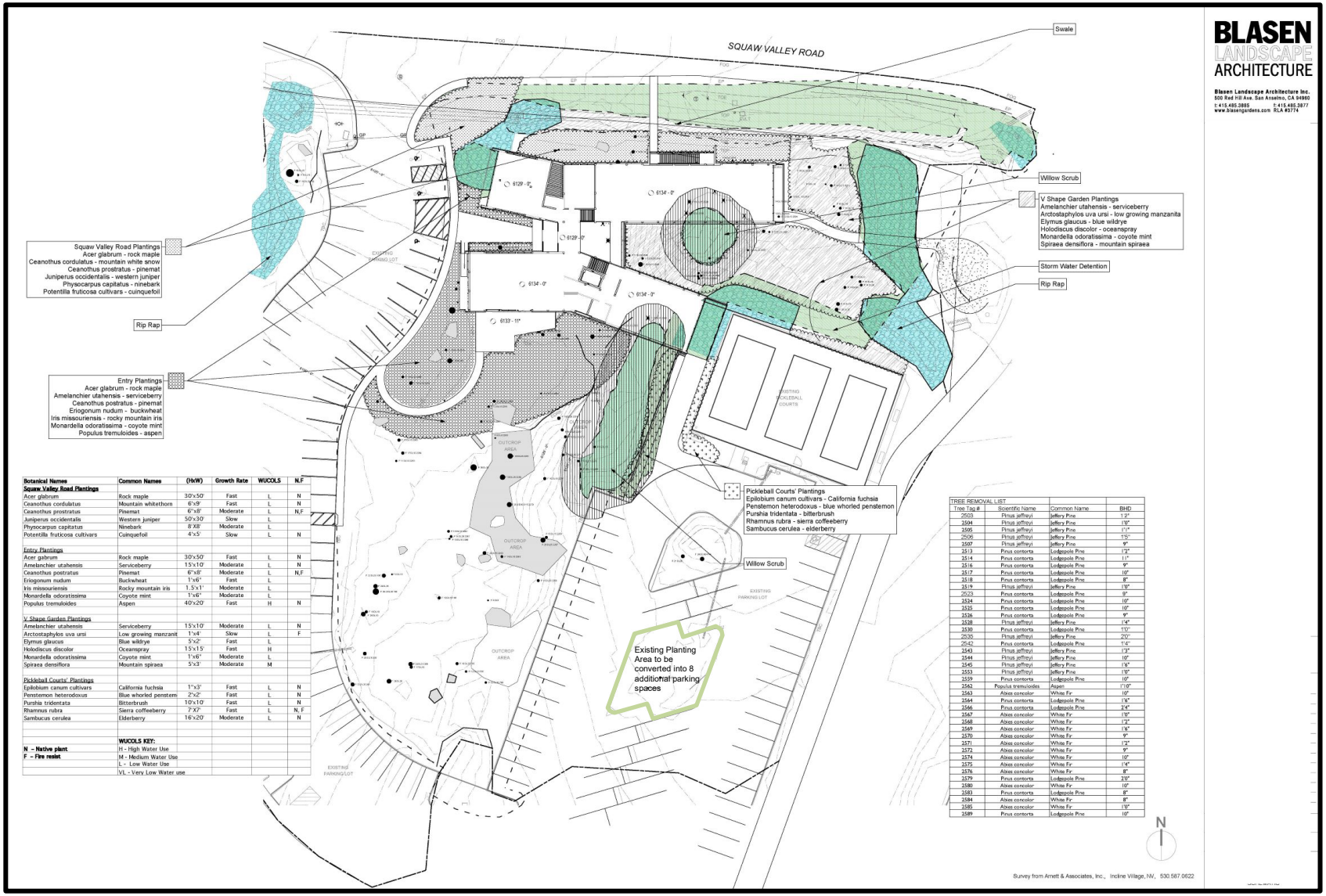
Minor Land Division
The project may include a Minor Land Division to create a separate parcel for the proposed project. This would result in the project being located on a separate parcel from the surrounding Squaw Valley Community Park.

Deed Restriction
In addition to the Placer County regulations, the Squaw Valley Community Park site is bound by a deed restriction relating to the past purchase of the parcel from the U.S. Forest Service (USFS) to Placer County, which occurred in 2000. The Quit Claim Deed conveying the park parcel to Placer County from the USFS includes the following restriction: "[T]he use of the property for a community park does not include the use of the property for private development of a commercial, residential, or industrial nature."

The intention of the museum and community cultural center is to educate visitors on the history of winter sports, particularly the 1960 Winter Olympics, and the museum would have a direct link to Squaw Valley Community Park and the outdoor culture of the Olympic Valley region. Furthermore, the museum's focus on active recreational and athletic pursuits are thematically supportive of the Squaw Valley Community Park's primary purpose of outdoor recreation. Therefore, the museum and community cultural center would be considered a non-commercial use and would not fall within the category of uses expressly prohibited by the Deed Restriction. Although the museum would introduce revenue-generating uses into the park, including a small café, gift shop, and facility rental, such uses and activities would be ancillary to the proposed museum and community cultural center, and all revenues from such activities would be restricted to supporting the museum. The Internal Revenue Code (IRC) and legal precedent allow charitable non-profit organizations enjoying benefits under IRC Section 501©(3) to pursue incidental revenue-generating activity without losing their non-profit tax-exempt status.[2] As described above, the ancillary nature and tax treatment of the revenue-generating activities proposed would not conflict with the deed restriction described above.

[2] Michael E. Profant, Attorney at Law, Placer County Counsel's Office. Personal Communication [letter] with Eli Ilano, Forest Supervisor, Tahoe National Forest. March 27, 2017.

Figure 8
Landscaping Plan



Botanical Names	Common Names	(Ht/W)	Growth Rate	WUCOLS	N,F
Squaw Valley Road Plantings					
Acer glabrum	Rock maple	30'x50'	Fast	L	N
Ceanothus cordulatus	Mountain whitethorn	6'x9'	Fast	L	N
Ceanothus prostratus	Pinemat	6"x8'	Moderate	L	N,F
Juniperus occidentalis	Western juniper	50'x30'	Slow	L	
Physocarpus capitatus	Ninebark	8'X8'	Moderate	L	
Potentilla fruticosa cultivars	Cuinquefoil	4'x5'	Slow	L	N
Entry Plantings					
Acer gabrum	Rock maple	30'x50'	Fast	L	N
Amelanchier utahensis	Serviceberry	15'x10'	Moderate	L	N
Ceanothus postratus	Pinemat	6"x8'	Moderate	L	N,F
Eriogonum nudum	Buckwheat	1'x6"	Fast	L	
Iris missouriensis	Rocky mountain iris	1.5'x1'	Moderate	L	
Monardella odoratissima	Coyote mint	1'x6"	Moderate	L	
Populus tremuloides	Aspen	40'x20'	Fast	H	N
V Shape Garden Plantings					
Amelanchier utahensis	Serviceberry	15'x10'	Moderate	L	N
Arctostaphylos uva ursi	Low growing manzanit	1'x4'	Slow	L	F
Elymus glaucus	Blue wildrye	5'x2'	Fast	L	
Holodiscus discolor	Oceanspray	15'x15'	Fast	H	
Monardella odoratissima	Coyote mint	1'x6"	Moderate	L	
Spiraea densiflora	Mountain spiraea	5'x3'	Moderate	M	
Pickleball Courts' Plantings					
Epilobium canum cultivars	California fuchsia	1"x3'	Fast	L	N
Penstemon heterodoxus	Blue whorled penstem	2'x2'	Fast	L	N
Purshia tridentata	Bitterbrush	10'x10'	Fast	L	N
Rhamnus rubra	Sierra coffeeberry	7'X7'	Fast	L	N, F
Sambucus cerulea	Elderberry	16'x20'	Moderate	L	N
	WUCOLS KEY:				
N – Native plant	H - High Water Use				
F – Fire resist	M - Medium Water Use				
	L - Low Water Use				
	VL - Very Low Water use				

TREE REMOVAL LIST			
Tree Tag #	Scientific Name	Common Name	BHD
2503	Pinus jeffreyi	Jeffery Pine	1'2"
2504	Pinus jeffreyi	Jeffery Pine	1'0"
2505	Pinus jeffreyi	Jeffery Pine	1'1"
2506	Pinus jeffreyi	Jeffery Pine	1'5"
2507	Pinus jeffreyi	Jeffery Pine	9"
2513	Pinus contorta	Lodgepole Pine	1'3"
2514	Pinus contorta	Lodgepole Pine	1'1"
2516	Pinus contorta	Lodgepole Pine	9"
2517	Pinus contorta	Lodgepole Pine	10"
2518	Pinus contorta	Lodgepole Pine	8"
2519	Pinus jeffreyi	Jeffery Pine	1'0"
2523	Pinus contorta	Lodgepole Pine	9"
2524	Pinus contorta	Lodgepole Pine	10"
2535	Pinus contorta	Lodgepole Pine	10"
2536	Pinus contorta	Lodgepole Pine	9"
2538	Pinus jeffreyi	Jeffery Pine	1'4"
2539	Pinus contorta	Lodgepole Pine	1'0"
2535	Pinus jeffreyi	Jeffery Pine	2'0"
2542	Pinus contorta	Lodgepole Pine	1'4"
2543	Pinus jeffreyi	Jeffery Pine	1'3"
2544	Pinus jeffreyi	Jeffery Pine	10"
2545	Pinus jeffreyi	Jeffery Pine	1'6"
2553	Pinus jeffreyi	Jeffery Pine	1'0"
2559	Pinus contorta	Lodgepole Pine	10"
2562	Populus tremuloides	Aspen	1'10"
2563	Abies concolor	White Fir	10"
2564	Pinus contorta	Lodgepole Pine	1'6"
2566	Pinus contorta	Lodgepole Pine	1'4"
2567	Abies concolor	White Fir	1'0"
2568	Abies concolor	White Fir	1'2"
2569	Abies concolor	White Fir	1'4"
2570	Abies concolor	White Fir	9"
2571	Abies concolor	White Fir	1'2"
2572	Abies concolor	White Fir	9"
2574	Abies concolor	White Fir	10"
2575	Abies concolor	White Fir	1'4"
2576	Abies concolor	White Fir	8"
2579	Pinus contorta	Lodgepole Pine	2'0"
2580	Abies concolor	White Fir	10"
2583	Pinus contorta	Lodgepole Pine	8"
2584	Abies concolor	White Fir	8"
2585	Abies concolor	White Fir	1'0"
2589	Pinus contorta	Lodgepole Pine	10"

Requested Entitlements
The proposed project would require County approval of the following:

- Rezone to create a new land use district to accommodate the proposed project;
- Text Amendment to Section 12.24.040 of the Placer County Government Code;
- Conditional Use Permit to allow a museum and community cultural center within the new land use district;
- Design Review; and
- Potential Minor Land Division to create a new parcel for the proposed project.

In addition to the above County approvals, the proposed project could require the following approvals/permits from other responsible and trustee agencies:

- Less than three-acre Conversion Exemption – California Department of Forestry and Fire Protection (CAL FIRE);
- Authority to Construct and Permit to Operate a Sewer Lift Station – Placer County Air Pollution Control District (PCAPCD);
- Section 404 Nationwide Permit (or Letter of Permission) – U.S. Army Corps of Engineers (USACE);
- Section 401 Water Quality Certification – Lahontan Regional Water Quality Control Board (RWQCB); and
- Section 1602 Permit – California Department of Fish and Wildlife (CDFW).

B. ENVIRONMENTAL SETTING:

Location	Zoning	General Plan/Specific Plan Designations	Existing Conditions and Improvements
Site	FR (Forest Recreation)	CP (Conservation Preserve)	Undeveloped, Parking lot
North	FR (Forest Recreation)	CP (Conservation Preserve)	Olympic Valley Road, across from which is undeveloped
South	CP (Conservation Preserve)	CP (Conservation Preserve)	Undeveloped; Truckee River Trail
East	RS-AG-B-43 (Residential Single Family/Agriculture – 43 Acre Minimum)	AG/T-80 (Agriculture/Timberland – 80 Acre Minimum)	SR 89, across from which is Single-Family Residential
West	FR (Forest Recreation); HDR (High Density Residential); EC (Entrance Commercial)	CP (Conservation Preserve); HDR (High Density Residential); EC (Entrance Commercial)	Squaw Valley Community Park; Tavern Inn Condominiums; Lake Tahoe Preparatory School; Olympic Valley Public Utilities District and Fire Department

C. NATIVE AMERICAN TRIBES: Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code (PRC) Section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?

Pursuant to Assembly Bill (AB) 52, invitations to consult were sent to tribes who requested notification of proposed projects within this geographic area on August 28, 2017. The tribes that were contacted included the Ione Band of Miwok Indians, the Shingle Springs Band of Miwok Indians (SSR), the T'Si-Akim Maidu, the United Auburn Indian Community (UAIC) of the Auburn Rancheria, the Washoe Tribe of Nevada and California, and the Wilton Rancheria. The UAIC initiated consultation and requested copies of cultural searches/surveys. The County provided copies of all requested documentation prepared for the proposed project, and consultation with the UAIC was closed on October 19, 2017. The SSR requested copies of cultural searches/surveys, which were provided, and consultation with the SSR was closed on October 26, 2017. Requests for consultation were not received from any of the other aforementioned tribes.

NOTE: Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process. (See Public Resources Code Section 21080.3.2.) Information may also be available from the California Native American Heritage Commission's Sacred Lands File pursuant to PRC Section 5097.96 and the California Historical Resources Information System administered by the California Office of Historic Preservation. Please also note that PRC Section 21082.3(c) contains provisions specific to confidentiality.

D. PREVIOUS ENVIRONMENTAL DOCUMENT:

The County has determined that an Initial Study shall be prepared in order to determine whether the potential exists for unmitigable impacts resulting from the proposed project. Relevant analysis from the County-wide General Plan and Specific Plan Certified EIRs, and other project-specific studies and reports that have been generated to date, were used as the database for the Initial Study. The decision to prepare the Initial Study utilizing the analysis contained in the General Plan Certified EIR, and project-specific analysis summarized herein, is sustained by Sections 15168 and 15183 of the CEQA Guidelines.

Section 15168 relating to Program EIRs indicates that where subsequent activities involve site-specific operations, the agency would use a written checklist or similar device to document the evaluation of the site and the activity, to determine whether the environmental effects of the operation were covered in the earlier Program EIR. A Program EIR is intended to provide the basis in an Initial Study for determining whether the later activity may have any significant effects. It will also be incorporated by reference to address regional influences, secondary effects, cumulative impacts, broad alternatives, and other factors that apply to the program as a whole.

The following document serves as the Program-level EIR from which incorporation by reference will occur, pursuant to CEQA Guidelines Section 15150:

- ➔ Placer County General Plan EIR.

In addition, reference to the SVGP will be given where appropriate. The SVGP document provides more specific direction for development and resource conservation within the Olympic Valley Area.

These documents are available at Placer County Community Development Resource Agency, 3091 County Center Drive, Suite 190, Auburn, CA 95603. For Tahoe projects, the document will also be available in the Tahoe Division Office, 565 West Lake Blvd., Tahoe City, CA 96145.

E. EVALUATION OF ENVIRONMENTAL IMPACTS:

The Initial Study checklist recommended by the State CEQA Guidelines is used to determine potential impacts of the proposed project on the physical environment. The checklist provides a list of questions concerning a comprehensive array of environmental issue areas potentially affected by the project (see CEQA Guidelines, Appendix G). Explanations to answers are provided in a discussion for each section of questions as follows:

a) A brief explanation is required for all answers including “No Impact” answers.
b) “Less Than Significant Impact” applies where the project’s impacts are insubstantial and do not require any mitigation to reduce impact“.
c) "Less Than Significant with Mitigation Measures" applies where the incorporation of mitigation measures has reduced an effect from “Potentially Significant Impact" to a "Less than Significant Impact." The County, as lead agency, must describe the mitigation measures, and briefly explain how they reduce the effect to a less-than-significant level (mitigation measures from earlier analyses may be cross-referenced“.
d) "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.
e) All answers must take account of the entire 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 [CEQA Guidelines, Section 15063(a)(1)].
f) Earlier analyses may be used where, pursuant to the tiering, Program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or Negative Declaration [CEQA Guidelines, Section 15063(c)(3)(D)]. A brief discussion should be attached addressing the following:
    - ➔ **Earlier analyses used** – Identify earlier analyses and state where they are available for review.
    - ➔ **Impacts adequately addressed** – Identify which effects from the above checklist were within the scope of, and adequately analyzed in, an earlier document pursuant to applicable legal standards. Also, state whether such effects were addressed by mitigation measures based on the earlier analysis.
    - ➔ **Mitigation measures** – For effects that are checked as “Less Than Significant with Mitigation Measures,” describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

g) References to information sources for potential impacts (i.e., General Plans/Community Plans, zoning ordinances) should be incorporated into the checklist. Reference to a previously-prepared or outside document should include a reference to the pages or chapters where the statement is substantiated. A source list should be attached and other sources used, or individuals contacted, should be cited in the discussion.

I. AESTHETICS – Except as provided in Public Resources Code Section 21099, would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
1. Have a substantial adverse effect on a scenic vista? (PLN)	**X**			
2. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings, within a state scenic highway? (PLN)			**X**	
3. In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality? (PLN)	**X**			
4. Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area? (PLN)	**X**			

Discussion Item I-1:
According to Policy 1.K.1 in the Placer County General Plan, Placer County considers resources such as river canyons, lake watersheds, scenic highway corridors, ridgelines, and steep slopes to be valuable scenic resources. In general, a project's impact to a scenic vista would occur if development of the project would substantially change or remove a scenic vista. Federal and State agencies have not designated any such locations within Placer County for viewing and sightseeing. However, the SVGP states that natural features – primarily mountain slopes, peaks, meadows, and watercourses – provide the key identifying characteristics of Olympic Valley. According to the SVGP, the degree to which natural features may be altered by man without adversely affecting their aesthetic value must be considered in reviewing each proposed development project. The mountain peaks and ridges are important to retain from a visual standpoint, as they define the point at which the mountains meet the sky. The project site is located in an area that contains views of ridgelines, steep slopes, and other features that would be considered scenic resources. Therefore, the proposed project could result in a ***potentially significant*** impact on scenic resources.

Further analysis of this potential impact will be discussed in the Aesthetics chapter of the SNOW Sports Museum and Community Cultural Center EIR.

Discussion Item I-2:
According to the California Scenic Highway Mapping System, the project site is not located within the vicinity of an officially designated State Scenic Highway. While SR 89, located approximately 100 feet east of the project site, is an Eligible State Scenic Highway, the roadway has not been officially designated. Therefore, development of the proposed project would not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State Scenic Highway, and a ***less-than-significant*** impact would occur. No mitigation measures are required.

Discussion Item I-3:
The project site is located in the southwest quadrant of the Olympic Valley Road and SR 89 intersection. The site currently consists of undeveloped areas of vegetation, predominantly montane coniferous forest, which largely consist of white fir and pine trees native to the area, as well as an existing parking lot.

Distinguishing between public and private views is important when evaluating changes to visual character or quality, because private views are views seen from privately-owned land and are typically associated with individual viewers, including views from private residences. Public views are experienced by the collective public, and include views of significant landscape features and along scenic roads. According to CEQA (PRC, § 21000 et seq.) case law, only public views, not private views, are protected under CEQA. For example, in *Association for Protection etc. Values v.*

City of Ukiah (1991) 2 Cal.App.4th 720 [3 Cal. Rptr.2d 488], the court determined that "we must differentiate between adverse impacts upon particular persons and adverse impacts upon the environment of persons in general. As recognized by the court in *Topanga Beach Renters Assn. v. Department of General Services* (1976) 58 Cal.App.3d 188 [129 Cal.Rptr. 739]: '[A]ll government activity has some direct or indirect adverse effect on some persons. The issue is not whether [the project] will adversely affect particular persons but whether [the project] will adversely affect the environment of persons in general.'" Therefore, it is appropriate to focus the aesthetic impact analysis on potential impacts to public views.

Public views of the project site are available from Olympic Valley Road and SR 89. The proposed project would develop the project site with a two-story building with a height of 29.8 feet, and associated improvements, changing the visual character of the project site from rural, undeveloped montane coniferous forest to a developed landscape. Further analysis is necessary to evaluate changes to the visual character and quality of the project site and its surroundings from Olympic Valley Road and SR 89. Therefore, a ***potentially significant*** impact could occur.

Further analysis of this potential impact will be discussed in the Aesthetics chapter of SNOW Sports Museum and Community Cultural Center EIR.

Discussion Item I-4:
The project site currently consists of undeveloped areas of vegetation, as well as an existing parking lot. As such, sources of light and glare are limited to parking lot lighting and headlights from vehicles using the parking lot. Development of the proposed project would introduce new sources of light to the site in the form of light fixtures on the exteriors of the buildings and increased motor vehicle traffic within the parking lot. Further analysis is required to ensure that the proposed project would comply with applicable standards related to light and glare and would not result in excess nighttime light pollution. Therefore, a ***potentially significant*** impact could occur.

Further analysis of this potential impact will be discussed in the Aesthetics chapter of SNOW Sports Museum and Community Cultural Center EIR.

II. AGRICULTURAL & FOREST RESOURCES – Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
1. 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? (PLN)			**X**	
2. Conflict with existing zoning for agricultural use, a Williamson Act contract or a Right-to-Farm Policy? (PLN)			**X**	
3. 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))? (PLN)			**X**	
4. Result in the loss of forest land or conversion of forest land to non-forest use? (PLN)			**X**	
5. 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? (PLN)			**X**	
6. Conflict with General Plan or other policies regarding land use buffers for agricultural operations? (PLN)			**X**	

Discussion – All Items:
The proposed project would be located within a portion of the existing Squaw Valley Community Park. Squaw Valley Community Park is an approximately 28-acre park consisting of five parcels, owned and operated by Placer County. The project site would be located between the Squaw Valley Community Park driveway entrance to the parking lot

from Olympic Valley Road and the pickleball courts. The project site has not been mapped by the Farmland Mapping and Monitoring Program. However, the site currently consists of undeveloped areas of vegetation, predominantly montane coniferous forest, which largely consist of white fir and pine trees native to the area, as well as an existing parking lot, and is, therefore, not considered Prime Farmland, Unique Farmland, or Farmland of Statewide Importance.[3] As such, development of the proposed project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to a non-agricultural use. In addition, the project site is not under an existing Williamson Act contract, nor is the site zoned for agricultural use. The project site is currently zoned FR.

According to the Tree Survey prepared for the proposed project, the project site is considered to be "timberland" pursuant to the Forest Practice Act.[4] However, pursuant to Section 1104.1 of the California Code of Regulations (CCR), a conversion exemption is applicable for a conversion of Timberland to a non-timber use for land less than three acres in one contiguous ownership, so long as the property owner seeking the exemption has not obtained such an exemption in the prior five years. While the total acreage of the Squaw Valley Community Park is approximately 28 acres, the project site is located within an approximately one-acre portion of the park. As such, the proposed project would require preparation of a Notice of Conversion Exemption Timber Operations in accordance with CCR Section 1104.1(a). Additionally, a substantial number of trees would remain in the immediate vicinity of the project site. Although the project site currently contains 228 trees, and 109 trees would require removal for development of the site, the area is not currently used or zoned for Timberland Production. Furthermore, the parcel on which the project site is located is currently in use as a recreational park. Therefore, timberland production at the project site would be incompatible with the site and the surrounding area.

Based on the above, the proposed project would have a ***less-than-significant*** impact with regard to conversion of agricultural land, forest land, or any potential conflict with forest land, timberland, or Timberland Production zoning. No mitigation measures are required.

III. AIR QUALITY – Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
1. Conflict with or obstruct implementation of the applicable air quality plan? (AQ)	**X**			
2. 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? (AQ)	**X**			
3. Expose sensitive receptors to substantial pollutant concentrations? (AQ)	**X**			
4. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people? (AQ)	**X**			

Discussion Items III-1, 2:
The project site is located within the Mountain Counties Air Basin (MCAB) portion of Placer County, and is under the jurisdiction of the Placer County Air Pollution Control District (PCAPCD). The federal Clean Air Act (CAA) and the California Clean Air Act (CCAA) require that federal and State ambient air quality standards (AAQS) be established, respectively, for six common air pollutants, known as criteria pollutants. The criteria pollutants include particulate matter (PM), ground-level ozone, carbon monoxide (CO), sulfur oxides (SO_X), nitrogen oxides (NO_X), and lead. At the federal level, the MCAB area is designated as nonattainment for the 8-hour ozone AAQS, and attainment or unclassified for all other federal criteria pollutant AAQS. At the State level, the MCAB area is designated as nonattainment for the 1-hour ozone, 8-hour ozone, particulate matter 10 microns in diameter (PM_{10}) AAQS, and attainment or unclassified for all other State AAQS.

During construction of the project, various types of equipment and vehicles would temporarily operate on the project site and off-site improvement areas. Construction exhaust emissions would be generated from construction

[3] Farmland Mapping and Monitoring Program. *California Important Farmland Finder.* Available at: https://maps.conservation.ca.gov/DLRP/CIFF/. Accessed February 2022.
[4] Under the Trees Forestry & Environmental Services. *Squaw Valley Olympic Museum Tree Survey*. November 17, 2016.

equipment, vegetation clearing and earth movement activities, construction worker commutes, and construction material hauling for the entire construction period. The aforementioned activities would involve the use of diesel- and gasoline-powered equipment that would generate emissions of criteria pollutants. Project construction activities also represent sources of fugitive dust, which include PM emissions. As construction of the proposed project would generate air pollutant emissions intermittently within the site, and the vicinity of the site, until all construction has been completed, construction is a potential concern because the proposed project is in a non-attainment area for ozone and PM.

Furthermore, development of the proposed project would result in an increased number of vehicle trips associated with traffic to and from the project site. Operation of the proposed project would result in emissions associated with area sources such as propane combustion from heating mechanisms and landscape maintenance equipment exhaust. The additional traffic and operations associated with the proposed project could result in increases in criteria pollutant emissions in the project vicinity above thresholds established by the PCAPCD. Therefore, the proposed project could conflict with or obstruct implementation of the applicable air quality plan.

Construction and operational emissions associated with the proposed project, in combination with other past, present, and reasonably foreseeable projects within the project region could either delay attainment of the standards or require the adoption of additional controls on existing and future air pollution sources to offset emission increases. Thus, the project could 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. Based on the above, the proposed project could result in a ***potentially significant*** impact.

Further analysis of these potential impacts will be discussed in the Air Quality, Greenhouse Gas Emissions, and Energy chapter of the SNOW Sports Museum and Community Cultural Center EIR.

Discussion Item III-3:
The major pollutants of concern are localized CO emissions and toxic air contaminant (TAC) emissions. Localized concentrations of CO are related to the levels of traffic and congestion along streets and at intersections. Implementation of the proposed project could increase traffic volumes on streets near the project site. Thus, the project could potentially increase local CO concentrations. Further analysis is required to determine whether the levels of service at area intersections would be substantially degraded as a result of the proposed project such that the concentrations of CO at the intersections would be considered a significant increase. In addition to CO construction equipment exhaust associated with the proposed project could result in TAC emissions.

Another concern related to air quality is naturally occurring asbestos (NOA). Because asbestos is a known carcinogen, NOA is considered a TAC. Sources of asbestos emissions include: unpaved roads or driveways surfaced with ultramafic rock; construction activities in ultramafic rock deposits; or rock quarrying activities where ultramafic rock is present. NOA is typically associated with fault zones, and areas containing serpentinite or contacts between serpentinite and other types of rocks. According to the Special Report 190: Relative Likelihood for the Presence of Naturally Occurring Asbestos in Placer County, California prepared by the Department of Conservation, the project site is located within an area categorized as least likely to contain NOA, because faults and serpentinite outcroppings are not known to be in the project area.[5]

Because the proposed project could cause an increase in the localized CO concentrations at area intersections, and would involve temporary TAC emissions associated with construction equipment, the proposed project could expose existing sensitive receptors to substantial pollutant concentrations. Accordingly, impacts related to exposure of sensitive receptors to substantial pollutant concentrations could be ***potentially significant***.

Further analysis of this potential impact will be discussed in the Air Quality, Greenhouse Gas Emissions, and Energy chapter of the SNOW Sports Museum and Community Cultural Center EIR.

Discussion Item III-4:
Emissions of pollutants have the potential to adversely affect sensitive receptors within the project area. Pollutants of principal concern include emissions leading to odors, visible emissions (including dust), or emissions considered to constitute air pollutants. Air pollutants are discussed under Items III-1, 2, and 3 above. Therefore, the following discussion focuses on emissions of odors and visible emissions.

[5] California Department of Conservation, California Geological Survey. *Special Report 190: Relative Likelihood for the Presence of Naturally Occurring Asbestos in Placer County, California*. Published 2006.

Examples of common land use types that typically generate significant odor impacts include, but are not limited to wastewater treatment plants; composting/green waste facilities; recycling facilities; petroleum refineries; chemical manufacturing plants; painting/coating operations; rendering plants; and food packaging plants. The proposed project would not involve or be located in the vicinity of any such uses. Diesel fumes from construction equipment are often found to be objectionable; however, construction is temporary and operation of equipment is regulated by federal, State, and local standards, including PCAPCD rules and regulations. Buildout of the proposed project would involve construction activity in different areas of the site and within off-site improvement areas throughout the construction period. Therefore, construction equipment would operate at varying distances from existing sensitive receptors, and potential odors from such equipment would not expose any single receptor to odors for a substantial period of time. Furthermore, construction activity would be restricted to certain hours of the day pursuant to the Placer County Code, Section 9.36.030(A)(7), which would limit the times of day during which construction related odors would potentially be emitted. Development of the proposed project would be required to comply with all applicable PCAPCD rules and regulations, which would help to control construction-related odorous emissions. Due to the temporary duration of construction and the regulated nature of construction equipment, project-related construction activity would not be anticipated to result in the creation of substantial odors.

While operations of the proposed museum would not include typical sources of objectionable odors, the proposed project would include the construction and operation of a sewer lift station, which would be located north of the project site, near the project driveway, within the Olympic Valley Road right-of-way. The nearest outdoor activity area associated with the existing park would be the pickleball courts located approximately 215 feet southeast of the lift station. Therefore, if not properly designed, the proposed sewer lift station could have the potential to subject people using the nearby pickleball courts to objectionable odors.

Placer County maintains a Pump Station Design Manual, which provides design and engineering criteria that must be met for approval of proposed sewer lift stations. The County, through the Design Manual, reserves the right to require that odor control facilities be included in sewer lift station design. In order to determine whether a proposed sewer lift station would require the inclusion of odor control facilities, County staff reviews project improvement plans for several factors. In particular, the potential for sewer lift stations to result in odors is largely dependent upon the size of the area serviced by the proposed lift station and whether the lift station receives sewage from other lift stations. Sewer lift stations that service large sewer shed areas or receive flows from other lift stations can have a heightened potential for creating odors, because sewage collected over large areas or transported over large distances is exposed to anaerobic conditions where odors can be generated. In addition to the consideration of the potential for a proposed lift station to result in the generation of odors, County staff considers the distance between the proposed lift station and the nearest receptors, as well as the site conditions surrounding the lift station. As such, further analysis is necessary to evaluate the potential for the proposed sewer lift station to result in significant odor impacts in the project area.

As defined in PCAPCD Rule 202, visible emissions may be smoke, dust, or any other substance that obscures an observer's view based on standardized scales of opacity. Visible emissions may result from the use of internal combustion engines, such as exhaust from diesel fueled equipment, the burning of vegetation, or the upset and release of soil as dust. PCAPCD Rule 202 specifically prohibits any person from discharging visible emissions of any air contaminant for a period or periods aggregating to more than three minutes in any one-hour time. Operation of the proposed recreational land use would not be anticipated to result in any visible emissions that would have the potential of violating Rule 202. Construction equipment on-site would be required to meet the visible emissions standards of Rule 202, and, considering the regulated nature of construction equipment, as well as the temporary use of such equipment on-site, would not be anticipated to result in substantial visible emissions. Considering the above, implementation of the proposed project would not be anticipated to result in substantial visible emissions during project construction or operations.

Based on the above, the proposed project could result in a ***potentially significant*** impact related to other emissions (such as those leading to odors) adversely affecting a substantial number of people.

Further analysis of these potential impacts will be discussed in the Air Quality, Greenhouse Gas Emissions, and Energy chapter of the SNOW Sports Museum and Community Cultural Center EIR.

IV. BIOLOGICAL RESOURCES – Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
1. 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 & Wildlife, U.S. Fish & Wildlife Service or National Marine Fisheries Service? (PLN)		**X**		
2. Have a substantial adverse effect on any riparian habitat or other sensitive natural community, identified in local or regional plans, policies or regulations, or regulated by the California Department of Fish & Wildlife, U.S. Fish & Wildlife Service, U.S. Army Corps of Engineers, or Regional Water Quality Control Board? (PLN)		**X**		
3. Have a substantial adverse effect on federal or state protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) or as defined by state statute, through direct removal, filling, hydrological interruption, or other means? (PLN)		**X**		
4. 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? (PLN)			**X**	
5. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? (PLN)				**X**
6. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan? (PLN)				**X**
7. Substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number of restrict the range of an endangered, rare, or threatened species? (PLN)		**X**		
8. Have a substantial adverse effect on the environment by converting oak woodlands? (PLN)				**X**

The following discussions are primarily based on a Biological Resources Assessment (BRA) prepared for the proposed project by WRA, Inc.[6]

Discussion Items IV-1, 7:
Special-status species include those plant and wildlife species that have been formally listed, are proposed as endangered or threatened, or are candidates for such listing under the federal and State Endangered Species Acts. Both acts afford protection to listed and proposed species. In addition, California Department of Fish and Wildlife (CDFW) Species of Special Concern and Fully Protected Species, which are species that face extirpation in California if current population and habitat trends continue, are considered special-status species. Although CDFW Species of Special Concern and Fully Protected Species generally do not have special legal status, they are given special consideration under CEQA. In addition to regulations for special-status species, most birds in the U.S., including non-status species, are protected by the Migratory Bird Treaty Act (MBTA) of 1918; and birds of prey are protected in California under provisions of the California Fish and Game Code (CFGC) Section 3503.5 (1992), which states, "it is unlawful to take, possess, or destroy any birds in the order Falconiformes or Strigiformes (birds of prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation

[6] WRA, Inc. *Biological Resources Assessment, SNOW Sports Museum Project, Truckee, Placer County, California.* March 2021.

adopted pursuant thereto.". Destroying active nests, eggs, and young is also illegal under the MBTA. In addition, plant species on California Native Plant Society (CNPS) Lists 1 and 2 are considered special-status plant species and are protected under CEQA.

The BRA included a search of the California Natural Diversity Database (CNDDB) for the Tahoe City, Truckee, Homewood, Martis Peak, Kings Beach, Meeks Bay, Norden, Granite Chief, and Wentworth Springs 7.5-minute U.S. Geological Survey (USGS) quadrangle maps. The intent of the database review was to identify documented occurrences of special-status species in the vicinity of the project area, to determine their locations relative to the project site, and to evaluate whether the site meets the habitat requirements of such species. Based on the results of the CNDDB search, several special-status plant and wildlife species are known to occur within the project region.

WRA conducted site surveys on July 23rd and July 24th, 2020, which included a protocol-level rare plant survey in which the project site was traversed on foot to evaluate plant communities present within the project site. In addition, the site survey included evaluation of whether potential suitable habitat for special-status wildlife species is present on-site.

The potential for special-status species to occur on the project site is discussed in further detail below.

Special-Status Plants

Special-status plants generally occur in relatively undisturbed areas within vegetation communities such as vernal pools, marshes and swamps, chenopod scrub, seasonal wetlands, riparian scrub, chaparral, alkali playa, dunes, and areas with unusual soil characteristics.

Based upon a review of species databases and literature, the possible occurrence of a total of 32 special-status plant species was considered in the BRA, based on documented occurrences within the 8-quadrangle radius surrounding the Tahoe City USGS quadrangle. As such, a protocol-level rare plant survey was conducted by WRA. The survey followed the protocol for rare plant surveys described by the CNPS, CDFW, and U.S. Fish and Wildlife Service (USFWS). The survey corresponded to peak blooming periods for observing and accurately identifying rare plant species with potential to occur within the project site vicinity. The plant surveys were floristic in nature with all observed species recorded and included as a species list provided in Appendix B of the BRA.

Of the 32 special-status plants considered during the habitat evaluation, the determination was made that 19 of the species would not occur on site due to the lack of specific habitat types such as subalpine coniferous forest, alpine fell fields, open water, perennial marshes and streams, seeps, or due to the distance to known occurrences. The remaining 13 species were not detected during protocol-level surveys. The site was also carefully searched for alder buckthorn (*Rhamnus alnifolia*) because a CNDDB-documented occurrence has been mapped approximately 700 feet to the west of the project site. However, the perennial shrub species was not observed during the focused rare plant survey. In all, over 100 plant species were observed and recorded during the site reconnaissance and rare plant surveys conducted on the project site. However, none of the species observed on-site are considered special-status. Therefore, disturbance of special-status plant species is not likely to occur with project development.

Special-Status Wildlife

Based upon a preliminary review of the CNDDB and the USFWS Quadrangle Species Lists, 44 special-status wildlife species have been recorded in the vicinity of the project site. Of the special-status wildlife species that are documented in the project site vicinity, 38 of the special-status wildlife species are not expected to occur or have a very low potential for occurrence on-site due to the degree of human disturbance from surrounding development including roads/highways, lack of specific habitat types such as alpine fell fields, fens, or vernal pools, the distance to known occurrences, the site being outside of the species' documented distribution range, and/or the site's lack of special habitat features, such as cliffs, caves, and perennial water sources for breeding and foraging. A detailed discussion of the remaining six special-status bat species that have been identified as having the potential to occur on site is provided below.

Special-Status Bats

Six special-status bat species have a marginal potential to occur on the project site, including: the pallid bat (*Antrozous pallidus*), long-eared myotis (*Myotis evotis*), fringed myotis (*Myotis thysanodes*), long-legged myotis (*Myotolansans*), Yuma myotis (*Myotis yumanensis*), and spotted bat (*Euderma maculatum*). The project site contains mature trees that could provide suitable roosting habitat for the six special-status bat species. Construction activities could result in the removal or disturbance of hibernation or maternal roost sites, if they are present in the project site, due to noise or human intrusion, which could result in direct mortality and reduction in reproductive success. In addition, impacts to individual bats through removal of occupied roost habitat during the bat hibernation or maternity

season has potential to result in harm, death, displacement and/or disruption of bats and/or nursery colony roosts. Thus, in the event that special-status bat species occur on the project site during the breeding season, project construction activities could result in a substantial adverse effect to the aforementioned special-status bat species.

Nesting Raptors and Migratory Birds
The project site contains existing trees and brush that could be used by migratory birds protected by the MBTA. Ground surface disturbance during construction activities could adversely affect the nesting success of migratory birds (i.e., lead to the abandonment of active nests) or result in mortality of individual birds, which would constitute a violation of State and federal laws. In addition, the project site contains trees suitable for raptor nesting. Therefore, the potential occurs for migratory birds protected under the MBTA to nest in the trees located within the project site. In the event that such species occur on the project site during the breeding season, project construction activities could result in a substantial adverse effect to species protected under the MBTA.

Conclusion
Based on the above, the proposed project could have an adverse effect, either directly or through habitat modifications, on species identified as special-status species in local or regional plans, policies, or regulations, or by the CDFW or the USFWS, including migratory birds, and six special-status bat species. Thus, a ***potentially significant*** impact could result.

Mitigation Measure(s)
Implementation of the following mitigation measures would reduce the above potential impacts to a *less-than-significant* level.

IV-1 To avoid impacting breeding or hibernating bats protected by CDFW, pre-construction surveys of potential bat roost habitat shall be performed, as determined by a qualified biologist, in all trees subject to removal for evidence of bat use (guano accumulation, acoustic or visual detections). Survey results shall be submitted to the Placer County Community Development Resource Agency. If evidence of bat use is found, then acoustic surveys shall be conducted by a qualified biologist to determine whether a site is occupied. The surveys shall determine if the roost is a maternity roost (if construction work is being performed in the spring), hibernacula or day roost. If a maternity roost is present, delay of the tree removal may be necessary until after the roost is vacated. If bat species are detected/observed within the trees, measures shall be taken to clear the bats prior to removal activities. Measures to exclude bats from occupied roosts may include but are not limited to: disturbance to roosting individuals through introduction of light and/or noise to create an undesirable setting and to encourage the bats to vacate the roost. Upon removal of the bats from trees to be removed, access points shall be sealed to prevent reentry of bat species. Once it has been concluded that no bat species are present, tree removal may commence upon final approval from Placer County. To offset the loss of any occupied bat roost, the project proponent shall install bat boxes at a suitable location in the vicinity of project site to provide roosting opportunities and locations for the displaced bats. The project applicant shall work with CDFW to agree upon the number of bat boxes and their respective installation locations prior to removal of the bat roost/tree removal activities.

IV-2 If vegetation removal is scheduled during the migratory bird nesting season (typically March 15 to August 31), a focused survey for active nests shall be conducted by a qualified biologist within three days prior to the beginning of project-related activities. Survey results shall be submitted to the Placer County Community Development Resource Agency. Surveys shall be conducted in and around proposed work areas, staging and storage areas, along equipment transportation routes, and soil, equipment, and material stockpile areas. For passerines and small raptors, surveys should be conducted within a 250-foot radius surrounding the work area (where access is feasible). For larger raptors, such as hawks the survey area shall be 500 feet. Surveys shall be conducted at the appropriate times of day, and during appropriate nesting times and would concentrate on areas of suitable habitat. If a lapse in project-related work of 14 days or longer occurs, an additional nest survey will be required before work can be reinitiated. If nests are encountered during any preconstruction survey, the qualified biologist shall determine, depending on conditions specific to each nest and the relative location and rate of construction activities, if it may be feasible for construction to occur as planned without impacting the success of the nest. The nest(s) shall be monitored by a qualified biologist during active construction. If, in the professional opinion of the biologist, construction activities have the potential to adversely affect the nest, the biologist shall immediately inform the construction manager to stop construction activities within minimum exclusion buffer of 50 feet for songbird nests, and 200 to 500 feet for raptor nests, depending on the species and location. Adjustments to these buffer distances can only be made through coordination with CDFW. Construction activities shall only proceed after either the nest is not active or the project receives approval to continue from CDFW.

Discussion Items IV-2, 3:
An Aquatic Resources Delineation Report[7] was prepared for the project site, which determined that the project site contains a 0.04-acre drainage swale that meets the U.S. Army Corps of Engineers (USACE) wetland criteria. The swale is confluent to the Truckee River through a culvert constructed under SR 89 (see Figure 9).

Based on the current Clean Water Act (CWA) regulations, the drainage swale would likely be regulated as federally protected wetland due to the swale's connectivity with the Truckee River.[8]

In addition to the drainage swale, the project site contains two patches of willow scrub totaling 0.05-acre (see Figure 9). Within the willow scrub habitat, Shining willow (*Salix lucida*) and Lemmon's willow (*Salix lemmonii*) occur in an open overstory, with sedges (*Carex, sp.*), rushes (*Juncus spp.*), hairgrass, tall mannagrass, and willow dock occurring as common understory associates. The BRA determined that the willow scrub does not meet the USACE wetland criteria because the habitat does not meet the primary wetland hydrology indicators; however, these depressional areas, may be regulated by CDFW. Project construction activities (e.g., stormwater infrastructure, including construction of new culverts and the museum facility) could result in the direct removal and/or disturbance of this willow scrub area.

Based on the above, the proposed project could result in ***potentially significant*** impacts to sensitive riparian habitats and jurisdictional wetlands through removal of vegetation, excessive erosion, and/or non-native species incursion.

Mitigation Measure(s)
Implementation of the following mitigation measures would reduce the above potential impact to a *less-than-significant* level.

IV-3 The project applicant shall design the project to avoid the loss of riparian habitat to the maximum extent feasible. However, if avoidance is not feasible, the project applicant shall be required to submit notification to CDFW and obtain a Lake and Streambed Alteration Agreement (LSAA) prior to Improvement Plan approval. The information provided to CDFW shall include a description of all of the activities associated with the proposed project, not just those closely associated with the drainages and/or riparian vegetation. Impacts shall be outlined in the application and are expected to be in substantial conformance with the impacts to biological resources outlined in this Initial Study. Temporary and permanent impacts for each activity, and a description of the mitigation proposed to reduce each impact on biological resources shall be outlined within the LSAA. Minimization and avoidance measures shall be proposed as appropriate and may include but not be limited to implementation of best management practices (i.e., erosion and sediment control measures) and seasonal work restrictions to avoid degradation of riparian habitat avoided by the project. In addition, CDFW is expected to require compensatory mitigation for impacts to riparian habitat. In-kind habitat compensation would be required at a minimum of a 1:1 ratio of created to permanently impacted habitat, in consultation with CDFW through the permit process. Compensatory mitigation may be accomplished through the purchase of riparian habitat credits at a CDFW-approved mitigation bank or through the development and implementation of riparian habitat mitigation and monitoring plan (HMMP) involving the creation and/or enhancement of riparian habitat onsite. Impacts to willow scrub shall not occur until LSAA is received from CDFW, or correspondence is received from CDFW indicating no permit is needed. Written verification of the LSAA shall be submitted to the Placer County Community Development Resource Agency.

IV-4 Any alterations of, or discharges into, Waters of the State or Waters of the U.S. must be in conformance with Sections 404 and 401 of the CWA via certification and permitting prior to Improvement Plan approval and the commencement of any grading or construction that may impact jurisdictional area(s), as applicable. Activities that usually involve a regulated discharge of dredged or fill materials include (but are not limited to) grading, placing of riprap for erosion control, pouring concrete, laying sod, preparing soil for planting (e.g., turning soil over, adding soil amendments), and stockpiling excavated material. If avoidance of federal and state protected wetlands is not feasible, securing 404 and 401 permits under the Clean Water Act will be required in accordance with USACE and RWQCB regulations.

[7] WRA, Inc. *Aquatic Resources Delineation Report, SNOW Sports Museum, Olympic Valley, Placer County, California.* June 2021.
[8] Amy Parravano, Senior Biologist, WRA, Inc. Personal Communication [email] with Nick Pappani, Vice President of Raney Planning & Management. January 5, 2022.

Figure 9
Map of Plant Communities and Land Cover Types

Prior to Improvement Plan approval and the initiation of ground disturbance activities within Waters of the U.S. or Waters of the State, the project proponent will obtain CWA 404 and 401 regulatory permits prior to project implementation and will be responsible for complying with all permit conditions that may include (but are not limited to) implementation of best management practices (i.e., erosion and sediment control measures) and seasonal work restrictions, as appropriate. In addition, the regulatory agencies may require compensatory mitigation for impacts to jurisdictional habitat features in order to comply with the federal and state "no net loss of wetlands" policy. The project applicant shall compensate for unavoidable impacts at a minimum of a 1:1 ratio through purchase of credits at an agency-approved wetland mitigation bank or through the development and implementation of a habitat mitigation and monitoring plan (HMMP) aimed at creating or restoring in-kind habitat. The project proponent would be required to submit the HMMP with the agency permit applications. The HMMP shall be developed through consultation with the Corps, Water Board, and CDFW and submitted with the application packages. The project proponent will be responsible for implementing the HMMP. The HMMP will address habitat mitigation and annual monitoring requirements to ensure the long-term success of revegetated areas and include the following elements:

- *Characterize baseline conditions of impacted area and mitigation site;*
- *Identify criteria for mitigation site selection;*
- *Quantify the total jurisdictional habitat acreage lost;*
- *Address protection measures for jurisdictional habitat features avoided by project construction, including wetlands and riparian habitat;*
- *Provide justification for how in-kind habitat restoration activities will achieve the "no net loss of wetlands" policy.*
- *Describe annual monitoring methods to be performed to measure vegetation reestablishment for a minimum of five years, including schedule and reporting requirements;*
- *Identify mitigation performance standards (e.g., species cover, composition, and survivorship);*
- *Establish specific annual success criteria pertaining to plant species composition and cover (i.e., survival of plantings shall exceed 80 percent of the total number of required plantings);*
- *Identify maintenance requirements necessary to meet the established success criteria (e.g., invasive species removal);*
- *Provide contingency measures if the success criteria are not being met during the monitoring period (e.g., corrective actions including replacement of mitigation plantings, invasive species removal, and/or substitution of different native species that may have a higher success rate);*
- *Identify regulatory agencies responsible for reviewing monitoring reports, confirming mitigation success, and/or evaluating effectiveness of corrective actions; and*
- *Identify responsible parties for conducting annual monitoring, submitting annual reports, and providing assurances that the success criteria will be met at the end of the monitoring period.*

Impacts to jurisdictional features shall not occur until the permits are received from the appropriate regulatory agencies, or correspondence is received from the agencies indicating that a permit is not required. Proof of compliance with the requirements of this mitigation measure shall be submitted to the Placer County Community Development Resource Agency.

Discussion Item IV-4:
A wildlife corridor is a linear landscape element which serves as a linkage between historically connected habitat or natural areas that are otherwise separated by rugged terrain, changes in vegetation, or human disturbance, and is meant to facilitate wildlife movement between the natural areas. Corridors are critical for the maintenance of ecological processes including allowing for the movement of animals and the continuation of viable populations. Three types of wildlife movements occur within corridors, including dispersal (i.e., one way movement away from a home site), migration (i.e., round trip movements), and home range movements (i.e., movements within an area with a defined probability of occurrence of an animal during a specified time period). For large herbivores and medium to large carnivores, corridors enable individuals to pass directly between two areas in discrete events of brief duration, facilitating juvenile dispersal, seasonal migration, and home range connectivity.

The project site is bordered by SR 89 to the east, Olympic Valley Road to the north, and Squaw Valley Community Park facilities with a paved bike path and parking lot to the west and south. According to the BRA prepared for the proposed project, due to the intensity of surrounding development throughout Olympic Valley, the fragmented habitat within the project site itself does not function as a movement corridor or serve as a critical linkage connecting patches of "high quality" habitat considered to be essential to the long-term survival of migratory wildlife species. Although limited wildlife movement may infrequently occur through the project site, such movement is very unlikely to result in

eventual movement of wildlife populations to intact, preserved habitats; therefore, the site does not act as a true wildlife corridor, movement pathway, or linkage of note between larger habitat areas for terrestrial wildlife. Therefore, the proposed project would not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites, and a ***less-than-significant*** impact would occur. No mitigation measures are required.

Discussion Items IV-5, 8:
According to the Tree Survey prepared for the proposed project, a total of 228 native trees exist within the project site.[9] Of the 228 trees, an estimated 109 trees would be removed for development of the site, 57 of which are recommended for removal due to health. The on-site trees consist of red fir (*Abies magnifica*), white fir (*Abies concolor*), Jeffrey pine (*Pinus jeffreyi*), Lodgepole pine (*Pinus contorta*), and Aspen (*Populus tremuloides*); oak woodland communities are not present within or adjacent to the project area. The project area is above the elevation range of oak woodland communities.

The Placer County Woodland Conservation Ordinance (Chapter 19, Article 50, of the Placer County Municipal Code) regulates the encroachment of construction activities into protected zones of protected trees and the removal of any protected trees. Tree permits are required for any development activities within the protected zone (diameter of the longest limb plus one foot) of any tree, as defined in the Code, on public or private land. Activities which could harm, destroy, kill or remove any protected tree must also be authorized by a tree permit or be permitted pursuant to approval of a discretionary project. In addition, the Placer County Woodland Conservation Ordinance prohibits the removal of landmark trees, trees located in designated Tree Preservation Zones, and trees within riparian areas. The County may also require replacement of removed trees to the satisfaction of the Planning Services Division. The proposed project would comply with all of the requirements included in the Placer County Woodland Conservation Ordinance.

Based on the above, the proposed project would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance and would not have a substantial adverse effect on the environment by converting oak woodlands. Thus, ***no impact*** would occur.

Discussion Item IV-6:
On September 1, 2020, Placer County adopted the PCCP, which is a Habitat Conservation Plan (HCP) under the Federal Endangered Species Act and a Natural Community Conservation Plan (NCCP) under the California Natural Community Conservation Planning Act. However, the PCCP area does not include the project site or surrounding area. Therefore, the project site is not currently subject to any habitat conservation plans, and the project would not conflict with the provisions of an adopted HCP, NCCP, or other approved local, regional, or state habitat conservation plan. As such, ***no impact*** related to said Plans would occur.

V. CULTURAL RESOURCES – Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
1. Cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines, Section 15064.5? (PLN)			**X**	
2. Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines, Section 15064.5? (PLN)		**X**		
3. Disturb any human remains, including these interred outside of dedicated cemeteries? (PLN)		**X**		
4. Have the potential to cause a physical change, which would affect unique ethnic cultural values? (PLN)			**X**	
5. Restrict existing religious or sacred uses within the potential impact area? (PLN)			**X**	

[9] Under the Trees Forestry & Environmental Services. *Squaw Valley Olympic Museum Tree Survey*. November 17, 2016.

The following discussions are primarily based on a Cultural Resource Inventory and Evaluation prepared for the proposed project by Susan Lindstrom, Consulting Archaeologist.[10]

Discussion Item V-1:
Section 15064.5 of the CEQA Guidelines provides instructions for a lead agency to consider the effects of projects on historical resources. A historical resource is a resource listed in, or determined to be eligible for listing in, the California Register of Historical Resources (CRHR) (PRC Section 21084.1), a resource included in a local register of historical resources (PRC Section 15064.5[a][2]), or any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant (PRC Section 15064.5[a][3]).

Resources eligible for listing include buildings, sites, structures, objects, or historic districts that retain historical integrity and are historically significant at the local, state or national level under one or more of the following four criteria:

1) It is associated with events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States;
2) It is associated with the lives of persons important to local, California, or national history;
3) It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master or possesses high artistic values; or
4) It has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California, or the nation.

In addition to having significance, resources must have integrity for the period of significance. The period of significance is the date or span of time within which significant events transpired, or significant individuals made their important contributions. Integrity is the authenticity of a historical resource's physical identity as evidenced by the survival of characteristics or historic fabric that existed during the resource's period of significance.

Examples of typical historical resources include, but are not limited to, buildings, farmsteads, rail lines, bridges, and trash scatters containing objects such as colored glass and ceramics. Pursuant to the National Register of Historic Places (NRHP) eligibility criteria, a resource must be at least 50 years old in order to be considered historic, except in exceptional circumstances.

As part of the Cultural Resource Inventory and Evaluation, a search for archaeological and historical records was completed by the North Central Information Center (NCIC) on January 8, 2018 (NCIC File No: PLA-87-3). While a total of five cultural resources have been previously recorded within the one-eighth mile search radius surrounding the project site, previously known cultural resources have not been discovered within the project site itself. An archeological field reconnaissance was conducted on January 17, 2018 as part of the Cultural Resource Inventory and Evaluation, which disclosed remnants of a gravel processing facility and quarry (SVOM-1). All that survives of SVOM-1 is an elevated earthen platform accessed by two earthen ramps, all of which are supported by concrete, metal and/or boulder retaining walls. The platform ramp is assumed to have functioned as a loading area where gravel was transported by truck to the high point of the elevated platform and dumped over the steep east side into screens positioned below to separate dirt from rock. Isolated discarded, broken slabs of concrete are strewn about the site, especially in the northeast corner of the site, where ground is deeply furrowed and where one large milled wooden beam was observed. The suspected quarry pit was in-filled in 1980, and most quarry remnants were removed sometime after post-1975.

The Cultural Resource Inventory and Evaluation concluded that SVOM-1 does not contain important information regarding an understanding of recreation and community development within the area. All of the potentially significant information of SVOM-1 has been recovered with the completion of an archaeological site record, and the site's data potential has been exhausted. Although the quarry is over 50 years old and qualifies as "historic", the site is not associated with important events, personalities and/or technologies important in state or regional history. Connections between gravel operations at SVOM-1 and construction activities associated with the 1960 Winter Olympics are unconfirmed. Quarry operations were owned by Oliver Henrikson, a local personality without regional or State renown. In addition, quarry operations have mostly been obliterated; remains have lost all integrity, "visibility" and "focus", so that any noteworthy engineering and construction methods (size and length, presence of distinctive engineering features and associated properties, structural integrity, and setting) are indeterminate. The rudimentary and temporary enterprise represented by SVOM-1 lacks distinctive characteristics of a type, period, or method of construction, and the property lacks integrity and research potential and does not contain the necessary quantity or

[10] Susan Lindstrom, Consulting Archaeologist. *Squaw Valley Olympic Museum Project Cultural Resource Inventory and Evaluation. January 2018*.

quality of archaeological data to make useful contributions in addressing the questions posed regarding recreation and community development in Olympic Valley. Accordingly, SVOM-1 does not meet Criterion 1 through Criterion 4 of the CRHR, and the resource was recommended ineligible for listing.

Based on the above, the proposed project would not cause a substantial adverse change in the significance of a historical resource as defined pursuant to CEQA Guidelines, Section 15064.5, and a ***less-than-significant*** impact would occur. No mitigation measures are required.

Discussion Items V-2, 3:
The project area falls within the center of Washoe territory, with primary use by the northern Washoe tribe. Washoe ethnographic encampments have been noted in west Truckee, around Donner Lake and Tahoe City. Traditional Native American sites have not been reported within the Tahoe Reach of the Truckee River, including Olympic Valley. The ethnographic record suggests that during the mild season, small groups of Washoe traveled through high mountain valleys collecting edible and medicinal roots, seeds, and marsh plants. In the higher elevations, men hunted large game (mountain sheep, deer) and trapped smaller mammals. The Truckee River and its tributaries were important fisheries year-round. Suitable toolstone (such as basalt) was quarried in various locales. The Washoe have a tradition of making long treks across the Sierran passes for the purpose of hunting, trading, and gathering acorns. These aboriginal trek routes, patterned after game trails, are often the precursors of historic and modern road systems. Archaeological evidence of these ancient subsistence activities are found along the mountain flanks as temporary small hunting camps containing flakes of stone and broken tools. In the high valleys more permanent base camps are represented by stone flakes, tools, grinding implements, and house depressions.

While the record search completed as part of the Cultural Resource Inventory and Evaluation identified five historical and archaeological resources within one-eighth mile of the project site, the record search did not identify any recorded archaeological resources within the project site boundaries. In addition, a search of the Native American Heritage Commission (NAHC) Sacred Lands File did not identify any known sacred sites within the project area. The archeological field reconnaissance conducted by Dr. Lindstrom resulted in the identification of one new cultural resource site, SVOM-1, within the project site boundaries; however, as discussed above the site is ineligible for listing.

The proposed project would include the construction of an off-site sanitary sewer force main along Olympic Valley Road, as well as a wet well and sanitary sewer lift station north of the project site, near the project driveway, within the Olympic Valley Road right-of-way. While the archeological field reconnaissance did not include a survey of the off-site improvement areas, the off-site areas have been previously disturbed during construction of Olympic Valley Road, Squaw Valley Community Park, and the Tower of Nations. Therefore, the potential for known cultural resources to be disturbed during construction of the off-site improvements is low.

Nonetheless, given the project site's location within the center of Washoe territory, ground disturbing activities may have the potential to uncover buried cultural deposits, including human bone. As a result, during construction and excavation activities, unknown archaeological resources may be uncovered, resulting in a ***potentially significant*** impact.

Mitigation Measure(s)
Implementation of the following mitigation measures would reduce the above potential impact to a *less-than-significant* level.

V-1. The Improvement Plans shall include a note stating that if potential Tribal Cultural Resources (TCRs), archaeological resources, other cultural resources, articulated, or disarticulated human remains are discovered during construction activities, all work shall cease within 100 feet of the find (based on the apparent distribution of cultural resources). Examples of potential cultural materials include midden soil, artifacts, chipped stone, exotic (non-native) rock, or unusual amounts of baked clay, shell, or bone.

A qualified cultural resources specialist and Native American Representative from the traditionally and culturally affiliated Native American Tribe(s) will assess the significance of the find and make recommendations for further evaluation and treatment as necessary. Culturally appropriate treatment that preserves or restores the cultural character and integrity of a Tribal Cultural Resource may be, but is not limited to, processing materials for reburial, minimizing handling of cultural objects, leaving objects in place within the landscape, construction monitoring of further construction activities by Tribal representatives of the traditionally and culturally affiliated Native American Tribe, and/or returning objects to a location within the project area where they will not be subject to future impacts.

Following a review of the find and consultation with appropriate experts, the authority to proceed may be accompanied by the addition of development requirements which provide for protection of the site and/or additional measures necessary to address the unique or sensitive nature of the site. The treatment recommendations made by the cultural resource specialist and the Native American Representative will be documented in the project record. Any recommendations made by these experts that are not implemented, must be documented and explained in the project record. Work in the area(s) of the cultural resource discovery may only proceed after authorization is granted by the Placer County Community Development Resource Agency following coordination with cultural resources experts and tribal representatives as appropriate.

V-2. If human remains are encountered, these remains shall be treated in accordance with Health and Safety Code Section 7050.5, PRC Section 5097.98, and CEQA Guidelines Section 15064.5(e).

The Improvement Plans shall include a note stating that if any archaeological artifacts, exotic rock (non-native), or unusual amounts of shell or bone are uncovered during any on-site construction activities, all work must stop immediately in the area and a qualified archaeologist retained to evaluate the deposit. The Placer County Planning Services Division and Division of Museums must also be contacted for review of the archaeological find(s).

If articulated or disarticulated human remains are discovered during construction activities, the County Coroner shall be contacted immediately. Upon determination by the County Coroner that the find is Native American in origin, the County Coroner will notify the Native American Heritage Commission to assign the Most Likely Descendant(s) who will work with the project proponent to define appropriate treatment and disposition of the burials.

Following a review of the find and consultation with appropriate experts, the authority to proceed may be accompanied by the addition of development requirements which provide for protection of the site and/or additional measures necessary to address the unique or sensitive nature of the site. The treatment recommendations made by the cultural resource specialist and the Native American Representative will be documented in the project record. Any recommendations made by these experts that are not implemented, must be documented and explained in the project record. Work in the area(s) of the cultural resource discovery may only proceed after authorization is granted by the Placer County Community Development Resource Agency following coordination with cultural resources experts and tribal representatives as appropriate.

Discussion Item V-4, 5:
The Cultural Resource Inventory and Evaluation prepared for the project site did not identify any known historic religious or sacred uses associated with the project site. As noted above, a search of the NAHC Sacred Lands File did not identify any known sacred sites within the project area. As such, a ***less-than-significant*** impact would occur. No additional mitigation measures are required.

VI. ENERGY – Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
1. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation? (PLN)			**X**	
2. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency? (PLN)	**X**			

Discussion Item VI-1:
The main forms of available energy supply are electricity, natural gas, and oil. Energy would be used to construct the proposed project, and once constructed, energy would be used for the lifetime of the proposed museum and cultural center. Construction of the proposed project is required to comply with the California Green Building Standards Code (CBSC, also known as the CALGreen Code) and the 2019 Building Energy Efficiency Standards (which is a portion

of the CBSC). All construction equipment and operation thereof would be regulated pursuant to the California Air Resources Board (CARB) In-Use Off-Road Diesel Vehicle Regulation. The purpose of the CBSC is to improve public health, safety, and general welfare by enhancing the design and construction of buildings through the use of building concepts having a reduced negative impact or positive environmental impact and encouraging sustainable construction practices. Building Energy Efficiency Standards achieve energy reductions through requiring high-efficacy lighting, improved water heating system efficiency, and high-performance attics and walls. CARB standards for construction equipment include measures to reduce emissions from vehicles by subjecting fleet owners to retrofit or accelerated replacement/repower requirements and imposing idling limitations on owners, operators, renters, or lessees of off-road diesel vehicles. The proposed project construction would also be required to comply with all applicable PCAPCD rules and regulations related to energy efficiency, which would help to further reduce energy use associated with the proposed project.

Energy use associated with operation of the proposed project would be typical of museum/community center uses, requiring electricity and propane for interior and exterior building lighting, heating, ventilation, and air conditioning, electronic equipment, and security systems. In addition, maintenance activities during operations, such as landscape maintenance would involve the use of electric or gas-powered equipment. While the proposed project would introduce new operational energy demands to the proposed project area, this demand does not necessarily mean that the proposed project would have an impact related to energy sources. The proposed project would result in an impact if the project would result in an inefficient use or waste of energy. The proposed project is required to comply with all applicable standards and regulations regarding energy conservation and fuel efficiency, including the CBSC, CARB, and PCAPCD standards noted above, which would ensure that the future uses would be designed to be energy efficient to the maximum extent practicable.

Accordingly, the proposed project would not be considered to result in a wasteful, inefficient, or unnecessary use of energy, and impacts related to construction and operational energy would be considered ***less than significant***. No mitigation measures are required.

Discussion Item VI-2:
The Placer County Sustainability Plan (PCSP), adopted by the Placer County Board of Supervisors on January 28, 2020, includes goals and policies for energy efficiency. Further analysis is required in order to ensure that the proposed project would be consistent with such goals and policies. Thus, a ***potentially significant*** impact could occur.

Further analysis of this potential impact will be discussed in the Air Quality, Greenhouse Gas Emissions, and Energy chapter of the SNOW Sports Museum and Community Cultural Center EIR.

VII. GEOLOGY & SOILS – Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
1. Result in substantial soil erosion or the loss of topsoil? (ESD)		**X**		
2. 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? (ESD)		**X**		
3. Be located on expansive soils, as defined in Section 1802.3.2 of the California Building Code (2007), creating substantial direct or indirect risks to life or property? (ESD)		**X**		
4. Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water? (EH)				**X**
5. Directly or indirectly destroy a unique paleontological resource or unique geologic or physical feature? (PLN)		**X**		

6. Result in significant disruptions, displacements, compaction or overcrowding of the soil? (ESD)		**X**		
7. Result in substantial change in topography or ground surface relief features? (ESD)		**X**		
8. Result in exposure of people or property to geologic and geomorphological (i.e. Avalanches) hazards such as earthquakes, landslides, mudslides, seismic-related ground failure, or similar hazards? (PLN, ESD)		**X**		

Discussion Item VII-1:
Erosion refers to the removal of soil from exposed bedrock surfaces by wind or water. Although naturally occurring, erosion is often accelerated by human activities that disturb soil and vegetation. The soils present on the project site are considered moderately susceptible to erosion where drainage concentrations occur. Buildout of the proposed project would require grading, excavation, and other construction-related activities, which, during the early stages of construction, could cause topsoil to be exposed, potentially resulting in wind erosion or an accelerated rate of erosion during storm events. Upon development of the site with buildings and structures, the amount of exposed soil that may be lost due to wind or stormwater runoff would be minimized.

It should be noted that Section 303(d) of the federal CWA requires states to identify surface water bodies that do not meet water quality standards. Such waters are placed on the CWA Section 303(d) list of impaired water bodies. The List identifies the pollutant(s) causing impairment and establishes a schedule for developing a control plan. The Truckee River is identified on the CWA Section 303(d) list, as the surface water body does not currently meet the Basin Plan's[11] water quality objective for sediment. Listed water body-pollutant combinations are generally addressed through pollutant control plans called Total Maximum Daily Loads (TMDLs). The TMDL for the Truckee River was adopted in 2008, and establishes a target 20 percent annual sediment load reduction through the implementation of management practices to control erosion and limit sedimentation.

Improvement Plans provided to the County prior to authorization of construction would conform to provisions of the County Grading Ordinance (Article 15.48 of the Placer County Code) and the Stormwater Quality Ordinance (Article 8.38 of the Placer County Code) that are in effect at the time of submittal. Because the proposed project would require construction activities that would result in a land disturbance of less than one acre (approximately 0.68-acre), the project applicant would not be required by the State to prepare a Stormwater Pollution Prevention Plan (SWPPP). However, the proposed project would be required to comply with the requirements of the Placer County Storm Water Management Manual (PCSWMM) and the Regional Water Quality Control Board (RWQCB). In addition, the proposed project would also comply with all the requirements from the California Stormwater Quality Association Stormwater Best Management Practice Handbook for New Development and Redevelopment. As such, temporary construction-phase BMPs would be used for the full duration of construction and would include fiber rolls, tree protection, construction entrance treatment, designated staging/storage areas, construction fencing, dust control measures and other miscellaneous provisions, as necessary.

Although topsoil exposure would be temporary during early construction activities and would significantly decrease once development of buildings and structures occurs, after grading and leveling and prior to overlaying the ground surface with structures, the potential exists for erosion to occur. Therefore, short-term, construction-related impacts associated with soil erosion and the loss of topsoil would be considered ***potentially significant***.

Mitigation Measure(s)
Implementation of the following mitigation measures would reduce the above potential impact to a *less-than-significant* level.

VII-1 The applicant shall prepare and submit Improvement Plans, specifications and cost estimates (per the requirements of Section II of the Land Development Manual (LDM) that are in effect at the time of submittal) to the Engineering and Surveying Division (ESD) for review and approval. The plans shall show all physical improvements as required by the conditions for the project as well as pertinent topographical features both on and off site. All existing and proposed utilities and easements, on site and adjacent to the project, which may be affected by planned construction, shall be shown on the plans. All landscaping and irrigation facilities within the public right-of-way (or public easements), or landscaping within sight distance areas at intersections, shall be included in the Improvement Plans. The applicant shall pay plan check and inspection

[11] The California Regional Water Quality Control Boards adopt and implement Water Quality Control Plans (Basin Plans), which recognize regional differences in natural water quality, actual and potential beneficial uses, and water quality problems associated with human activities.

fees and, if applicable, Placer County Fire Department improvement plan review and inspection fees with the 1st Improvement Plan submittal. (NOTE: Prior to plan approval, all applicable recording and reproduction costs shall be paid). The cost of the above-noted landscape and irrigation facilities shall be included in the estimates used to determine these fees. It is the applicant's responsibility to obtain all required agency signatures on the plans and to secure department approvals. If the Design/Site Review process and/or Development Review Committee (DRC) review is required as a condition of approval for the project, said review process shall be completed prior to submittal of Improvement Plans.

Conceptual landscape plans submitted prior to project approval may require modification during the Improvement Plan process to resolve issues of drainage and traffic safety.

Any Building Permits associated with this project shall not be issued until, at a minimum, the Improvement Plans are approved by the Engineering and Surveying Division.

Prior to the County's final acceptance of the project's improvements, submit to the Engineering and Surveying Division one copy of the Record Drawings in digital format (on compact disc or other acceptable media) along with one blackline hardcopy (black print on bond paper) and one PDF copy. The digital format is to allow integration with Placer County's Geographic Information System (GIS). The final approved blackline hardcopy Record Drawings will be the official document of record.

VII-2 *The Improvement Plans shall show all proposed grading, drainage improvements, vegetation and tree removal and all work shall conform to provisions of the County Grading Ordinance (Ref. Article 15.48, Placer County Code) and Stormwater Quality Ordinance (Ref. Article 8.28, Placer County Code) that are in effect at the time of submittal. No grading, clearing, or tree disturbance shall occur until the Improvement Plans are approved and all temporary construction fencing has been installed and inspected by a member of the Development Review Committee (DRC). All cut/fill slopes shall be at a maximum of 2:1 (horizontal: vertical) unless a soils report supports a steeper slope and the Engineering and Surveying Division (ESD) concurs with said recommendation.*

The applicant shall revegetate all disturbed areas. Revegetation, undertaken from April 1 to October 1, shall include regular watering to ensure adequate growth. A winterization plan shall be provided with project Improvement Plans. It is the applicant's responsibility to ensure proper installation and maintenance of erosion control/winterization before, during, and after project construction. Soil stockpiling or borrow areas, shall have proper erosion control measures applied for the duration of the construction as specified in the Improvement Plans. Provide for erosion control where roadside drainage is off of the pavement, to the satisfaction of the Engineering and Surveying Division (ESD).

The applicant shall submit to the ESD a letter of credit or cash deposit in the amount of 110 percent of an approved engineer's estimate using the County's current Plan Check and Inspection Fee Spreadsheet for winterization and permanent erosion control work prior to Improvement Plan approval to guarantee protection against erosion and improper grading practices. For an improvement plan with a calculated security that exceeds $100,000, a minimum of $100,000 shall be provided as letter of credit or cash security and the remainder can be bonded. One year after the County's acceptance of improvements as complete, if there are no erosion or runoff issues to be corrected, unused portions of said deposit shall be refunded or released, as applicable, to the project applicant or authorized agent.

If, at any time during construction, a field review by County personnel indicates a significant deviation from the proposed grading shown on the Improvement Plans, specifically with regard to slope heights, slope ratios, erosion control, winterization, tree disturbance, and/or pad elevations and configurations, the plans shall be reviewed by the DRC/ESD for a determination of substantial conformance to the project approvals prior to any further work proceeding. Failure of the DRC/ESD to make a determination of substantial conformance may serve as grounds for the revocation/modification of the project approval by the appropriate hearing body.

Discussion Items VII-2, 3, 8:

According to the Placer County General Plan, Placer County lies within a seismically active area of the western United States, but beyond the influence of the highly active faults found along California's coast. While the western portion of the County is generally characterized by low seismicity, the eastern portion of the County in the vicinity of Lake Tahoe, in which the proposed project is located, has rather high seismicity.[12] According to the Geotechnical

[12] Placer County. *Countywide General Plan EIR* [pg. 9-1]. July 1994.

Engineering Report Update Letter prepared by NV5 for the proposed project,[13] an unnamed fault has been mapped (Geologic Map of the North Lake Tahoe-Donner Pass Region prepared by Sylvester et al [2012]) through, or very near to, the eastern portion of the project site in a general north-northwest direction. The inferred fault is a possible extension or splay off of the Tahoe-Sierra Nevada frontal fault (TSNFF), which has been mapped as connecting with the West Tahoe-Dollar Point Fault. The authors indicate that the fault is approximately located. The map shows the fault as relatively short and discontinuous. Studies completed by others in the vicinity do not show a fault trending through the site, and LiDAR imagery covering the site and areas to the north and south does not reveal positive evidence that an active fault crosses the site. The imagery shows clear glacial moraine morphology at the location of the previously mapped fault immediately north of the site; however, prominent lineaments do not extend north or south of the site. Due to the discontinuous nature of the fault mapped through the site, and lack of active fault features viewed on LiDAR imagery, NV5 concluded that the fault is not active and is likely a glacial moraine feature.

As such, the project site is not underlain by any active faults and is not located within an Alquist-Priolo Fault Study Zone. Notwithstanding, strong ground shaking could still occur at the site due to active faults in the region such as the Dog Valley Fault, the Polaris Fault, the West Tahoe-Dollar Point Fault Zone, the Tahoe Sierra Frontal Fault Zone, and the West and North Tahoe Faults. However, the design of project structures would be required to adhere to the provisions of the 2019 CBSC. The 2019 CBSC contains provisions to safeguard against major structural failures or loss of life caused by earthquakes or other geologic hazards.

According to the Natural Resources Conservation Service (NRCS) web soil survey, two soil types are mapped across the site and are designated as Tallac very gravelly sandy loam, 2 to 30 percent slopes, and Tallac very gravelly sandy loam, 30 to 50 percent slopes. The Tallac soil type typically forms on glacial moraines, is moderately well drained, has an average depth to groundwater of about 42 to 60 inches, and has a moderately low to moderately high permeability rate.

Soil liquefaction results from loss of strength during cyclic loading, such as loading imposed by earthquakes. Soils most susceptible to liquefaction are clean, loose, saturated, uniformly graded, fine-grained sands. According to the Geotechnical Engineering Report prepared for the Squaw Valley Community Park Project,[14] as well as the Geotechnical Engineering Report Update Letter prepared for the proposed project, the soils encountered within the project site contained varying gravel and cobble content. In addition, saturated soil conditions were not encountered at the project site. Thus, the potential for liquefaction at the project site is low.

Lateral spreading is horizontal/lateral ground movement of relatively flat-lying soil deposits towards a free face such as an excavation, channel, or open body of water; typically, lateral spreading is associated with liquefaction of one or more subsurface layers near the bottom of the exposed slope. The project site does not contain any open faces that would be considered susceptible to lateral spreading. In addition, as noted above, the site is not anticipated to be subject to substantial liquefaction hazards. Therefore, the potential for lateral spreading to pose a risk to the proposed development is low.

When subsurface earth materials move, the movement can cause the gradual settling or sudden sinking of ground. The phenomenon of settling or sinking ground is referred to as subsidence, or settlement. According to the Geotechnical Engineering Report Update Letter prepared for the proposed project, approximately 10 feet of existing fill is located within the mounds at the project site. Due to the potential for excessive settlement, NV5 determined that the existing fill would not be suitable for direct support of proposed structures. As such, without the removal of existing fill prior to the development of the proposed project, the potential for subsidence to pose a risk to the proposed development is high.

Expansive soils are soils which undergo significant volume change with changes in moisture content. Specifically, such soils shrink and harden when dried and expand and soften when wetted, potentially resulting in damage to building foundations. Soils with a linear extensibility rating of between three and six percent and a clay content of 25 to 35 percent are characterized by a moderate shrink-swell class (i.e., moderate expansive potential). Soils with a linear extensibility rating of between six and nine percent with a clay content of 35 to 45 percent are characterized by a high shrink-swell class. According to the NRCS web soil survey, the on-site soils have a linear extensibility rating of 1.5 percent, and a clay content of 6.0 percent.[15] Therefore, the project site does not contain soils that are considered to be highly expansive.

[13] NV5. Geotechnical Engineering Report Update Letter. February 4, 2022.

[14] Holdridge & Kull. *Geotechnical Engineering Report for Proposed Squaw Valley Park State Route 89 and Olympic Valley Road Placer County, California.* November 6, 2000.

[15] U.S. Department of Agriculture Natural Resource Conservation Service. *Web Soil Survey.* Available at: https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx. Accessed December 2021.

Seismically-induced landslides are triggered by earthquake ground shaking. The risk of landslide hazard is greatest in areas with steep, unstable slopes. The project site is gently to moderately sloping to the north. Therefore, steep, unstable slopes are not present within the project site, and the Geotechnical Engineering Report Update Letter concluded that the potential for slope instability within the project site and immediately surrounding area is low.

Based on the above, the proposed project would not likely be subject to issues associated with fault rupture, liquefaction, lateral spreading, liquefaction, expansive soils, landslides, or collapse. However, due to the existing fill on-site, potential for subsidence to pose a risk to the proposed development is high. As such, implementation of the recommendations included in the original Geotechnical Engineering Report as well as the Geotechnical Engineering Report Update Letter would be required in order to ensure adequate support of the proposed project. Such recommendations include, but are not limited to, native soil preparation, the removal of existing fill, and erosion controls. Without mitigation, the proposed project could result in a ***potentially significant*** impact.

Mitigation Measure(s)
Implementation of the following mitigation measure would reduce the above potential impact to a *less-than-significant* level.

VII-3 The Improvement Plan submittal shall include a final geotechnical engineering report produced by a California Registered Civil Engineer or Geotechnical Engineer for Engineering and Surveying Division review and approval. The report shall address and make recommendations on the following:

A) Road, pavement, and parking area design;
B) Structural foundations, including retaining wall design (if applicable);
C) Grading practices;
D) Erosion/winterization;
E) Special problems discovered on-site, (i.e., groundwater, expansive/unstable soils, etc.)
F) Slope stability

Once approved by the Engineering and Surveying Division (ESD), two copies of the final report shall be provided to the ESD and one copy to the Building Services Division for its use. It is the responsibility of the developer to provide for engineering inspection and certification that earthwork has been performed in conformity with recommendations contained in the report.

If the geotechnical engineering report indicates the presence of critically expansive or other soil problems that, if not corrected, could lead to structural defects, a certification of completion of the requirements of the soils report shall be required , prior to issuance of Building Permits. This shall be so noted on the Improvement Plans.

Discussion Item VII-4:
Sewer infrastructure currently exists within the project vicinity, and the proposed project would connect to the sewer system within Olympic Valley Road. Thus, the construction or operation of septic tanks or other alternative wastewater disposal systems is not included as part of the project. Therefore, ***no impact*** regarding the capability of soil to adequately support the use of septic tanks or alternative wastewater disposal systems would occur.

Discussion Item VII-5:
According to the Placer County General Plan, paleontological resources are associated with sedimentary, metasedimentary, and alluvial geology which is found in mostly the western half of the County, outside of the project area. Additionally, paleontological resources have not been discovered on or in the vicinity of the project site. Thus, implementation of the proposed project would be considered to have a low potential to uncover or damage fossils or cause significant impacts to any resource that currently qualifies as a significant paleontological resource. However, the General Plan also states that inventories or other information sources that characterize the extent, sensitivity, or significance of paleontological resources in Placer County do not exist. Therefore, although the project site does not contain any known paleontological resources or unique geologic features, the potential exists for paleontological resources to be found within the project site. Thus, a unique paleontological resource or site could be unearthed during project construction activities, and a ***potentially significant*** impact could occur.

Mitigation Measure(s)
Implementation of the following mitigation measure would reduce the above potential impact to a *less-than-significant* level.

VII-4 Should paleontological resources be discovered during ground disturbing activities, work shall be halted in the area within 50 feet of the find. The property owner shall then provide written evidence to the Planning Services Division that a qualified paleontologist has been retained by the applicant to observe grading activities and salvage fossils as necessary. The paleontologist shall establish procedures for paleontological resource surveillance and shall establish, in cooperation with the property owner, procedures for temporarily halting or redirecting work to permit sampling, identification, and evaluation of fossils. If major paleontological resources are discovered, which require temporary halting or redirecting of grading, the paleontologist shall report such findings to the project developer, and to the Placer County Department of Museums and Planning Services Division.

The paleontologist shall determine appropriate actions, in cooperation with the project developer, which ensure proper exploration and/or salvage. Excavated finds shall be offered to a State-designated repository such as Museum of Paleontology, U.C. Berkeley, the California Academy of Sciences, or any other State-designated repository. If a designated repository declines to add the find to its collection, the finds shall be offered to the Placer County Department of Museums for purposes of public education and interpretive displays.

These actions, as well as final mitigation and disposition of the resources shall be subject to approval by the Department of Museums. The paleontologist shall submit a follow-up report to the Department of Museums and Planning Services Division which shall include the period of inspection, an analysis of the fossils found, and present repository of fossils.

Discussion Items VII-6, 7:
Within the project site, the proposed project would include removal of existing vegetation, grading for building pads, and other associated project improvements. As discussed previously, portions of the site have been previously disturbed as a result of construction associated with the Squaw Valley Community Park. Nonetheless, the proposed project would include site preparation, grading, paving, utility placement, and various other construction activities which would disrupt on-site soils. As such, soils on the project site would be reworked as necessary to support the development, potentially resulting in disruptions, displacements, compaction, or overcrowding of the soils. The proposed project would include modifications to the project site that would alter the existing topography and ground surface relief features. Thus, the proposed project could result in significant disruptions, displacements, compaction or overcrowding of on-site soils, and/or substantial change in topography or ground surface relief features, and a ***potentially significant*** impact could occur.

Mitigation Measure(s)
Implementation of the following mitigation measures would reduce the above potential impact to a *less-than-significant* level.

VII-5 Implement Mitigation Measures VII-1, VII-2, and VII-3.

VIII. GREENHOUSE GAS EMISSIONS – Would the project**:**

Environmental Issue	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
1. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? (PLN, Air Quality)	**X**			
2. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases? (PLN, Air Quality)	**X**			

Discussion Items VIII-1, 2:
Emissions of greenhouse gases (GHGs) contributing to global climate change are attributable in large part to human activities associated with the industrial/manufacturing, utility, transportation, residential, and agricultural sectors. Therefore, the cumulative global emissions of GHGs contributing to global climate change can be attributed to every nation, region, and city, and virtually every individual on earth. An individual project's GHG emissions are at a micro-scale level relative to global emissions and effects to global climate change; however, an individual project could

result in a cumulatively considerable incremental contribution to a significant cumulative macro-scale impact. As such, impacts related to emissions of GHG are inherently considered cumulative impacts.

Recognizing the global scale of climate change, California has enacted several pieces of legislation in an attempt to address GHG emissions. Specifically, AB 32 and Senate Bill (SB) 32 have established statewide GHG emissions reduction targets. Accordingly, the California Air Resources Board (CARB) has prepared the Climate Change Scoping Plan for California (Scoping Plan), which was updated in 2017. The Scoping Plan provides the outline for actions to reduce California's GHG emissions and achieve the emissions reductions targets required by AB 32 and SB 32. In concert with statewide efforts to reduce GHG emissions, air districts, counties, and local jurisdictions throughout the State have implemented their own policies and plans to achieve emissions reductions in line with the Scoping Plan and emissions reductions targets, including AB 32 and SB 32.

Estimated GHG emissions attributable to future project development would be primarily associated with increases of carbon dioxide (CO_2) and, to a lesser extent, other GHG pollutants, such as methane (CH_4) and nitrous oxide (N_2O) associated with area sources, mobile sources or vehicles, utilities (electricity and natural gas), water usage, wastewater generation, and the generation of solid waste. Buildout of the proposed project would contribute to increases of GHG emissions that are associated with global climate change during construction and operations. As such, the proposed project would generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment, or conflict with applicable plans, policies, and regulations for the purpose of reducing the emissions of GHGs. Therefore, impacts related to GHG emissions and global climate change could be cumulatively considerable and considered ***potentially significant***.

Further analysis of these potential impacts will be discussed in the Air Quality, Greenhouse Gas Emissions, and Energy chapter of the SNOW Sports Museum and Community Cultural Center EIR.

IX. HAZARDS & HAZARDOUS MATERIALS – Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
1. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? (EH)			**X**	
2. 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? (EH)		**X**		
3. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? (AQ)			**X**	
4. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment? (EH)		**X**		
5. 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 or excessive noise for people residing or working in the project area? (PLN)				**X**
6. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? (PLN)	**X**			
7. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires? (PLN)	**X**			

The following discussions are primarily based on a Phase I Environmental Site Assessment (ESA) prepared for the proposed project by NV5.[16]

Discussion Item IX-1:
A significant hazard to the public or the environment could result from the routine transport, use, or disposal of hazardous materials. Projects that involve the routine transport, use, or disposal of hazardous materials are typically industrial in nature. The proposed project would not be industrial in nature. Operations of the proposed project would not include any activities that would involve the routine transport, use, disposal, or generation of substantial amounts of hazardous materials. During operations, hazardous material use would be limited to landscaping products such as fertilizer, pesticides, as well as typical commercial and maintenance products (cleaning agents, degreasers, paints, batteries, and motor oil). Proper handling and usage of such materials in accordance with label instructions would ensure that adverse impacts to human health or the environment would not result. Thus, operations of the proposed project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.

Based on the above, the proposed project would not create a significant hazard to the public or the environment through the routine handling, transport, use, or disposal of hazardous materials. Thus, a ***less-than-significant*** impact would occur. No mitigation measures are required.

Discussion Item IX-2, 4:
The project site is located between the Squaw Valley Community Park driveway entrance to the parking lot from Olympic Valley Road and the pickleball courts. The site currently consists of undeveloped areas of vegetation, predominantly montane coniferous forest, which largely consist of white fir and pine trees native to the area, as well as an existing parking lot. The project site does not contain existing habitable structures, and, thus, asbestos containing materials (ACMs) or lead-based paints do not occur on-site. Features such as septic systems, wells, above-ground storage tanks (ASTs), underground storage tanks (USTs), or other features related to uses of environmental concern were not identified on the site according to the Phase I ESA. In addition, given that the site has not been subject to previous development, the presence of such features on the site is unlikely. Furthermore, the project site is not included on any lists of hazardous material sites compiled pursuant to Government Code Section 65962.5. The Phase I ESA did not identify any historic recognized environmental concerns.

As part of the regulatory database review conducted for the Phase I ESA, six facilities that store and generate hazardous materials and waste and/or stored maintained USTs were identified within an eighth-mile of the project area, with the nearest being the Liberty Utilities Facility, located approximately 275 feet north of the site. Based on the regulatory database review, several violations were reported regarding administrative issues at the facilities such as improper labeling of hazardous wastes; failure to conduct regular tank inspections; failure to post evacuation routes, hazardous waste and material locations, administrative/documentation procedures regarding the spill plan and labeling of hazardous wastes; failure to establish and electronically submit adequate employee training programs; and failure to provide a revised hazardous materials inventory. However, due to the administrative nature of the reported violations, the Phase I ESA concluded that the reported violations do not pose a significant environmental threat to the project area. In addition, the administrative issues have since been returned to compliance. It should be noted that during an inspection of the Liberty Utilities Facility in August 2019 a leaking transformer was observed and required immediate repair. Nonetheless, due to the relatively immobile nature of transformer fluid, NV5 determined that any residual fluid does not pose a significant environmental threat to the project area. Thus, the six facilities identified within an eighth-mile of the project area do not pose a significant environmental risk that could be exacerbated by the proposed project.

According to the Phase I ESA, an earthen ramp is located near the center of the project area and appears to contain up to 15 feet of existing fill. A concrete retaining wall is located along the eastern base of the ramp, and a metal wall which appears to be a dump truck tailgate is located along the western base of the ramp. The ramp and walls are assumed to be remnants of a former gravel quarry that was mined for resources to construct buildings and roadways for the 1960 Winter Olympics. Evidence of contamination was not observed; however, the possibility exists that the fill may contain contamination related to former site uses.

In addition, radon gas is sometimes present within Placer County in the subsurface at concentrations that may present a risk related to indoor air quality. According to a Radon Gas Potential Letter prepared by NV5 for the proposed project, the California Geological Survey (CGS) Special report 211, Radon Potential in the Lake Tahoe Area, indicated that 26 of 98 tests for radon in indoor air in the project vicinity exceeded the recommended action level

[16] NV5. *Phase I Environmental Site Assessment, Squaw Valley Museum.* September 17, 2019.

(RAL) of 4.0 picocuries per liter (pCi/L).[17] The CGS study also indicated that glacial till and outwash sediments have a moderate radon gas potential. Based on the subsurface conditions of the project site, NV5 concluded that radon gas is likely present in the subsurface soil of the site at concentrations that may result in accumulation of radon gas into structures. The proposed building would be constructed in accordance with modern standards and codes, which would substantially reduce the potential for radon gas to enter and accumulate into the structure. In addition, the proposed structure would contain a ventilation system, which may exchange enough air on a daily basis to prevent the concentration of radon gas in indoor air. Furthermore, the Geotechnical Engineering Report Update Letter prepared by NV5 for the proposed project,[18] includes recommendations such as waterproofing/sealing building foundations, and under slab drains to help reduce moisture migration through foundation floors, which would greatly reduce the potential for radon gas entering into the proposed structure. As discussed in Section VII, Geology and Soils, of this Initial Study, Mitigation Measure VII-4 would require the preparation of a final geotechnical engineering report, and the County would ensure all geotechnical recommendations are implemented as part of the proposed project. Therefore, the proposed project would not result in hazards associated with radon gas accumulation. It is also noted that the effects of radon gas on future indoor visitors and employees of the proposed project is beyond the scope of CEQA, as it pertains to the environment's effect on the project. Pursuant to the *California Building Industry Association v. Bay Area Air Quality Management District* (2015) 62 Cal.4th 369 (CBIA), the California Supreme Court held that "agencies subject to CEQA generally are not required to analyze the impact of existing environmental conditions on a project's future users or residents. But when a proposed project risks exacerbating those environmental hazards or conditions that already exist, an agency must analyze the potential impact of such hazards on future residents or users. In those specific instances, it is the project's impact on the environment – and not the environment's impact on the project – that compels an evaluation of how future residents or users could be affected by exacerbated conditions." (Id. at pp. 377-378.).

Construction activities associated with implementation of the proposed project, would involve the use of heavy equipment, which would contain fuels and oils, and various other products such as concrete, paints, and adhesives. The project contractor is required to comply with all California Health and Safety Codes and local County ordinances regulating the handling, storage, and transportation of hazardous and toxic materials. Pursuant to California Health and Safety Code Section 25510(a), except as provided in subdivision (b),[19] the handler or an employee, authorized representative, agent, or designee of a handler, shall, upon discovery, immediately report any release or threatened release of a hazardous material to the unified program agency (in the case of the proposed project, the Placer County Environmental Health Department [PCEHD]) in accordance with the regulations adopted pursuant to Section 25510(a). The handler or an employee, authorized representative, agent, or designee of the handler shall provide all State, city, or county fire or public health or safety personnel and emergency response personnel with access to the handler's facilities. In the case of the proposed project, the contractors are required to notify the PCEHD in the event of an accidental release of a hazardous material, who would then monitor the conditions and recommend appropriate remediation measures.

Based on the above, the proposed project is not located on a site included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. However, the project site contains existing fill which could have the potential to 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 if the fill contains contamination related to former site uses. Thus, a ***potentially significant*** impact could occur.

Mitigation Measure(s)

Implementation of the following mitigation measure would reduce the above potential impact to a *less-than-significant* level.

IX-1 If indicators of apparent soil contamination (soil staining, odors, debris fill material, etc.) are encountered at the project site, the impacted area(s) should be isolated from surrounding, non-impacted areas. The project environmental professional shall obtain samples of the potentially impacted soil for analysis of the contaminants of concern and comparison with applicable regulatory residential screening levels (i.e., Environmental Screening Levels, California Human Health Screening Levels, Regional Screening Levels, etc.). Where the soil contaminant concentrations exceed the applicable regulatory residential screening levels, the impacted soil shall be excavated and disposed of offsite at a licensed landfill facility to the satisfaction of the Placer County Environmental Health Department.

[17] NV5. Radon Gas Potential Letter. February 4, 2022.

[18] NV5. Geotechnical Engineering Report Update Letter. February 4, 2022.

[19] Subdivision (a) does not apply to a person engaged in the transportation of a hazardous material on a highway that is subject to, and in compliance with, the requirements of Sections 2453 and 23112.5 of the Vehicle Code.

Discussion Item IX-3:
The project site is located approximately 0.2-mile from the Lake Tahoe Preparatory School. Therefore, the project site is located within one-quarter mile of a school. However, projects that emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste are typically industrial in nature. The proposed project would not be industrial in nature. Operations of the proposed museum and community center would not include any activities that would involve the routine emission or handling of substantial amounts of hazardous or acutely hazardous materials. During operations, hazardous material use would be limited to landscaping products such as fertilizer, pesticides, as well as typical commercial and maintenance products (cleaning agents, degreasers, paints, batteries, and motor oil). Proper handling and usage of such materials in accordance with label instructions would ensure that adverse impacts to human health or the environment would not result. Thus, operations of the proposed project would not create a significant hazard to the public or the environment through hazardous emissions or the handling of hazardous or acutely hazardous materials.

Additionally, construction activities associated with implementation of the proposed project would involve the use of heavy equipment, which would contain fuels and oils, and various other products such as concrete, paints, and adhesives. However, as discussed above, the project contractor is required to comply with all California Health and Safety Codes and local County ordinances regulating the handling, storage, and transportation of hazardous and toxic materials.

Therefore, the project would have a ***less-than-significant*** impact related to hazardous emissions or the handling of hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. No mitigation measures are required.

Discussion Item IX-5:
The nearest airport to the project site is the Tahoe-Truckee Airport, located approximately 12 miles northeast of the site. As such, the project site is not covered by an airport land use plan and is not located within two miles of a private airstrip, public airport, or public use airport. Therefore, the proposed project would not result in a safety hazard associated with an airport or airstrip, and ***no impact*** would occur.

Discussion Item IX-6:
Vehicle access to the proposed project would be provided by one driveway from Olympic Valley Road, which currently serves as the entrance to Squaw Valley Community Park and connects to the existing surface parking lot. The entrance provides full access to the project site. The existing parking lot and driveway are consistent with all applicable County roadway engineering standards, and do not include sharp curves or create dangerous intersections. However, Placer County has adopted various plans related to emergency response and evacuation including the Placer County Local Hazard Mitigation Plan, Squaw Valley Wildland Fire Evacuation Plan, and Avalanche Mitigation Plan. Further analysis is required in order to ensure that the proposed project would be consistent with such goals and policies. Thus, a ***potentially significant*** impact could occur.

Further analysis of this potential impact will be discussed in the Wildfire chapter of the SNOW Sports Museum and Community Cultural Center EIR.

Discussion Item IX-7:
According to the California Department of Forestry and Fire Protection (CAL FIRE) Fire and Resource Assessment Program, the project site is located within a State Responsibility Area (SRA), and is just outside the boundaries of the nearest Very High Fire Hazard Severity Zone.[20] Given the fire risk present within the project area, further analysis is required to ensure that the proposed project would not result in the exposure of people or structures to a significant risk of loss, injury, or death involving wildland fires, and a ***potentially significant*** impact could occur.

Further analysis of this potential impact will be discussed in the Wildfire chapter of the SNOW Sports Museum and Community Cultural Center EIR.

[20] California Department of Forestry and Fire Protection. *FHSZ Viewer*. Available at: https://egis.fire.ca.gov/FHSZ/. Accessed October 2021.

X. HYDROLOGY & WATER QUALITY – Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
1. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade ground water quality? (EH)			**X**	
2. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin? (EH)			**X**	
3. 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: a) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite; b) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems? (ESD)		**X**		
4. Create or contribute runoff water which would include substantial additional sources of polluted runoff or otherwise substantially degrade surface water quality either during construction or in the post-construction condition? (ESD)		**X**		
5. Place housing or improvements within a 100-year flood hazard area either as mapped on a federal Flood Hazard boundary or Flood Insurance Rate Map or other flood hazard delineation map which would: a) impede or redirect flood flows; b) expose people or structures to risk of loss, injury, or death involving flooding; or c) risk release of pollutants due to project inundation? (ESD)				**X**
6. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan? (EH)			**X**	

The following discussions are primarily based on a Preliminary Drainage Report prepared for the proposed project by JK Architecture Engineering.[21]

Discussion Items X-1, 2, 6:
The project site is located within a portion of the Squaw Creek watershed, a tributary to the middle reach of the Truckee River (downstream of Lake Tahoe). The middle Truckee River flows northeast, terminating at Pyramid Lake, Nevada (a remnant of ancient Lake Lahontan). The Squaw Creek watershed, the area of land where precipitation and its runoff is routed to Squaw Creek and its tributaries, extends to the mountain peaks above Olympic Valley to the north, west, and south. The total area of the watershed is 5,146 acres, and the Olympic Valley floor is 701 acres, which is 13 percent of the total watershed area.

According to the Olympic Valley Public Service District (OVPSD) (Previously known as the Squaw Valley Public Service District [SVPSD]), all domestic, municipal, and irrigation water in Olympic Valley is derived from the local groundwater sources of the Olympic Valley Groundwater Basin.[22] Bulletin 118 – Interim Update 2016 defines 517 groundwater basins and subbasins in California. Pursuant to the Sustainable Groundwater Management Act (SGMA),

[21] JK Architecture Engineering. *Preliminary Drainage Report for SNOW Sports Museum.* February 23, 2021.
[22] Squaw Valley Public Services District. *Water Year 2011-2015 Quinquennial Review and Report Olympic Valley, California.* March 2017

the Department of Water Resources (DWR) is required to prioritize the 517 groundwater basins and subbasins as either High, Medium, Low, or Very Low. Prioritization is based on the following considerations:

- The population overlying the basin or subbasin;
- The rate of current and projected growth of the population overlying the basin or subbasin;
- The number of public supply wells that draw from the basin or subbasin;
- The total number of wells that draw from the basin or subbasin;
- The irrigated acreage overlying the basin or subbasin;
- The degree to which persons overlying the basin or subbasin rely on groundwater as their primary source of water;
- Any documented impacts on the groundwater within the basin or subbasin, including overdraft, subsidence, saline intrusion, and other water quality degradation; and
- Any other information determined to be relevant by the department, including adverse impacts on local habitat and local streamflows.

Each basin's priority determines which provisions of California Statewide Groundwater Elevation Monitoring (CASGEM) and SGMA apply. SGMA requires Medium and High priority basins to develop groundwater sustainability agencies (GSAs), develop groundwater sustainability plans (GSPs) and manage groundwater for long-term sustainability. The Olympic Valley Groundwater Basin is considered Very Low Priority according to the DWR, and the DWR has not identified the Basin as either in overdraft or expected to be in overdraft.[23] As a Very Low Priority Basin, the Olympic Valley Groundwater Basin is not subject to a GSP. Apart from the SGMA, the OVPSD prepared a Groundwater Management Plan (GMP) in 2007.[24] The GMP evaluates the Basin and identifies a set of goals and objectives for Basin management, many of which focus on minimizing groundwater depletion and minimizing interference with recharge.

According to the Preliminary Drainage Report prepared for the proposed project, the post-development conditions of the project site would remain similar to the existing conditions of the site. The building, associated walkways and loading access drive would be the only proposed impervious areas, and the remainder of the project site would remain undisturbed and pervious following development of the proposed project. In addition, the proposed on-site drainage system would direct runoff from the building roofs and entryways to the underground infiltration system located throughout the site, and stormwater runoff in excess of design flows would overflow toward the northeast section of the project site to the existing natural infiltration basin, similar to pre-development conditions. Therefore, development of the project site with impervious surfaces would not substantially interfere with the infiltration of stormwater into local groundwater. In addition, the proposed project would not substantially degrade groundwater quality

In terms of groundwater use, as previously mentioned, potable water within Olympic Valley is provided by groundwater wells operated by OVPSD. The Water Supply Assessment (WSA) prepared for the Village at Squaw Valley Specific Plan included a 2040 cumulative water demand evaluation, given that the Village project is anticipated to be fully built out by 2040. The cumulative water demand, accounted for reasonably foreseeable development projects within the Valley, including the development of the proposed museum;[25] and thus, the water demand from buildout of the project site is generally accounted for in the cumulative water demand projections. It is also noteworthy that some of the cumulative growth assumed in the projections for the WSA is speculative at this time (e.g., 104 net hotel rooms/condo bedrooms at the PlumpJack site). As shown in Table 2, the total demand in 2040 is estimated to be 1,254 acre-feet per year (AFY), of which 1,186 AFY would be served from the Basin. The remaining 68 AFY demand would be met by the OVPSD and the Squaw Valley Mutual Water Company (SVMWC) horizontal bedrock wells, which are expected to continue to produce water at the same level as under historical conditions. As demonstrated in the table, the Basin is sufficient to meet the expected demand from the proposed project and other reasonably foreseeable development through 2040 with a margin of safety.[26]

[23] California Department of Water Resources. *SGMA Basin Prioritization Dashboard*. Available at: https://gis.water.ca.gov/app/bp-dashboard/final/. Accessed October 2021.

[24] Squaw Valley Public Service District. *Olympic Valley Groundwater Management Plan*. May 2007 (Revised June 1, 2007).

[25] Farr West Engineering. *Technical Memorandum, Squaw Valley Public Service District Water Demand Projections Through 2040*. June 10, 2015, page 6. The Farr West report is also included as Appendix A to the Village at Squaw Valley Specific Plan Water Supply Assessment.

[26] Placer County and Squaw Valley Public Service District. *Village at Squaw Valley Specific Plan Water Supply Assessment* [pg. 8-1]. July 22, 2015. According to the WSA [pg. 6-7], the criteria used for sufficiency of supply was 65% average saturated thickness. The margin of safety is representative of the fact that over the entire Modeled period the average percent saturation for all the wells in the western wellfield ranged from 77 to 99 percent, well above the 65 percent criteria. This indicates that there is sufficient available groundwater supply capacity to meet the estimated demands in 2040 with a margin of safety above the criteria.

Table 2
Comparison of Year 2040 Projected Supply and Demand

2040 Supply and Demand	Normal	Single-Dry Year[3]	Multiple Dry Years[3]		
			2	3	4
Supply Total[1]	> 1,254	> 1,254	> 1,254	> 1,254	> 1,254
Demand Total[2]	1,254	1,254	1,254	1,254	1,254
Difference	+ [4]	+	+	+	+

Notes: Supply and demand totals are shown in acre-feet. All values rounded to nearest whole number. Totals may reflect the effects of rounding.

1 Supply total at 2040 is based on the results of producing 1,186 acre-feet per year (AFY) from the Olympic Valley Groundwater Basin Model and 68 AFY from horizontal wells outside the Basin, as described in detail in Section 6 of the *Village at Squaw Valley Specific Plan Water Supply Assessment*. The results of the sufficiency of supply analysis indicate that there is sufficient groundwater supply from the Olympic Valley Groundwater Basin with a margin of safety. The supply total shown above is not actually limited to the exact volume of the demands, but that is the equivalent volume that was analyzed in the *Village at Squaw Valley Specific Plan Water Supply Assessment*.

2 2040 total demand from averages presented in the *Village at Squaw Valley Specific Plan Water Supply Assessment* [Tables 4-2 and 4-3].

3 No reduction in demand or supply expected in dry years.

4 + signifies that water supply exceeds demand with a margin of safety.

Source: Placer County and Squaw Valley Public Service District. Village at Squaw Valley Specific Plan Water Supply Assessment [Table 8-2]. July 22, 2015.

Given the relatively small scale of the proposed project and the adequate capacity of the groundwater basin , the project would not significantly impact the OVPSD's water supply. As such, the OVPSD would have sufficient water supplies available to serve the proposed project as well as reasonably foreseeable future development during normal, dry, and multiple dry years.

Based on the above, the proposed project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin, or conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. Thus, a ***less-than-significant*** impact would occur. No mitigation measures are required.

Discussion Item X-3:
The project site is part of the overall Squaw Creek watershed. Existing topography in the project area is comprised of one drainage area, and ground slopes vary from two percent to 50 percent, increasing in elevation from north to south. Shrubs, rocks, bare ground, native grassy vegetation, and trees are the predominant existing surface types within the project area. According to the Preliminary Drainage Report prepared for the proposed project, the U.S. Department of Agriculture (USDA) Web Soil Survey classifies the soil in the project area as Tallac, a very gravelly sandy loam which is associated with hydrologic soils group A. Existing impervious surfaces within the area of the project site where construction would take place do not exist; however, the site is adjacent to previously disturbed areas.

In addition, an existing stormwater system has been developed throughout the Squaw Valley Community Park, adjacent to the project site. The adjacent storm drain system includes detention/retention ponds, which treat runoff from the existing impervious areas including but not limited to sidewalks, parking areas, and pickleball courts.

The entire project site ultimately drains to the north, across Olympic Valley Road through a 24-inch Corrugated Metal Pipe (CMP) culvert, and eventually to the Truckee River on the east side of SR 89. Most of the precipitation in the project area occurs between November and May in the form of snow melt, and the site is typically dry from mid-summer through fall, until the first rain or snow events. As discussed in Section VII, Geology and Soils, of this Initial Study, the Truckee River is identified on the CWA Section 303(d) list, as the surface water body does not currently meet the Basin Plan's[27] water quality objective for sediment. As such, the TMDL for the Truckee River, which was adopted in 2008, establishes a target 20 percent annual sediment load reduction through the implementation of management practices to control erosion and limit sedimentation.

27 The California Regional Water Quality Control Boards adopt and implement Water Quality Control Plans (Basin Plans), which recognize regional differences in natural water quality, actual and potential beneficial uses, and water quality problems associated with human activities.

According to the Preliminary Drainage Report, post-development conditions on-site would remain similar to the existing conditions. The building, associated walkways and loading access drive would be the only proposed impervious areas, and the remainder of the project site would remain undisturbed and pervious following project development.

The stormwater drainage system proposed to be developed on-site would divide the project site into five Drainage Management Areas (DMAs) which would include on-site stormwater drainage improvements in order to collect and treat runoff (see Figure 10). DMA 1 would include an underground rainstore retention facility, while the remaining four DMAs would include underground infiltration trenches. Ultimately, runoff from the building roofs and entryways would be directed to the proposed underground infiltration system which would be developed throughout the site, which would provide similar conditions to current on-site drainage conditions.

In addition, stormwater runoff in excess of design flows would overflow toward the northeast section of the site to the existing natural infiltration basin located in the northeast corner of the project site, similar to the drainage patterns of the project site under pre-development conditions.

The estimated peak flows at the overland release location located at the northeast corner of the project site were calculated for both pre- and post-development conditions and are presented in Table 3.

Table 3
Pre- and Post-development On-Site Peak Flows

Pre- or Post-Development	Local Watershed Area (acres)	Infiltration Rate (in/hr)	Percent Impervious[1]	Q10[2] (cubic feet per second [cfs])	Q100[3] (cfs)
Winter					
Pre-Development	60	0.35	90.0%	33.43	57.43
Post-Development	60	0.35	90.0%	33.43	57.43
			Net Difference	*0.0*	*0.0*
Summer					
Pre-Development	60	0.35	4.0%	11.33	35.33
Post-Development	60	0.35	4.7%	11.51	35.51
			Net Difference	*0.18*	*0.18*

1 The percent of impervious surfaces varies during summer and winter conditions due to the amount of snow on the ground surface.
2 Represents peak flows for 10-year storm events.
3 Represents peak flows for 100-year storm events.

Source: JK Architecture Engineering, 2021.

As shown in the table, the proposed project would not result in an increase in post-development flows during the winter months; however, a 0.18 cubic feet per second (cfs) increase would occur for post-development flows in the summer months. As such, the proposed project would include surface grades surrounding the new buildings that would slope away to safely convey runoff away from buildings, as well as other site improvements to prevent flooding and provide proper overland release. As discussed above, excess runoff would be conveyed by swales and surface flow away from the building and existing facilities, and would be directed to the north and east, similar to pre-development conditions. The proposed project would also include the implementation of temporary and permanent Best Management Practices (BMPs), as discussed in further detail below, to ensure impacts to water quality do not occur.

Based on the above, the proposed project would not substantially alter the existing drainage pattern of the project area or substantially increase the rate or amount of surface runoff. A final drainage report would be required with the project Improvement Plans to substantiate the preliminary drainage design. Without approval of a final drainage report, a ***potentially significant*** impact could occur.

Mitigation Measure(s)
Implementation of the following mitigation measures would reduce the above potential impact to a *less-than-significant* level.

X-1 As part of the Improvement Plan submittal process, the Preliminary Drainage Report provided during environmental review shall be submitted in final format. The Final Drainage Report may require more detail than that provided in the preliminary report, and will be reviewed in concert with the Improvement Plans to confirm conformity between the two.

Figure 10
Preliminary Grading and Drainage Plan

The report shall be prepared by a Registered Civil Engineer and shall, at a minimum, include: A written text addressing existing conditions, the effects of the proposed improvements, all appropriate calculations, watershed maps, changes in flows and patterns, and proposed on- and off-site improvements and drainage easements to accommodate flows from this project. The report shall identify water quality protection features and methods to be used during construction, as well as long-term post-construction water quality measures. The Final Drainage Report shall be prepared in conformance with the requirements of Section 5 of the Land Development Manual and the Placer County Stormwater Management Manual that are in effect at the time of Improvement Plan submittal. The Final Drainage Report shall be submitted to the Placer County Community Development Resource Agency for review and approval

X-2 The Improvement Plan submittal and Final Drainage Report shall provide details showing that storm water run-off peak flows and volumes shall be reduced to pre-project conditions through the installation of detention/retention facilities. Detention/retention facilities shall be designed in accordance with the requirements of the Placer County Stormwater Management Manual that are in effect at the time of submittal, and to the satisfaction of the Engineering and Surveying Division (ESD) and shall be shown on the Improvement Plans. The ESD may, after review of the project's Final Drainage Report, delete this requirement if it is determined that drainage conditions do not warrant installation of this type of facility. Maintenance of detention/retention facilities by the homeowner's association, property owner's association, property owner, or entity responsible for project maintenance shall be required. Detention/retention facility construction shall not be permitted within any identified wetlands area, floodplain, or right-of-way, except as authorized by project approvals.

Discussion Item X-4:
The following sections provide an analysis of potential impacts to water quality associated with construction and operation of the proposed project.

Construction
Construction of the proposed project would include grading, excavation, trenching for utilities, and other construction-related activities that could cause soil erosion at an accelerated rate during storm events. All such activities have the potential to affect water quality and contribute to localized violations of water quality standards if impacted stormwater runoff from construction activities enters downstream waterways.

Soils exposed by the aforementioned types of construction activities have the potential to affect water quality in two ways: 1) suspended soil particles and sediments transported through runoff; or 2) sediments transported as dust that eventually reach local water bodies. As discussed above, the Truckee River is identified on the CWA Section 303(d) list due to sediment impairment. Spills or leaks from heavy equipment and machinery, staging areas, or building sites also have the potential to enter runoff. Typical pollutants include, but are not limited to, petroleum and heavy metals from equipment and products such as paints, solvents, and cleaning agents, which could contain hazardous constituents. Sediment from erosion of graded or excavated surface materials, leaks or spills from equipment, or inadvertent releases of building products could result in water quality degradation if runoff containing the sediment or contaminants should enter receiving waters in sufficient quantities. Discharge of polluted stormwater or non-stormwater runoff could violate waste discharge requirements. However, in general, impacts from construction-related activities would be short-term and of limited duration.

Because the proposed project would require construction activities that would result in a land disturbance of less than one acre (approximately 0.68-acre), the project applicant would not be required by the State to prepare a Stormwater Pollution Prevention Permit (SWPPP However, the proposed project would be required to comply with the requirements of the Placer County Storm Water Management Manual (PCSWMM) and the Regional Water Quality Control Board (RWQCB) including, but not limited to, the following:

- Runoff from impervious surfaces shall be collected and treated on-site, pursuant to the Placer County Storm Water Quality Plan design criteria, which complies with the requirements of the Lahontan RWQCB.
- Storm drainage facilities will be designed to provide groundwater recharge, attenuate peak flows, and minimize risk of erosion.
- Existing drainage patterns will be generally maintained with proposed site layout and grading.
- Improvements will be protected from inundation, flood hazard, and ponding.
- Concentrated flow shall not cause property damage.
- The 100-year peak runoff shall be conveyed in a manner that does not compromise any structures or overtop any road surfaces (overland release).

- All construction activities and permanent improvements shall include temporary and permanent BMPs for the protection of water resources.

The proposed project would also comply with all the requirements from the California Stormwater Quality Association Stormwater Best Management Practice Handbook for New Development and Redevelopment. As such, temporary construction-phase BMPs would be used for the full duration of construction and would include fiber rolls, tree protection, construction entrance, designated staging/storage areas, construction fencing, dust control measures and other miscellaneous provisions, as necessary.

Operation

Development of the proposed project would result in the conversion of the project site from an undeveloped forested area and parking lot, to museum and community center uses with associated improvements. Such new land uses could result in new stormwater pollutants being introduced to the project area. Pollutants associated with the operational phase of the proposed project could include oil and grease, metals, organics, pesticides, bacteria, sediment, trash, and other debris. Pesticides, which are toxic to aquatic organisms and can bioaccumulate in larger species, such as birds and fish, can potentially enter stormwater after application to landscaped areas within the project site. Oil and grease could enter stormwater from vehicle leaks, traffic, and maintenance activities. Metals could enter stormwater as surfaces corrode, decay, or leach. Clippings associated with landscape maintenance and street litter could be carried into storm drainage systems. Pathogens (from pets, wildlife, and human activities) have the potential to affect downstream water quality.

However, as discussed above, the proposed project would be required to comply with all requirements of the PCSWMM and the RWQCB including the collection and treatment of all on-site runoff. As such, the project site would be divided into five DMAs which would include on-site stormwater drainage improvements in order to collect and treat runoff. DMA 1 would include an underground rainstore retention facility, while the remaining four DMAs would include underground infiltration trenches. Ultimately, runoff from the building roofs and entryways would be directed to the proposed underground infiltration system which would be developed throughout the site and provide similar conditions to current on-site drainage conditions.

In order to ensure continued operation of the proposed underground infiltration system, the proposed project would include inspection and maintenance procedures to be implemented by the project operator. Required maintenance activity would include, the inspection of all infiltration trenches and the storm drain junction box and storm drain outlet of the underground rainstore twice a year, as well as the removal of all debris and sediment from the infiltration system. The proposed project would also implement permanent BMPs including soil stabilization and revegetation.

Conclusion

Compliance with all requirements of the PCSWMM and the RWQCB, as described above, would minimize the potential degradation of stormwater quality and downstream surface water associated with construction and operation of the proposed project. In addition, BMPs designed in accordance with the California Stormwater Quality Association Stormwater Best Management Practice Handbooks for Construction and for New Development/Redevelopment would further reduce the potential for the potential degradation of stormwater quality and downstream surface water in the project vicinity. However, as noted above, the Truckee River is identified on the CWA Section 303(d) list for sediment impairment. Therefore, a lack of compliance with the aforementioned regulations could result in a ***potentially significant*** impact related to potential degradation of stormwater quality and downstream surface water associated with construction and operation of the proposed project.

Mitigation Measure(s)

Implementation of the following mitigation measures would reduce the above potential impact to a *less-than-significant* level.

X-3 The Improvement Plans shall include the message details, placement, and locations showing that all storm drain inlets and catch basins within the project area shall be permanently marked/embossed with prohibitive language such as "No Dumping! Flows to Creek." or other language and/or graphical icons to discourage illegal dumping as approved by the Engineering and Surveying Division (ESD). ESD-approved signs and prohibitive language and/or graphical icons, which prohibit illegal dumping, shall be posted at public access points along channels and creeks within the project area. The property owner is responsible for maintaining the legibility of stamped messages and signs.

X-4 The Improvement Plans shall show that all stormwater runoff shall be diverted around trash storage areas to minimize contact with pollutants. Trash container areas shall be screened or walled to prevent off-site

transport of trash by the forces of water or wind. Trash containers shall not be allowed to leak and must remain covered when not in use.

X-5 The Improvement Plans shall show water quality treatment facilities/Best Management Practices (BMPs) designed according to the guidance of the California Stormwater Quality Association Stormwater Best Management Practice Handbooks for Construction, for New Development/Redevelopment, and for Industrial and Commercial (or other similar source as approved by the Engineering and Surveying Division (ESD)).

Storm drainage from on- and off-site impervious surfaces (including roads) shall be collected and routed through specially designed catch basins, vegetated swales, vaults, infiltration basins, water quality basins, filters, etc. for entrapment of sediment, debris and oils/greases or other identified pollutants, as approved by the Engineering and Surveying Division (ESD). BMPs shall be designed in accordance with the East Placer Storm Water Quality Design Manual for sizing of permanent post-construction Best Management Practices for stormwater quality protection. No water quality facility construction shall be permitted within any identified wetlands area, floodplain, or right-of-way, except as authorized by project approvals.

All permanent BMPs shall be maintained as required to ensure effectiveness. The applicant shall provide for the establishment of vegetation, where specified, by means of proper irrigation. Proof of on-going maintenance, such as contractual evidence, shall be provided to ESD upon request. The project owners/permittees shall provide maintenance of these facilities and annually report a certification of completed maintenance to the County DPW Stormwater Coordinator, unless, and until, a County Service Area is created and said facilities are accepted by the County for maintenance. Contractual evidence of a monthly parking lot sweeping and vacuuming, and catch basin cleaning program shall be provided to the ESD upon request. Failure to do so will be grounds for discretionary permit revocation. Prior to Improvement Plan or Final Subdivision Map approval, easements shall be created and offered for dedication to the County for maintenance and access to these facilities in anticipation of possible County maintenance.

X-6 This project is located within the permit area covered by Placer County's Small Municipal Separate Storm Sewer System (MS4) Permit (State Water Resources Control Board National Pollutant Discharge Elimination System (NPDES)). Project-related storm water discharges are subject to all applicable requirements of said permit.

The project shall implement permanent and operational source control measures as applicable. Source control measures shall be designed for pollutant generating activities or sources consistent with recommendations from the California Stormwater Quality Association (CASQA) Stormwater BMP Handbook for New Development and Redevelopment, or equivalent manual, and shall be shown on the Improvement Plans.

The project is also required to implement Low Impact Development (LID) standards designed to reduce runoff, treat storm water, and provide baseline hydromodification management as outlined in the East Placer Storm Water Quality Design Manual.

Discussion Item X-5:
According to the November 2, 2018 Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) number 06061C0329H, the proposed project site is located within Flood Hazard Zone X, which is described by FEMA as an area of minimal flood hazard, usually above the 500-year flood level. Furthermore, the project is not located within any local 100-year floodplain. Consequently, the proposed project would not place housing or improvements within a 100-year flood hazard area either as mapped on a federal Flood Hazard boundary, FIRM, or other flood hazard delineation map which would: a) impede or redirect flood flows; b) expose people or structures to risk of loss, injury, or death involving flooding; or c) risk release of pollutants due to project inundation. Therefore, ***no impact*** would occur.

XI. LAND USE & PLANNING – Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
1. Physically divide an established community? (PLN)			**X**	

2. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect? (EH, ESD, PLN)	**X**			
3. Result in the development of incompatible uses and/or the creation of land use conflicts? (PLN)			**X**	
4. Cause economic or social changes that would result in significant adverse physical changes to the environment such as urban decay or deterioration? (PLN)			**X**	

Discussion Item XI-1:
The proposed project would be located within a portion of the existing Squaw Valley Community Park. Squaw Valley Community Park is an approximately 28-acre park consisting of five parcels, owned and operated by Placer County. The project site would be located between the Squaw Valley Community Park driveway entrance to the parking lot from Olympic Valley Road and the pickleball courts. The site currently consists of undeveloped areas of vegetation, predominantly montane coniferous forest, comprised primarily of white fir and pine trees native to the area, as well as an existing parking lot. However, project development would occur solely within undeveloped areas of Squaw Valley Community Park. In addition, the proposed project would be generally consistent with the intensity of land uses planned to the east, west, and south of the project site. As such, the proposed project would not physically divide an established community or disrupt or divide the physical arrangement of an established community, and a ***less-than-significant*** impact would occur. No mitigation measures are required.

Discussion Item XI-2:
The General Plan Guidelines published by the State Office of Planning and Research defines "consistency" as follows, "An action, program, or project is consistent with the general plan if, considering all its aspects, it will further the objectives and policies of the general plan and not obstruct their attainment." Therefore, the standard for this analysis is in general agreement with the policy language and furtherance of the policy intent (as determined by a review of the policy context). The determination that the project is consistent or inconsistent with the Placer County General Plan policies or other County plans and policies is ultimately the decision of the Placer County Board of Supervisors. Furthermore, although CEQA analysis may identify some areas of general consistency with County policies, the County has the ability to impose additional requirements or conditions of approval on a project, at the time of its approval, to bring a project into more complete conformance with existing policies.

The proposed project would include a Rezone to create a new land use district to accommodate the proposed project, as well as an amendment to the County Code. The proposed Rezone and County Code amendment would allow for development of a museum, community cultural center, and ancillary uses within the project site, subject to a CUP, as well as operation of the facility beyond the currently allowable hours in Section 12.24 of the Placer County Code. Approval of the rezone and Code amendment are discretionary actions subject to approval by the Placer County Board of Supervisors. Should the Placer County Board of Supervisors approve the requested entitlements, the project would be rendered consistent with the SVGP and Placer County Code Section 12.24.

The focus of this section of the environmental checklist is whether the proposed project would conflict with plans or policies adopted for the purpose of avoiding or mitigating environmental effects. Placer County has adopted policies related to GHG emissions and sustainability, such as the PCSP. As discussed in Section VII of this Initial Study, the proposed project would generate an increase in GHG emissions and energy demand. Consistency with plans and policies related to GHG emissions and energy efficiency will be evaluated in the Air Quality, Greenhouse Gas Emissions, and Energy chapter of the SNOW Sports Museum and Community Cultural Center EIR. The Noise Element of the Placer County General Plan includes several policies applicable to the proposed project, among which is Policy 9.A.2, requiring noise created by new non-transportation noise sources to be mitigated so as not to exceed the noise level standards in Table 9-1 of the General Plan, as measured immediately within the property line of lands designated for noise-sensitive uses. While the proposed project is not anticipated to generate substantial non-transportation noise, certain project components, such as the heating, ventilation, and air conditioning system may generate noise that could exceed the County's noise standards at the nearest sensitive receptors. Further analysis of the project's limited noise sources will be included in the EIR.

In June 2021, Placer County adopted vehicle miles traveled (VMT) thresholds and screening criteria for East Placer. The proposed project would generate an increase in VMT within and beyond Olympic Valley. Further analysis of project-specific VMT will be conducted in the EIR to determine if said VMT would conflict with Placer County's adopted VMT thresholds.

In addition, Placer County adopted an updated Health and Safety Element of the General Plan in October 2021. The Health and Safety Element includes several policies applicable to the proposed project, among which is Policy 8.C.1, which requires the County to ensure that development in high-fire hazard areas is designed and constructed in a manner that minimizes the risk from fire hazards and meets all applicable state and County fire standards. As discussed in Section XX, Wildfire, of this Initial Study, the project site is located within a State Responsibility Area (SRA), and is just outside the boundaries of the nearest Very High Fire Hazard Severity Zone. Therefore, further analysis of potential wildfire hazards associated with the proposed project will be included in the EIR.

Notwithstanding the above, this Initial Study demonstrates that the project complies with several plans and policies adopted for the purpose of avoiding or mitigating an environmental effect. According to Section IV, Biological Resources, of this Initial Study, the proposed tree removal activities would not conflict with the County's Tree Ordinance or General Plan policies related to wetland protection. As discussed in Section VII, Geology & Soils, of this Initial Study, the proposed project would be subject to State guidelines, Articles 8.28 and 15.48 of the Placer County Code, and Policy 6.A.5 of the Placer County General Plan, which require project implementation of BMPs designed to control erosion and other non-stormwater management and materials management BMPs. Thus, the project would not conflict with Policy I.K.6 related to erosion and sedimentation risks from new development on hillsides.

Based on the above, the potential for the proposed project to cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect will be evaluated in the technical chapters of the SNOW Sports Museum and Community Cultural Center EIR. Pending further analysis, a ***potentially significant*** impact could occur.

Further analysis of applicable policies related to aesthetics, air quality, greenhouse gas, noise, transportation, and wildfire will be discussed in their respective chapters of the SNOW Sports Museum and Community Cultural Center EIR.

Discussion Item XI-3:
In addition to the Placer County regulations, the Squaw Valley Community Park site is bound by a deed restriction relating to the past transfer of the parcel from the USFS to Placer County. The Quit Claim Deed conveying the park parcel to Placer County from the USFS includes the following restriction: "[T]he use of the property for a community park does not include the use of the property for private development of a commercial, residential, or industrial nature."

As discussed previously, the zoning and General Plan land use designation for the site is FR. The FR designation is intended to "establish areas wherein public or private recreation facilities, either commercial in nature or publicly funded, can be developed to meet the year-round recreation needs of the residents and visitors in Squaw Valley." The proposed project would include a Rezone to create a new land use district to accommodate the proposed project. The proposed Rezone would allow for development of a museum, community cultural center, and ancillary uses within the project site, subject to a CUP.

The intention of the museum and community cultural center is to educate visitors on the history of winter sports, particularly the 1960 Winter Olympics, and the museum would have a direct link to Squaw Valley Community Park and the outdoor culture of the Olympic Valley region. Furthermore, the museum's focus on active recreational and athletic pursuits are thematically supportive of the Squaw Valley Community Park's primary purpose of outdoor recreation. Therefore, the museum and community cultural center would be considered a non-commercial use and would not fall within the category of uses expressly prohibited by the Deed Restriction. Although the museum would introduce revenue-generating uses into the park, including a small café, gift shop, and facility rental, such uses and activities would be ancillary to the proposed museum and community cultural center, and all revenues from such activities would be restricted to supporting the museum. The Internal Revenue Code (IRC) and legal precedent allow charitable non-profit organizations enjoying benefits under IRC Section 501(c)(3) to pursue incidental revenue-generating activity without losing their non-profit tax-exempt status.[28] As previously noted, the ancillary nature and tax treatment of the revenue-generating activities proposed would not conflict with the deed restriction described above.

It is also important to note that the question of land use compatibility in the context of this analysis is focused on physical environmental effects that could result from placing one land use next to another, such as placing industrial

[28] Michael E. Profant, Attorney at Law, Placer County Counsel's Office. Personal Communication [letter] with Eli Ilano, Forest Supervisor, Tahoe National Forest. March 27, 2017.

uses next to residential uses, where the noise and hazards associated with industrial operations could adversely affect the residents. The question of whether the proposed project is consistent with the terms of the deed restriction is a legal consideration, not an environmental consideration subject to CEQA. Moreover, the potential compatibility issues associated with building a museum and cultural center at the existing Squaw Valley Community Park are evaluated throughout this Initial Study. Substantial evidence exists that the proposed museum and cultural center would not present significant environmental incompatibilities with the adjacent park or nearest residential uses, which are located approximately 500 feet east of the project site, across SR 89.

Therefore, the proposed project would not result in the development of incompatible uses and/or the creation of land use conflicts, and a ***less-than-significant*** impact would occur. No mitigation measures are required.

Discussion Item XI-4:
CEQA does not require an analysis of social issues unless a direct link to the physical environment exists. One way that social issues are typically handled in CEQA documents is to consider the potential for a project to change the socioeconomics of a community, which could lead to physical blight. In recent years, the State courts have identified the term urban decay as the physical manifestation of a project's potential socioeconomic impacts and specifically identified the need to address the potential for urban decay in environmental documents for large retail projects. The leading case is *Bakersfield Citizens for Local Control v. City of Bakersfield* (2004) 124 Cal.App.4th 1184, in which the court set aside two environmental impact reports for two proposed large retail projects that would have been located fewer than five miles from each other.

The proposed project would develop a museum and cultural center within a portion of the County which is primarily characterized by existing recreational land uses, as well as undeveloped forest land. The proposed project would include the development of a café and museum shop; however, the proposed uses would be intended to serve the museum, and would not have an effect on other businesses in the area. As such, the proposed project would not develop retail uses that would result in increased vacancy rates or abandonment of commercial spaces in the project vicinity, resulting in urban decay. Therefore, the project would not cause economic or social changes that would result in significant adverse physical changes to the environment such as urban decay or deterioration, and a ***less-than-significant*** impact would occur. No mitigation measures are required.

XII. MINERAL RESOURCES – Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
1. 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? (PLN)				**X**
2. 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? (PLN)				**X**

Discussion Items XII-1, 2:
Pursuant to the California Division of Mines and Geology (CDMG), the project site is classified as MRZ-3a$^{(sg\text{-}15)}$ for aggregate as a result of glacial deposits. The MRZ-3a designation is used to describe areas underlain by geologic settings within which undiscovered mineral resources similar to known deposits in the same producing district or reason may be reasonably expected to exist. However, the project site is located within the existing Squaw Valley Community Park. Therefore, regardless of the proposed project being developed, the potential for mining activities to occur on-site would be very low. In addition, according to Table 8-6 in the Placer County Final EIR, the project area is not identified as an area containing existing or potential mineral extraction sites.[29] As a result, ***no impact*** to mineral resources would occur as a result of development of the project.

[29] Placer County. *Placer County Countywide General Plan Final EIR [pg. 8-25; Table 8-6].* July 26, 1994.

XIII. NOISE – Would the project result in:

Environmental Issue	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
1. 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? (PLN)	**X**			
2. Generation of excessive groundborne vibration or groundborne noise levels? (PLN)	**X**			
3. 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? (PLN)				**X**

Discussion Items XIII-1, 2:
The project site is located within a portion of the existing Squaw Valley Community Park, and currently consists of undeveloped areas of vegetation, predominantly montane coniferous forest, comprised primarily of white fir and pine trees native to the area, as well as an existing parking lot. The proposed project would include development of a museum and community cultural center building, as well as various associated site improvements, and a number of amenities such as event space. The introduction of the proposed project to the site would increase vehicular traffic in the area. Increased vehicle traffic would concomitantly increase the level of traffic noise along surrounding roadways, some of which are bordered by noise-sensitive residential uses. In addition, operational noise produced by events held at the museum could increase the ambient noise levels in the project area. The museum is anticipated to operate daily from 10:00 AM to 6:00 PM, with events typically being held in the evenings so as not to conflict with peak daytime usage of the park by recreational users. Therefore, the proposed project could expose persons to a permanent increase in ambient noise levels that could exceed the County's applicable noise level standards. Furthermore, construction of the project would temporarily increase ambient noise levels in the site vicinity, and could result in the generation of excessive groundborne vibration or groundborne noise levels.

Based on the above, the project could have a ***potentially significant*** impact related to substantial temporary or permanent increases in ambient noise levels in the vicinity of the project in excess of standards established by the County, or the generation of excessive groundborne vibration or groundborne noise levels.

Further analysis of these potential impacts will be discussed in the Noise chapter of the SNOW Sports Museum and Community Cultural Center EIR.

Discussion Item XIII-3:
The nearest airport to the project site is the Tahoe-Truckee Airport, located approximately 12 miles northeast of the site. As such, the project site is not covered by an airport land use plan and is not located within two miles of a private airstrip, public airport, or public use airport. Therefore, the proposed project would not expose people residing or working in the project area to excessive noise levels associated with air traffic, and ***no impact*** would occur.

XIV. POPULATION & HOUSING – Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
1. Induce substantial unplanned population growth in an area, either directly (i.e., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)? (PLN)			**X**	

2. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere? (PLN)				**X**

Discussion Item XIV-1:
Growth can be induced in a number of ways, including through the elimination of obstacles to growth or through the stimulation of economic activity within the region. Examples of projects likely to have growth-inducing impacts include extensions or expansions of infrastructure systems beyond what is needed to serve project-specific demand, and development of new residential subdivisions or office complexes in areas that are currently only sparsely developed or are undeveloped.

The proposed project would include development of a museum and community cultural center building, as well as various site improvements, and a number of amenities such as event space. As a result, the proposed project would not be considered to induce substantial unplanned population growth, and a ***less-than-significant*** impact would result. No mitigation measures are required.

Discussion Item XIV-2:
The project site does not contain any existing housing. Therefore, the proposed project would not displace existing people or housing, necessitating the construction of replacement housing elsewhere, and ***no impact*** would occur.

XV. PUBLIC SERVICES – 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?

Environmental Issue	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
1. Fire protection? (ESD, PLN)			**X**	
2. Sheriff protection? (ESD, PLN)			**X**	
3. Schools? (ESD, PLN)			**X**	
4. Parks? (PLN)			**X**	
5. Other public facilities? (ESD, PLN)			**X**	
6. Maintenance of public facilities, including roads? (ESD, PLN)			**X**	

Discussion Item XV-1:
The project site is currently developed with the Squaw Valley Community Park and serviced by the Olympic Valley Fire Department (OVFD). The OVFD serves approximately 1,500 full-time residents within a 14-square mile area, with a full-time staff of 13 people. At least three people are on duty 24 hours per day, 7 days a week. In addition, part-time paid firefighters are employed during busy periods. The OVFD is located at 305 Olympic Valley Road, approximately 0.25-mile west of the project site. CAL FIRE provides wildland fire suppression services and prevention for the Valley. It should be noted that further discussion of impacts related to wildfire will be included in the Wildfire chapter of the SNOW Museum EIR, and the analysis included herein focuses on whether the project would require new or physically altered fire protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for fire protection.

The OVFD strives to meet the National Fire Protection Association (NFPA) 1710 guideline for fire department responses, which allows firefighters one minute to don their turnouts once an emergency call for service is received from dispatch and four minutes of drive time (i.e., a total of five minutes).[30] The proposed project would include development of a museum and community cultural center building, as well as various site improvements, and a number of amenities such as event space. With respect to fire prevention for the proposed project, the museum and community cultural center building would include fire protection features as required by the California Fire Code, including fire sprinklers, fire alarm systems, fire extinguisher systems, and exit illumination. Furthermore, the International Building Code (IBC) includes the 2021 International Wildland-Urban Interface Code (IWUIC) that specifies construction standards to be used in urban interface and wildlands areas where there is an elevated threat

[30] Nevada County Consolidated Fire District. *Nevada County Consolidated Fire District Strategic Plan 2016-2021*. February 28, 2017.

of fire. In conformance with the IWUIC, fire resistant building materials would be used to construct the proposed project.

Given that the OVFD is located approximately 0.25-mile from the project site, and the proposed project would include the incorporation of fire protection features in building design, the proposed project would not require new or physically altered fire protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for fire protection. Thus, a ***less-than-significant*** impact would occur. No mitigation measures are required.

Discussion Item XV-2:
The Placer County Sheriff's Department (PCSD) provides general law enforcement services to the County, including Olympic Valley. The Tahoe Substation in Tahoe City, located at 2501 North Lake Boulevard, approximately 4.5 miles east of the project site, is the closest Sheriff's substation to the site. The proposed project would not result in direct population growth. Therefore, the proposed project would not be expected to result in substantial adverse physical impacts associated with the provision of new or physically altered PCSD facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for Sheriff's services, and a ***less-than-significant*** impact would occur. No mitigation measures are required.

Discussion Item XV-3:
The Tahoe-Truckee Unified School District (TTUSD) provides public school services to Olympic Valley. Students living in Olympic Valley attend Tahoe Lake Elementary School (K-4), North Tahoe School (5- 8), and North Tahoe High School (9-12), all of which are located in Tahoe City. The proposed project would include development of a museum and community cultural center building, as well as various site improvements, and a number of amenities such as event space. The proposed project would not directly increase the student population within the project area. While employment opportunities would be provided, the employment opportunities would be expected to be filled by existing residents of the area in order to support the local community and provide opportunities for residents to reside and work in the same community. Thus, it is not expected that employees with children would relocate to the area. It should be noted that although the proposed museum is not a school, museums are educational facilities and one of the objectives of the museum would be to serve school-aged children. Therefore, the proposed project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental services and/or facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or performance objectives for maintenance of schools. Thus, a ***less-than-significant*** impact would occur. No mitigation measures are required.

Discussion Item XV-4:
General Plan Policy 5.A.1 sets a standard of five acres of active parkland and five acres of passive recreation area or open space per 1,000 residents. The parcel on which the project site is located is currently developed with the Squaw Valley Community Park. The proposed project would include development of a museum and community cultural center building, as well as various site improvements, and a number of amenities such as event space within an undeveloped area of the Squaw Valley Community Park. Thus, the proposed project would not result in the need for new or physically altered parks, the construction of which could have substantial adverse physical impacts, a ***less-than-significant*** impact would occur. No mitigation measures are required.

Discussion Items XV-5, 6:
The following section describes the proposed project's potential adverse physical effects associated with maintenance and construction of County roads and library facilities.

Roads
The proposed project would result in the construction of a museum and community cultural center building, as well as various site improvements, and a number of amenities such as event space. The proposed project would not develop any new roadways. While project-generated traffic could result in an incremental increase in maintenance of County roads in the project area, such an increase would be negligible due to the limited number of visitors and employees, and associated vehicle trips. Currently, the County uses gasoline tax and federal and State funding for transportation infrastructure maintenance.

Libraries and Other Public Facilities and Services
Placer County maintains public facilities such as public libraries and community buildings. Museums are considered public facilities, and, thus, the proposed project would provide additional public facility space to residents and visitors of Olympic Valley. In addition, the proposed museum and community facility would not be expected to substantially

increase the population within the project area. Therefore, the proposed project would not generate any additional demand on existing public facilities, and would increase the availability of public facilities within Placer County.

Conclusion

Based on the above, the proposed project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental services and/or facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or performance objectives for maintenance of public facilities, including roads, or for other government services. Thus, a ***less-than-significant*** impact would occur. No mitigation measures are required.

XVI. RECREATION:

Environmental Issue	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
1. 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? (PLN)			**X**	
2. 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? (PLN)			**X**	

Discussion Items XVI-1, 2:

As discussed under Section XV above, the parcel on which the project site is located is currently developed with the Squaw Valley Community Park. The proposed project would include development of a museum and community cultural center building, as well as various site improvements, and a number of amenities such as event space within an undeveloped area of the Squaw Valley Community Park. Due to the relatively steep topography and rock outcroppings within the project site, the site is unsuitable for development with recreational park uses. As such, the proposed project would provide additional community space to residents and visitors of Olympic Valley. In addition, the proposed museum and community facility would not be expected to substantially increase the population within the project area. Therefore, the proposed project would not generate any additional demand on existing recreational facilities in the project vicinity or increase use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of such facilities would occur or be accelerated. Thus, the proposed project would result in a ***less-than-significant*** impact related to recreation. No mitigation measures are required.

XVII. TRANSPORTATION – Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
1. Conflict with a program, plan, ordinance or policy, except LOS (Level of Service) addressing the circulation system (i.e., transit, roadway, bicycle, pedestrian facilities, etc.)? (ESD)	**X**			
2. Substantially increase hazards to vehicle safety due to geometric design features (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? (ESD)	**X**			
3. Result in inadequate emergency access or access to nearby uses? (ESD)	**X**			
4. Result in insufficient parking capacity on-site or off-site? (ESD, PLN)			**X**	

5. Would the project result in VMT (Vehicle Miles Traveled) which exceeds an applicable threshold of significance, except as provided in CEQA Guidelines Section 15064.3, subdivision (b)? (ESD)	**X**			

Discussion Item XVII-1:
The proposed project would result in an increase in vehicle traffic on the street system surrounding the project area. The project has the potential to generate new bicycle and pedestrian traffic. Determination of traffic impacts based solely on vehicle level of service (LOS) is no longer allowable based on CEQA Guidelines Section 15064.3. However, the potential remains for the proposed project to result in conflicts with General Plan policies related to transportation facilities, including transit, roadway, bicycle, and pedestrian facilities. Therefore, a ***potentially significant*** impact could occur.

Further analysis of this potential impact will be discussed in the Transportation chapter of the SNOW Sports Museum and Community Cultural Center EIR.

Discussion Items XVII-2, 3:
Vehicle access to the proposed project would be provided by one driveway from Olympic Valley Road, which currently serves as the entrance to Squaw Valley Community Park and connects to the existing surface parking lot. The entrance provides full access to the project site. Up to 6,000 sf of the driveway and asphalt parking lot would be resurfaced and the parking area directly fronting the museum would be restriped to include two additional accessible parking spaces. The re-striping of the parking lot would allow space for a bus turnaround for buses up to 40 feet in length in the eastern portion of the parking lot. The existing parking lot and driveway are consistent with all applicable County roadway engineering standards, and do not include sharp curves or create dangerous intersections. However, the proposed project would increase the amount of visitors to the park, which could affect the safe movement of vehicles in and out of the driveway due to factors such as increased queue lengths that could exceed the existing storage space on-site. Queue lengths that exceed designated storage space could increase traffic congestion in the project area, and increase the possibility of traffic collisions. Further analysis is required in order to ensure that the proposed project would not result in increased transportation hazards. Thus, a ***potentially significant*** impact could occur.

Further analysis of these potential impacts will be discussed in the Transportation chapter of the SNOW Sports Museum and Community Cultural Center EIR.

Discussion Item XVII-4:
Pursuant to Section 17.54.060 of the Placer County Code, the proposed project would be required to provide a minimum of one parking space per 400 sf. As discussed above, a portion of the existing parking lot would be resurfaced, and the parking area directly fronting the museum would be restriped to include two additional accessible parking spaces. Additionally, a planting area in the eastern portion of the parking lot would be removed and replaced with eight vehicle parking spaces. Including existing and proposed parking, a total of 121 parking spaces, including seven ADA-compliant parking spaces, would be provided onsite. The County has determined that the proposed project would provide for sufficient on-site parking in accordance with Section 17.54.060 of the Placer County Code. Furthermore, the County would require the preparation of a Parking Management Plan as part of the proposed project to ensure that the various uses within Squaw Valley Community Park would be coordinated such that parking onsite would be adequate to accommodate visitors of the park. Therefore, the proposed project would not result in insufficient parking capacity on-site or off-site, and a ***less-than-significant*** impact would occur. No mitigation measures are required.

Discussion Item XVII-5:
The proposed project could result in increased VMT associated with future visitors of the museum travelling between the project site and other locations within the project region. In June 2021, Placer County adopted VMT thresholds and screening criteria for East Placer. Further analysis of project-specific VMT will be conducted in the EIR to determine if project-related VMT would conflict with Placer County's adopted VMT thresholds. Therefore, the proposed project could result in VMT (Vehicle Miles Traveled) which exceeds an applicable threshold of significance, and a ***potentially significant*** impact could occur.

Further analysis of this potential impact will be discussed in the Transportation chapter of the SNOW Sports Museum and Community Cultural Center EIR.

XVIII. TRIBAL CULTURAL RESOURCES – 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:

Environmental Issue	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
1. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k), or (PLN)		**X**		
2. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe. (PLN)		**X**		

Discussion Items XVIII-1, 2:
The project area falls within the center of Washoe territory, with primary use by the northern Washoe tribe. Washoe ethnographic encampments have been noted in west Truckee, around Donner Lake and Tahoe City. Traditional Native American sites have not been reported within the Tahoe Reach of the Truckee River, including Olympic Valley. The ethnographic record suggests that during the mild season, small groups of Washoe traveled through high mountain valleys collecting edible and medicinal roots, seeds, and marsh plants. In the higher elevations, men hunted large game (mountain sheep, deer) and trapped smaller mammals. The Truckee River and its tributaries were important fisheries year-round. Suitable toolstone (such as basalt) was quarried in various locales. The Washoe have a tradition of making long treks across the Sierran passes for the purpose of hunting, trading, and gathering acorns. These aboriginal trek routes, patterned after game trails, are often the precursors of historic and modern road systems. Archaeological evidence of these ancient subsistence activities are found along the mountain flanks as temporary small hunting camps containing flakes of stone and broken tools. In the high valleys more permanent base camps are represented by stone flakes, tools, grinding implements, and house depressions.

Pursuant to Assembly Bill (AB) 52 and Senate Bill (SB) 18, invitations to consult were sent to tribes who requested notification of proposed projects within this geographic area on August 28, 2017. The tribes that were contacted included the Ione Band of Miwok Indians, the Shingle Springs Band of Miwok Indians (SSR), the T'Si-Akim Maidu, the United Auburn Indian Community (UAIC) of the Auburn Rancheria, the Washoe Tribe of Nevada and California, and the Wilton Rancheria. The UAIC initiated consultation and requested copies of cultural searches/surveys. The County provided copies of all requested documentation prepared for the proposed project, and consultation with the UAIC was closed on October 19, 2017. The SSR requested copies of cultural searches/surveys, which were provided, and consultation with the SSR was closed on October 26, 2017. Requests for consultation were not received from any of the other aforementioned tribes.

According to the Cultural Resource Inventory and Evaluation prepared for the proposed project, a Sacred Lands File (SLF) search request was sent to the NAHC on January 5, 2018. The NAHC SLF search produced negative results.

While none of the contacted tribes identified known Tribal Cultural Resources on the project site, the possibility exists that construction of the proposed project could result in a substantial adverse change in the significance of a tribal cultural resource if previously unknown tribal cultural resources are uncovered during grading or other ground-disturbing activities. Thus, a ***potentially significant*** impact could occur.

Mitigation Measure(s)
Implementation of the following mitigation measures would reduce the above potential impact to a *less-than-significant* level.

XVIII-1 Implement Mitigation Measures V-1 through V-2.

XIX. UTILITIES & SERVICE SYSTEMS – Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
1. 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? (EH, ESD, PLN)			**X**	
2. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years? (EH)			**X**	
3. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments? (EH, ESD)			**X**	
4. 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? (EH)			**X**	
5. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste? (EH)			**X**	

Discussion Item XIX-1, 2, 3:
Electricity, telecommunications, water, and sanitary sewer services would be provided by way of new connections to existing infrastructure in the project area. Brief discussions of the water, sewer service, stormwater drainage, electrical, propane, and telecommunications facilities that would serve the proposed project are included below.

Water
Water supplies for the project site are supplied by the OVPSD. As discussed in Section X, Hydrology and Water Quality, of this Initial Study, all domestic, municipal, and irrigation water in Olympic Valley, is derived from the Olympic Valley Groundwater Basin, which is considered Very Low Priority according to the DWR, and is not identified as either in overdraft or expected to be in overdraft.[31]

Given that the groundwater basin has adequate capacity, as demonstrated in question 'b' of Section X, Hydrology and Water Quality, of this Initial Study, the proposed project would not significantly impact the District's water supply. As such, the District would have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years. Furthermore, the project would include a connection to existing water infrastructure in the project vicinity. A six-inch water service lateral and fire hydrant would be provided in the northwest corner of the project site; and the water services extension would connect to the lateral adjacent to the proposed building within Olympic Valley Road. Off-site water system improvements would not be required. Therefore, the proposed project would not require major relocation or expansion of any water supply infrastructure.

Sewer Service
Sewer service would be provided to the site by the OVPSD. OVPSD services the project area through the operation and maintenance of a wastewater collection system. Collected sewage is conveyed to the Tahoe Truckee Sanitation Agency (TTSA) Water Reclamation Plant, located adjacent to the Truckee River and Tahoe Truckee Airport. The TTSA previously upgraded and expanded wastewater facilities to increase handling capacity. The proposed project would construct a sanitary sewer force main along Olympic Valley Road. The force main would begin at the intersection of Olympic Valley Road and the project driveway, and run northwest along Olympic Valley Road to connect to the existing sanitary sewer manhole located east of the Tavern Inn Condominiums. In addition, a wet well and sanitary sewer lift station would be constructed north of the project site, near the project driveway, within the

[31] California Department of Water Resources. *SGMA Basin Prioritization Dashboard*. Available at: https://gis.water.ca.gov/app/bp-dashboard/final/. Accessed October 2021.

Olympic Valley Road right-of-way. All sewer improvements would be consistent with the Placer County "All Districts" Sewer System Master Plan. The off-site sewer improvements would require disruption of existing pavement, but disturbance of natural habitats would not occur. As such, the proposed project would not require major relocation or expansion of any sewer service infrastructure, the construction of which could cause significant environmental effects.

Stormwater Systems

The existing stormwater detention basin located in the northwest corner of the site would remain in place following development of the proposed project. The stormwater drainage generated on the project site would not drain into the existing basin; rather, a new stormwater drainage system would be installed. The stormwater drainage system proposed to be developed on-site would divide the project site into five DMAs which would include on-site stormwater drainage improvements in order to collect and treat runoff (see Figure 10). DMA 1 would include an underground rainstore retention facility , while the remaining four DMAs would include underground infiltration trenches. Ultimately, runoff from the building roofs and entryways would be directed to the proposed underground infiltration system which would be developed throughout the site, which would provide similar conditions to current on-site drainage conditions. In addition, stormwater runoff in excess of design flows would overflow toward the northeast section of the site to the existing natural infiltration basin located in the northeast corner of the project site, similar to the drainage patterns of the project site under pre-development conditions. Based on the conclusions of the Preliminary Drainage Report prepared for the proposed project, the proposed on-site stormwater system would be properly sized to handle stormwater under the 10- and 100-year events, and off-site expansion or relocation would not be required. In addition, Mitigation Measures X-1 and X-2 of this Initial Study would ensure a final drainage report would be submitted with the project Improvement Plans to substantiate the preliminary drainage design.

Other Utilities

Electric and telecommunications utilities would be provided by way of connections to existing infrastructure located within the immediate project vicinity. Electricity would be provided to the proposed project by Liberty Utilities. A new propane tank would be provided to the project site by Southwest Gas Corporation. However, the proposed project would not require major upgrades to, or extension of, existing infrastructure related to electric, propane, and telecommunication utilities.

Conclusion

Although off-site improvements to the sewer system would be required, all improvements would occur within the existing paved right-of-way. The proposed project would not include any other off-site improvements or infrastructure upgrades that could cause significant environmental effects. Therefore, the project would result in a ***less-than-significant*** impact related to the relocation or construction of new or expanded water, wastewater treatment, or stormwater drainage, electric power, propane, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects. No mitigation measures are required.

Discussion Item XIX-4, 5:

The Tahoe Truckee Sierra Disposal Company (TTSD) provides solid waste collection and removal for the Olympic Valley area, and would provide service to the project site after implementation of the proposed project. Solid waste from the proposed project would continue to be transported to Placer County's Eastern Regional Transfer Station, and then to the Lockwood Regional Landfill in Nevada.

The Eastern Regional Transfer Station is located west of SR 89, approximately three miles south of Truckee, and five miles north of the intersection of SR 89 and Olympic Valley Road. Solid waste is sorted at this facility to recover recyclable materials. After the garbage has been sorted, materials that cannot be recycled would be taken to Lockwood Regional Landfill, which is a municipal solid waste facility located in Storey County, off I-80, east of Sparks, Nevada.

Pursuant to the CALGreen Code, at least 65 percent diversion of construction waste is required for projects permitted after January 1, 2017. Because the landfill is not operating at maximum capacity and the project would only create a temporary increase in the amount of waste during construction activities, the proposed project would not result in a significant impact related to solid waste generation during construction.

With respect to operational solid waste generation, due to the nature and scale of the proposed project, the project would not be expected to generate substantial amounts of solid waste. Therefore, the proposed project would not 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 and would comply with federal, State, and local management and reduction statutes and regulations related to solid waste. Therefore, a ***less-than-significant*** impact would occur. No mitigation measures are required.

XX. WILDFIRE – If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
1. Substantially impair an adopted emergency response plan or emergency evacuation plan? (PLN)	**X**			
2. 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? (PLN)	**X**			
3. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) the construction or operation of which may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment? (PLN)	**X**			
4. Expose people or structures to significant risks, including downslope or downstream flooding, mudslides, or landslides, as a result of runoff, post-fire slope instability, or drainage changes? (PLN)	**X**			

Discussion – All Items:
According to the California Department of Forestry and Fire Protection (CAL FIRE) Fire and Resource Assessment Program, the project site is located within a State responsibility Area (SRA), and is just outside the boundaries of the nearest Very High Fire Hazard Severity Zone.[32] Placer County has adopted various plans related to emergency response and evacuation including the Placer County Local Hazard Mitigation Plan, Squaw Valley Wildland Fire Evacuation Plan, and Avalanche Mitigation Plan. The project site is located at the entrance to Olympic Valley. The project takes access off of Olympic Valley Road, which serves as the single point of entry to, and exit from, the Valley. Further analysis will be included in the EIR as to whether additional traffic added by the proposed project would have the potential to substantially impair emergency response and evacuation to the Valley in the event of a disaster. Further analysis is required in order to ensure that the proposed project would be consistent with such goals and policies. Thus, a ***potentially significant*** impact could occur.

Further analysis of these potential impacts will be discussed in the Wildfire chapter of the SNOW Sports Museum and Community Cultural Center EIR.

F. MANDATORY FINDINGS OF SIGNIFICANCE:

Environmental Issue	Yes	No
1. Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?		**X**
2. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)	**X**	
3. Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?	**X**	

[32] California Department of Forestry and Fire Protection. *FHSZ Viewer*. Available at: https://egis.fire.ca.gov/FHSZ/. Accessed October 2021.

Discussion Item F-1:
As discussed in Section IV, Biological Resources, of this Initial Study, while the potential exists for special-status bats and nesting birds and raptors protected by the MBTA to occur on-site, Mitigation Measures IV-1 and IV-2 would ensure that impacts to special-status species would be less than significant. In addition, as discussed in Section V, Cultural Resources, of this Initial Study the proposed project would not result in significant impacts to historic resources. With implementation of Mitigation Measures V-1 through V-2, potential impacts to archaeological resources would be reduced to less-than-significant levels.

Considering the above, the proposed project would not: 1) degrade the quality of the environment; 2) substantially reduce or impact the habitat of fish or wildlife species; 3) cause fish or wildlife populations to drop below self-sustaining levels; 4) threaten to eliminate a plant or animal community; 5) reduce the number or restrict the range of a rare or endangered plant or animal; or 6) eliminate important examples of the major periods of California history or prehistory.

Discussion Item F-2:
The proposed project in conjunction with other development within Placer County could incrementally contribute to cumulative impacts in the project area. In addition, the County anticipates that the Squaw Valley Community Park would continue to make some level of improvements into the future (e.g., additional pickleball courts, picnic areas, or other park-related improvements). In particular, as discussed in Section III, Air Quality, of this Initial Study, the proposed project could cumulatively contribute to regional air quality health effects through emissions of criteria and mobile source air pollutants. According to Section VIII, Greenhouse Gas Emissions, of this Initial Study, buildout of the proposed project would contribute to increases of GHG emissions that are associated with global climate change during construction and operations, and impacts related to GHG emissions and global climate change could be cumulatively considerable. In addition, according to Section XVII, Transportation, of this Initial Study, the proposed project would result in a contribution to regional VMT.

As noted on page 12 of this Initial Study, all other cumulative impacts were addressed in the analysis included in the County-wide General Plan EIR.

Further analysis of these potential impacts will be discussed in the SNOW Sports Museum and Community Cultural Center EIR.

Discussion Item F-3:
As described in this Initial Study, implementation of the proposed project could result in significant impacts related to aesthetics; air quality, GHG emissions, and energy; noise; transportation; and wildfire. As such, in the absence of appropriate mitigation, the project could cause substantial adverse effects on human beings.

Further analysis of these potential impacts will be discussed in the SNOW Sports Museum and Community Cultural Center EIR.

G. OTHER RESPONSIBLE AND TRUSTEE AGENCIES whose approval is required:

X California Department of Fish and Wildlife	☐Local Agency Formation Commission (LAFCO)
X California Department of Forestry	☐National Marine Fisheries Service
☐California Department of Health Services	☐Tahoe Regional Planning Agency
☐California Department of Toxic Substances	**X** U.S. Army Corps of Engineers
☒California Department of Transportation	☐U.S. Fish and Wildlife Service
☐California Integrated Waste Management Board	☐ _____
X California Regional Water Quality Control Board	☐ _____

H. DETERMINATION – The Environmental Review Committee finds that:

X	The proposed project **MAY** have a significant effect on the environment, and an **ENVIRONMENTAL IMPACT REPORT** is required.

I. ENVIRONMENTAL REVIEW COMMITTEE (Persons/Departments consulted):

Planning Services Division, Patrick Dobbs, Chairperson
Planning Services Division-Air Quality, Angel Green
Engineering and Surveying Division, Ed Staniforth, P.E.
Department of Public Works-Transportation, Ryan Decker
Flood Control and Water Conservation District, Brad Brewer
DPW- Parks Division, Ted Rel
HHS-Environmental Health Services, Laura Rath
Placer County Fire Planning/CDF, Brian Skehan

Signature _____ Date 03/15/22
Leigh Chavez, Environmental Coordinator

J. SUPPORTING INFORMATION SOURCES: The following public documents were utilized and site-specific studies prepared to evaluate in detail the effects or impacts associated with the project. This information is available at the following web address: https://www.placer.ca.gov/2526/Environmental-Impact-Reports

County Documents	**X** Air Pollution Control District Rules & Regulations	
	X Community Plan	
	X Environmental Review Ordinance	
	X General Plan	
	X Grading Ordinance	
	X Land Development Manual	
	X Land Division Ordinance	
	X Stormwater Management Manual	
	X Tree Ordinance	
	☐	
Trustee Agency Documents	☐Department of Toxic Substances Control	
Site-Specific Studies	Planning Services Division	**X** Biological Study
		X Cultural Resources Pedestrian Survey
		X Cultural Resources Records Search
		☐Lighting & Photometric Plan
		☐ Paleontological Survey
		X Tree Survey & Arborist Report
		☐ Visual Impact Analysis
		X Wetland Delineation
		☐ Acoustical Analysis
		☐
	Engineering & Surveying Division, Flood Control District	☐Phasing Plan
		X Preliminary Grading Plan
		X Preliminary Geotechnical Report
		X Preliminary Drainage Report
		X Stormwater & Surface Water Quality BMP Plan
		X East Placer Storm Water Quality Design Manual
		☐ Traffic Study
		☐ Sewer Pipeline Capacity Analysis

		☐Placer County Commercial/Industrial Waste Survey (where public sewer is available)
		☐Sewer Master Plan
		☐ Utility Plan
		☐ Tentative Map
		☐ BMP Plan **X** SWQP
	Environmental Health Services	☐Groundwater Contamination Report
		X Hydro-Geological Study
		X Phase I Environmental Site Assessment
		☐Soils Screening
		☐Preliminary Endangerment Assessment
		☐
	Planning Services Division, Air Quality	☐CALINE4 Carbon Monoxide Analysis
		☐Construction Emission & Dust Control Plan
		☐Geotechnical Report (for naturally occurring asbestos)
		☐Health Risk Assessment
		☐ CalEEMod Model Output
		☐
	Fire Department	☐Emergency Response and/or Evacuation Plan
		☐Traffic & Circulation Plan
		☐Fire Safe Plan

APPENDIX B

State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
North Central Region
1701 Nimbus Road, Suite A
Rancho Cordova, CA 95670-4599
916-358-2900
www.wildlife.ca.gov

GAVIN NEWSOM, Governor
CHARLTON H. BONHAM, Director

April 13, 2022

Shirlee Herrington
Environmental Coordination Services
Placer County Community Development Resources Agency
3091 County Center Drive, Suite 190
Auburn, CA 95603
cdraecs@placer.ca.gov

Subject: NOTICE OF PREPARATION OF AN ENVIRONMENTAL IMPACT REPORT FOR THE PROPOSED SIERRA NEVADA OLYMPIC WINTER SPORTS MUSEUM AND COMMUNITY CULTURAL CENTER PROJECT
SCH# 2022030511

Dear Ms. Herrington:

The California Department of Fish and Wildlife (CDFW) received and reviewed the Notice of Preparation of an Environmental Impact Report (EIR) from the Placer County Community Development Resources Agency for the Sierra Nevada Olympic Winter Sports Museum and Community Cultural Center Project (Project) located in Placer County pursuant the California Environmental Quality Act (CEQA) statute and guidelines.[1]

Thank you for the opportunity to provide comments and recommendations regarding those activities involved in the Project that may affect California fish, wildlife, plants, and their habitats. Likewise, we appreciate the opportunity to provide comments regarding those aspects of the Project that CDFW, by law, may need to exercise its own regulatory authority under the Fish and Game Code (Fish & G. Code).

CDFW ROLE

CDFW is California's Trustee Agency for fish and wildlife resources and holds those resources in trust by statute for all the people of the State (Fish & G. Code, §§ 711.7, subd. (a) & 1802; Pub. Resources Code, § 21070; CEQA Guidelines § 15386, subd. (a).). CDFW, in its trustee capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species (*Id.*, § 1802.). Similarly, for purposes of CEQA, CDFW provides, as available, biological expertise during public agency environmental

1 CEQA is codified in the California Public Resources Code in section 21000 et seq. The "CEQA Guidelines" are found in Title 14 of the California Code of Regulations, commencing with section 15000.

review efforts, focusing specifically on projects and related activities that have the potential to adversely affect fish and wildlife resources.

CDFW may also act as a Responsible Agency under CEQA. (Pub. Resources Code, § 21069; CEQA Guidelines, § 15381.) CDFW expects that it may need to exercise regulatory authority as provided by the Fish and Game Code. As proposed, for example, the Project may be subject to CDFW's lake and streambed alteration regulatory authority. (Fish & G. Code, § 1600 et seq.) Likewise, to the extent implementation of the Project as proposed may result in "take" as defined by State law of any species protected under the California Endangered Species Act (CESA) (Fish & G. Code, § 2050 et seq.), the Project proponent may seek related take authorization as provided by the Fish and Game Code.

PROJECT DESCRIPTION SUMMARY

The Project site consists of approximately one (1) acre (with a disturbance area of 0.68-acre) of the 26.8-acre Squaw Valley Community Park site, 101 Olympic Valley Road, southwest of the intersection of Olympic Valley Road and River Road/State Route 89 in the unincorporated community of Olympic Valley. Squaw Valley Community Park is identified by Assessor's Parcel Numbers 096-290-021-000, 096-290-056-000, 096-290-061-000, 096-310-009-000, and 096-310-040-000.

The proposed Project would include construction of a two-story, U-shaped building celebrating the 1960 Winter Olympics and history of winter sports in the Sierra Nevada. The building would consist of up to 20,000 square feet with a maximum height of 30 feet, as well as outdoor gathering spaces and amenities. The building would include the following components:

- Museum of Olympic History and Sierra Nevada Ski History (Museum). The museum would commemorate the events of the 1960 Winter Olympic Games held in Olympic Valley and Lake Tahoe and the ensuing effects on regional and western ski history. The museum would also document the ski history of the Sierra Nevada region beginning with the Washoe Tribe to 19th century gold miners, to members of the 10th Mountain Division, to current World Cup athletes;

- Cultural Community Center. The cultural community center would offer education and awareness programs in history, culture, sports innovation, and environmental stewardship;

- Event Space. The building would include event space for exhibits, films, educational and recreational classes, conferences, lectures, and community events, and small private celebrations (e.g., birthdays, weddings, meetings, etc.);

- Visitor Center. A visitor center would be included as part of the building and would be operated in partnership with Placer County and the North Lake Tahoe Resort Association; and

- Café and Museum Shop. A small café and museum shop, ancillary to the museum, community cultural center, and visitor center would be provided.

Various associated improvements would be included in the development of the proposed Project, including, but not limited to landscaping and utility installation.

CDFW recommends that the EIR Project description include the whole action as defined in the CEQA Guidelines § 15378 and should include appropriate detailed exhibits disclosing the Project area including temporary impacted areas such as equipment stage area, spoils areas, infrastructure development, staging areas, and access and haul roads, if applicable.

As required by § 15126.6 of the CEQA Guidelines, the EIR should include an appropriate range of reasonable and feasible alternatives that would attain most of the basic Project objectives and avoid or minimize significant impacts to resources under CDFW's jurisdiction.

COMMENTS AND RECOMMENDATIONS

CDFW offers the comments and recommendations presented below to assist Placer County in adequately identifying and/or mitigating the Project's significant, or potentially significant, impacts on biological resources. The comments and recommendations are also offered to enable CDFW to adequately review and comment on the proposed Project with respect to impacts on biological resources. CDFW recommends that the forthcoming EIR address the following:

Assessment of Biological Resources

Section 15125(c) of the CEQA Guidelines states that knowledge of the regional setting of a project is critical to the assessment of environmental impacts and that special emphasis should be placed on environmental resources that are rare or unique to the region. To enable CDFW staff to adequately review and comment on the Project, the EIR should include a complete assessment of the flora and fauna within and adjacent to the Project footprint, with emphasis on identifying rare, threatened, endangered, and other sensitive species and their associated habitats. CDFW recommends the EIR specifically include:

1. An assessment of all habitat types located within the Project footprint, and a map that identifies the location of each habitat type. CDFW recommends that floristic, alliance- and/or association-based mapping and assessment be completed following, *The Manual of California Vegetation*, second edition (Sawyer 2009). Adjoining habitat areas should also be included in this assessment where site activities could lead to direct or indirect impacts offsite. Habitat mapping at the alliance level will help establish baseline vegetation conditions.

2. A general biological inventory of the fish, amphibian, reptile, bird, and mammal species that are present or have the potential to be present within each habitat

type onsite and within adjacent areas that could be affected by the Project. CDFW recommends that the California Natural Diversity Database (CNDDB), as well as previous studies performed in the area, be consulted to assess the potential presence of sensitive species and habitats. A nine United States Geologic Survey 7.5-minute quadrangle search is recommended to determine what may occur in the region, larger if the Project area extends past one quad (see *Data Use Guidelines* on the Department webpage www.wildlife.ca.gov/Data/CNDDB/Maps-and-Data). Please review the webpage for information on how to access the database to obtain current information on any previously reported sensitive species and habitat, including Significant Natural Areas identified under Chapter 12 of the Fish and Game Code, in the vicinity of the Project. CDFW recommends that CNDDB Field Survey Forms be completed and submitted to CNDDB to document survey results. Online forms can be obtained and submitted at: https://www.wildlife.ca.gov/Data/CNDDB/Submitting-Data.

Please note that CDFW's CNDDB is not exhaustive in terms of the data it houses, nor is it an absence database. CDFW recommends that it be used as a starting point in gathering information about the *potential presence* of species within the general area of the Project site. Other sources for identification of species and habitats near or adjacent to the Project area should include, but may not be limited to, State and federal resource agency lists, California Wildlife Habitat Relationship System, California Native Plant Society Inventory, agency contacts, environmental documents for other projects in the vicinity, academics, and professional or scientific organizations.

3. A complete and recent inventory of rare, threatened, endangered, and other sensitive species located within the Project footprint and within offsite areas with the potential to be affected, including California Species of Special Concern and California Fully Protected Species (Fish & G. Code § § 3511, 4700, 5050, and 5515). Species to be addressed should include all those which meet the CEQA definition (CEQA Guidelines § 15380). The inventory should address seasonal variations in use of the Project area and should not be limited to resident species. The EIR should include the results of focused species-specific surveys, completed by a qualified biologist and conducted at the appropriate time of year and time of day when the sensitive species are active or otherwise identifiable. Species-specific surveys should be conducted in order to ascertain the presence of species with the potential to be directly, indirectly, on or within a reasonable distance of the Project activities. CDFW recommends Placer County rely on survey and monitoring protocols and guidelines available at: www.wildlife.ca.gov/Conservation/Survey-Protocols. Alternative survey protocols may be warranted; justification should be provided to substantiate why an alternative protocol is necessary. Acceptable species-specific survey procedures should be developed in consultation with CDFW and the U.S. Fish and Wildlife Service, where necessary. Some aspects of the Project may warrant periodic updated surveys for certain sensitive taxa, particularly if the Project is proposed

to occur over a protracted time frame, or in phases, or if surveys are completed during periods of drought or deluge.

4. A thorough, recent (within the last two years), floristic-based assessment of special-status plants and natural communities, following CDFW's *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities* (see www.wildlife.ca.gov/Conservation/Plants).

5. Information on the regional setting that is critical to an assessment of environmental impacts, with special emphasis on resources that are rare or unique to the region (CEQA Guidelines § 15125[c]).

Analysis of Direct, Indirect, and Cumulative Impacts to Biological Resources

The EIR should provide a thorough discussion of the Project's potential direct, indirect, and cumulative impacts on biological resources. To ensure that Project impacts on biological resources are fully analyzed, the following information should be included in the EIR:

1. The EIR should define the threshold of significance for each impact and describe the criteria used to determine whether the impacts are significant (CEQA Guidelines, § 15064, subd. (f)). The EIR must demonstrate that the significant environmental impacts of the Project were adequately investigated and discussed and it must permit the significant effects of the Project to be considered in the full environmental context.

2. A discussion of potential impacts from lighting, noise, human activity, and wildlife-human interactions created by Project activities especially those adjacent to natural areas, exotic and/or invasive species occurrences, and drainages. The EIR should address Project-related changes to drainage patterns and water quality within, upstream, and downstream of the Project site, including: volume, velocity, and frequency of existing and post-Project surface flows; polluted runoff; soil erosion and/or sedimentation in streams and water bodies; and post-Project fate of runoff from the Project site.

3. A discussion of potential indirect Project impacts on biological resources, including resources in areas adjacent to the Project footprint, such as nearby public lands (e.g. National Forests, State Parks, etc.), open space, adjacent natural habitats, riparian ecosystems, wildlife corridors, and any designated and/or proposed reserve or mitigation lands (e.g., preserved lands associated with a Conservation or Recovery Plan, or other conserved lands).

4. A cumulative effects analysis developed as described under CEQA Guidelines section 15130. The EIR should discuss the Project's cumulative impacts to natural resources and determine if that contribution would result in a significant impact. The EIR should include a list of present, past, and probable future

projects producing related impacts to biological resources or shall include a summary of the projections contained in an adopted local, regional, or statewide plan, that consider conditions contributing to a cumulative effect. The cumulative analysis shall include impact analysis of vegetation and habitat reductions within the area and their potential cumulative effects. Please include all potential direct and indirect Project-related impacts to riparian areas, wetlands, wildlife corridors or wildlife movement areas, aquatic habitats, sensitive species and/or special-status species, open space, and adjacent natural habitats in the cumulative effects analysis.

Mitigation Measures for Project Impacts to Biological Resources

The EIR should include appropriate and adequate avoidance, minimization, and/or mitigation measures for all direct, indirect, and cumulative impacts that are expected to occur as a result of the construction and long-term operation and maintenance of the Project. CDFW also recommends the environmental documentation provide scientifically supported discussion regarding adequate avoidance, minimization, and/or mitigation measures to address the Project's significant impacts upon fish and wildlife and their habitat. For individual projects, mitigation must be roughly proportional to the level of impacts, including cumulative impacts, in accordance with the provisions of CEQA (Guidelines § § 15126.4(a)(4)(B), 15064, 15065, and 16355). In order for mitigation measures to be effective, they must be specific, enforceable, and feasible actions that will improve environmental conditions. When proposing measures to avoid, minimize, or mitigate impacts, CDFW recommends consideration of the following:

1. *Fully Protected Species*: Multiple Fully Protected Species (Fish & G. Code § § 3511, 4700) have the potential to occur within or adjacent to the Project area, including, but not limited to: California wolverine (*Gulo gulo*), American peregrine falcon (*Falco peregrinus anatum*), bald eagle (*Haliaeetus leucocephalus*), golden eagle (*Aquila chrysaetos*), and greater sandhill crane (*Antigone canadensis tabida*). Fully protected species may not be taken or possessed at any time. Project activities described in the EIR should be designed to completely avoid any fully protected species that have the potential to be present within or adjacent to the Project area. CDFW also recommends the EIR fully analyze potential adverse impacts to fully protected species due to habitat modification, loss of foraging habitat, and/or interruption of migratory and breeding behaviors. CDFW recommends that Placer County include in the analysis how appropriate avoidance, minimization and mitigation measures will reduce indirect impacts to fully protected species.

2. *Species of Special Concern*: Several Species of Special Concern (SSC) have the potential to occur within or adjacent to the Project area, including, but not limited to: southern long-toed salamander (*Ambystoma macrodactylum sigillatum*), northern goshawk (*Accipiter gentilis*), black swift (*Cypseloides niger*), yellow warbler (*Setophaga petechia*), California spotted owl (*Strix occidentalis occidentalis*), Sierra Nevada snowshoe hare (*Lepus americanus tahoensis*),

western white-tailed jackrabbit (*Lepus townsendii townsendii*), fisher (*Pekania pennanti*), American badger (*Taxidea taxus*), pallid bat (*Antrozous pallidus*), and western red bat (*Lasiurus blossevillii*). Project activities described in the EIR should be designed to avoid any SSC that have the potential to be present within or adjacent to the Project area. CDFW also recommends that the EIR fully analyze potential adverse impacts to SSC due to habitat modification, loss of foraging habitat, and/or interruption of migratory and breeding behaviors. CDFW recommends Placer County include in the analysis how appropriate avoidance, minimization and mitigation measures will reduce impacts to SSC.

3. *Sensitive Plant Communities*: CDFW considers sensitive plant communities to be imperiled habitats having both local and regional significance. Plant communities, alliances, and associations with a statewide ranking of S-1, S-2, S-3, and S-4 should be considered sensitive and declining at the local and regional level. These ranks can be obtained by querying the CNDDB and are included in *The Manual of California Vegetation* (Sawyer 2009). The EIR should include measures to fully avoid and otherwise protect sensitive plant communities from Project-related direct and indirect impacts.

4. *Native Wildlife Nursey Sites:* CDFW recommends the EIR fully analyze potential adverse impacts to native wildlife nursey sites, including but not limited to bat maternity roosts. Based on review of Project materials, aerial photography, and observation of the site from public roadways, the Project site contains potential nursery site habitat for structure and tree roosting bats and is near potential foraging habitat. Bats are considered non-game mammals and are afforded protection by state law from take and/or harassment, (Fish & G. Code, § 4150; Cal. Code of Regs, § 251.1). CDFW recommends that the EIR fully identify the Project's potential impacts to native wildlife nursery sites, and include appropriate avoidance, minimization, and mitigation measures to reduce impacts or mitigate any potential significant impacts to bat nursery sites.

5. *Mitigation*: CDFW considers adverse Project-related impacts to sensitive species and habitats to be significant to both local and regional ecosystems, and the EIR should include mitigation measures for adverse Project-related impacts to these resources. Mitigation measures should emphasize avoidance and reduction of Project impacts. For unavoidable impacts, onsite habitat restoration, enhancement, or permanent protection should be evaluated and discussed in detail. If onsite mitigation is not feasible or would not be biologically viable and therefore not adequately mitigate the loss of biological functions and values, offsite mitigation through habitat creation and/or acquisition and preservation in perpetuity should be addressed.

   The EIR should include measures to perpetually protect the targeted habitat values within mitigation areas from direct and indirect adverse impacts in order to meet mitigation objectives to offset Project-induced qualitative and quantitative losses of biological values. Specific issues that should be addressed include

restrictions on access, proposed land dedications, long-term monitoring and management programs, control of illegal dumping, water pollution, increased human intrusion, etc.

6. *Habitat Revegetation/Restoration Plans*: Plans for restoration and revegetation should be prepared by persons with expertise in the regional ecosystems and native plant restoration techniques. Plans should identify the assumptions used to develop the proposed restoration strategy. Each plan should include, at a minimum: (a) the location of restoration sites and assessment of appropriate reference sites; (b) the plant species to be used, sources of local propagules, container sizes, and seeding rates; (c) a schematic depicting the mitigation area; (d) a local seed and cuttings and planting schedule; (e) a description of the irrigation methodology; (f) measures to control exotic vegetation on site; (g) specific success criteria; (h) a detailed monitoring program; (i) contingency measures should the success criteria not be met; and (j) identification of the party responsible for meeting the success criteria and providing for conservation of the mitigation site in perpetuity. Monitoring of restoration areas should extend across a sufficient time frame to ensure that the new habitat is established, self-sustaining, and capable of surviving drought.

   CDFW recommends that local onsite propagules from the Project area and nearby vicinity be collected and used for restoration purposes. Onsite seed collection should be appropriately timed to ensure the viability of the seeds when planted. Onsite vegetation mapping at the alliance and/or association level should be used to develop appropriate restoration goals and local plant palettes. Reference areas should be identified to help guide restoration efforts. Specific restoration plans should be developed for various Project components as appropriate. Restoration objectives should include protecting special habitat elements or re-creating them in areas affected by the Project. Examples may include retention of woody material, logs, snags, rocks, and brush piles. Fish and Game Code sections 1002, 1002.5 and 1003 authorize CDFW to issue permits for the take or possession of plants and wildlife for scientific, educational, and propagation purposes. Please see our website for more information on Scientific Collecting Permits at www.wildlife.ca.gov/Licensing/Scientific-Collecting#53949678-regulations-.

7. *Nesting Birds:* Please note that it is the Project proponent's responsibility to comply with all applicable laws related to nesting birds and birds of prey. Migratory non-game native bird species are protected by international treaty under the federal Migratory Bird Treaty Act (MBTA) of 1918, as amended (16 U.S.C. 703 *et seq.*). CDFW implemented the MBTA by adopting the Fish and Game Code section 3513. Fish and Game Code sections 3503, 3503.5 and 3800 provide additional protection to nongame birds, birds of prey, their nests and eggs. Sections 3503, 3503.5, and 3513 of the Fish and Game Code afford protective measures as follows: section 3503 states that it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise

provided by the Fish and Game Code or any regulation made pursuant thereto; section 3503.5 states that is it unlawful to take, possess, or destroy any birds in the orders Falconiformes or Strigiformes (birds-of-prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by the Fish and Game Code or any regulation adopted pursuant thereto; and section 3513 states that it is unlawful to take or possess any migratory nongame bird as designated in the MBTA or any part of such migratory nongame bird except as provided by rules and regulations adopted by the Secretary of the Interior under provisions of the MBTA.

Potential habitat for nesting birds and birds of prey is present within the Project area. The Project should disclose all potential activities that may incur a direct or indirect take to nongame nesting birds within the Project footprint and its vicinity. Appropriate avoidance, minimization, and/or mitigation measures to avoid take must be included in the EIR.

CDFW recommends the EIR include specific avoidance and minimization measures to ensure that impacts to nesting birds or their nests do not occur. Project-specific avoidance and minimization measures may include, but not be limited to: Project phasing and timing, monitoring of Project-related noise (where applicable), sound walls, and buffers, where appropriate. The EIR should also include specific avoidance and minimization measures that will be implemented should a nest be located within the Project site. In addition to larger, protocol level survey efforts and scientific assessments, CDFW recommends a final preconstruction survey be required no more than three (3) days prior to vegetation clearing or ground disturbance activities, as instances of nesting could be missed if surveys are conducted earlier.

8. *Moving out of Harm's Way:* The Project is anticipated to result in the clearing of natural habitats that support native species. To avoid direct mortality, Placer County should state in the EIR a requirement for a qualified biologist with the proper handling permits, will be retained to be onsite prior to and during all ground- and habitat-disturbing activities. Furthermore, the EIR should describe that the qualified biologist with the proper permits may move out of harm's way special-status species or other wildlife of low or limited mobility that would otherwise be injured or killed from Project-related activities, as needed. The EIR should also describe qualified biologist qualifications and authorities to stop work to prevent direct mortality of special-status species. CDFW recommends fish and wildlife species be allowed to move out of harm's way on their own volition, if possible, and to assist their relocation as a last resort. It should be noted that the temporary relocation of onsite wildlife does not constitute effective mitigation for habitat loss.

9. *Translocation of Species*: CDFW generally does not support the use of relocation, salvage, and/or transplantation as the sole mitigation for impacts to rare, threatened, or endangered species as these efforts are generally

experimental in nature and largely unsuccessful. Therefore, the EIR should describe additional mitigation measures utilizing habitat restoration, conservation, and/or preservation, in addition to avoidance and minimization measures, if it is determined that there may be impacts to rare, threatened, or endangered species.

The EIR should incorporate mitigation performance standards that would ensure that impacts are reduced to a less-than-significant level. Mitigation measures proposed in the EIR should be made a condition of approval of the Project. Please note that obtaining a permit from CDFW by itself with no other mitigation proposal may constitute mitigation deferral. CEQA Guidelines section 15126.4, subdivision (a)(1)(B) states that formulation of mitigation measures should not be deferred until some future time. To avoid deferring mitigation in this way, the EIR should describe avoidance, minimization and mitigation measures that would be implemented should the impact occur.

California Endangered Species Act

CDFW is responsible for ensuring appropriate conservation of fish and wildlife resources including threatened, endangered, and/or candidate plant and animal species, pursuant to the CESA. CDFW recommends that a CESA Incidental Take Permit (ITP) be obtained if the Project has the potential to result in "take" (Fish & G. Code § 86 defines "take" as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill") of State-listed CESA species, either through construction or over the life of the Project.

State-listed or candidate species with the potential to occur in the area include but are not limited to: willow flycatcher (*Empidonax traillii*), great gray owl (*Strix nebulosa*), gray wolf (*Canis lupus*), Sierra Nevada red fox (*Vulpes vulpes necator*), and Sierra Nevada yellow-legged frog (*Rana sierrae*).

The EIR should disclose the potential of the Project to take State-listed or candidate species and how the impacts will be avoided, minimized, and mitigated. Please note that mitigation measures that are adequate to reduce impacts to a less-than significant level to meet CEQA requirements may not be enough for the issuance of an ITP. To facilitate the issuance of an ITP, if applicable, CDFW recommends the EIR include measures to minimize and fully mitigate the impacts to any State-listed species the Project has potential to take. CDFW encourages early consultation with staff to determine appropriate measures to facilitate future permitting processes and to engage with the U.S. Fish and Wildlife Service to coordinate specific measures if both State and federally listed species may be present within the Project vicinity.

Native Plant Protection Act

The Native Plant Protection Act (Fish & G. Code §1900 *et seq*.) prohibits the take or possession of State-listed rare and endangered plants, including any part or product thereof, unless authorized by CDFW or in certain limited circumstances. Take of State-

listed rare and/or endangered plants due to Project activities may only be permitted through an ITP or other authorization issued by CDFW pursuant to California Code of Regulations, Title 14, section 786.9 subdivision (b).

Lake and Streambed Alteration Program

The EIR should identify all perennial, intermittent, and ephemeral rivers, streams, lakes, other hydrologically connected aquatic features, and any associated biological resources/habitats present within the entire Project footprint (including utilities, access and staging areas). The environmental document should analyze all potential temporary, permanent, direct, indirect and/or cumulative impacts to the above-mentioned features and associated biological resources/habitats that may occur because of the Project. If it is determined the Project will result in significant impacts to these resources the EIR should propose appropriate avoidance, minimization and/or mitigation measures to reduce impacts to a less-than-significant level.

Section 1602 of the Fish and Game Code requires an entity to notify CDFW prior to commencing any activity that may do one or more of the following: substantially divert or obstruct the natural flow of any river, stream or lake; substantially change or use any material from the bed, channel or bank of any river, stream, or lake; or deposit debris, waste or other materials that could pass into any river, stream or lake. Please note that "any river, stream or lake" includes those that are episodic (i.e., those that are dry for periods of time) as well as those that are perennial (i.e., those that flow year-round). This includes ephemeral streams and watercourses with a subsurface flow. It may also apply to work undertaken within the flood plain of a body of water.

If upon review of an entity's notification, CDFW determines that the Project activities may substantially adversely affect an existing fish or wildlife resource, a Lake and Streambed Alteration (LSA) Agreement will be issued which will include reasonable measures necessary to protect the resource. CDFW's issuance of an LSA Agreement is a "project" subject to CEQA (see Pub. Resources Code 21065). To facilitate issuance of an LSA Agreement, if one is necessary, the EIR should fully identify the potential impacts to the lake, stream, or riparian resources, and provide adequate avoidance, mitigation, and monitoring and reporting commitments. Early consultation with CDFW is recommended, since modification of the Project may avoid or reduce impacts to fish and wildlife resources. Notifications for projects should be submitted online through CDFW's Environmental Permit Information Management System (EPIMS). For more information about EPIMS, please visit https://wildlife.ca.gov/Conservation/Environmental-Review/EPIMS. More information about LSA Notifications, paper forms and fees may be found at https://www.wildlife.ca.gov/Conservation/Environmental-Review/LSA.

Please note that other agencies may use specific methods and definitions to determine impacts to areas subject to their authorities. These methods and definitions often do not include all needed information for CDFW to determine the extent of fish and wildlife resources affected by activities subject to Notification under Fish and Game Code

section 1602. Therefore, CDFW does not recommend relying solely on methods developed specifically for delineating areas subject to other agencies' jurisdiction (such as United States Army Corps of Engineers) when mapping lakes, streams, wetlands, floodplains, riparian areas, etc. in preparation for submitting a Notification of an LSA.

CDFW relies on the lead agency environmental document analysis when acting as a responsible agency issuing an LSA Agreement. CDFW recommends lead agencies coordinate with us as early as possible, since potential modification of the proposed Project may avoid or reduce impacts to fish and wildlife resources and expedite the Project approval process.

The following information will be required for the processing of an LSA Notification and CDFW recommends incorporating this information into any forthcoming CEQA document(s) to avoid subsequent documentation and Project delays:

1. Mapping and quantification of lakes, streams, and associated fish and wildlife habitat (e.g., riparian habitat, freshwater wetlands, etc.) that will be temporarily and/or permanently impacted by the Project, including impacts from access and staging areas. Please include an estimate of impact to each habitat type.

2. Discussion of specific avoidance, minimization, and mitigation measures to reduce Project impacts to fish and wildlife resources to a less-than-significant level. Please refer to section 15370 of the CEQA Guidelines.

Based on review of Project materials, aerial photography, and observation of the site from public roadways, the Project site supports unnamed tributaries to the Truckee River, and associated riparian habitat. CDFW recommends the EIR fully identify the Project's potential impacts to the stream and its associated vegetation and wetlands.

ENVIRONMENTAL DATA

CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database, which may be used to make subsequent or supplemental environmental determinations (Pub. Resources Code, § 21003, subd. (e)). Accordingly, please report any special-status species and natural communities detected during Project surveys to the California Natural Diversity Database. The CNNDB field survey form can be found at the following link: https://www.wildlife.ca.gov/Data/CNDDB/Submitting-Data. The completed form can be submitted online or mailed electronically to CNDDB at the following email address: CNDDB@wildlife.ca.gov.

FILING FEES

The Project, as proposed, would have an effect on fish and wildlife, and assessment of filing fees is necessary. Fees are payable upon filing of the Notice of Determination by Placer County and serve to help defray the cost of environmental review by CDFW. Payment of the fee is required in order for the underlying project approval to be

operative, vested, and final. (Cal. Code Regs, tit. 14, § 753.5; Fish & G. Code § 711.4; Pub. Resources Code, § 21089.)

CONCLUSION

Pursuant to Public Resources Code sections 21092 and 21092.2, CDFW requests written notification of proposed actions and pending decisions regarding the Project. Written notifications shall be directed to: California Department of Fish and Wildlife North Central Region, 1701 Nimbus Road, Rancho Cordova, CA 95670.

CDFW appreciates the opportunity to comment on the Notice of Preparation of the EIR for the Sierra Nevada Olympic Winter Sports Museum and Community Cultural Center Project and recommends that Placer County address CDFW's comments and concerns in the forthcoming EIR. CDFW personnel are available for consultation regarding biological resources and strategies to minimize impacts.

If you have any questions regarding the comments provided in this letter or wish to schedule a meeting and/or site visit, please contact Patrick Moeszinger, Senior Environmental Scientist (Specialist) at (916) 767-3935 or patrick.moeszinger@wildlife.ca.gov.

Sincerely,

DocuSigned by:
Kelley Barker
778EDA8AE45F4C9...

Kelley Barker
Environmental Program Manager

ec: Juan Torres, Senior Environmental Scientist (Supervisory)
Patrick Moeszinger, Senior Environmental Scientist (Specialist)
Department of Fish and Wildlife

Office of Planning and Research, State Clearinghouse, Sacramento

Literature Cited

Sawyer, J. O., T. Keeler-Wolf, and J. M. Evens. 2009. A Manual of California Vegetation, 2nd ed. California Native Plant Society Press, Sacramento, California. http://vegetation.cnps.org/

California Department of Transportation

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April 18, 2022

GTS# 03-PLA-2021-00914
03-PLA-89-13.54

Shirlee Herrington
3091 County Center Drive Suite 190
Auburn, CA 95603

SNOW Sports Museum and Community Cultural Center Project – NOP EIR

Dear Ms. Herrington:

Thank you for including the California Department of Transportation (Caltrans) in the review process for the project referenced above. We reviewed this local development for impacts to the State Highway System (SHS) in keeping with our mission, vision, and goals, some of which includes addressing equity, climate change, and safety, as outlined in our statewide plans such as the California Transportation Plan, Caltrans Strategic Plan, and Climate Action Plan for Transportation Infrastructure.

This project proposal is for a two-story building up to 20,000 square feet with multiple components indoors and outdoors. Including the Museum itself, Cultural Community Center, Event Space, Visitor Center, and Café/Museum Shop. The comments below are on the Environmental Impact Report circulated for review.

Highway Operations

- There are no traffic numbers to analyze the new facility. Please provide analysis on the impact to SR 89 at the traffic signal, and the parking lot entrance from Olympic Valley Road.
- Please indicate if access from Olympic Valley Road planned to remain the same with the assumed increase in trips generated, and if there will be any turn restrictions to implement.
    - Allowing left turns across a busy intersection approach increases the possibility of collisions.
- Please indicate if the amount of parking is adequate considering the increased usage of the area.
    - Please indicate if there will be enough ADA and van accessible spaces.

If you have any questions regarding these comments or require additional information, please contact David Dosanjh, Intergovernmental Review Coordinator for Placer County, at David.Dosanjh@dot.ca.gov.

Sincerely,

Kevin Yount

KEVIN YOUNT, Branch Chief
Office of Transportation Planning
Regional Planning Branch—East

NATIVE AMERICAN HERITAGE COMMISSION

NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov
NAHC.ca.gov

March 24, 2022

Shirlee Herrington
Placer County
3091 County Center Drive
Auburn, CA 95603

Re: 2022030511, SNOW Sports Museum and Community Cultural Center Project (PLN16-00349), Placer County

Dear Ms. Herrington:

The Native American Heritage Commission (NAHC) has received the Notice of Preparation (NOP), Draft Environmental Impact Report (DEIR) or Early Consultation for the project referenced above. The California Environmental Quality Act (CEQA) (Pub. Resources Code §21000 et seq.), specifically Public Resources Code §21084.1, states that a project that may cause a substantial adverse change in the significance of a historical resource, is a project that may have a significant effect on the environment. (Pub. Resources Code § 21084.1; Cal. Code Regs., tit.14, §15064.5 (b) (CEQA Guidelines §15064.5 (b)). If there is substantial evidence, in light of the whole record before a lead agency, that a project may have a significant effect on the environment, an Environmental Impact Report (EIR) shall be prepared. (Pub. Resources Code §21080 (d); Cal. Code Regs., tit. 14, § 5064 subd.(a)(1) (CEQA Guidelines §15064 (a)(1)). In order to determine whether a project will cause a substantial adverse change in the significance of a historical resource, a lead agency will need to determine whether there are historical resources within the area of potential effect (APE).

CEQA was amended significantly in 2014. Assembly Bill 52 (Gatto, Chapter 532, Statutes of 2014) (AB 52) amended CEQA to create a separate category of cultural resources, "tribal cultural resources" (Pub. Resources Code §21074) and provides that a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment. (Pub. Resources Code §21084.2). Public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource. (Pub. Resources Code §21084.3 (a)). **AB 52 applies to any project for which a notice of preparation, a notice of negative declaration, or a mitigated negative declaration is filed on or after July 1, 2015.** If your project involves the adoption of or amendment to a general plan or a specific plan, or the designation or proposed designation of open space, on or after March 1, 2005, it may also be subject to Senate Bill 18 (Burton, Chapter 905, Statutes of 2004) (SB 18). **Both SB 18 and AB 52 have tribal consultation requirements.** If your project is also subject to the federal National Environmental Policy Act (42 U.S.C. § 4321 et seq.) (NEPA), the tribal consultation requirements of Section 106 of the National Historic Preservation Act of 1966 (154 U.S.C. 300101, 36 C.F.R. §800 et seq.) may also apply.

The NAHC recommends consultation with California Native American tribes that are traditionally and culturally affiliated with the geographic area of your proposed project as early as possible in order to avoid inadvertent discoveries of Native American human remains and best protect tribal cultural resources. Below is a brief summary of portions of AB 52 and SB 18 as well as the NAHC's recommendations for conducting cultural resources assessments.

Consult your legal counsel about compliance with AB 52 and SB 18 as well as compliance with any other applicable laws.

AB 52

AB 52 has added to CEQA the additional requirements listed below, along with many other requirements:

1. Fourteen Day Period to Provide Notice of Completion of an Application/Decision to Undertake a Project: Within fourteen (14) days of determining that an application for a project is complete or of a decision by a public agency to undertake a project, a lead agency shall provide formal notification to a designated contact of, or tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, to be accomplished by at least one written notice that includes:

a. A brief description of the project.

b. The lead agency contact information.

c. Notification that the California Native American tribe has 30 days to request consultation. (Pub. Resources Code §21080.3.1 (d)).

d. A "California Native American tribe" is defined as a Native American tribe located in California that is on the contact list maintained by the NAHC for the purposes of Chapter 905 of Statutes of 2004 (SB 18). (Pub. Resources Code §21073).

2. Begin Consultation Within 30 Days of Receiving a Tribe's Request for Consultation and Before Releasing a Negative Declaration, Mitigated Negative Declaration, or Environmental Impact Report: A lead agency shall begin the consultation process within 30 days of receiving a request for consultation from a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project. (Pub. Resources Code §21080.3.1, subds. (d) and (e)) and prior to the release of a negative declaration, mitigated negative declaration or Environmental Impact Report. (Pub. Resources Code §21080.3.1(b)).

a. For purposes of AB 52, "consultation shall have the same meaning as provided in Gov. Code §65352.4 (SB 18). (Pub. Resources Code §21080.3.1 (b)).

3. Mandatory Topics of Consultation If Requested by a Tribe: The following topics of consultation, if a tribe requests to discuss them, are mandatory topics of consultation:

a. Alternatives to the project.

b. Recommended mitigation measures.

c. Significant effects. (Pub. Resources Code §21080.3.2 (a)).

4. Discretionary Topics of Consultation: The following topics are discretionary topics of consultation:

a. Type of environmental review necessary.

b. Significance of the tribal cultural resources.

c. Significance of the project's impacts on tribal cultural resources.

d. If necessary, project alternatives or appropriate measures for preservation or mitigation that the tribe may recommend to the lead agency. (Pub. Resources Code §21080.3.2 (a)).

5. Confidentiality of Information Submitted by a Tribe During the Environmental Review Process: With some exceptions, any information, including but not limited to, the location, description, and use of tribal cultural resources submitted by a California Native American tribe during the environmental review process shall not be included in the environmental document or otherwise disclosed by the lead agency or any other public agency to the public, consistent with Government Code §6254 (r) and §6254.10. Any information submitted by a California Native American tribe during the consultation or environmental review process shall be published in a confidential appendix to the environmental document unless the tribe that provided the information consents, in writing, to the disclosure of some or all of the information to the public. (Pub. Resources Code §21082.3 (c)(1)).

6. Discussion of Impacts to Tribal Cultural Resources in the Environmental Document: If a project may have a significant impact on a tribal cultural resource, the lead agency's environmental document shall discuss both of the following:

a. Whether the proposed project has a significant impact on an identified tribal cultural resource.

b. Whether feasible alternatives or mitigation measures, including those measures that may be agreed to pursuant to Public Resources Code §21082.3, subdivision (a), avoid or substantially lessen the impact on the identified tribal cultural resource. (Pub. Resources Code §21082.3 (b)).

7. Conclusion of Consultation: Consultation with a tribe shall be considered concluded when either of the following occurs:

a. The parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource; or

b. A party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached. (Pub. Resources Code §21080.3.2 (b)).

8. Recommending Mitigation Measures Agreed Upon in Consultation in the Environmental Document: Any mitigation measures agreed upon in the consultation conducted pursuant to Public Resources Code §21080.3.2 shall be recommended for inclusion in the environmental document and in an adopted mitigation monitoring and reporting program, if determined to avoid or lessen the impact pursuant to Public Resources Code §21082.3, subdivision (b), paragraph 2, and shall be fully enforceable. (Pub. Resources Code §21082.3 (a)).

9. Required Consideration of Feasible Mitigation: If mitigation measures recommended by the staff of the lead agency as a result of the consultation process are not included in the environmental document or if there are no agreed upon mitigation measures at the conclusion of consultation, or if consultation does not occur, and if substantial evidence demonstrates that a project will cause a significant effect to a tribal cultural resource, the lead agency shall consider feasible mitigation pursuant to Public Resources Code §21084.3 (b). (Pub. Resources Code §21082.3 (e)).

10. Examples of Mitigation Measures That, If Feasible, May Be Considered to Avoid or Minimize Significant Adverse Impacts to Tribal Cultural Resources:

a. Avoidance and preservation of the resources in place, including, but not limited to:

i. Planning and construction to avoid the resources and protect the cultural and natural context.

ii. Planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.

b. Treating the resource with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following:

i. Protecting the cultural character and integrity of the resource.

ii. Protecting the traditional use of the resource.

iii. Protecting the confidentiality of the resource.

c. Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places.

d. Protecting the resource. (Pub. Resource Code §21084.3 (b)).

e. Please note that a federally recognized California Native American tribe or a non-federally recognized California Native American tribe that is on the contact list maintained by the NAHC to protect a California prehistoric, archaeological, cultural, spiritual, or ceremonial place may acquire and hold conservation easements if the conservation easement is voluntarily conveyed. (Civ. Code §815.3 (c)).

f. Please note that it is the policy of the state that Native American remains and associated grave artifacts shall be repatriated. (Pub. Resources Code §5097.991).

11. Prerequisites for Certifying an Environmental Impact Report or Adopting a Mitigated Negative Declaration or Negative Declaration with a Significant Impact on an Identified Tribal Cultural Resource: An Environmental Impact Report may not be certified, nor may a mitigated negative declaration or a negative declaration be adopted unless one of the following occurs:

a. The consultation process between the tribes and the lead agency has occurred as provided in Public Resources Code §21080.3.1 and §21080.3.2 and concluded pursuant to Public Resources Code §21080.3.2.

b. The tribe that requested consultation failed to provide comments to the lead agency or otherwise failed to engage in the consultation process.

c. The lead agency provided notice of the project to the tribe in compliance with Public Resources Code §21080.3.1 (d) and the tribe failed to request consultation within 30 days. (Pub. Resources Code §21082.3 (d)).

The NAHC's PowerPoint presentation titled, "Tribal Consultation Under AB 52: Requirements and Best Practices" may be found online at: http://nahc.ca.gov/wp-content/uploads/2015/10/AB52TribalConsultation_CalEPAPDF.pdf

SB 18

SB 18 applies to local governments and requires local governments to contact, provide notice to, refer plans to, and consult with tribes prior to the adoption or amendment of a general plan or a specific plan, or the designation of open space. (Gov. Code §65352.3). Local governments should consult the Governor's Office of Planning and Research's "Tribal Consultation Guidelines," which can be found online at: https://www.opr.ca.gov/docs/09_14_05_Updated_Guidelines_922.pdf.

Some of SB 18's provisions include:

1. Tribal Consultation: If a local government considers a proposal to adopt or amend a general plan or a specific plan, or to designate open space it is required to contact the appropriate tribes identified by the NAHC by requesting a "Tribal Consultation List." If a tribe, once contacted, requests consultation the local government must consult with the tribe on the plan proposal. **A tribe has 90 days from the date of receipt of notification to request consultation unless a shorter timeframe has been agreed to by the tribe.** (Gov. Code §65352.3 (a)(2)).
2. No Statutory Time Limit on SB 18 Tribal Consultation. There is no statutory time limit on SB 18 tribal consultation.
3. Confidentiality: Consistent with the guidelines developed and adopted by the Office of Planning and Research pursuant to Gov. Code §65040.2, the city or county shall protect the confidentiality of the information concerning the specific identity, location, character, and use of places, features and objects described in Public Resources Code §5097.9 and §5097.993 that are within the city's or county's jurisdiction. (Gov. Code §65352.3 (b)).
4. Conclusion of SB 18 Tribal Consultation: Consultation should be concluded at the point in which:
    a. The parties to the consultation come to a mutual agreement concerning the appropriate measures for preservation or mitigation; or
    b. Either the local government or the tribe, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached concerning the appropriate measures of preservation or mitigation. (Tribal Consultation Guidelines, Governor's Office of Planning and Research (2005) at p. 18).

Agencies should be aware that neither AB 52 nor SB 18 precludes agencies from initiating tribal consultation with tribes that are traditionally and culturally affiliated with their jurisdictions before the timeframes provided in AB 52 and SB 18. For that reason, we urge you to continue to request Native American Tribal Contact Lists and "Sacred Lands File" searches from the NAHC. The request forms can be found online at: http://nahc.ca.gov/resources/forms/.

NAHC Recommendations for Cultural Resources Assessments

To adequately assess the existence and significance of tribal cultural resources and plan for avoidance, preservation in place, or barring both, mitigation of project-related impacts to tribal cultural resources, the NAHC recommends the following actions:

1. Contact the appropriate regional California Historical Research Information System (CHRIS) Center (http://ohp.parks.ca.gov/?page_id=1068) for an archaeological records search. The records search will determine:
    a. If part or all of the APE has been previously surveyed for cultural resources.
    b. If any known cultural resources have already been recorded on or adjacent to the APE.
    c. If the probability is low, moderate, or high that cultural resources are located in the APE.
    d. If a survey is required to determine whether previously unrecorded cultural resources are present.

2. If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.
    a. The final report containing site forms, site significance, and mitigation measures should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum and not be made available for public disclosure.

b. The final written report should be submitted within 3 months after work has been completed to the appropriate regional CHRIS center.

3. Contact the NAHC for:

a. A Sacred Lands File search. Remember that tribes do not always record their sacred sites in the Sacred Lands File, nor are they required to do so. A Sacred Lands File search is not a substitute for consultation with tribes that are traditionally and culturally affiliated with the geographic area of the project's APE.

b. A Native American Tribal Consultation List of appropriate tribes for consultation concerning the project site and to assist in planning for avoidance, preservation in place, or, failing both, mitigation measures.

4. Remember that the lack of surface evidence of archaeological resources (including tribal cultural resources) does not preclude their subsurface existence.

a. Lead agencies should include in their mitigation and monitoring reporting program plan provisions for the identification and evaluation of inadvertently discovered archaeological resources per Cal. Code Regs., tit. 14, §15064.5(f) (CEQA Guidelines §15064.5(f)). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American with knowledge of cultural resources should monitor all ground-disturbing activities.

b. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the disposition of recovered cultural items that are not burial associated in consultation with culturally affiliated Native Americans.

c. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the treatment and disposition of inadvertently discovered Native American human remains. Health and Safety Code §7050.5, Public Resources Code §5097.98, and Cal. Code Regs., tit. 14, §15064.5, subdivisions (d) and (e), (CEQA Guidelines §15064.5, subds. (d) and (e)) address the processes to be followed in the event of an inadvertent discovery of any Native American human remains and associated grave goods in a location other than a dedicated cemetery.

If you have any questions or need additional information, please contact me at my email address: Pricilla.Torres-Fuentes@nahc.ca.gov

Sincerely,

Pricilla Torres-Fuentes

Pricilla Torres-Fuentes
Cultural Resources Analyst

cc: State Clearinghouse

USDA United States Department of Agriculture | Forest Service | Tahoe National Forest Supervisor's Office

631 Coyote Street
Nevada City, CA 95959
530-478-6100
TDD: 1-800-735-2929
Fax: 530-478-6109

File Code: 5450; 1950
Date: April 13, 2022

Shirlee Herrington
Environmental Coordination Services
Placer County Community Development Resource Agency
3091 County Center Drive, Suite 190
Auburn, CA 95603

Dear Ms. Herrington:

This letter responds to the call for public and agency comments on Placer County's *Notice of Preparation of an Environmental Impact Report for the Proposed SNOW Sports Museum and Community Cultural Center Project* (NOP). As you may be aware, my staff and I have had multiple communications with Placer County over the past several years concerning this proposed project and the disposition of deed restrictions held by the United States affecting development of lands at Squaw Valley Community Park (SVCP).

For context, in December of 1999, the United States conveyed approximately 36 acres of National Forest System lands administered by the Tahoe National Forest (TNF) to Placer County at the entrance to Olympic Valley. The land was conveyed for a purchase price of $282,000 under authority of Public Law 105-208 dated July 29, 1998. PL 105-208 authorized the lands to be conveyed to Placer County for the purpose of creating a community park; PL 105-208 required a sales price at fair market value. Deed restrictions were placed on the conveyance commensurate with valuation of the lands to be used for community park purposes and prohibited use of the lands for commercial, residential or industrial developments. The deed restrictions allowed the lands to be conveyed to Placer County at a discounted price compared with valuation of the lands without a deed restriction.

Page 16 of the NOP describes the subject deed restriction and, based on a March 27, 2017 letter from County Counsel to me, concludes that there is no conflict between the proposed development and the deed restriction. This conclusion does not reflect the views of the Forest Service or the Department of Agriculture Office of the General Counsel. In response to County Counsel's letter, we provided a letter dated May 12, 2017 (enclosed) to Ken Grehm, Director of Placer County Public Works and Facilities providing our views of County Counsel's letter. This position has been reiterated by the Chief of the Forest Service in a letter to Senator Feinstein dated March 21, 2022 (enclosed).

The current proposal being considered, a museum conducting commerce on the premises in the form of renting event space and operating a café and museum shop, would be in direct conflict with the deed restriction barring commercial use. Tax exempt status of a non-profit entity does not waive the requirements of the deed restriction.

In my May 12, 2017 letter, I offered the assistance of my staff to work with the County towards having the deed restriction removed in order to enable private commercial use of the lands to accommodate development of the proposed SNOW Sports Museum and Cultural Center. I have met with various County staff and officials and understand that the County may be interested in such a transaction. I suggest that the County and the Forest Service complete all necessary real estate transactions assuring the County's legal authority to proceed with the proposal before considering it further.

Sincerely,

ELI ILANO
Forest Supervisor

Enclosures (2)

USDA United States Department of Agriculture
Forest Service
Tahoe National Forest
Supervisor's Office
631 Coyote Street
Nevada City, CA 95959
530-478-6100
TDD: 1-800-735-2929
Fax: 530-478-6109

File Code: 5570
Date: May 12, 2017

Ken Grehm
Director, Placer County Department of Public Works and Facilities
11476 C Avenue
Auburn, CA 95603

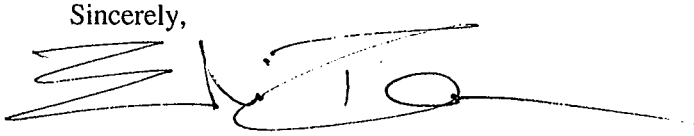
Dear Mr. Grehm,

Thank you for the letter from Placer County Counsel dated March 27, 2017, which provided a legal opinion regarding the proposed Squaw Valley Ski Museum. Specifically, the letter concluded that California law suggests that uses such as museums can be compatible with deeds restricting lands to use as a community park. County Counsel's letter was informative, although it did not specifically analyze the portion of the deed that restricts the property from development of a commercial nature. Analysis of the supporting materials submitted with the letter shows that the museum's proponents are aware that this is a complex area of the law. The proposal nevertheless contains descriptions of several commercial aspects to the proposed Museum's activities (entrance fees, sale of refreshments and souvenirs, and potential rental use of the facilities for events both related and unrelated to the Museum's core purpose). Whether the proposed museum and its operations meet the threshold of a development that is commercial in nature is currently an unanswered legal question. It will be incumbent on Placer County to ensure any further development of the property is not commercial in nature and meets all of the deed restrictions for the property. Your attention in this matter will insure that the United States is not put in a position to consider termination of the deed in the future.

Should Placer County be interested in relieving both the County and the United States of monitoring the restrictions placed on the use of this parcel, we would be willing to explore the possibility of removing the deed restriction if it can be shown that the enabling legislation would allow it, and if a process can be identified to accomplish it. Such a process would likely require appraising the property without any use restrictions, reflecting the added economic benefit of the change and compensating the United States for such a change.

If you have any questions, please contact Joanne Roubique, District Ranger at (530) 587-3558.

Sincerely,



ELI ILANO
Forest Supervisor

USDA United States Department of Agriculture | Forest Service | Washington Office | 1400 Independence Avenue, SW Washington, D.C. 20250

File Code: 5400; 1510 (8778604)
Date: March 21, 2022

The Honorable Dianne Feinstein
United States Senate
331 Hart Senate Office Building
Washington, D.C. 20510

Dear Senator Feinstein:

Thank you for your letter of November 9, 2021, regarding the Sierra Nevada Olympic and Winter Sports Foundation (SNOW) proposal to develop a SNOW Museum on former National Forest System (NFS) lands at Squaw Valley Park. I apologize for the delayed response.

The former NFS lands at Squaw Valley Park were conveyed from the Tahoe National Forest to Placer County in 1999, in accordance with Public Law 105-208. The legislation articulated intended use of these lands as a community park and required Placer County to pay fair market value for them. To meet this intent and make the purchase affordable for Placer County, the Forest Service retained a deed restriction limiting the use of the lands to that of a community park and prohibiting the "use of the property for private development of a commercial, residential or industrial nature."

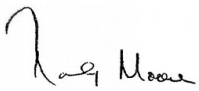
Since receiving the initial proposal several years ago by the predecessor organization to SNOW, the Tahoe National Forest received public feedback both in favor and opposed to the museum development. Some members of the public support the venture, and others oppose it with a preference to maintain the open and undeveloped character of Squaw Valley Park. The Forest Service does not have a position on the merits of the SNOW proposal.

Tahoe National Forest leadership consulted with the U.S. Department of Agriculture's Office of the General Counsel regarding the museum proposal and deed restriction and thoroughly discussed it with Placer County staff and the SNOW Foundation over several years. As stated in the enclosed letter of May 12, 2017, the museum foundation's status as a 501(c)(3) non-profit organization does not exempt it from the deed restriction precluding private commercial use, which is contained in the current museum proposal in the form of conference room rentals, a snack bar, a gift shop, and admission fees. The 501(c)(3) status also does not change the original intent of the legislation facilitating transferring the land to Placer County.

In our letter of May 12, 2017, to Placer County, the Forest Service expressed our willingness and ability to consider releasing the deed restriction in exchange for consideration at fair market value, if this is found to be consistent with the requirements of Public Law 105-208. If Placer County were to acquire the remainder of the interests in the lands currently retained by the United States at fair market value, it could develop the land in whatever manner it sees fit.

Again, thank you for writing. If you or your staff have any questions, please contact Jacob Donnay, Director of Legislative Affairs, at (202) 205-1617 or jacob.donnay@usda.gov.

Sincerely,

X 

Signed by: RANDY MOORE
RANDY MOORE
Chief

Enclosure

TAVERN INN

Condominium Property Association • Olympic Valley, California

April 18, 2022

Ms. Shirlee Herrington
Environmental Coordination Services
Placer County Community Development Resource Agency
3091 County Center Drive, Suite 190
Auburn, CA 95603

Dear Ms. Herrington:

I write on behalf of the Board of Directors of the Tavern Inn Condominiums Association in response to the Notice of Preparation, issued by the County regarding the preparation of an Environmental Impact Report for the Proposed SNOW Sports Museum and Community Cultural Center Project to be located at the Squaw Valley Community Park Site, 101 Olympic Valley Road, Olympic Valley, CA.

The Tavern Inn community consists of 56 condominium units located adjacent to the proposed project. While we appreciate the park's amenities, we have already experienced overflow parking occurring at Tavern Inn during soccer field usage. With an additional estimated 70,000 – 80,000 annual visitors, we would like to see a plan for adequate parking for the increased traffic to the proposed development. The parking at Tavern Inn is private and cannot accommodate parking for users of the park and proposed museum at any time.

Additionally, since traffic tends to back up onto River Road/State Route (SR) 89, at the Olympic Valley Road traffic light during Palisades Tahoe opening hours, additional traffic flow for the Museum is a concern. Perhaps operating hours could be coordinated with Palisades Tahoe to reduce the impact of additional traffic.

There are also concerns regarding noise impacts, both during construction and during events at the proposed museum. We request that measures are adopted that ensure construction noise does not exceed levels set by the County Code and restricting construction activity to Monday through Friday from 8:00 a.m. to 5:00 p.m. We also respectfully request that no community events extend beyond 10 pm, due to the potential noise disruption to our homeowners.

Sincerely,

Janet Basler

Janet Basler
Vice President
Tavern Inn Condominiums Association
PO Box 2237
Olympic Valley, CA 96146

Shirlee Herrington

From: Ed Heneveld <doced@att.net>
Sent: Monday, April 18, 2022 12:30 PM
To: Placer County Environmental Coordination Services
Cc: Shirlee Herrington; Eli Ilano
Subject: [EXTERNAL] NOP for proposed SNOW museum in Olympic Valley

Date: April 18, 2022

To: Shirley Herrington, Placer County Community Development Resource Agency

Re: NOP comments for proposed SNOW museum in Olympic Valley

Dear Shirley and Placer County Officials involved with SNOW museum NOP:

Thank you for the opportunity to comment on the NOP for the proposed SNOW museum in Squaw Valley Park.

My biggest concern remains the USFS deed restriction that prohibits commercial operations in the Park. Only the County's lawyer is quoted in the rationale that this museum will not be a commercial operation. The comment that it is a "legal question" is valid. There is a very pertinent letter from US Forest Supervisor, Eli Ilano, dated May 12, 2017, where he clearly states the USFS will "consider termination" if the museum's financial operations overstep into a "commercial" nature. He has also stated that his review finds most of the USFS employees who were involved with the park land sale to Placer County agreed that commercial aspects of a museum would "violate the intent of the deed restriction".

Although not typically addressed in an EIR, the financial budget for this proposed museum is critical to determine if Mr. Ilano will find it "crosses the line" of commercial. It is also necessary for the public to understand the sustainability of the endeavor. A detailed operational budget needs to be included in the consideration of approving this development.

I also have concern involving potential conflict with existing and future uses addressed in F-2 "cumulatively considerable" impacts, including future projects. Placer County has not conducted a Squaw Valley master plan despite numerous requests. Immediate concerns include:

1. the need for a 4th pickleball court to properly host tournaments and meet the growing demand for this popular amenity. This court should be adjacent to existing courts and this creates conflict with required parking spaces with what is proposed.

2. Tot lot is directly across the parking lot from proposed museum; the proximity creates a danger that must be addressed.
3. Bocce ball courts have been a longstanding priority.
4. Community gathering place, a pavilion, is warranted and could easily be best located just south of the museum building in the “re-zone” area. Any conflict here?
5. Winter sledding – a safe, gentle but fun sledding area needs to be created. Where? Museum footprint in no project alternative? Seriously, a small sled hill is important.

Although the document acknowledges future park amenities, some specific discussion of existing and future cumulative impacts is warranted in this upcoming document, especially as to not impede future amenities.

Finally, the traffic conflicts at the park entrance are, at times, already an issue. Cars entering Olympic Valley have to turn left again 2-3 lanes of exiting traffic, as do park exiting cars wanting to turn left.
Bus and fire truck turn around, especially in winter, seems very challenging given and not well addressed. The document finds this is significant; I await the details.

With respect,

Ed Heneveld
589 Forest Glen Road
Olympic Valley, CA 96146
doced@att.net

To: Shirlee Herrington
Environmental Coordination Services
Placer County Community Development Resources Agency
3091 County Center Drive, Suite 190
Auburn, California 95603

Re: SNOW Museum EIR

From: Marylyn Siewert
361 Sierra Crest Trail, P. O. Box 2396
Olympic Valley, California 96146

Following are my comments regarding the EIR to place the SNOW museum on a needed rezoned parcel in the existing Squaw Valley Park.

First of all, I question the validity of taking dedicated-USFS-land to the public and changing the zoning to allow a semi-commercial museum. The "taking" of public land for the benefit of an organization such as the museum will create a precedent of all future open public land in Placer County. This museum says they will hold private weddings and conferences in extra rooms that will not be part of the museum. Further there is a restaurant. The museum claims the profits will go to the museum (paying employees, etc.). How can this not be construed to be commercial use which is against the deed from the USFS?

At the present time, the Park is fully utilized in the Spring, Summer, Fall months by athletic endeavors: Soccer, Bicycling, Hiking, Basket Ball, Pickleball, Youth Playground, Trailhead parking, etc. The parking lot is always full. Any open space is used for resting under the trees or playing under the trees by youngsters. I question whether the County has the right to change the use of this piece of property within the dedicated-to-the public park.

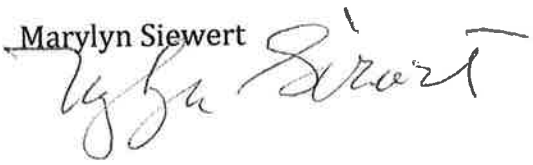
Traffic and air quality will be affected. The parking lot is normally full because of the aforementioned activities. The normal traffic is created by personal cars. To date there are no busses. The EIR talks about a turn around for busses. Again, the museum is creating an air quality problem for the athletes that are using the Park under the rules of the deed. Busses stand with engines running which create a diminishing of air quality for those exercising. A mitigation of this, of course, would first not allow the museum and second not allow busses in the Park.

The museum will cause more traffic in the parking lot which is utilized to a great extent by different ages including many small children. Is the parking lot being rezoned also? If so – more taking of public property. Is further increase in traffic increasing danger to the public using the property? Mitigate by no project!

In conclusion to my comments, I would like to say that the Squaw Valley Park has been an asset to the community and the tourist community for many years. It took a great effort by the local community to achieve the existence of the Park. The EIR should represent the environmental destruction of this valuable asset. Please mitigate by stating that mitigation is by having no project.

Thank you,

Marylyn Siewert



Placer County Environmental Coordination Services

From: Rozlynn Worrall <rozworrall@hotmail.com>
Sent: Monday, April 18, 2022 1:18 PM
To: Placer County Environmental Coordination Services
Cc: info@sierrawatch.org
Subject: [EXTERNAL] Public Comments regarding EIR preparation for Snow Museum at Squaw Valley Community Park

Yesterday, our family (area residents of Nevada and Placer county) met up at the Squaw Valley Community Park and enjoyed this lovely gem. It is an oasis in a busy tourist area intended for recreational purposes of the local community. The parking lots during the summer are filled with people preparing for biking, hiking, playing pickleball, and enjoying the children's playground. The main highway is always busy and often congested, particularly during snow season. We frequent this park regularly when the snow is not flying and enjoy playing on the pickleball courts. When the snow does fly, we avoid the main highway because of the traffic congestion.

We noticed the sign of EIR intent and followed up by visiting the WEBSITE. Here are our comments:

1. In general, we like the idea of a Snow Museum and Cultural Center, but there are already two Olympic and snow museums around, one at Squaw Valley and one at Boreal Ridge. Why not invest and improve upon what already exists? The Donner State Park Visitor Center is a Cultural and Historic Center.
2.
3. Specifically, we dislike the idea of co-opting our community park intended for recreation and outdoor beauty for an edifice intended primarily as a tourist attraction, visitor, and event center, with commercial food service and gift shop, and increased traffic at an already busy intersection.

    - The economic benefit for Friends of Squaw Valley (Palisades) to build in this area is evident and desirable for this purpose for them with an excellent location, "free or nominal cost space?", and already existing entrance, parking, and some utilities.

-
- **HOWEVER**

    - The proposed project would not be "nestled" between the two parking lots, it would be "sandwiched" into a small space that is currently an island of trees, beautiful boulders, and wet land drainage area. The existing pickleball courts will be surrounded by cars, tourist busses and vehicle exhaust

    - The benefit to the local residents and current park users is highly questionable.

    - The benefit to wildlife, trees, birds, habitat, land, and natural beauty is NIL.

Thank you for considering these comments of initial opposition.
Rozlynn M. Worrall

Placer County, voting resident PO Box 656, Weimar, California 95736
Nevada County part-time resident, 15715 Donner Pass Road, Truckee, CA 96161
rozworrall@hotmail.com
530 305-3739

The SNOW Museum Project
NOP Scoping Meeting Comment Summary

Date: March 28, 2022
Time: 3:00 PM
Location: Zoom meeting

I. Presentation by Project Planner Patrick Dobbs

II. Verbal Comments (arranged in order of "appearance" of commenter):

1. Public Comments:

Commenter 1: Mark Calhoun – Member of Olympic Valley Municipal Advisory Council

- The commenter has concerns related to the exterior appearance of the museum, such as color, vegetation, and signage.
- The commenter has concerns related to the connectivity of new trails throughout the subdivision and to the existing regional trail network.

Commenter 2: Marjorie Sladek – Owners at Tavern Inn Condominiums

- The commenter has concerns related to the traffic light at the corner of 89 and Olympic Valley Road.
- The commenter has concerns related to overflow parking infringing on the Tavern Inn Condominiums.

Commenter 3: Ed Henninbald – Olympic Valley Resident

- The commenter has concerns related to the definition of rezoning to cultural amenities zoning district.
- The commenter has concerns related to the size and capacity of the conference room.
- The commenter has concerns related to the U.S. Forest Service deeming the museum a commercial operation.
- The commenter has concerns related to the Olympic Committee's views on the name of the museum and its use of the word "Olympic."
- The commenter has concerns related to the funds being put towards the museum and EIR process.

III. Closing remarks by Patrick Dobbs

APPENDIX C

SNOW Sports Museum - Placer County APCD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

SNOW Sports Museum

Placer County APCD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	20.00	1000sqft	0.78	20,000.00	0
Parking Lot	9.54	1000sqft	0.22	9,542.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	74
Climate Zone	14			**Operational Year**	2024
Utility Company	Sierra Pacific Resources				
CO2 Intensity (lb/MWhr)	1328.16	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Building lot acreage and parking lot square footage based on site plan.

Construction Phase - Project construction timing based on default assumptions for construction of the proposed project.

Trips and VMT -

Grading - Based on Civil site plans for the proposed project.

Vehicle Trips - Based on trip rates and VMT analysis prepared by LSC Transportation Consultants, Inc.

Energy Use - The proposed project would use propane instead of natural gas - propane emissions calculated separately.

Area Mitigation - Pursuant to PCAPCD regulations.

Water Mitigation - Compliant with MWELO

SNOW Sports Museum - Placer County APCD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstructionPhase	NumDays	10.00	5.00
tblConstructionPhase	NumDays	2.00	10.00
tblEnergyUse	T24NG	19.34	0.00
tblGrading	MaterialExported	0.00	1,200.00
tblLandUse	LandUseSquareFeet	9,540.00	9,542.00
tblLandUse	LotAcreage	0.46	0.78
tblVehicleTrips	CC_TL	7.30	10.07
tblVehicleTrips	CNW_TL	7.30	10.07
tblVehicleTrips	CW_TL	9.50	13.10
tblVehicleTrips	DV_TP	19.00	0.00
tblVehicleTrips	PB_TP	4.00	0.00
tblVehicleTrips	PR_TP	77.00	100.00
tblVehicleTrips	ST_TR	2.21	10.95
tblVehicleTrips	SU_TR	0.70	11.20
tblVehicleTrips	WD_TR	9.74	8.35

2.0 Emissions Summary

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.1366	0.4292	0.4451	8.5000e-004	0.0346	0.0200	0.0546	0.0150	0.0184	0.0334	0.0000	75.3873	75.3873	0.0197	1.5300e-003	76.3349
Maximum	**0.1366**	**0.4292**	**0.4451**	**8.5000e-004**	**0.0346**	**0.0200**	**0.0546**	**0.0150**	**0.0184**	**0.0334**	**0.0000**	**75.3873**	**75.3873**	**0.0197**	**1.5300e-003**	**76.3349**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.1366	0.4292	0.4451	8.5000e-004	0.0346	0.0200	0.0546	0.0150	0.0184	0.0334	0.0000	75.3873	75.3873	0.0197	1.5300e-003	76.3348
Maximum	**0.1366**	**0.4292**	**0.4451**	**8.5000e-004**	**0.0346**	**0.0200**	**0.0546**	**0.0150**	**0.0184**	**0.0334**	**0.0000**	**75.3873**	**75.3873**	**0.0197**	**1.5300e-003**	**76.3348**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

SNOW Sports Museum - Placer County APCD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	5-1-2023	7-31-2023	0.2675	0.2675
2	8-1-2023	9-30-2023	0.1595	0.1595
		Highest	0.2675	0.2675

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0882	0.0000	2.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	5.3000e-004	5.3000e-004	0.0000	0.0000	5.6000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	130.6939	130.6939	2.8500e-003	5.9000e-004	130.9411
Mobile	0.1217	0.2000	1.2615	2.6900e-003	0.2706	2.3700e-003	0.2730	0.0725	2.2300e-003	0.0747	0.0000	252.4279	252.4279	0.0142	0.0127	256.5645
Waste						0.0000	0.0000		0.0000	0.0000	3.7756	0.0000	3.7756	0.2231	0.0000	9.3540
Water						0.0000	0.0000		0.0000	0.0000	1.1277	16.1814	17.3092	0.1162	2.8100e-003	21.0506
Total	**0.2099**	**0.2000**	**1.2617**	**2.6900e-003**	**0.2706**	**2.3700e-003**	**0.2730**	**0.0725**	**2.2300e-003**	**0.0747**	**4.9034**	**399.3037**	**404.2071**	**0.3564**	**0.0161**	**417.9107**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0882	0.0000	2.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	5.3000e-004	5.3000e-004	0.0000	0.0000	5.6000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	130.6939	130.6939	2.8500e-003	5.9000e-004	130.9411
Mobile	0.1217	0.2000	1.2615	2.6900e-003	0.2706	2.3700e-003	0.2730	0.0725	2.2300e-003	0.0747	0.0000	252.4279	252.4279	0.0142	0.0127	256.5645
Waste						0.0000	0.0000		0.0000	0.0000	3.7756	0.0000	3.7756	0.2231	0.0000	9.3540
Water						0.0000	0.0000		0.0000	0.0000	1.1277	15.2627	16.3904	0.1162	2.8000e-003	20.1300
Total	**0.2099**	**0.2000**	**1.2617**	**2.6900e-003**	**0.2706**	**2.3700e-003**	**0.2730**	**0.0725**	**2.2300e-003**	**0.0747**	**4.9034**	**398.3849**	**403.2883**	**0.3564**	**0.0161**	**416.9902**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.23**	**0.23**	**0.01**	**0.06**	**0.22**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	5/1/2023	5/5/2023	5	5	
2	Site Preparation	Site Preparation	5/6/2023	5/8/2023	5	1	
3	Grading	Grading	5/9/2023	5/22/2023	5	10	

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4	Building Construction	Building Construction	5/23/2023	10/9/2023	5	100	
5	Paving	Paving	10/10/2023	10/16/2023	5	5	
6	Architectural Coating	Architectural Coating	10/17/2023	10/23/2023	5	5	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 7.5

Acres of Paving: 0.22

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 30,000; Non-Residential Outdoor: 10,000; Striped Parking Area: 573 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	1.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	150.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	10.00	5.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	2.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.6200e-003	0.0145	0.0185	3.0000e-005		7.1000e-004	7.1000e-004		6.7000e-004	6.7000e-004	0.0000	2.6045	2.6045	4.7000e-004	0.0000	2.6164
Total	**1.6200e-003**	**0.0145**	**0.0185**	**3.0000e-005**		**7.1000e-004**	**7.1000e-004**		**6.7000e-004**	**6.7000e-004**	**0.0000**	**2.6045**	**2.6045**	**4.7000e-004**	**0.0000**	**2.6164**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.0000e-005	4.0000e-005	5.7000e-004	0.0000	2.0000e-004	0.0000	2.0000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1550	0.1550	0.0000	0.0000	0.1564
Total	**6.0000e-005**	**4.0000e-005**	**5.7000e-004**	**0.0000**	**2.0000e-004**	**0.0000**	**2.0000e-004**	**5.0000e-005**	**0.0000**	**5.0000e-005**	**0.0000**	**0.1550**	**0.1550**	**0.0000**	**0.0000**	**0.1564**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.6200e-003	0.0145	0.0185	3.0000e-005		7.1000e-004	7.1000e-004		6.7000e-004	6.7000e-004	0.0000	2.6045	2.6045	4.7000e-004	0.0000	2.6164
Total	**1.6200e-003**	**0.0145**	**0.0185**	**3.0000e-005**		**7.1000e-004**	**7.1000e-004**		**6.7000e-004**	**6.7000e-004**	**0.0000**	**2.6045**	**2.6045**	**4.7000e-004**	**0.0000**	**2.6164**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.0000e-005	4.0000e-005	5.7000e-004	0.0000	2.0000e-004	0.0000	2.0000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1550	0.1550	0.0000	0.0000	0.1564
Total	**6.0000e-005**	**4.0000e-005**	**5.7000e-004**	**0.0000**	**2.0000e-004**	**0.0000**	**2.0000e-004**	**5.0000e-005**	**0.0000**	**5.0000e-005**	**0.0000**	**0.1550**	**0.1550**	**0.0000**	**0.0000**	**0.1564**

3.3 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.7000e-004	0.0000	2.7000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.7000e-004	3.0900e-003	1.9600e-003	0.0000		1.1000e-004	1.1000e-004		1.0000e-004	1.0000e-004	0.0000	0.4275	0.4275	1.4000e-004	0.0000	0.4309
Total	**2.7000e-004**	**3.0900e-003**	**1.9600e-003**	**0.0000**	**2.7000e-004**	**1.1000e-004**	**3.8000e-004**	**3.0000e-005**	**1.0000e-004**	**1.3000e-004**	**0.0000**	**0.4275**	**0.4275**	**1.4000e-004**	**0.0000**	**0.4309**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-005	0.0000	6.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0155	0.0155	0.0000	0.0000	0.0156
Total	**1.0000e-005**	**0.0000**	**6.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0155**	**0.0155**	**0.0000**	**0.0000**	**0.0156**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.7000e-004	0.0000	2.7000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.7000e-004	3.0900e-003	1.9600e-003	0.0000		1.1000e-004	1.1000e-004		1.0000e-004	1.0000e-004	0.0000	0.4275	0.4275	1.4000e-004	0.0000	0.4309
Total	**2.7000e-004**	**3.0900e-003**	**1.9600e-003**	**0.0000**	**2.7000e-004**	**1.1000e-004**	**3.8000e-004**	**3.0000e-005**	**1.0000e-004**	**1.3000e-004**	**0.0000**	**0.4275**	**0.4275**	**1.4000e-004**	**0.0000**	**0.4309**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-005	0.0000	6.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0155	0.0155	0.0000	0.0000	0.0156
Total	**1.0000e-005**	**0.0000**	**6.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0155**	**0.0155**	**0.0000**	**0.0000**	**0.0156**

3.4 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0266	0.0000	0.0266	0.0129	0.0000	0.0129	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.6700e-003	0.0509	0.0278	7.0000e-005		2.1000e-003	2.1000e-003		1.9300e-003	1.9300e-003	0.0000	6.1905	6.1905	2.0000e-003	0.0000	6.2406
Total	**4.6700e-003**	**0.0509**	**0.0278**	**7.0000e-005**	**0.0266**	**2.1000e-003**	**0.0287**	**0.0129**	**1.9300e-003**	**0.0148**	**0.0000**	**6.1905**	**6.1905**	**2.0000e-003**	**0.0000**	**6.2406**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.8000e-004	0.0102	2.2600e-003	5.0000e-005	1.2600e-003	9.0000e-005	1.3500e-003	3.5000e-004	9.0000e-005	4.3000e-004	0.0000	4.3882	4.3882	1.0000e-005	6.9000e-004	4.5939
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-004	7.0000e-005	9.1000e-004	0.0000	3.1000e-004	0.0000	3.2000e-004	8.0000e-005	0.0000	9.0000e-005	0.0000	0.2481	0.2481	1.0000e-005	1.0000e-005	0.2503
Total	**2.8000e-004**	**0.0103**	**3.1700e-003**	**5.0000e-005**	**1.5700e-003**	**9.0000e-005**	**1.6700e-003**	**4.3000e-004**	**9.0000e-005**	**5.2000e-004**	**0.0000**	**4.6363**	**4.6363**	**2.0000e-005**	**7.0000e-004**	**4.8442**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0266	0.0000	0.0266	0.0129	0.0000	0.0129	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.6700e-003	0.0509	0.0278	7.0000e-005		2.1000e-003	2.1000e-003		1.9300e-003	1.9300e-003	0.0000	6.1905	6.1905	2.0000e-003	0.0000	6.2405
Total	**4.6700e-003**	**0.0509**	**0.0278**	**7.0000e-005**	**0.0266**	**2.1000e-003**	**0.0287**	**0.0129**	**1.9300e-003**	**0.0148**	**0.0000**	**6.1905**	**6.1905**	**2.0000e-003**	**0.0000**	**6.2405**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.8000e-004	0.0102	2.2600e-003	5.0000e-005	1.2600e-003	9.0000e-005	1.3500e-003	3.5000e-004	9.0000e-005	4.3000e-004	0.0000	4.3882	4.3882	1.0000e-005	6.9000e-004	4.5939
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-004	7.0000e-005	9.1000e-004	0.0000	3.1000e-004	0.0000	3.2000e-004	8.0000e-005	0.0000	9.0000e-005	0.0000	0.2481	0.2481	1.0000e-005	1.0000e-005	0.2503
Total	**2.8000e-004**	**0.0103**	**3.1700e-003**	**5.0000e-005**	**1.5700e-003**	**9.0000e-005**	**1.6700e-003**	**4.3000e-004**	**9.0000e-005**	**5.2000e-004**	**0.0000**	**4.6363**	**4.6363**	**2.0000e-005**	**7.0000e-004**	**4.8442**

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0316	0.3209	0.3549	5.7000e-004		0.0160	0.0160		0.0147	0.0147	0.0000	50.1042	50.1042	0.0162	0.0000	50.5093
Total	**0.0316**	**0.3209**	**0.3549**	**5.7000e-004**		**0.0160**	**0.0160**		**0.0147**	**0.0147**	**0.0000**	**50.1042**	**50.1042**	**0.0162**	**0.0000**	**50.5093**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.9000e-004	0.0116	3.6600e-003	5.0000e-005	1.6300e-003	7.0000e-005	1.7000e-003	4.7000e-004	7.0000e-005	5.4000e-004	0.0000	4.8550	4.8550	1.0000e-005	7.3000e-004	5.0742
Worker	1.2900e-003	8.7000e-004	0.0114	3.0000e-005	3.9300e-003	2.0000e-005	3.9500e-003	1.0500e-003	2.0000e-005	1.0600e-003	0.0000	3.1006	3.1006	9.0000e-005	9.0000e-005	3.1283
Total	**1.5800e-003**	**0.0124**	**0.0150**	**8.0000e-005**	**5.5600e-003**	**9.0000e-005**	**5.6500e-003**	**1.5200e-003**	**9.0000e-005**	**1.6000e-003**	**0.0000**	**7.9556**	**7.9556**	**1.0000e-004**	**8.2000e-004**	**8.2024**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0316	0.3209	0.3549	5.7000e-004		0.0160	0.0160		0.0147	0.0147	0.0000	50.1042	50.1042	0.0162	0.0000	50.5093
Total	**0.0316**	**0.3209**	**0.3549**	**5.7000e-004**		**0.0160**	**0.0160**		**0.0147**	**0.0147**	**0.0000**	**50.1042**	**50.1042**	**0.0162**	**0.0000**	**50.5093**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.9000e-004	0.0116	3.6600e-003	5.0000e-005	1.6300e-003	7.0000e-005	1.7000e-003	4.7000e-004	7.0000e-005	5.4000e-004	0.0000	4.8550	4.8550	1.0000e-005	7.3000e-004	5.0742
Worker	1.2900e-003	8.7000e-004	0.0114	3.0000e-005	3.9300e-003	2.0000e-005	3.9500e-003	1.0500e-003	2.0000e-005	1.0600e-003	0.0000	3.1006	3.1006	9.0000e-005	9.0000e-005	3.1283
Total	**1.5800e-003**	**0.0124**	**0.0150**	**8.0000e-005**	**5.5600e-003**	**9.0000e-005**	**5.6500e-003**	**1.5200e-003**	**9.0000e-005**	**1.6000e-003**	**0.0000**	**7.9556**	**7.9556**	**1.0000e-004**	**8.2000e-004**	**8.2024**

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.5300e-003	0.0138	0.0176	3.0000e-005		6.6000e-004	6.6000e-004		6.2000e-004	6.2000e-004	0.0000	2.3498	2.3498	6.8000e-004	0.0000	2.3669
Paving	2.9000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**1.8200e-003**	**0.0138**	**0.0176**	**3.0000e-005**		**6.6000e-004**	**6.6000e-004**		**6.2000e-004**	**6.2000e-004**	**0.0000**	**2.3498**	**2.3498**	**6.8000e-004**	**0.0000**	**2.3669**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2000e-004	8.0000e-005	1.0200e-003	0.0000	3.5000e-004	0.0000	3.6000e-004	9.0000e-005	0.0000	1.0000e-004	0.0000	0.2791	0.2791	1.0000e-005	1.0000e-005	0.2816
Total	**1.2000e-004**	**8.0000e-005**	**1.0200e-003**	**0.0000**	**3.5000e-004**	**0.0000**	**3.6000e-004**	**9.0000e-005**	**0.0000**	**1.0000e-004**	**0.0000**	**0.2791**	**0.2791**	**1.0000e-005**	**1.0000e-005**	**0.2816**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.5300e-003	0.0138	0.0176	3.0000e-005		6.6000e-004	6.6000e-004		6.2000e-004	6.2000e-004	0.0000	2.3498	2.3498	6.8000e-004	0.0000	2.3669
Paving	2.9000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**1.8200e-003**	**0.0138**	**0.0176**	**3.0000e-005**		**6.6000e-004**	**6.6000e-004**		**6.2000e-004**	**6.2000e-004**	**0.0000**	**2.3498**	**2.3498**	**6.8000e-004**	**0.0000**	**2.3669**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2000e-004	8.0000e-005	1.0200e-003	0.0000	3.5000e-004	0.0000	3.6000e-004	9.0000e-005	0.0000	1.0000e-004	0.0000	0.2791	0.2791	1.0000e-005	1.0000e-005	0.2816
Total	**1.2000e-004**	**8.0000e-005**	**1.0200e-003**	**0.0000**	**3.5000e-004**	**0.0000**	**3.6000e-004**	**9.0000e-005**	**0.0000**	**1.0000e-004**	**0.0000**	**0.2791**	**0.2791**	**1.0000e-005**	**1.0000e-005**	**0.2816**

3.7 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0940					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.8000e-004	3.2600e-003	4.5300e-003	1.0000e-005		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004	0.0000	0.6383	0.6383	4.0000e-005	0.0000	0.6393
Total	**0.0945**	**3.2600e-003**	**4.5300e-003**	**1.0000e-005**		**1.8000e-004**	**1.8000e-004**		**1.8000e-004**	**1.8000e-004**	**0.0000**	**0.6383**	**0.6383**	**4.0000e-005**	**0.0000**	**0.6393**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Architectural Coating - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-005	1.0000e-005	1.1000e-004	0.0000	4.0000e-005	0.0000	4.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0310	0.0310	0.0000	0.0000	0.0313
Total	**1.0000e-005**	**1.0000e-005**	**1.1000e-004**	**0.0000**	**4.0000e-005**	**0.0000**	**4.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0310**	**0.0310**	**0.0000**	**0.0000**	**0.0313**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0940					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.8000e-004	3.2600e-003	4.5300e-003	1.0000e-005		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004	0.0000	0.6383	0.6383	4.0000e-005	0.0000	0.6393
Total	**0.0945**	**3.2600e-003**	**4.5300e-003**	**1.0000e-005**		**1.8000e-004**	**1.8000e-004**		**1.8000e-004**	**1.8000e-004**	**0.0000**	**0.6383**	**0.6383**	**4.0000e-005**	**0.0000**	**0.6393**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Architectural Coating - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-005	1.0000e-005	1.1000e-004	0.0000	4.0000e-005	0.0000	4.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0310	0.0310	0.0000	0.0000	0.0313
Total	**1.0000e-005**	**1.0000e-005**	**1.1000e-004**	**0.0000**	**4.0000e-005**	**0.0000**	**4.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0310**	**0.0310**	**0.0000**	**0.0000**	**0.0313**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

SNOW Sports Museum - Placer County APCD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.1217	0.2000	1.2615	2.6900e-003	0.2706	2.3700e-003	0.2730	0.0725	2.2300e-003	0.0747	0.0000	252.4279	252.4279	0.0142	0.0127	256.5645
Unmitigated	0.1217	0.2000	1.2615	2.6900e-003	0.2706	2.3700e-003	0.2730	0.0725	2.2300e-003	0.0747	0.0000	252.4279	252.4279	0.0142	0.0127	256.5645

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	167.00	219.00	224.00	735,661	735,661
Parking Lot	0.00	0.00	0.00		
Total	167.00	219.00	224.00	735,661	735,661

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Office Building	13.10	10.07	10.07	33.00	48.00	19.00	100	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.466187	0.061512	0.210180	0.153350	0.034639	0.008391	0.014417	0.011935	0.000556	0.000412	0.031993	0.000977	0.005450
Parking Lot	0.466187	0.061512	0.210180	0.153350	0.034639	0.008391	0.014417	0.011935	0.000556	0.000412	0.031993	0.000977	0.005450

5.0 Energy Detail

SNOW Sports Museum - Placer County APCD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	130.6939	130.6939	2.8500e-003	5.9000e-004	130.9411
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	130.6939	130.6939	2.8500e-003	5.9000e-004	130.9411
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

SNOW Sports Museum - Placer County APCD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Office Building	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Office Building	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Office Building	213600	128.6819	2.8100e-003	5.8000e-004	128.9254
Parking Lot	3339.7	2.0120	4.0000e-005	1.0000e-005	2.0158
Total		**130.6939**	**2.8500e-003**	**5.9000e-004**	**130.9411**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Office Building	213600	128.6819	2.8100e-003	5.8000e-004	128.9254
Parking Lot	3339.7	2.0120	4.0000e-005	1.0000e-005	2.0158
Total		**130.6939**	**2.8500e-003**	**5.9000e-004**	**130.9411**

6.0 Area Detail

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0882	0.0000	2.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	5.3000e-004	5.3000e-004	0.0000	0.0000	5.6000e-004
Unmitigated	0.0882	0.0000	2.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	5.3000e-004	5.3000e-004	0.0000	0.0000	5.6000e-004

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	9.4000e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0787					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.0000e-005	0.0000	2.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	5.3000e-004	5.3000e-004	0.0000	0.0000	5.6000e-004
Total	**0.0882**	**0.0000**	**2.7000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**5.3000e-004**	**5.3000e-004**	**0.0000**	**0.0000**	**5.6000e-004**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	9.4000e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0787					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.0000e-005	0.0000	2.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	5.3000e-004	5.3000e-004	0.0000	0.0000	5.6000e-004
Total	**0.0882**	**0.0000**	**2.7000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**5.3000e-004**	**5.3000e-004**	**0.0000**	**0.0000**	**5.6000e-004**

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	16.3904	0.1162	2.8000e-003	20.1300
Unmitigated	17.3092	0.1162	2.8100e-003	21.0506

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Office Building	3.55467 / 2.17867	17.3092	0.1162	2.8100e-003	21.0506
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**17.3092**	**0.1162**	**2.8100e-003**	**21.0506**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Office Building	3.55467 / 1.74294	16.3904	0.1162	2.8000e-003	20.1300
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**16.3904**	**0.1162**	**2.8000e-003**	**20.1300**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	3.7756	0.2231	0.0000	9.3540
Unmitigated	3.7756	0.2231	0.0000	9.3540

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Office Building	18.6	3.7756	0.2231	0.0000	9.3540
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**3.7756**	**0.2231**	**0.0000**	**9.3540**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Office Building	18.6	3.7756	0.2231	0.0000	9.3540
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**3.7756**	**0.2231**	**0.0000**	**9.3540**

9.0 Operational Offroad

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

SNOW Sports Museum - Placer County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

SNOW Sports Museum

Placer County APCD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	20.00	1000sqft	0.78	20,000.00	0
Parking Lot	9.54	1000sqft	0.22	9,542.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	74
Climate Zone	14			**Operational Year**	2024
Utility Company	Sierra Pacific Resources				
CO2 Intensity (lb/MWhr)	1328.16	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Building lot acreage and parking lot square footage based on site plan.

Construction Phase - Project construction timing based on default assumptions for construction of the proposed project.

Trips and VMT -

Grading - Based on Civil site plans for the proposed project.

Vehicle Trips - Based on trip rates and VMT analysis prepared by LSC Transportation Consultants, Inc.

Energy Use - The proposed project would use propane instead of natural gas - propane emissions calculated separately.

Area Mitigation - Pursuant to PCAPCD regulations.

Water Mitigation - Compliant with MWELO

SNOW Sports Museum - Placer County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstructionPhase	NumDays	10.00	5.00
tblConstructionPhase	NumDays	2.00	10.00
tblEnergyUse	T24NG	19.34	0.00
tblGrading	MaterialExported	0.00	1,200.00
tblLandUse	LandUseSquareFeet	9,540.00	9,542.00
tblLandUse	LotAcreage	0.46	0.78
tblVehicleTrips	CC_TL	7.30	10.07
tblVehicleTrips	CNW_TL	7.30	10.07
tblVehicleTrips	CW_TL	9.50	13.10
tblVehicleTrips	DV_TP	19.00	0.00
tblVehicleTrips	PB_TP	4.00	0.00
tblVehicleTrips	PR_TP	77.00	100.00
tblVehicleTrips	ST_TR	2.21	10.95
tblVehicleTrips	SU_TR	0.70	11.20
tblVehicleTrips	WD_TR	9.74	8.35

2.0 Emissions Summary

SNOW Sports Museum - Placer County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	37.8087	12.1337	7.6474	0.0238	5.6539	0.4383	6.0922	2.6601	0.4039	3.0640	0.0000	2,390.9802	2,390.9802	0.4446	0.1533	2,447.7890
Maximum	**37.8087**	**12.1337**	**7.6474**	**0.0238**	**5.6539**	**0.4383**	**6.0922**	**2.6601**	**0.4039**	**3.0640**	**0.0000**	**2,390.9802**	**2,390.9802**	**0.4446**	**0.1533**	**2,447.7890**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	37.8087	12.1337	7.6474	0.0238	5.6539	0.4383	6.0922	2.6601	0.4039	3.0640	0.0000	2,390.9802	2,390.9802	0.4446	0.1533	2,447.7890
Maximum	**37.8087**	**12.1337**	**7.6474**	**0.0238**	**5.6539**	**0.4383**	**6.0922**	**2.6601**	**0.4039**	**3.0640**	**0.0000**	**2,390.9802**	**2,390.9802**	**0.4446**	**0.1533**	**2,447.7890**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

SNOW Sports Museum - Placer County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.4832	3.0000e-005	3.0100e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		6.4600e-003	6.4600e-003	2.0000e-005		6.8900e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.9308	1.2334	8.8326	0.0193	1.9076	0.0160	1.9236	0.5092	0.0151	0.5242		1,992.8703	1,992.8703	0.0996	0.0900	2,022.1938
Total	**1.4139**	**1.2334**	**8.8356**	**0.0193**	**1.9076**	**0.0160**	**1.9236**	**0.5092**	**0.0151**	**0.5242**		**1,992.8768**	**1,992.8768**	**0.0997**	**0.0900**	**2,022.2007**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.4832	3.0000e-005	3.0100e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		6.4600e-003	6.4600e-003	2.0000e-005		6.8900e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.9308	1.2334	8.8326	0.0193	1.9076	0.0160	1.9236	0.5092	0.0151	0.5242		1,992.8703	1,992.8703	0.0996	0.0900	2,022.1938
Total	**1.4139**	**1.2334**	**8.8356**	**0.0193**	**1.9076**	**0.0160**	**1.9236**	**0.5092**	**0.0151**	**0.5242**		**1,992.8768**	**1,992.8768**	**0.0997**	**0.0900**	**2,022.2007**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	5/1/2023	5/5/2023	5	5	
2	Site Preparation	Site Preparation	5/6/2023	5/8/2023	5	1	
3	Grading	Grading	5/9/2023	5/22/2023	5	10	
4	Building Construction	Building Construction	5/23/2023	10/9/2023	5	100	
5	Paving	Paving	10/10/2023	10/16/2023	5	5	
6	Architectural Coating	Architectural Coating	10/17/2023	10/23/2023	5	5	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 7.5

Acres of Paving: 0.22

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 30,000; Non-Residential Outdoor: 10,000; Striped Parking Area: 573 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	1.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37

SNOW Sports Museum - Placer County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	150.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	10.00	5.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	2.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6463	5.7787	7.3926	0.0120		0.2821	0.2821		0.2698	0.2698		1,148.4055	1,148.4055	0.2089		1,153.6290
Total	**0.6463**	**5.7787**	**7.3926**	**0.0120**		**0.2821**	**0.2821**		**0.2698**	**0.2698**		**1,148.4055**	**1,148.4055**	**0.2089**		**1,153.6290**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0294	0.0153	0.2548	7.3000e-004	0.0822	3.9000e-004	0.0825	0.0218	3.6000e-004	0.0222		74.2113	74.2113	1.8400e-003	1.7400e-003	74.7753
Total	**0.0294**	**0.0153**	**0.2548**	**7.3000e-004**	**0.0822**	**3.9000e-004**	**0.0825**	**0.0218**	**3.6000e-004**	**0.0222**		**74.2113**	**74.2113**	**1.8400e-003**	**1.7400e-003**	**74.7753**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6463	5.7787	7.3926	0.0120		0.2821	0.2821		0.2698	0.2698	0.0000	1,148.4055	1,148.4055	0.2089		1,153.6290
Total	**0.6463**	**5.7787**	**7.3926**	**0.0120**		**0.2821**	**0.2821**		**0.2698**	**0.2698**	**0.0000**	**1,148.4055**	**1,148.4055**	**0.2089**		**1,153.6290**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0294	0.0153	0.2548	7.3000e-004	0.0822	3.9000e-004	0.0825	0.0218	3.6000e-004	0.0222		74.2113	74.2113	1.8400e-003	1.7400e-003	74.7753
Total	**0.0294**	**0.0153**	**0.2548**	**7.3000e-004**	**0.0822**	**3.9000e-004**	**0.0825**	**0.0218**	**3.6000e-004**	**0.0222**		**74.2113**	**74.2113**	**1.8400e-003**	**1.7400e-003**	**74.7753**

SNOW Sports Museum - Placer County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	0.5348	6.1887	3.9239	9.7300e-003		0.2266	0.2266		0.2084	0.2084		942.4317	942.4317	0.3048		950.0517
Total	**0.5348**	**6.1887**	**3.9239**	**9.7300e-003**	**0.5303**	**0.2266**	**0.7568**	**0.0573**	**0.2084**	**0.2657**		**942.4317**	**942.4317**	**0.3048**		**950.0517**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0147	7.6700e-003	0.1274	3.6000e-004	0.0411	2.0000e-004	0.0413	0.0109	1.8000e-004	0.0111		37.1057	37.1057	9.2000e-004	8.7000e-004	37.3877
Total	**0.0147**	**7.6700e-003**	**0.1274**	**3.6000e-004**	**0.0411**	**2.0000e-004**	**0.0413**	**0.0109**	**1.8000e-004**	**0.0111**		**37.1057**	**37.1057**	**9.2000e-004**	**8.7000e-004**	**37.3877**

SNOW Sports Museum - Placer County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	0.5348	6.1887	3.9239	9.7300e-003		0.2266	0.2266		0.2084	0.2084	0.0000	942.4317	942.4317	0.3048		950.0517
Total	**0.5348**	**6.1887**	**3.9239**	**9.7300e-003**	**0.5303**	**0.2266**	**0.7568**	**0.0573**	**0.2084**	**0.2657**	**0.0000**	**942.4317**	**942.4317**	**0.3048**		**950.0517**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0147	7.6700e-003	0.1274	3.6000e-004	0.0411	2.0000e-004	0.0413	0.0109	1.8000e-004	0.0111		37.1057	37.1057	9.2000e-004	8.7000e-004	37.3877
Total	**0.0147**	**7.6700e-003**	**0.1274**	**3.6000e-004**	**0.0411**	**2.0000e-004**	**0.0413**	**0.0109**	**1.8000e-004**	**0.0111**		**37.1057**	**37.1057**	**9.2000e-004**	**8.7000e-004**	**37.3877**

SNOW Sports Museum - Placer County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.3255	0.0000	5.3255	2.5706	0.0000	2.5706			0.0000			0.0000
Off-Road	0.9335	10.1789	5.5516	0.0141		0.4201	0.4201		0.3865	0.3865		1,364.7713	1,364.7713	0.4414		1,375.8062
Total	**0.9335**	**10.1789**	**5.5516**	**0.0141**	**5.3255**	**0.4201**	**5.7456**	**2.5706**	**0.3865**	**2.9571**		**1,364.7713**	**1,364.7713**	**0.4414**		**1,375.8062**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0380	1.9426	0.4490	9.1300e-003	0.2626	0.0179	0.2805	0.0720	0.0171	0.0891		966.8398	966.8398	1.7800e-003	0.1519	1,012.1625
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0235	0.0123	0.2038	5.8000e-004	0.0657	3.2000e-004	0.0660	0.0174	2.9000e-004	0.0177		59.3691	59.3691	1.4700e-003	1.3900e-003	59.8203
Total	**0.0615**	**1.9549**	**0.6528**	**9.7100e-003**	**0.3284**	**0.0182**	**0.3466**	**0.0894**	**0.0174**	**0.1069**		**1,026.2089**	**1,026.2089**	**3.2500e-003**	**0.1533**	**1,071.9828**

SNOW Sports Museum - Placer County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.3255	0.0000	5.3255	2.5706	0.0000	2.5706			0.0000			0.0000
Off-Road	0.9335	10.1789	5.5516	0.0141		0.4201	0.4201		0.3865	0.3865	0.0000	1,364.7713	1,364.7713	0.4414		1,375.8062
Total	**0.9335**	**10.1789**	**5.5516**	**0.0141**	**5.3255**	**0.4201**	**5.7456**	**2.5706**	**0.3865**	**2.9571**	**0.0000**	**1,364.7713**	**1,364.7713**	**0.4414**		**1,375.8062**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0380	1.9426	0.4490	9.1300e-003	0.2626	0.0179	0.2805	0.0720	0.0171	0.0891		966.8398	966.8398	1.7800e-003	0.1519	1,012.1625
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0235	0.0123	0.2038	5.8000e-004	0.0657	3.2000e-004	0.0660	0.0174	2.9000e-004	0.0177		59.3691	59.3691	1.4700e-003	1.3900e-003	59.8203
Total	**0.0615**	**1.9549**	**0.6528**	**9.7100e-003**	**0.3284**	**0.0182**	**0.3466**	**0.0894**	**0.0174**	**0.1069**		**1,026.2089**	**1,026.2089**	**3.2500e-003**	**0.1533**	**1,071.9828**

SNOW Sports Museum - Placer County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6322	6.4186	7.0970	0.0114		0.3203	0.3203		0.2946	0.2946		1,104.6089	1,104.6089	0.3573		1,113.5402
Total	**0.6322**	**6.4186**	**7.0970**	**0.0114**		**0.3203**	**0.3203**		**0.2946**	**0.2946**		**1,104.6089**	**1,104.6089**	**0.3573**		**1,113.5402**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.9500e-003	0.2198	0.0720	1.0100e-003	0.0339	1.3900e-003	0.0353	9.7500e-003	1.3300e-003	0.0111		106.9364	106.9364	3.1000e-004	0.0162	111.7604
Worker	0.0294	0.0153	0.2548	7.3000e-004	0.0822	3.9000e-004	0.0825	0.0218	3.6000e-004	0.0222		74.2113	74.2113	1.8400e-003	1.7400e-003	74.7753
Total	**0.0353**	**0.2351**	**0.3268**	**1.7400e-003**	**0.1160**	**1.7800e-003**	**0.1178**	**0.0315**	**1.6900e-003**	**0.0332**		**181.1477**	**181.1477**	**2.1500e-003**	**0.0179**	**186.5357**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6322	6.4186	7.0970	0.0114		0.3203	0.3203		0.2946	0.2946	0.0000	1,104.6089	1,104.6089	0.3573		1,113.5402
Total	**0.6322**	**6.4186**	**7.0970**	**0.0114**		**0.3203**	**0.3203**		**0.2946**	**0.2946**	**0.0000**	**1,104.6089**	**1,104.6089**	**0.3573**		**1,113.5402**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.9500e-003	0.2198	0.0720	1.0100e-003	0.0339	1.3900e-003	0.0353	9.7500e-003	1.3300e-003	0.0111		106.9364	106.9364	3.1000e-004	0.0162	111.7604
Worker	0.0294	0.0153	0.2548	7.3000e-004	0.0822	3.9000e-004	0.0825	0.0218	3.6000e-004	0.0222		74.2113	74.2113	1.8400e-003	1.7400e-003	74.7753
Total	**0.0353**	**0.2351**	**0.3268**	**1.7400e-003**	**0.1160**	**1.7800e-003**	**0.1178**	**0.0315**	**1.6900e-003**	**0.0332**		**181.1477**	**181.1477**	**2.1500e-003**	**0.0179**	**186.5357**

SNOW Sports Museum - Placer County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6112	5.5046	7.0209	0.0113		0.2643	0.2643		0.2466	0.2466		1,036.0878	1,036.0878	0.3018		1,043.6331
Paving	0.1153					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.7264**	**5.5046**	**7.0209**	**0.0113**		**0.2643**	**0.2643**		**0.2466**	**0.2466**		**1,036.0878**	**1,036.0878**	**0.3018**		**1,043.6331**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0528	0.0276	0.4586	1.3100e-003	0.1479	7.1000e-004	0.1486	0.0392	6.5000e-004	0.0399		133.5804	133.5804	3.3100e-003	3.1300e-003	134.5956
Total	**0.0528**	**0.0276**	**0.4586**	**1.3100e-003**	**0.1479**	**7.1000e-004**	**0.1486**	**0.0392**	**6.5000e-004**	**0.0399**		**133.5804**	**133.5804**	**3.3100e-003**	**3.1300e-003**	**134.5956**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6112	5.5046	7.0209	0.0113		0.2643	0.2643		0.2466	0.2466	0.0000	1,036.0878	1,036.0878	0.3018		1,043.6331
Paving	0.1153					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.7264**	**5.5046**	**7.0209**	**0.0113**		**0.2643**	**0.2643**		**0.2466**	**0.2466**	**0.0000**	**1,036.0878**	**1,036.0878**	**0.3018**		**1,043.6331**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0528	0.0276	0.4586	1.3100e-003	0.1479	7.1000e-004	0.1486	0.0392	6.5000e-004	0.0399		133.5804	133.5804	3.3100e-003	3.1300e-003	134.5956
Total	**0.0528**	**0.0276**	**0.4586**	**1.3100e-003**	**0.1479**	**7.1000e-004**	**0.1486**	**0.0392**	**6.5000e-004**	**0.0399**		**133.5804**	**133.5804**	**3.3100e-003**	**3.1300e-003**	**134.5956**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	37.6112					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	**37.8028**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**		**281.4481**	**281.4481**	**0.0168**		**281.8690**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.8700e-003	3.0700e-003	0.0510	1.5000e-004	0.0164	8.0000e-005	0.0165	4.3600e-003	7.0000e-005	4.4300e-003		14.8423	14.8423	3.7000e-004	3.5000e-004	14.9551
Total	**5.8700e-003**	**3.0700e-003**	**0.0510**	**1.5000e-004**	**0.0164**	**8.0000e-005**	**0.0165**	**4.3600e-003**	**7.0000e-005**	**4.4300e-003**		**14.8423**	**14.8423**	**3.7000e-004**	**3.5000e-004**	**14.9551**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Architectural Coating - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	37.6112					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690
Total	**37.8028**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**	**0.0000**	**281.4481**	**281.4481**	**0.0168**		**281.8690**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.8700e-003	3.0700e-003	0.0510	1.5000e-004	0.0164	8.0000e-005	0.0165	4.3600e-003	7.0000e-005	4.4300e-003		14.8423	14.8423	3.7000e-004	3.5000e-004	14.9551
Total	**5.8700e-003**	**3.0700e-003**	**0.0510**	**1.5000e-004**	**0.0164**	**8.0000e-005**	**0.0165**	**4.3600e-003**	**7.0000e-005**	**4.4300e-003**		**14.8423**	**14.8423**	**3.7000e-004**	**3.5000e-004**	**14.9551**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.9308	1.2334	8.8326	0.0193	1.9076	0.0160	1.9236	0.5092	0.0151	0.5242		1,992.8703	1,992.8703	0.0996	0.0900	2,022.1938
Unmitigated	0.9308	1.2334	8.8326	0.0193	1.9076	0.0160	1.9236	0.5092	0.0151	0.5242		1,992.8703	1,992.8703	0.0996	0.0900	2,022.1938

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	167.00	219.00	224.00	735,661	735,661
Parking Lot	0.00	0.00	0.00		
Total	167.00	219.00	224.00	735,661	735,661

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Office Building	13.10	10.07	10.07	33.00	48.00	19.00	100	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.466187	0.061512	0.210180	0.153350	0.034639	0.008391	0.014417	0.011935	0.000556	0.000412	0.031993	0.000977	0.005450
Parking Lot	0.466187	0.061512	0.210180	0.153350	0.034639	0.008391	0.014417	0.011935	0.000556	0.000412	0.031993	0.000977	0.005450

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Office Building	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Office Building	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

SNOW Sports Museum - Placer County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.4832	3.0000e-005	3.0100e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		6.4600e-003	6.4600e-003	2.0000e-005		6.8900e-003
Unmitigated	0.4832	3.0000e-005	3.0100e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		6.4600e-003	6.4600e-003	2.0000e-005		6.8900e-003

SNOW Sports Museum - Placer County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0515					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.4314					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.8000e-004	3.0000e-005	3.0100e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		6.4600e-003	6.4600e-003	2.0000e-005		6.8900e-003
Total	**0.4832**	**3.0000e-005**	**3.0100e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**		**6.4600e-003**	**6.4600e-003**	**2.0000e-005**		**6.8900e-003**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0515					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.4314					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.8000e-004	3.0000e-005	3.0100e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		6.4600e-003	6.4600e-003	2.0000e-005		6.8900e-003
Total	**0.4832**	**3.0000e-005**	**3.0100e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**		**6.4600e-003**	**6.4600e-003**	**2.0000e-005**		**6.8900e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

SNOW Sports Museum - Placer County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

SNOW Sports Museum

Placer County APCD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	20.00	1000sqft	0.78	20,000.00	0
Parking Lot	9.54	1000sqft	0.22	9,542.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	74
Climate Zone	14			**Operational Year**	2024
Utility Company	Sierra Pacific Resources				
CO2 Intensity (lb/MWhr)	1328.16	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Building lot acreage and parking lot square footage based on site plan.

Construction Phase - Project construction timing based on default assumptions for construction of the proposed project.

Trips and VMT -

Grading - Based on Civil site plans for the proposed project.

Vehicle Trips - Based on trip rates and VMT analysis prepared by LSC Transportation Consultants, Inc.

Energy Use - The proposed project would use propane instead of natural gas - propane emissions calculated separately.

Area Mitigation - Pursuant to PCAPCD regulations.

Water Mitigation - Compliant with MWELO

SNOW Sports Museum - Placer County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstructionPhase	NumDays	10.00	5.00
tblConstructionPhase	NumDays	2.00	10.00
tblEnergyUse	T24NG	19.34	0.00
tblGrading	MaterialExported	0.00	1,200.00
tblLandUse	LandUseSquareFeet	9,540.00	9,542.00
tblLandUse	LotAcreage	0.46	0.78
tblVehicleTrips	CC_TL	7.30	10.07
tblVehicleTrips	CNW_TL	7.30	10.07
tblVehicleTrips	CW_TL	9.50	13.10
tblVehicleTrips	DV_TP	19.00	0.00
tblVehicleTrips	PB_TP	4.00	0.00
tblVehicleTrips	PR_TP	77.00	100.00
tblVehicleTrips	ST_TR	2.21	10.95
tblVehicleTrips	SU_TR	0.70	11.20
tblVehicleTrips	WD_TR	9.74	8.35

2.0 Emissions Summary

SNOW Sports Museum - Placer County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	37.8083	12.2797	7.6250	0.0238	5.6539	0.4383	6.0922	2.6601	0.4039	3.0640	0.0000	2,386.5278	2,386.5278	0.4448	0.1538	2,443.4722
Maximum	**37.8083**	**12.2797**	**7.6250**	**0.0238**	**5.6539**	**0.4383**	**6.0922**	**2.6601**	**0.4039**	**3.0640**	**0.0000**	**2,386.5278**	**2,386.5278**	**0.4448**	**0.1538**	**2,443.4722**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	37.8083	12.2797	7.6250	0.0238	5.6539	0.4383	6.0922	2.6601	0.4039	3.0640	0.0000	2,386.5278	2,386.5278	0.4448	0.1538	2,443.4722
Maximum	**37.8083**	**12.2797**	**7.6250**	**0.0238**	**5.6539**	**0.4383**	**6.0922**	**2.6601**	**0.4039**	**3.0640**	**0.0000**	**2,386.5278**	**2,386.5278**	**0.4448**	**0.1538**	**2,443.4722**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

SNOW Sports Museum - Placer County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.4832	3.0000e-005	3.0100e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		6.4600e-003	6.4600e-003	2.0000e-005		6.8900e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.8160	1.4186	8.9780	0.0179	1.9076	0.0160	1.9236	0.5092	0.0151	0.5242		1,849.8158	1,849.8158	0.1122	0.0978	1,881.7655
Total	**1.2992**	**1.4186**	**8.9810**	**0.0179**	**1.9076**	**0.0160**	**1.9236**	**0.5092**	**0.0151**	**0.5242**		**1,849.8223**	**1,849.8223**	**0.1122**	**0.0978**	**1,881.7724**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.4832	3.0000e-005	3.0100e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		6.4600e-003	6.4600e-003	2.0000e-005		6.8900e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.8160	1.4186	8.9780	0.0179	1.9076	0.0160	1.9236	0.5092	0.0151	0.5242		1,849.8158	1,849.8158	0.1122	0.0978	1,881.7655
Total	**1.2992**	**1.4186**	**8.9810**	**0.0179**	**1.9076**	**0.0160**	**1.9236**	**0.5092**	**0.0151**	**0.5242**		**1,849.8223**	**1,849.8223**	**0.1122**	**0.0978**	**1,881.7724**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	5/1/2023	5/5/2023	5	5	
2	Site Preparation	Site Preparation	5/6/2023	5/8/2023	5	1	
3	Grading	Grading	5/9/2023	5/22/2023	5	10	
4	Building Construction	Building Construction	5/23/2023	10/9/2023	5	100	
5	Paving	Paving	10/10/2023	10/16/2023	5	5	
6	Architectural Coating	Architectural Coating	10/17/2023	10/23/2023	5	5	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 7.5

Acres of Paving: 0.22

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 30,000; Non-Residential Outdoor: 10,000; Striped Parking Area: 573 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	1.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	150.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	10.00	5.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	2.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6463	5.7787	7.3926	0.0120		0.2821	0.2821		0.2698	0.2698		1,148.4055	1,148.4055	0.2089		1,153.6290
Total	**0.6463**	**5.7787**	**7.3926**	**0.0120**		**0.2821**	**0.2821**		**0.2698**	**0.2698**		**1,148.4055**	**1,148.4055**	**0.2089**		**1,153.6290**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0273	0.0191	0.2324	6.5000e-004	0.0822	3.9000e-004	0.0825	0.0218	3.6000e-004	0.0222		66.8835	66.8835	2.1600e-003	2.0100e-003	67.5372
Total	**0.0273**	**0.0191**	**0.2324**	**6.5000e-004**	**0.0822**	**3.9000e-004**	**0.0825**	**0.0218**	**3.6000e-004**	**0.0222**		**66.8835**	**66.8835**	**2.1600e-003**	**2.0100e-003**	**67.5372**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6463	5.7787	7.3926	0.0120		0.2821	0.2821		0.2698	0.2698	0.0000	1,148.4055	1,148.4055	0.2089		1,153.6290
Total	**0.6463**	**5.7787**	**7.3926**	**0.0120**		**0.2821**	**0.2821**		**0.2698**	**0.2698**	**0.0000**	**1,148.4055**	**1,148.4055**	**0.2089**		**1,153.6290**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0273	0.0191	0.2324	6.5000e-004	0.0822	3.9000e-004	0.0825	0.0218	3.6000e-004	0.0222		66.8835	66.8835	2.1600e-003	2.0100e-003	67.5372
Total	**0.0273**	**0.0191**	**0.2324**	**6.5000e-004**	**0.0822**	**3.9000e-004**	**0.0825**	**0.0218**	**3.6000e-004**	**0.0222**		**66.8835**	**66.8835**	**2.1600e-003**	**2.0100e-003**	**67.5372**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	0.5348	6.1887	3.9239	9.7300e-003		0.2266	0.2266		0.2084	0.2084		942.4317	942.4317	0.3048		950.0517
Total	**0.5348**	**6.1887**	**3.9239**	**9.7300e-003**	**0.5303**	**0.2266**	**0.7568**	**0.0573**	**0.2084**	**0.2657**		**942.4317**	**942.4317**	**0.3048**		**950.0517**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0137	9.5600e-003	0.1162	3.3000e-004	0.0411	2.0000e-004	0.0413	0.0109	1.8000e-004	0.0111		33.4417	33.4417	1.0800e-003	1.0100e-003	33.7686
Total	**0.0137**	**9.5600e-003**	**0.1162**	**3.3000e-004**	**0.0411**	**2.0000e-004**	**0.0413**	**0.0109**	**1.8000e-004**	**0.0111**		**33.4417**	**33.4417**	**1.0800e-003**	**1.0100e-003**	**33.7686**

SNOW Sports Museum - Placer County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	0.5348	6.1887	3.9239	9.7300e-003		0.2266	0.2266		0.2084	0.2084	0.0000	942.4317	942.4317	0.3048		950.0517
Total	**0.5348**	**6.1887**	**3.9239**	**9.7300e-003**	**0.5303**	**0.2266**	**0.7568**	**0.0573**	**0.2084**	**0.2657**	**0.0000**	**942.4317**	**942.4317**	**0.3048**		**950.0517**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0137	9.5600e-003	0.1162	3.3000e-004	0.0411	2.0000e-004	0.0413	0.0109	1.8000e-004	0.0111		33.4417	33.4417	1.0800e-003	1.0100e-003	33.7686
Total	**0.0137**	**9.5600e-003**	**0.1162**	**3.3000e-004**	**0.0411**	**2.0000e-004**	**0.0413**	**0.0109**	**1.8000e-004**	**0.0111**		**33.4417**	**33.4417**	**1.0800e-003**	**1.0100e-003**	**33.7686**

SNOW Sports Museum - Placer County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.3255	0.0000	5.3255	2.5706	0.0000	2.5706			0.0000			0.0000
Off-Road	0.9335	10.1789	5.5516	0.0141		0.4201	0.4201		0.3865	0.3865		1,364.7713	1,364.7713	0.4414		1,375.8062
Total	**0.9335**	**10.1789**	**5.5516**	**0.0141**	**5.3255**	**0.4201**	**5.7456**	**2.5706**	**0.3865**	**2.9571**		**1,364.7713**	**1,364.7713**	**0.4414**		**1,375.8062**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0352	2.0855	0.4585	9.1500e-003	0.2626	0.0179	0.2806	0.0720	0.0172	0.0892		968.2497	968.2497	1.6400e-003	0.1522	1,013.6362
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0218	0.0153	0.1859	5.2000e-004	0.0657	3.2000e-004	0.0660	0.0174	2.9000e-004	0.0177		53.5068	53.5068	1.7300e-003	1.6100e-003	54.0297
Total	**0.0570**	**2.1008**	**0.6443**	**9.6700e-003**	**0.3284**	**0.0183**	**0.3466**	**0.0894**	**0.0174**	**0.1069**		**1,021.7564**	**1,021.7564**	**3.3700e-003**	**0.1538**	**1,067.6660**

SNOW Sports Museum - Placer County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.3255	0.0000	5.3255	2.5706	0.0000	2.5706			0.0000			0.0000
Off-Road	0.9335	10.1789	5.5516	0.0141		0.4201	0.4201		0.3865	0.3865	0.0000	1,364.7713	1,364.7713	0.4414		1,375.8062
Total	**0.9335**	**10.1789**	**5.5516**	**0.0141**	**5.3255**	**0.4201**	**5.7456**	**2.5706**	**0.3865**	**2.9571**	**0.0000**	**1,364.7713**	**1,364.7713**	**0.4414**		**1,375.8062**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0352	2.0855	0.4585	9.1500e-003	0.2626	0.0179	0.2806	0.0720	0.0172	0.0892		968.2497	968.2497	1.6400e-003	0.1522	1,013.6362
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0218	0.0153	0.1859	5.2000e-004	0.0657	3.2000e-004	0.0660	0.0174	2.9000e-004	0.0177		53.5068	53.5068	1.7300e-003	1.6100e-003	54.0297
Total	**0.0570**	**2.1008**	**0.6443**	**9.6700e-003**	**0.3284**	**0.0183**	**0.3466**	**0.0894**	**0.0174**	**0.1069**		**1,021.7564**	**1,021.7564**	**3.3700e-003**	**0.1538**	**1,067.6660**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6322	6.4186	7.0970	0.0114		0.3203	0.3203		0.2946	0.2946		1,104.6089	1,104.6089	0.3573		1,113.5402
Total	**0.6322**	**6.4186**	**7.0970**	**0.0114**		**0.3203**	**0.3203**		**0.2946**	**0.2946**		**1,104.6089**	**1,104.6089**	**0.3573**		**1,113.5402**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.5300e-003	0.2363	0.0747	1.0100e-003	0.0339	1.3900e-003	0.0353	9.7500e-003	1.3300e-003	0.0111		107.1722	107.1722	2.9000e-004	0.0162	112.0102
Worker	0.0273	0.0191	0.2324	6.5000e-004	0.0822	3.9000e-004	0.0825	0.0218	3.6000e-004	0.0222		66.8835	66.8835	2.1600e-003	2.0100e-003	67.5372
Total	**0.0328**	**0.2554**	**0.3070**	**1.6600e-003**	**0.1160**	**1.7800e-003**	**0.1178**	**0.0315**	**1.6900e-003**	**0.0332**		**174.0556**	**174.0556**	**2.4500e-003**	**0.0182**	**179.5474**

SNOW Sports Museum - Placer County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6322	6.4186	7.0970	0.0114		0.3203	0.3203		0.2946	0.2946	0.0000	1,104.6089	1,104.6089	0.3573		1,113.5402
Total	**0.6322**	**6.4186**	**7.0970**	**0.0114**		**0.3203**	**0.3203**		**0.2946**	**0.2946**	**0.0000**	**1,104.6089**	**1,104.6089**	**0.3573**		**1,113.5402**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.5300e-003	0.2363	0.0747	1.0100e-003	0.0339	1.3900e-003	0.0353	9.7500e-003	1.3300e-003	0.0111		107.1722	107.1722	2.9000e-004	0.0162	112.0102
Worker	0.0273	0.0191	0.2324	6.5000e-004	0.0822	3.9000e-004	0.0825	0.0218	3.6000e-004	0.0222		66.8835	66.8835	2.1600e-003	2.0100e-003	67.5372
Total	**0.0328**	**0.2554**	**0.3070**	**1.6600e-003**	**0.1160**	**1.7800e-003**	**0.1178**	**0.0315**	**1.6900e-003**	**0.0332**		**174.0556**	**174.0556**	**2.4500e-003**	**0.0182**	**179.5474**

SNOW Sports Museum - Placer County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6112	5.5046	7.0209	0.0113		0.2643	0.2643		0.2466	0.2466		1,036.0878	1,036.0878	0.3018		1,043.6331
Paving	0.1153					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.7264**	**5.5046**	**7.0209**	**0.0113**		**0.2643**	**0.2643**		**0.2466**	**0.2466**		**1,036.0878**	**1,036.0878**	**0.3018**		**1,043.6331**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0492	0.0344	0.4182	1.1800e-003	0.1479	7.1000e-004	0.1486	0.0392	6.5000e-004	0.0399		120.3902	120.3902	3.8900e-003	3.6200e-003	121.5669
Total	**0.0492**	**0.0344**	**0.4182**	**1.1800e-003**	**0.1479**	**7.1000e-004**	**0.1486**	**0.0392**	**6.5000e-004**	**0.0399**		**120.3902**	**120.3902**	**3.8900e-003**	**3.6200e-003**	**121.5669**

SNOW Sports Museum - Placer County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6112	5.5046	7.0209	0.0113		0.2643	0.2643		0.2466	0.2466	0.0000	1,036.0878	1,036.0878	0.3018		1,043.6331
Paving	0.1153					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.7264**	**5.5046**	**7.0209**	**0.0113**		**0.2643**	**0.2643**		**0.2466**	**0.2466**	**0.0000**	**1,036.0878**	**1,036.0878**	**0.3018**		**1,043.6331**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0492	0.0344	0.4182	1.1800e-003	0.1479	7.1000e-004	0.1486	0.0392	6.5000e-004	0.0399		120.3902	120.3902	3.8900e-003	3.6200e-003	121.5669
Total	**0.0492**	**0.0344**	**0.4182**	**1.1800e-003**	**0.1479**	**7.1000e-004**	**0.1486**	**0.0392**	**6.5000e-004**	**0.0399**		**120.3902**	**120.3902**	**3.8900e-003**	**3.6200e-003**	**121.5669**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	37.6112					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	**37.8028**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**		**281.4481**	**281.4481**	**0.0168**		**281.8690**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.4600e-003	3.8200e-003	0.0465	1.3000e-004	0.0164	8.0000e-005	0.0165	4.3600e-003	7.0000e-005	4.4300e-003		13.3767	13.3767	4.3000e-004	4.0000e-004	13.5074
Total	**5.4600e-003**	**3.8200e-003**	**0.0465**	**1.3000e-004**	**0.0164**	**8.0000e-005**	**0.0165**	**4.3600e-003**	**7.0000e-005**	**4.4300e-003**		**13.3767**	**13.3767**	**4.3000e-004**	**4.0000e-004**	**13.5074**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Architectural Coating - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	37.6112					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690
Total	**37.8028**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**	**0.0000**	**281.4481**	**281.4481**	**0.0168**		**281.8690**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.4600e-003	3.8200e-003	0.0465	1.3000e-004	0.0164	8.0000e-005	0.0165	4.3600e-003	7.0000e-005	4.4300e-003		13.3767	13.3767	4.3000e-004	4.0000e-004	13.5074
Total	**5.4600e-003**	**3.8200e-003**	**0.0465**	**1.3000e-004**	**0.0164**	**8.0000e-005**	**0.0165**	**4.3600e-003**	**7.0000e-005**	**4.4300e-003**		**13.3767**	**13.3767**	**4.3000e-004**	**4.0000e-004**	**13.5074**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.8160	1.4186	8.9780	0.0179	1.9076	0.0160	1.9236	0.5092	0.0151	0.5242		1,849.8158	1,849.8158	0.1122	0.0978	1,881.7655
Unmitigated	0.8160	1.4186	8.9780	0.0179	1.9076	0.0160	1.9236	0.5092	0.0151	0.5242		1,849.8158	1,849.8158	0.1122	0.0978	1,881.7655

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	167.00	219.00	224.00	735,661	735,661
Parking Lot	0.00	0.00	0.00		
Total	167.00	219.00	224.00	735,661	735,661

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Office Building	13.10	10.07	10.07	33.00	48.00	19.00	100	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.466187	0.061512	0.210180	0.153350	0.034639	0.008391	0.014417	0.011935	0.000556	0.000412	0.031993	0.000977	0.005450
Parking Lot	0.466187	0.061512	0.210180	0.153350	0.034639	0.008391	0.014417	0.011935	0.000556	0.000412	0.031993	0.000977	0.005450

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Office Building	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Office Building	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

SNOW Sports Museum - Placer County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.4832	3.0000e-005	3.0100e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		6.4600e-003	6.4600e-003	2.0000e-005		6.8900e-003
Unmitigated	0.4832	3.0000e-005	3.0100e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		6.4600e-003	6.4600e-003	2.0000e-005		6.8900e-003

SNOW Sports Museum - Placer County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0515					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.4314					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.8000e-004	3.0000e-005	3.0100e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		6.4600e-003	6.4600e-003	2.0000e-005		6.8900e-003
Total	**0.4832**	**3.0000e-005**	**3.0100e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**		**6.4600e-003**	**6.4600e-003**	**2.0000e-005**		**6.8900e-003**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0515					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.4314					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.8000e-004	3.0000e-005	3.0100e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		6.4600e-003	6.4600e-003	2.0000e-005		6.8900e-003
Total	**0.4832**	**3.0000e-005**	**3.0100e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**		**6.4600e-003**	**6.4600e-003**	**2.0000e-005**		**6.8900e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

SNOW Sports Museum - Particle Deposition VMT Adjustment - Placer County APCD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

SNOW Sports Museum - Particle Deposition VMT Adjustment

Placer County APCD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	20.00	1000sqft	0.78	20,000.00	0
Parking Lot	9.54	1000sqft	0.22	9,542.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	74
Climate Zone	14			**Operational Year**	2024
Utility Company	Sierra Pacific Resources				
CO2 Intensity (lb/MWhr)	1328.16	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Building lot acreage and parking lot square footage based on site plan.

Construction Phase - Project construction timing based on default assumptions for construction of the proposed project.

Trips and VMT -

Grading - Based on Civil site plans for the proposed project.

Vehicle Trips - Based on trip rates and VMT analysis prepared by LSC Transportation Consultants, Inc. VMT is representative of only VMT within the Lake Tahoe area.

Energy Use - The proposed project would use propane instead of natural gas - propane emissions calculated separately.

Area Mitigation - Pursuant to PCAPCD regulations.

Water Mitigation - Compliant with MWELO

SNOW Sports Museum - Particle Deposition VMT Adjustment - Placer County APCD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstructionPhase	NumDays	10.00	5.00
tblConstructionPhase	NumDays	2.00	10.00
tblEnergyUse	T24NG	19.34	0.00
tblGrading	MaterialExported	0.00	1,200.00
tblLandUse	LandUseSquareFeet	9,540.00	9,542.00
tblLandUse	LotAcreage	0.46	0.78
tblVehicleTrips	CC_TL	7.30	3.19
tblVehicleTrips	CNW_TL	7.30	3.19
tblVehicleTrips	CW_TL	9.50	4.15
tblVehicleTrips	DV_TP	19.00	0.00
tblVehicleTrips	PB_TP	4.00	0.00
tblVehicleTrips	PR_TP	77.00	100.00
tblVehicleTrips	ST_TR	2.21	10.95
tblVehicleTrips	SU_TR	0.70	11.20
tblVehicleTrips	WD_TR	9.74	8.35

2.0 Emissions Summary

SNOW Sports Museum - Particle Deposition VMT Adjustment - Placer County APCD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.1366	0.4292	0.4451	8.5000e-004	0.0346	0.0200	0.0546	0.0150	0.0184	0.0334	0.0000	75.3873	75.3873	0.0197	1.5300e-003	76.3349
Maximum	**0.1366**	**0.4292**	**0.4451**	**8.5000e-004**	**0.0346**	**0.0200**	**0.0546**	**0.0150**	**0.0184**	**0.0334**	**0.0000**	**75.3873**	**75.3873**	**0.0197**	**1.5300e-003**	**76.3349**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.1366	0.4292	0.4451	8.5000e-004	0.0346	0.0200	0.0546	0.0150	0.0184	0.0334	0.0000	75.3873	75.3873	0.0197	1.5300e-003	76.3348
Maximum	**0.1366**	**0.4292**	**0.4451**	**8.5000e-004**	**0.0346**	**0.0200**	**0.0546**	**0.0150**	**0.0184**	**0.0334**	**0.0000**	**75.3873**	**75.3873**	**0.0197**	**1.5300e-003**	**76.3348**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	5-1-2023	7-31-2023	0.2675	0.2675
2	8-1-2023	9-30-2023	0.1595	0.1595
		Highest	0.2675	0.2675

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0882	0.0000	2.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	5.3000e-004	5.3000e-004	0.0000	0.0000	5.6000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	130.6939	130.6939	2.8500e-003	5.9000e-004	130.9411
Mobile	0.0721	0.0825	0.5371	8.9000e-004	0.0857	8.4000e-004	0.0866	0.0230	7.9000e-004	0.0238	0.0000	83.4586	83.4586	7.3100e-003	5.3300e-003	85.2299
Waste						0.0000	0.0000		0.0000	0.0000	3.7756	0.0000	3.7756	0.2231	0.0000	9.3540
Water						0.0000	0.0000		0.0000	0.0000	1.1277	16.1814	17.3092	0.1162	2.8100e-003	21.0506
Total	**0.1602**	**0.0825**	**0.5373**	**8.9000e-004**	**0.0857**	**8.4000e-004**	**0.0866**	**0.0230**	**7.9000e-004**	**0.0238**	**4.9034**	**230.3345**	**235.2378**	**0.3495**	**8.7300e-003**	**246.5761**

SNOW Sports Museum - Particle Deposition VMT Adjustment - Placer County APCD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0882	0.0000	2.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	5.3000e-004	5.3000e-004	0.0000	0.0000	5.6000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	130.6939	130.6939	2.8500e-003	5.9000e-004	130.9411
Mobile	0.0721	0.0825	0.5371	8.9000e-004	0.0857	8.4000e-004	0.0866	0.0230	7.9000e-004	0.0238	0.0000	83.4586	83.4586	7.3100e-003	5.3300e-003	85.2299
Waste						0.0000	0.0000		0.0000	0.0000	3.7756	0.0000	3.7756	0.2231	0.0000	9.3540
Water						0.0000	0.0000		0.0000	0.0000	1.1277	15.2627	16.3904	0.1162	2.8000e-003	20.1300
Total	**0.1602**	**0.0825**	**0.5373**	**8.9000e-004**	**0.0857**	**8.4000e-004**	**0.0866**	**0.0230**	**7.9000e-004**	**0.0238**	**4.9034**	**229.4157**	**234.3191**	**0.3495**	**8.7200e-003**	**245.6556**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.40**	**0.39**	**0.01**	**0.11**	**0.37**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	5/1/2023	5/5/2023	5	5	
2	Site Preparation	Site Preparation	5/6/2023	5/8/2023	5	1	
3	Grading	Grading	5/9/2023	5/22/2023	5	10	

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4	Building Construction	Building Construction	5/23/2023	10/9/2023	5	100	
5	Paving	Paving	10/10/2023	10/16/2023	5	5	
6	Architectural Coating	Architectural Coating	10/17/2023	10/23/2023	5	5	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 7.5

Acres of Paving: 0.22

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 30,000; Non-Residential Outdoor: 10,000; Striped Parking Area: 573 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	1.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

SNOW Sports Museum - Particle Deposition VMT Adjustment - Placer County APCD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	150.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	10.00	5.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	2.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.6200e-003	0.0145	0.0185	3.0000e-005		7.1000e-004	7.1000e-004		6.7000e-004	6.7000e-004	0.0000	2.6045	2.6045	4.7000e-004	0.0000	2.6164
Total	**1.6200e-003**	**0.0145**	**0.0185**	**3.0000e-005**		**7.1000e-004**	**7.1000e-004**		**6.7000e-004**	**6.7000e-004**	**0.0000**	**2.6045**	**2.6045**	**4.7000e-004**	**0.0000**	**2.6164**

SNOW Sports Museum - Particle Deposition VMT Adjustment - Placer County APCD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.0000e-005	4.0000e-005	5.7000e-004	0.0000	2.0000e-004	0.0000	2.0000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1550	0.1550	0.0000	0.0000	0.1564
Total	**6.0000e-005**	**4.0000e-005**	**5.7000e-004**	**0.0000**	**2.0000e-004**	**0.0000**	**2.0000e-004**	**5.0000e-005**	**0.0000**	**5.0000e-005**	**0.0000**	**0.1550**	**0.1550**	**0.0000**	**0.0000**	**0.1564**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.6200e-003	0.0145	0.0185	3.0000e-005		7.1000e-004	7.1000e-004		6.7000e-004	6.7000e-004	0.0000	2.6045	2.6045	4.7000e-004	0.0000	2.6164
Total	**1.6200e-003**	**0.0145**	**0.0185**	**3.0000e-005**		**7.1000e-004**	**7.1000e-004**		**6.7000e-004**	**6.7000e-004**	**0.0000**	**2.6045**	**2.6045**	**4.7000e-004**	**0.0000**	**2.6164**

SNOW Sports Museum - Particle Deposition VMT Adjustment - Placer County APCD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.0000e-005	4.0000e-005	5.7000e-004	0.0000	2.0000e-004	0.0000	2.0000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1550	0.1550	0.0000	0.0000	0.1564
Total	**6.0000e-005**	**4.0000e-005**	**5.7000e-004**	**0.0000**	**2.0000e-004**	**0.0000**	**2.0000e-004**	**5.0000e-005**	**0.0000**	**5.0000e-005**	**0.0000**	**0.1550**	**0.1550**	**0.0000**	**0.0000**	**0.1564**

3.3 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.7000e-004	0.0000	2.7000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.7000e-004	3.0900e-003	1.9600e-003	0.0000		1.1000e-004	1.1000e-004		1.0000e-004	1.0000e-004	0.0000	0.4275	0.4275	1.4000e-004	0.0000	0.4309
Total	**2.7000e-004**	**3.0900e-003**	**1.9600e-003**	**0.0000**	**2.7000e-004**	**1.1000e-004**	**3.8000e-004**	**3.0000e-005**	**1.0000e-004**	**1.3000e-004**	**0.0000**	**0.4275**	**0.4275**	**1.4000e-004**	**0.0000**	**0.4309**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-005	0.0000	6.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0155	0.0155	0.0000	0.0000	0.0156
Total	**1.0000e-005**	**0.0000**	**6.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0155**	**0.0155**	**0.0000**	**0.0000**	**0.0156**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.7000e-004	0.0000	2.7000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.7000e-004	3.0900e-003	1.9600e-003	0.0000		1.1000e-004	1.1000e-004		1.0000e-004	1.0000e-004	0.0000	0.4275	0.4275	1.4000e-004	0.0000	0.4309
Total	**2.7000e-004**	**3.0900e-003**	**1.9600e-003**	**0.0000**	**2.7000e-004**	**1.1000e-004**	**3.8000e-004**	**3.0000e-005**	**1.0000e-004**	**1.3000e-004**	**0.0000**	**0.4275**	**0.4275**	**1.4000e-004**	**0.0000**	**0.4309**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-005	0.0000	6.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0155	0.0155	0.0000	0.0000	0.0156
Total	**1.0000e-005**	**0.0000**	**6.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0155**	**0.0155**	**0.0000**	**0.0000**	**0.0156**

3.4 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0266	0.0000	0.0266	0.0129	0.0000	0.0129	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.6700e-003	0.0509	0.0278	7.0000e-005		2.1000e-003	2.1000e-003		1.9300e-003	1.9300e-003	0.0000	6.1905	6.1905	2.0000e-003	0.0000	6.2406
Total	**4.6700e-003**	**0.0509**	**0.0278**	**7.0000e-005**	**0.0266**	**2.1000e-003**	**0.0287**	**0.0129**	**1.9300e-003**	**0.0148**	**0.0000**	**6.1905**	**6.1905**	**2.0000e-003**	**0.0000**	**6.2406**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.8000e-004	0.0102	2.2600e-003	5.0000e-005	1.2600e-003	9.0000e-005	1.3500e-003	3.5000e-004	9.0000e-005	4.3000e-004	0.0000	4.3882	4.3882	1.0000e-005	6.9000e-004	4.5939
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-004	7.0000e-005	9.1000e-004	0.0000	3.1000e-004	0.0000	3.2000e-004	8.0000e-005	0.0000	9.0000e-005	0.0000	0.2481	0.2481	1.0000e-005	1.0000e-005	0.2503
Total	**2.8000e-004**	**0.0103**	**3.1700e-003**	**5.0000e-005**	**1.5700e-003**	**9.0000e-005**	**1.6700e-003**	**4.3000e-004**	**9.0000e-005**	**5.2000e-004**	**0.0000**	**4.6363**	**4.6363**	**2.0000e-005**	**7.0000e-004**	**4.8442**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0266	0.0000	0.0266	0.0129	0.0000	0.0129	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.6700e-003	0.0509	0.0278	7.0000e-005		2.1000e-003	2.1000e-003		1.9300e-003	1.9300e-003	0.0000	6.1905	6.1905	2.0000e-003	0.0000	6.2405
Total	**4.6700e-003**	**0.0509**	**0.0278**	**7.0000e-005**	**0.0266**	**2.1000e-003**	**0.0287**	**0.0129**	**1.9300e-003**	**0.0148**	**0.0000**	**6.1905**	**6.1905**	**2.0000e-003**	**0.0000**	**6.2405**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.8000e-004	0.0102	2.2600e-003	5.0000e-005	1.2600e-003	9.0000e-005	1.3500e-003	3.5000e-004	9.0000e-005	4.3000e-004	0.0000	4.3882	4.3882	1.0000e-005	6.9000e-004	4.5939
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-004	7.0000e-005	9.1000e-004	0.0000	3.1000e-004	0.0000	3.2000e-004	8.0000e-005	0.0000	9.0000e-005	0.0000	0.2481	0.2481	1.0000e-005	1.0000e-005	0.2503
Total	**2.8000e-004**	**0.0103**	**3.1700e-003**	**5.0000e-005**	**1.5700e-003**	**9.0000e-005**	**1.6700e-003**	**4.3000e-004**	**9.0000e-005**	**5.2000e-004**	**0.0000**	**4.6363**	**4.6363**	**2.0000e-005**	**7.0000e-004**	**4.8442**

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0316	0.3209	0.3549	5.7000e-004		0.0160	0.0160		0.0147	0.0147	0.0000	50.1042	50.1042	0.0162	0.0000	50.5093
Total	**0.0316**	**0.3209**	**0.3549**	**5.7000e-004**		**0.0160**	**0.0160**		**0.0147**	**0.0147**	**0.0000**	**50.1042**	**50.1042**	**0.0162**	**0.0000**	**50.5093**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.9000e-004	0.0116	3.6600e-003	5.0000e-005	1.6300e-003	7.0000e-005	1.7000e-003	4.7000e-004	7.0000e-005	5.4000e-004	0.0000	4.8550	4.8550	1.0000e-005	7.3000e-004	5.0742
Worker	1.2900e-003	8.7000e-004	0.0114	3.0000e-005	3.9300e-003	2.0000e-005	3.9500e-003	1.0500e-003	2.0000e-005	1.0600e-003	0.0000	3.1006	3.1006	9.0000e-005	9.0000e-005	3.1283
Total	**1.5800e-003**	**0.0124**	**0.0150**	**8.0000e-005**	**5.5600e-003**	**9.0000e-005**	**5.6500e-003**	**1.5200e-003**	**9.0000e-005**	**1.6000e-003**	**0.0000**	**7.9556**	**7.9556**	**1.0000e-004**	**8.2000e-004**	**8.2024**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0316	0.3209	0.3549	5.7000e-004		0.0160	0.0160		0.0147	0.0147	0.0000	50.1042	50.1042	0.0162	0.0000	50.5093
Total	**0.0316**	**0.3209**	**0.3549**	**5.7000e-004**		**0.0160**	**0.0160**		**0.0147**	**0.0147**	**0.0000**	**50.1042**	**50.1042**	**0.0162**	**0.0000**	**50.5093**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.9000e-004	0.0116	3.6600e-003	5.0000e-005	1.6300e-003	7.0000e-005	1.7000e-003	4.7000e-004	7.0000e-005	5.4000e-004	0.0000	4.8550	4.8550	1.0000e-005	7.3000e-004	5.0742
Worker	1.2900e-003	8.7000e-004	0.0114	3.0000e-005	3.9300e-003	2.0000e-005	3.9500e-003	1.0500e-003	2.0000e-005	1.0600e-003	0.0000	3.1006	3.1006	9.0000e-005	9.0000e-005	3.1283
Total	**1.5800e-003**	**0.0124**	**0.0150**	**8.0000e-005**	**5.5600e-003**	**9.0000e-005**	**5.6500e-003**	**1.5200e-003**	**9.0000e-005**	**1.6000e-003**	**0.0000**	**7.9556**	**7.9556**	**1.0000e-004**	**8.2000e-004**	**8.2024**

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.5300e-003	0.0138	0.0176	3.0000e-005		6.6000e-004	6.6000e-004		6.2000e-004	6.2000e-004	0.0000	2.3498	2.3498	6.8000e-004	0.0000	2.3669
Paving	2.9000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**1.8200e-003**	**0.0138**	**0.0176**	**3.0000e-005**		**6.6000e-004**	**6.6000e-004**		**6.2000e-004**	**6.2000e-004**	**0.0000**	**2.3498**	**2.3498**	**6.8000e-004**	**0.0000**	**2.3669**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2000e-004	8.0000e-005	1.0200e-003	0.0000	3.5000e-004	0.0000	3.6000e-004	9.0000e-005	0.0000	1.0000e-004	0.0000	0.2791	0.2791	1.0000e-005	1.0000e-005	0.2816
Total	**1.2000e-004**	**8.0000e-005**	**1.0200e-003**	**0.0000**	**3.5000e-004**	**0.0000**	**3.6000e-004**	**9.0000e-005**	**0.0000**	**1.0000e-004**	**0.0000**	**0.2791**	**0.2791**	**1.0000e-005**	**1.0000e-005**	**0.2816**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.5300e-003	0.0138	0.0176	3.0000e-005		6.6000e-004	6.6000e-004		6.2000e-004	6.2000e-004	0.0000	2.3498	2.3498	6.8000e-004	0.0000	2.3669
Paving	2.9000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**1.8200e-003**	**0.0138**	**0.0176**	**3.0000e-005**		**6.6000e-004**	**6.6000e-004**		**6.2000e-004**	**6.2000e-004**	**0.0000**	**2.3498**	**2.3498**	**6.8000e-004**	**0.0000**	**2.3669**

SNOW Sports Museum - Particle Deposition VMT Adjustment - Placer County APCD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2000e-004	8.0000e-005	1.0200e-003	0.0000	3.5000e-004	0.0000	3.6000e-004	9.0000e-005	0.0000	1.0000e-004	0.0000	0.2791	0.2791	1.0000e-005	1.0000e-005	0.2816
Total	**1.2000e-004**	**8.0000e-005**	**1.0200e-003**	**0.0000**	**3.5000e-004**	**0.0000**	**3.6000e-004**	**9.0000e-005**	**0.0000**	**1.0000e-004**	**0.0000**	**0.2791**	**0.2791**	**1.0000e-005**	**1.0000e-005**	**0.2816**

3.7 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0940					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.8000e-004	3.2600e-003	4.5300e-003	1.0000e-005		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004	0.0000	0.6383	0.6383	4.0000e-005	0.0000	0.6393
Total	**0.0945**	**3.2600e-003**	**4.5300e-003**	**1.0000e-005**		**1.8000e-004**	**1.8000e-004**		**1.8000e-004**	**1.8000e-004**	**0.0000**	**0.6383**	**0.6383**	**4.0000e-005**	**0.0000**	**0.6393**

SNOW Sports Museum - Particle Deposition VMT Adjustment - Placer County APCD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Architectural Coating - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-005	1.0000e-005	1.1000e-004	0.0000	4.0000e-005	0.0000	4.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0310	0.0310	0.0000	0.0000	0.0313
Total	**1.0000e-005**	**1.0000e-005**	**1.1000e-004**	**0.0000**	**4.0000e-005**	**0.0000**	**4.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0310**	**0.0310**	**0.0000**	**0.0000**	**0.0313**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0940					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.8000e-004	3.2600e-003	4.5300e-003	1.0000e-005		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004	0.0000	0.6383	0.6383	4.0000e-005	0.0000	0.6393
Total	**0.0945**	**3.2600e-003**	**4.5300e-003**	**1.0000e-005**		**1.8000e-004**	**1.8000e-004**		**1.8000e-004**	**1.8000e-004**	**0.0000**	**0.6383**	**0.6383**	**4.0000e-005**	**0.0000**	**0.6393**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Architectural Coating - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-005	1.0000e-005	1.1000e-004	0.0000	4.0000e-005	0.0000	4.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0310	0.0310	0.0000	0.0000	0.0313
Total	**1.0000e-005**	**1.0000e-005**	**1.1000e-004**	**0.0000**	**4.0000e-005**	**0.0000**	**4.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0310**	**0.0310**	**0.0000**	**0.0000**	**0.0313**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0721	0.0825	0.5371	8.9000e-004	0.0857	8.4000e-004	0.0866	0.0230	7.9000e-004	0.0238	0.0000	83.4586	83.4586	7.3100e-003	5.3300e-003	85.2299
Unmitigated	0.0721	0.0825	0.5371	8.9000e-004	0.0857	8.4000e-004	0.0866	0.0230	7.9000e-004	0.0238	0.0000	83.4586	83.4586	7.3100e-003	5.3300e-003	85.2299

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	167.00	219.00	224.00	233,048	233,048
Parking Lot	0.00	0.00	0.00		
Total	167.00	219.00	224.00	233,048	233,048

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Office Building	4.15	3.19	3.19	33.00	48.00	19.00	100	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.466187	0.061512	0.210180	0.153350	0.034639	0.008391	0.014417	0.011935	0.000556	0.000412	0.031993	0.000977	0.005450
Parking Lot	0.466187	0.061512	0.210180	0.153350	0.034639	0.008391	0.014417	0.011935	0.000556	0.000412	0.031993	0.000977	0.005450

5.0 Energy Detail

SNOW Sports Museum - Particle Deposition VMT Adjustment - Placer County APCD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	130.6939	130.6939	2.8500e-003	5.9000e-004	130.9411
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	130.6939	130.6939	2.8500e-003	5.9000e-004	130.9411
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

SNOW Sports Museum - Particle Deposition VMT Adjustment - Placer County APCD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Office Building	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Office Building	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Office Building	213600	128.6819	2.8100e-003	5.8000e-004	128.9254
Parking Lot	3339.7	2.0120	4.0000e-005	1.0000e-005	2.0158
Total		**130.6939**	**2.8500e-003**	**5.9000e-004**	**130.9411**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Office Building	213600	128.6819	2.8100e-003	5.8000e-004	128.9254
Parking Lot	3339.7	2.0120	4.0000e-005	1.0000e-005	2.0158
Total		**130.6939**	**2.8500e-003**	**5.9000e-004**	**130.9411**

6.0 Area Detail

SNOW Sports Museum - Particle Deposition VMT Adjustment - Placer County APCD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0882	0.0000	2.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	5.3000e-004	5.3000e-004	0.0000	0.0000	5.6000e-004
Unmitigated	0.0882	0.0000	2.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	5.3000e-004	5.3000e-004	0.0000	0.0000	5.6000e-004

SNOW Sports Museum - Particle Deposition VMT Adjustment - Placer County APCD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	9.4000e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0787					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.0000e-005	0.0000	2.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	5.3000e-004	5.3000e-004	0.0000	0.0000	5.6000e-004
Total	**0.0882**	**0.0000**	**2.7000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**5.3000e-004**	**5.3000e-004**	**0.0000**	**0.0000**	**5.6000e-004**

SNOW Sports Museum - Particle Deposition VMT Adjustment - Placer County APCD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	9.4000e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0787					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.0000e-005	0.0000	2.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	5.3000e-004	5.3000e-004	0.0000	0.0000	5.6000e-004
Total	**0.0882**	**0.0000**	**2.7000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**5.3000e-004**	**5.3000e-004**	**0.0000**	**0.0000**	**5.6000e-004**

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

SNOW Sports Museum - Particle Deposition VMT Adjustment - Placer County APCD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	16.3904	0.1162	2.8000e-003	20.1300
Unmitigated	17.3092	0.1162	2.8100e-003	21.0506

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Office Building	3.55467 / 2.17867	17.3092	0.1162	2.8100e-003	21.0506
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**17.3092**	**0.1162**	**2.8100e-003**	**21.0506**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Office Building	3.55467 / 1.74294	16.3904	0.1162	2.8000e-003	20.1300
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**16.3904**	**0.1162**	**2.8000e-003**	**20.1300**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	3.7756	0.2231	0.0000	9.3540
Unmitigated	3.7756	0.2231	0.0000	9.3540

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Office Building	18.6	3.7756	0.2231	0.0000	9.3540
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**3.7756**	**0.2231**	**0.0000**	**9.3540**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Office Building	18.6	3.7756	0.2231	0.0000	9.3540
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**3.7756**	**0.2231**	**0.0000**	**9.3540**

9.0 Operational Offroad

SNOW Sports Museum - Particle Deposition VMT Adjustment - Placer County APCD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

SNOW Sports Museum - Particle Deposition VMT Adjustment - Placer County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

SNOW Sports Museum - Particle Deposition VMT Adjustment

Placer County APCD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	20.00	1000sqft	0.78	20,000.00	0
Parking Lot	9.54	1000sqft	0.22	9,542.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	74
Climate Zone	14			**Operational Year**	2024
Utility Company	Sierra Pacific Resources				
CO2 Intensity (lb/MWhr)	1328.16	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Building lot acreage and parking lot square footage based on site plan.

Construction Phase - Project construction timing based on default assumptions for construction of the proposed project.

Trips and VMT -

Grading - Based on Civil site plans for the proposed project.

Vehicle Trips - Based on trip rates and VMT analysis prepared by LSC Transportation Consultants, Inc. VMT is representative of only VMT within the Lake Tahoe area.

Energy Use - The proposed project would use propane instead of natural gas - propane emissions calculated separately.

Area Mitigation - Pursuant to PCAPCD regulations.

Water Mitigation - Compliant with MWELO

SNOW Sports Museum - Particle Deposition VMT Adjustment - Placer County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstructionPhase	NumDays	10.00	5.00
tblConstructionPhase	NumDays	2.00	10.00
tblEnergyUse	T24NG	19.34	0.00
tblGrading	MaterialExported	0.00	1,200.00
tblLandUse	LandUseSquareFeet	9,540.00	9,542.00
tblLandUse	LotAcreage	0.46	0.78
tblVehicleTrips	CC_TL	7.30	3.19
tblVehicleTrips	CNW_TL	7.30	3.19
tblVehicleTrips	CW_TL	9.50	4.15
tblVehicleTrips	DV_TP	19.00	0.00
tblVehicleTrips	PB_TP	4.00	0.00
tblVehicleTrips	PR_TP	77.00	100.00
tblVehicleTrips	ST_TR	2.21	10.95
tblVehicleTrips	SU_TR	0.70	11.20
tblVehicleTrips	WD_TR	9.74	8.35

2.0 Emissions Summary

SNOW Sports Museum - Particle Deposition VMT Adjustment - Placer County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	37.8087	12.1337	7.6474	0.0238	5.6539	0.4383	6.0922	2.6601	0.4039	3.0640	0.0000	2,390.9802	2,390.9802	0.4446	0.1533	2,447.7890
Maximum	**37.8087**	**12.1337**	**7.6474**	**0.0238**	**5.6539**	**0.4383**	**6.0922**	**2.6601**	**0.4039**	**3.0640**	**0.0000**	**2,390.9802**	**2,390.9802**	**0.4446**	**0.1533**	**2,447.7890**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	37.8087	12.1337	7.6474	0.0238	5.6539	0.4383	6.0922	2.6601	0.4039	3.0640	0.0000	2,390.9802	2,390.9802	0.4446	0.1533	2,447.7890
Maximum	**37.8087**	**12.1337**	**7.6474**	**0.0238**	**5.6539**	**0.4383**	**6.0922**	**2.6601**	**0.4039**	**3.0640**	**0.0000**	**2,390.9802**	**2,390.9802**	**0.4446**	**0.1533**	**2,447.7890**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

SNOW Sports Museum - Particle Deposition VMT Adjustment - Placer County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.4832	3.0000e-005	3.0100e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		6.4600e-003	6.4600e-003	2.0000e-005		6.8900e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.6063	0.5112	3.5433	6.3500e-003	0.6043	5.6800e-003	0.6100	0.1613	5.3200e-003	0.1666		656.8677	656.8677	0.0485	0.0377	669.3223
Total	**1.0895**	**0.5112**	**3.5463**	**6.3500e-003**	**0.6043**	**5.6900e-003**	**0.6100**	**0.1613**	**5.3300e-003**	**0.1666**		**656.8741**	**656.8741**	**0.0485**	**0.0377**	**669.3292**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.4832	3.0000e-005	3.0100e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		6.4600e-003	6.4600e-003	2.0000e-005		6.8900e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.6063	0.5112	3.5433	6.3500e-003	0.6043	5.6800e-003	0.6100	0.1613	5.3200e-003	0.1666		656.8677	656.8677	0.0485	0.0377	669.3223
Total	**1.0895**	**0.5112**	**3.5463**	**6.3500e-003**	**0.6043**	**5.6900e-003**	**0.6100**	**0.1613**	**5.3300e-003**	**0.1666**		**656.8741**	**656.8741**	**0.0485**	**0.0377**	**669.3292**

SNOW Sports Museum - Particle Deposition VMT Adjustment - Placer County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	5/1/2023	5/5/2023	5	5	
2	Site Preparation	Site Preparation	5/6/2023	5/8/2023	5	1	
3	Grading	Grading	5/9/2023	5/22/2023	5	10	
4	Building Construction	Building Construction	5/23/2023	10/9/2023	5	100	
5	Paving	Paving	10/10/2023	10/16/2023	5	5	
6	Architectural Coating	Architectural Coating	10/17/2023	10/23/2023	5	5	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 7.5

Acres of Paving: 0.22

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 30,000; Non-Residential Outdoor: 10,000; Striped Parking Area: 573 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	1.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37

SNOW Sports Museum - Particle Deposition VMT Adjustment - Placer County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	150.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	10.00	5.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	2.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

SNOW Sports Museum - Particle Deposition VMT Adjustment - Placer County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6463	5.7787	7.3926	0.0120		0.2821	0.2821		0.2698	0.2698		1,148.4055	1,148.4055	0.2089		1,153.6290
Total	**0.6463**	**5.7787**	**7.3926**	**0.0120**		**0.2821**	**0.2821**		**0.2698**	**0.2698**		**1,148.4055**	**1,148.4055**	**0.2089**		**1,153.6290**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0294	0.0153	0.2548	7.3000e-004	0.0822	3.9000e-004	0.0825	0.0218	3.6000e-004	0.0222		74.2113	74.2113	1.8400e-003	1.7400e-003	74.7753
Total	**0.0294**	**0.0153**	**0.2548**	**7.3000e-004**	**0.0822**	**3.9000e-004**	**0.0825**	**0.0218**	**3.6000e-004**	**0.0222**		**74.2113**	**74.2113**	**1.8400e-003**	**1.7400e-003**	**74.7753**

SNOW Sports Museum - Particle Deposition VMT Adjustment - Placer County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6463	5.7787	7.3926	0.0120		0.2821	0.2821		0.2698	0.2698	0.0000	1,148.4055	1,148.4055	0.2089		1,153.6290
Total	**0.6463**	**5.7787**	**7.3926**	**0.0120**		**0.2821**	**0.2821**		**0.2698**	**0.2698**	**0.0000**	**1,148.4055**	**1,148.4055**	**0.2089**		**1,153.6290**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0294	0.0153	0.2548	7.3000e-004	0.0822	3.9000e-004	0.0825	0.0218	3.6000e-004	0.0222		74.2113	74.2113	1.8400e-003	1.7400e-003	74.7753
Total	**0.0294**	**0.0153**	**0.2548**	**7.3000e-004**	**0.0822**	**3.9000e-004**	**0.0825**	**0.0218**	**3.6000e-004**	**0.0222**		**74.2113**	**74.2113**	**1.8400e-003**	**1.7400e-003**	**74.7753**

SNOW Sports Museum - Particle Deposition VMT Adjustment - Placer County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	0.5348	6.1887	3.9239	9.7300e-003		0.2266	0.2266		0.2084	0.2084		942.4317	942.4317	0.3048		950.0517
Total	**0.5348**	**6.1887**	**3.9239**	**9.7300e-003**	**0.5303**	**0.2266**	**0.7568**	**0.0573**	**0.2084**	**0.2657**		**942.4317**	**942.4317**	**0.3048**		**950.0517**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0147	7.6700e-003	0.1274	3.6000e-004	0.0411	2.0000e-004	0.0413	0.0109	1.8000e-004	0.0111		37.1057	37.1057	9.2000e-004	8.7000e-004	37.3877
Total	**0.0147**	**7.6700e-003**	**0.1274**	**3.6000e-004**	**0.0411**	**2.0000e-004**	**0.0413**	**0.0109**	**1.8000e-004**	**0.0111**		**37.1057**	**37.1057**	**9.2000e-004**	**8.7000e-004**	**37.3877**

SNOW Sports Museum - Particle Deposition VMT Adjustment - Placer County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	0.5348	6.1887	3.9239	9.7300e-003		0.2266	0.2266		0.2084	0.2084	0.0000	942.4317	942.4317	0.3048		950.0517
Total	**0.5348**	**6.1887**	**3.9239**	**9.7300e-003**	**0.5303**	**0.2266**	**0.7568**	**0.0573**	**0.2084**	**0.2657**	**0.0000**	**942.4317**	**942.4317**	**0.3048**		**950.0517**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0147	7.6700e-003	0.1274	3.6000e-004	0.0411	2.0000e-004	0.0413	0.0109	1.8000e-004	0.0111		37.1057	37.1057	9.2000e-004	8.7000e-004	37.3877
Total	**0.0147**	**7.6700e-003**	**0.1274**	**3.6000e-004**	**0.0411**	**2.0000e-004**	**0.0413**	**0.0109**	**1.8000e-004**	**0.0111**		**37.1057**	**37.1057**	**9.2000e-004**	**8.7000e-004**	**37.3877**

SNOW Sports Museum - Particle Deposition VMT Adjustment - Placer County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.3255	0.0000	5.3255	2.5706	0.0000	2.5706			0.0000			0.0000
Off-Road	0.9335	10.1789	5.5516	0.0141		0.4201	0.4201		0.3865	0.3865		1,364.7713	1,364.7713	0.4414		1,375.8062
Total	**0.9335**	**10.1789**	**5.5516**	**0.0141**	**5.3255**	**0.4201**	**5.7456**	**2.5706**	**0.3865**	**2.9571**		**1,364.7713**	**1,364.7713**	**0.4414**		**1,375.8062**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0380	1.9426	0.4490	9.1300e-003	0.2626	0.0179	0.2805	0.0720	0.0171	0.0891		966.8398	966.8398	1.7800e-003	0.1519	1,012.1625
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0235	0.0123	0.2038	5.8000e-004	0.0657	3.2000e-004	0.0660	0.0174	2.9000e-004	0.0177		59.3691	59.3691	1.4700e-003	1.3900e-003	59.8203
Total	**0.0615**	**1.9549**	**0.6528**	**9.7100e-003**	**0.3284**	**0.0182**	**0.3466**	**0.0894**	**0.0174**	**0.1069**		**1,026.2089**	**1,026.2089**	**3.2500e-003**	**0.1533**	**1,071.9828**

SNOW Sports Museum - Particle Deposition VMT Adjustment - Placer County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.3255	0.0000	5.3255	2.5706	0.0000	2.5706			0.0000			0.0000
Off-Road	0.9335	10.1789	5.5516	0.0141		0.4201	0.4201		0.3865	0.3865	0.0000	1,364.7713	1,364.7713	0.4414		1,375.8062
Total	**0.9335**	**10.1789**	**5.5516**	**0.0141**	**5.3255**	**0.4201**	**5.7456**	**2.5706**	**0.3865**	**2.9571**	**0.0000**	**1,364.7713**	**1,364.7713**	**0.4414**		**1,375.8062**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0380	1.9426	0.4490	9.1300e-003	0.2626	0.0179	0.2805	0.0720	0.0171	0.0891		966.8398	966.8398	1.7800e-003	0.1519	1,012.1625
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0235	0.0123	0.2038	5.8000e-004	0.0657	3.2000e-004	0.0660	0.0174	2.9000e-004	0.0177		59.3691	59.3691	1.4700e-003	1.3900e-003	59.8203
Total	**0.0615**	**1.9549**	**0.6528**	**9.7100e-003**	**0.3284**	**0.0182**	**0.3466**	**0.0894**	**0.0174**	**0.1069**		**1,026.2089**	**1,026.2089**	**3.2500e-003**	**0.1533**	**1,071.9828**

SNOW Sports Museum - Particle Deposition VMT Adjustment - Placer County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6322	6.4186	7.0970	0.0114		0.3203	0.3203		0.2946	0.2946		1,104.6089	1,104.6089	0.3573		1,113.5402
Total	**0.6322**	**6.4186**	**7.0970**	**0.0114**		**0.3203**	**0.3203**		**0.2946**	**0.2946**		**1,104.6089**	**1,104.6089**	**0.3573**		**1,113.5402**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.9500e-003	0.2198	0.0720	1.0100e-003	0.0339	1.3900e-003	0.0353	9.7500e-003	1.3300e-003	0.0111		106.9364	106.9364	3.1000e-004	0.0162	111.7604
Worker	0.0294	0.0153	0.2548	7.3000e-004	0.0822	3.9000e-004	0.0825	0.0218	3.6000e-004	0.0222		74.2113	74.2113	1.8400e-003	1.7400e-003	74.7753
Total	**0.0353**	**0.2351**	**0.3268**	**1.7400e-003**	**0.1160**	**1.7800e-003**	**0.1178**	**0.0315**	**1.6900e-003**	**0.0332**		**181.1477**	**181.1477**	**2.1500e-003**	**0.0179**	**186.5357**

SNOW Sports Museum - Particle Deposition VMT Adjustment - Placer County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6322	6.4186	7.0970	0.0114		0.3203	0.3203		0.2946	0.2946	0.0000	1,104.6089	1,104.6089	0.3573		1,113.5402
Total	**0.6322**	**6.4186**	**7.0970**	**0.0114**		**0.3203**	**0.3203**		**0.2946**	**0.2946**	**0.0000**	**1,104.6089**	**1,104.6089**	**0.3573**		**1,113.5402**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.9500e-003	0.2198	0.0720	1.0100e-003	0.0339	1.3900e-003	0.0353	9.7500e-003	1.3300e-003	0.0111		106.9364	106.9364	3.1000e-004	0.0162	111.7604
Worker	0.0294	0.0153	0.2548	7.3000e-004	0.0822	3.9000e-004	0.0825	0.0218	3.6000e-004	0.0222		74.2113	74.2113	1.8400e-003	1.7400e-003	74.7753
Total	**0.0353**	**0.2351**	**0.3268**	**1.7400e-003**	**0.1160**	**1.7800e-003**	**0.1178**	**0.0315**	**1.6900e-003**	**0.0332**		**181.1477**	**181.1477**	**2.1500e-003**	**0.0179**	**186.5357**

SNOW Sports Museum - Particle Deposition VMT Adjustment - Placer County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6112	5.5046	7.0209	0.0113		0.2643	0.2643		0.2466	0.2466		1,036.0878	1,036.0878	0.3018		1,043.6331
Paving	0.1153					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.7264**	**5.5046**	**7.0209**	**0.0113**		**0.2643**	**0.2643**		**0.2466**	**0.2466**		**1,036.0878**	**1,036.0878**	**0.3018**		**1,043.6331**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0528	0.0276	0.4586	1.3100e-003	0.1479	7.1000e-004	0.1486	0.0392	6.5000e-004	0.0399		133.5804	133.5804	3.3100e-003	3.1300e-003	134.5956
Total	**0.0528**	**0.0276**	**0.4586**	**1.3100e-003**	**0.1479**	**7.1000e-004**	**0.1486**	**0.0392**	**6.5000e-004**	**0.0399**		**133.5804**	**133.5804**	**3.3100e-003**	**3.1300e-003**	**134.5956**

SNOW Sports Museum - Particle Deposition VMT Adjustment - Placer County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6112	5.5046	7.0209	0.0113		0.2643	0.2643		0.2466	0.2466	0.0000	1,036.0878	1,036.0878	0.3018		1,043.6331
Paving	0.1153					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.7264**	**5.5046**	**7.0209**	**0.0113**		**0.2643**	**0.2643**		**0.2466**	**0.2466**	**0.0000**	**1,036.0878**	**1,036.0878**	**0.3018**		**1,043.6331**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0528	0.0276	0.4586	1.3100e-003	0.1479	7.1000e-004	0.1486	0.0392	6.5000e-004	0.0399		133.5804	133.5804	3.3100e-003	3.1300e-003	134.5956
Total	**0.0528**	**0.0276**	**0.4586**	**1.3100e-003**	**0.1479**	**7.1000e-004**	**0.1486**	**0.0392**	**6.5000e-004**	**0.0399**		**133.5804**	**133.5804**	**3.3100e-003**	**3.1300e-003**	**134.5956**

SNOW Sports Museum - Particle Deposition VMT Adjustment - Placer County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	37.6112					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	**37.8028**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**		**281.4481**	**281.4481**	**0.0168**		**281.8690**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.8700e-003	3.0700e-003	0.0510	1.5000e-004	0.0164	8.0000e-005	0.0165	4.3600e-003	7.0000e-005	4.4300e-003		14.8423	14.8423	3.7000e-004	3.5000e-004	14.9551
Total	**5.8700e-003**	**3.0700e-003**	**0.0510**	**1.5000e-004**	**0.0164**	**8.0000e-005**	**0.0165**	**4.3600e-003**	**7.0000e-005**	**4.4300e-003**		**14.8423**	**14.8423**	**3.7000e-004**	**3.5000e-004**	**14.9551**

SNOW Sports Museum - Particle Deposition VMT Adjustment - Placer County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Architectural Coating - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	37.6112					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690
Total	**37.8028**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**	**0.0000**	**281.4481**	**281.4481**	**0.0168**		**281.8690**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.8700e-003	3.0700e-003	0.0510	1.5000e-004	0.0164	8.0000e-005	0.0165	4.3600e-003	7.0000e-005	4.4300e-003		14.8423	14.8423	3.7000e-004	3.5000e-004	14.9551
Total	**5.8700e-003**	**3.0700e-003**	**0.0510**	**1.5000e-004**	**0.0164**	**8.0000e-005**	**0.0165**	**4.3600e-003**	**7.0000e-005**	**4.4300e-003**		**14.8423**	**14.8423**	**3.7000e-004**	**3.5000e-004**	**14.9551**

SNOW Sports Museum - Particle Deposition VMT Adjustment - Placer County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.6063	0.5112	3.5433	6.3500e-003	0.6043	5.6800e-003	0.6100	0.1613	5.3200e-003	0.1666		656.8677	656.8677	0.0485	0.0377	669.3223
Unmitigated	0.6063	0.5112	3.5433	6.3500e-003	0.6043	5.6800e-003	0.6100	0.1613	5.3200e-003	0.1666		656.8677	656.8677	0.0485	0.0377	669.3223

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	167.00	219.00	224.00	233,048	233,048
Parking Lot	0.00	0.00	0.00		
Total	167.00	219.00	224.00	233,048	233,048

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Office Building	4.15	3.19	3.19	33.00	48.00	19.00	100	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

SNOW Sports Museum - Particle Deposition VMT Adjustment - Placer County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.466187	0.061512	0.210180	0.153350	0.034639	0.008391	0.014417	0.011935	0.000556	0.000412	0.031993	0.000977	0.005450
Parking Lot	0.466187	0.061512	0.210180	0.153350	0.034639	0.008391	0.014417	0.011935	0.000556	0.000412	0.031993	0.000977	0.005450

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

SNOW Sports Museum - Particle Deposition VMT Adjustment - Placer County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Office Building	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Office Building	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

SNOW Sports Museum - Particle Deposition VMT Adjustment - Placer County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.4832	3.0000e-005	3.0100e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		6.4600e-003	6.4600e-003	2.0000e-005		6.8900e-003
Unmitigated	0.4832	3.0000e-005	3.0100e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		6.4600e-003	6.4600e-003	2.0000e-005		6.8900e-003

SNOW Sports Museum - Particle Deposition VMT Adjustment - Placer County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0515					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.4314					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.8000e-004	3.0000e-005	3.0100e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		6.4600e-003	6.4600e-003	2.0000e-005		6.8900e-003
Total	**0.4832**	**3.0000e-005**	**3.0100e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**		**6.4600e-003**	**6.4600e-003**	**2.0000e-005**		**6.8900e-003**

SNOW Sports Museum - Particle Deposition VMT Adjustment - Placer County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0515					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.4314					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.8000e-004	3.0000e-005	3.0100e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		6.4600e-003	6.4600e-003	2.0000e-005		6.8900e-003
Total	**0.4832**	**3.0000e-005**	**3.0100e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**		**6.4600e-003**	**6.4600e-003**	**2.0000e-005**		**6.8900e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

SNOW Sports Museum - Particle Deposition VMT Adjustment - Placer County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

SNOW Sports Museum - Particle Deposition VMT Adjustment - Placer County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

SNOW Sports Museum - Particle Deposition VMT Adjustment

Placer County APCD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	20.00	1000sqft	0.78	20,000.00	0
Parking Lot	9.54	1000sqft	0.22	9,542.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	74
Climate Zone	14			**Operational Year**	2024
Utility Company	Sierra Pacific Resources				
CO2 Intensity (lb/MWhr)	1328.16	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Building lot acreage and parking lot square footage based on site plan.

Construction Phase - Project construction timing based on default assumptions for construction of the proposed project.

Trips and VMT -

Grading - Based on Civil site plans for the proposed project.

Vehicle Trips - Based on trip rates and VMT analysis prepared by LSC Transportation Consultants, Inc. VMT is representative of only VMT within the Lake Tahoe area.

Energy Use - The proposed project would use propane instead of natural gas - propane emissions calculated separately.

Area Mitigation - Pursuant to PCAPCD regulations.

Water Mitigation - Compliant with MWELO

SNOW Sports Museum - Particle Deposition VMT Adjustment - Placer County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstructionPhase	NumDays	10.00	5.00
tblConstructionPhase	NumDays	2.00	10.00
tblEnergyUse	T24NG	19.34	0.00
tblGrading	MaterialExported	0.00	1,200.00
tblLandUse	LandUseSquareFeet	9,540.00	9,542.00
tblLandUse	LotAcreage	0.46	0.78
tblVehicleTrips	CC_TL	7.30	3.19
tblVehicleTrips	CNW_TL	7.30	3.19
tblVehicleTrips	CW_TL	9.50	4.15
tblVehicleTrips	DV_TP	19.00	0.00
tblVehicleTrips	PB_TP	4.00	0.00
tblVehicleTrips	PR_TP	77.00	100.00
tblVehicleTrips	ST_TR	2.21	10.95
tblVehicleTrips	SU_TR	0.70	11.20
tblVehicleTrips	WD_TR	9.74	8.35

2.0 Emissions Summary

SNOW Sports Museum - Particle Deposition VMT Adjustment - Placer County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	37.8083	12.2797	7.6250	0.0238	5.6539	0.4383	6.0922	2.6601	0.4039	3.0640	0.0000	2,386.5278	2,386.5278	0.4448	0.1538	2,443.4722
Maximum	**37.8083**	**12.2797**	**7.6250**	**0.0238**	**5.6539**	**0.4383**	**6.0922**	**2.6601**	**0.4039**	**3.0640**	**0.0000**	**2,386.5278**	**2,386.5278**	**0.4448**	**0.1538**	**2,443.4722**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	37.8083	12.2797	7.6250	0.0238	5.6539	0.4383	6.0922	2.6601	0.4039	3.0640	0.0000	2,386.5278	2,386.5278	0.4448	0.1538	2,443.4722
Maximum	**37.8083**	**12.2797**	**7.6250**	**0.0238**	**5.6539**	**0.4383**	**6.0922**	**2.6601**	**0.4039**	**3.0640**	**0.0000**	**2,386.5278**	**2,386.5278**	**0.4448**	**0.1538**	**2,443.4722**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

SNOW Sports Museum - Particle Deposition VMT Adjustment - Placer County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.4832	3.0000e-005	3.0100e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		6.4600e-003	6.4600e-003	2.0000e-005		6.8900e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.4679	0.5881	3.9583	5.9200e-003	0.6043	5.6800e-003	0.6100	0.1613	5.3300e-003	0.1666		612.4393	612.4393	0.0596	0.0414	626.2699
Total	**0.9510**	**0.5881**	**3.9613**	**5.9200e-003**	**0.6043**	**5.6900e-003**	**0.6100**	**0.1613**	**5.3400e-003**	**0.1666**		**612.4458**	**612.4458**	**0.0597**	**0.0414**	**626.2768**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.4832	3.0000e-005	3.0100e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		6.4600e-003	6.4600e-003	2.0000e-005		6.8900e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.4679	0.5881	3.9583	5.9200e-003	0.6043	5.6800e-003	0.6100	0.1613	5.3300e-003	0.1666		612.4393	612.4393	0.0596	0.0414	626.2699
Total	**0.9510**	**0.5881**	**3.9613**	**5.9200e-003**	**0.6043**	**5.6900e-003**	**0.6100**	**0.1613**	**5.3400e-003**	**0.1666**		**612.4458**	**612.4458**	**0.0597**	**0.0414**	**626.2768**

SNOW Sports Museum - Particle Deposition VMT Adjustment - Placer County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	5/1/2023	5/5/2023	5	5	
2	Site Preparation	Site Preparation	5/6/2023	5/8/2023	5	1	
3	Grading	Grading	5/9/2023	5/22/2023	5	10	
4	Building Construction	Building Construction	5/23/2023	10/9/2023	5	100	
5	Paving	Paving	10/10/2023	10/16/2023	5	5	
6	Architectural Coating	Architectural Coating	10/17/2023	10/23/2023	5	5	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 7.5

Acres of Paving: 0.22

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 30,000; Non-Residential Outdoor: 10,000; Striped Parking Area: 573 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	1.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37

SNOW Sports Museum - Particle Deposition VMT Adjustment - Placer County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	150.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	10.00	5.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	2.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

SNOW Sports Museum - Particle Deposition VMT Adjustment - Placer County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6463	5.7787	7.3926	0.0120		0.2821	0.2821		0.2698	0.2698		1,148.4055	1,148.4055	0.2089		1,153.6290
Total	**0.6463**	**5.7787**	**7.3926**	**0.0120**		**0.2821**	**0.2821**		**0.2698**	**0.2698**		**1,148.4055**	**1,148.4055**	**0.2089**		**1,153.6290**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0273	0.0191	0.2324	6.5000e-004	0.0822	3.9000e-004	0.0825	0.0218	3.6000e-004	0.0222		66.8835	66.8835	2.1600e-003	2.0100e-003	67.5372
Total	**0.0273**	**0.0191**	**0.2324**	**6.5000e-004**	**0.0822**	**3.9000e-004**	**0.0825**	**0.0218**	**3.6000e-004**	**0.0222**		**66.8835**	**66.8835**	**2.1600e-003**	**2.0100e-003**	**67.5372**

SNOW Sports Museum - Particle Deposition VMT Adjustment - Placer County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6463	5.7787	7.3926	0.0120		0.2821	0.2821		0.2698	0.2698	0.0000	1,148.4055	1,148.4055	0.2089		1,153.6290
Total	**0.6463**	**5.7787**	**7.3926**	**0.0120**		**0.2821**	**0.2821**		**0.2698**	**0.2698**	**0.0000**	**1,148.4055**	**1,148.4055**	**0.2089**		**1,153.6290**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0273	0.0191	0.2324	6.5000e-004	0.0822	3.9000e-004	0.0825	0.0218	3.6000e-004	0.0222		66.8835	66.8835	2.1600e-003	2.0100e-003	67.5372
Total	**0.0273**	**0.0191**	**0.2324**	**6.5000e-004**	**0.0822**	**3.9000e-004**	**0.0825**	**0.0218**	**3.6000e-004**	**0.0222**		**66.8835**	**66.8835**	**2.1600e-003**	**2.0100e-003**	**67.5372**

SNOW Sports Museum - Particle Deposition VMT Adjustment - Placer County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	0.5348	6.1887	3.9239	9.7300e-003		0.2266	0.2266		0.2084	0.2084		942.4317	942.4317	0.3048		950.0517
Total	**0.5348**	**6.1887**	**3.9239**	**9.7300e-003**	**0.5303**	**0.2266**	**0.7568**	**0.0573**	**0.2084**	**0.2657**		**942.4317**	**942.4317**	**0.3048**		**950.0517**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0137	9.5600e-003	0.1162	3.3000e-004	0.0411	2.0000e-004	0.0413	0.0109	1.8000e-004	0.0111		33.4417	33.4417	1.0800e-003	1.0100e-003	33.7686
Total	**0.0137**	**9.5600e-003**	**0.1162**	**3.3000e-004**	**0.0411**	**2.0000e-004**	**0.0413**	**0.0109**	**1.8000e-004**	**0.0111**		**33.4417**	**33.4417**	**1.0800e-003**	**1.0100e-003**	**33.7686**

SNOW Sports Museum - Particle Deposition VMT Adjustment - Placer County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	0.5348	6.1887	3.9239	9.7300e-003		0.2266	0.2266		0.2084	0.2084	0.0000	942.4317	942.4317	0.3048		950.0517
Total	**0.5348**	**6.1887**	**3.9239**	**9.7300e-003**	**0.5303**	**0.2266**	**0.7568**	**0.0573**	**0.2084**	**0.2657**	**0.0000**	**942.4317**	**942.4317**	**0.3048**		**950.0517**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0137	9.5600e-003	0.1162	3.3000e-004	0.0411	2.0000e-004	0.0413	0.0109	1.8000e-004	0.0111		33.4417	33.4417	1.0800e-003	1.0100e-003	33.7686
Total	**0.0137**	**9.5600e-003**	**0.1162**	**3.3000e-004**	**0.0411**	**2.0000e-004**	**0.0413**	**0.0109**	**1.8000e-004**	**0.0111**		**33.4417**	**33.4417**	**1.0800e-003**	**1.0100e-003**	**33.7686**

SNOW Sports Museum - Particle Deposition VMT Adjustment - Placer County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.3255	0.0000	5.3255	2.5706	0.0000	2.5706			0.0000			0.0000
Off-Road	0.9335	10.1789	5.5516	0.0141		0.4201	0.4201		0.3865	0.3865		1,364.7713	1,364.7713	0.4414		1,375.8062
Total	**0.9335**	**10.1789**	**5.5516**	**0.0141**	**5.3255**	**0.4201**	**5.7456**	**2.5706**	**0.3865**	**2.9571**		**1,364.7713**	**1,364.7713**	**0.4414**		**1,375.8062**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0352	2.0855	0.4585	9.1500e-003	0.2626	0.0179	0.2806	0.0720	0.0172	0.0892		968.2497	968.2497	1.6400e-003	0.1522	1,013.6362
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0218	0.0153	0.1859	5.2000e-004	0.0657	3.2000e-004	0.0660	0.0174	2.9000e-004	0.0177		53.5068	53.5068	1.7300e-003	1.6100e-003	54.0297
Total	**0.0570**	**2.1008**	**0.6443**	**9.6700e-003**	**0.3284**	**0.0183**	**0.3466**	**0.0894**	**0.0174**	**0.1069**		**1,021.7564**	**1,021.7564**	**3.3700e-003**	**0.1538**	**1,067.6660**

SNOW Sports Museum - Particle Deposition VMT Adjustment - Placer County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.3255	0.0000	5.3255	2.5706	0.0000	2.5706			0.0000			0.0000
Off-Road	0.9335	10.1789	5.5516	0.0141		0.4201	0.4201		0.3865	0.3865	0.0000	1,364.7713	1,364.7713	0.4414		1,375.8062
Total	**0.9335**	**10.1789**	**5.5516**	**0.0141**	**5.3255**	**0.4201**	**5.7456**	**2.5706**	**0.3865**	**2.9571**	**0.0000**	**1,364.7713**	**1,364.7713**	**0.4414**		**1,375.8062**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0352	2.0855	0.4585	9.1500e-003	0.2626	0.0179	0.2806	0.0720	0.0172	0.0892		968.2497	968.2497	1.6400e-003	0.1522	1,013.6362
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0218	0.0153	0.1859	5.2000e-004	0.0657	3.2000e-004	0.0660	0.0174	2.9000e-004	0.0177		53.5068	53.5068	1.7300e-003	1.6100e-003	54.0297
Total	**0.0570**	**2.1008**	**0.6443**	**9.6700e-003**	**0.3284**	**0.0183**	**0.3466**	**0.0894**	**0.0174**	**0.1069**		**1,021.7564**	**1,021.7564**	**3.3700e-003**	**0.1538**	**1,067.6660**

SNOW Sports Museum - Particle Deposition VMT Adjustment - Placer County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6322	6.4186	7.0970	0.0114		0.3203	0.3203		0.2946	0.2946		1,104.6089	1,104.6089	0.3573		1,113.5402
Total	**0.6322**	**6.4186**	**7.0970**	**0.0114**		**0.3203**	**0.3203**		**0.2946**	**0.2946**		**1,104.6089**	**1,104.6089**	**0.3573**		**1,113.5402**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.5300e-003	0.2363	0.0747	1.0100e-003	0.0339	1.3900e-003	0.0353	9.7500e-003	1.3300e-003	0.0111		107.1722	107.1722	2.9000e-004	0.0162	112.0102
Worker	0.0273	0.0191	0.2324	6.5000e-004	0.0822	3.9000e-004	0.0825	0.0218	3.6000e-004	0.0222		66.8835	66.8835	2.1600e-003	2.0100e-003	67.5372
Total	**0.0328**	**0.2554**	**0.3070**	**1.6600e-003**	**0.1160**	**1.7800e-003**	**0.1178**	**0.0315**	**1.6900e-003**	**0.0332**		**174.0556**	**174.0556**	**2.4500e-003**	**0.0182**	**179.5474**

SNOW Sports Museum - Particle Deposition VMT Adjustment - Placer County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6322	6.4186	7.0970	0.0114		0.3203	0.3203		0.2946	0.2946	0.0000	1,104.6089	1,104.6089	0.3573		1,113.5402
Total	**0.6322**	**6.4186**	**7.0970**	**0.0114**		**0.3203**	**0.3203**		**0.2946**	**0.2946**	**0.0000**	**1,104.6089**	**1,104.6089**	**0.3573**		**1,113.5402**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.5300e-003	0.2363	0.0747	1.0100e-003	0.0339	1.3900e-003	0.0353	9.7500e-003	1.3300e-003	0.0111		107.1722	107.1722	2.9000e-004	0.0162	112.0102
Worker	0.0273	0.0191	0.2324	6.5000e-004	0.0822	3.9000e-004	0.0825	0.0218	3.6000e-004	0.0222		66.8835	66.8835	2.1600e-003	2.0100e-003	67.5372
Total	**0.0328**	**0.2554**	**0.3070**	**1.6600e-003**	**0.1160**	**1.7800e-003**	**0.1178**	**0.0315**	**1.6900e-003**	**0.0332**		**174.0556**	**174.0556**	**2.4500e-003**	**0.0182**	**179.5474**

SNOW Sports Museum - Particle Deposition VMT Adjustment - Placer County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6112	5.5046	7.0209	0.0113		0.2643	0.2643		0.2466	0.2466		1,036.0878	1,036.0878	0.3018		1,043.6331
Paving	0.1153					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.7264**	**5.5046**	**7.0209**	**0.0113**		**0.2643**	**0.2643**		**0.2466**	**0.2466**		**1,036.0878**	**1,036.0878**	**0.3018**		**1,043.6331**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0492	0.0344	0.4182	1.1800e-003	0.1479	7.1000e-004	0.1486	0.0392	6.5000e-004	0.0399		120.3902	120.3902	3.8900e-003	3.6200e-003	121.5669
Total	**0.0492**	**0.0344**	**0.4182**	**1.1800e-003**	**0.1479**	**7.1000e-004**	**0.1486**	**0.0392**	**6.5000e-004**	**0.0399**		**120.3902**	**120.3902**	**3.8900e-003**	**3.6200e-003**	**121.5669**

SNOW Sports Museum - Particle Deposition VMT Adjustment - Placer County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6112	5.5046	7.0209	0.0113		0.2643	0.2643		0.2466	0.2466	0.0000	1,036.0878	1,036.0878	0.3018		1,043.6331
Paving	0.1153					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.7264**	**5.5046**	**7.0209**	**0.0113**		**0.2643**	**0.2643**		**0.2466**	**0.2466**	**0.0000**	**1,036.0878**	**1,036.0878**	**0.3018**		**1,043.6331**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0492	0.0344	0.4182	1.1800e-003	0.1479	7.1000e-004	0.1486	0.0392	6.5000e-004	0.0399		120.3902	120.3902	3.8900e-003	3.6200e-003	121.5669
Total	**0.0492**	**0.0344**	**0.4182**	**1.1800e-003**	**0.1479**	**7.1000e-004**	**0.1486**	**0.0392**	**6.5000e-004**	**0.0399**		**120.3902**	**120.3902**	**3.8900e-003**	**3.6200e-003**	**121.5669**

SNOW Sports Museum - Particle Deposition VMT Adjustment - Placer County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	37.6112					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	**37.8028**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**		**281.4481**	**281.4481**	**0.0168**		**281.8690**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.4600e-003	3.8200e-003	0.0465	1.3000e-004	0.0164	8.0000e-005	0.0165	4.3600e-003	7.0000e-005	4.4300e-003		13.3767	13.3767	4.3000e-004	4.0000e-004	13.5074
Total	**5.4600e-003**	**3.8200e-003**	**0.0465**	**1.3000e-004**	**0.0164**	**8.0000e-005**	**0.0165**	**4.3600e-003**	**7.0000e-005**	**4.4300e-003**		**13.3767**	**13.3767**	**4.3000e-004**	**4.0000e-004**	**13.5074**

SNOW Sports Museum - Particle Deposition VMT Adjustment - Placer County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Architectural Coating - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	37.6112					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690
Total	**37.8028**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**	**0.0000**	**281.4481**	**281.4481**	**0.0168**		**281.8690**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.4600e-003	3.8200e-003	0.0465	1.3000e-004	0.0164	8.0000e-005	0.0165	4.3600e-003	7.0000e-005	4.4300e-003		13.3767	13.3767	4.3000e-004	4.0000e-004	13.5074
Total	**5.4600e-003**	**3.8200e-003**	**0.0465**	**1.3000e-004**	**0.0164**	**8.0000e-005**	**0.0165**	**4.3600e-003**	**7.0000e-005**	**4.4300e-003**		**13.3767**	**13.3767**	**4.3000e-004**	**4.0000e-004**	**13.5074**

SNOW Sports Museum - Particle Deposition VMT Adjustment - Placer County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.4679	0.5881	3.9583	5.9200e-003	0.6043	5.6800e-003	0.6100	0.1613	5.3300e-003	0.1666		612.4393	612.4393	0.0596	0.0414	626.2699
Unmitigated	0.4679	0.5881	3.9583	5.9200e-003	0.6043	5.6800e-003	0.6100	0.1613	5.3300e-003	0.1666		612.4393	612.4393	0.0596	0.0414	626.2699

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	167.00	219.00	224.00	233,048	233,048
Parking Lot	0.00	0.00	0.00		
Total	167.00	219.00	224.00	233,048	233,048

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Office Building	4.15	3.19	3.19	33.00	48.00	19.00	100	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

SNOW Sports Museum - Particle Deposition VMT Adjustment - Placer County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.466187	0.061512	0.210180	0.153350	0.034639	0.008391	0.014417	0.011935	0.000556	0.000412	0.031993	0.000977	0.005450
Parking Lot	0.466187	0.061512	0.210180	0.153350	0.034639	0.008391	0.014417	0.011935	0.000556	0.000412	0.031993	0.000977	0.005450

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

SNOW Sports Museum - Particle Deposition VMT Adjustment - Placer County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Office Building	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Office Building	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

SNOW Sports Museum - Particle Deposition VMT Adjustment - Placer County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.4832	3.0000e-005	3.0100e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		6.4600e-003	6.4600e-003	2.0000e-005		6.8900e-003
Unmitigated	0.4832	3.0000e-005	3.0100e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		6.4600e-003	6.4600e-003	2.0000e-005		6.8900e-003

SNOW Sports Museum - Particle Deposition VMT Adjustment - Placer County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0515					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.4314					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.8000e-004	3.0000e-005	3.0100e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		6.4600e-003	6.4600e-003	2.0000e-005		6.8900e-003
Total	**0.4832**	**3.0000e-005**	**3.0100e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**		**6.4600e-003**	**6.4600e-003**	**2.0000e-005**		**6.8900e-003**

SNOW Sports Museum - Particle Deposition VMT Adjustment - Placer County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0515					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.4314					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.8000e-004	3.0000e-005	3.0100e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		6.4600e-003	6.4600e-003	2.0000e-005		6.8900e-003
Total	**0.4832**	**3.0000e-005**	**3.0100e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**		**6.4600e-003**	**6.4600e-003**	**2.0000e-005**		**6.8900e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

The maximum pounds per day in row 11 is summed over overlapping phases, but the maximum tons per phase in row 34 is not summed over overlapping phases.

Road Construction Emissions Model, Version 9.0.0

Daily Emission Estimates for -> SNOW Sports Museum														
Project Phases (Pounds)	ROG (lbs/day)	CO (lbs/day)	NOx (lbs/day)	Total PM10 (lbs/day)	Exhaust PM10 (lbs/day)	Fugitive Dust PM10 (lbs/day)	Total PM2.5 (lbs/day)	Exhaust PM2.5 (lbs/day)	Fugitive Dust PM2.5 (lbs/day)	SOx (lbs/day)	CO2 (lbs/day)	CH4 (lbs/day)	N2O (lbs/day)	CO2e (lbs/day)
Grubbing/Land Clearing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grading/Excavation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Drainage/Utilities/Sub-Grade	2.42	25.91	16.61	3.08	1.08	2.00	1.32	0.91	0.42	0.05	4,691.24	0.57	0.08	4,729.23
Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum (pounds/day)	2.42	25.91	16.61	3.08	1.08	2.00	1.32	0.91	0.42	0.05	4,691.24	0.57	0.08	4,729.23
Total (tons/construction project)	0.00	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.56	0.00	0.00	3.59

Notes:

Project Start Year ->	2023
Project Length (months) ->	0
Total Project Area (acres) ->	0
Maximum Area Disturbed/Day (acres) ->	0
Water Truck Used? ->	No

	Total Material Imported/Exported Volume (yd^3/day)		Daily VMT (miles/day)			
Phase	Soil	Asphalt	Soil Hauling	Asphalt Hauling	Worker Commute	Water Truck
Grubbing/Land Clearing	0	0	0	0	0	0
Grading/Excavation	0	0	0	0	0	0
Drainage/Utilities/Sub-Grade	4	0	15	0	2,200	0
Paving	0	0	0	0	0	0

PM10 and PM2.5 estimates assume 50% control of fugitive dust from watering and associated dust control measures if a minimum number of water trucks are specified.

Total PM10 emissions shown in column F are the sum of exhaust and fugitive dust emissions shown in columns G and H. Total PM2.5 emissions shown in Column I are the sum of exhaust and fugitive dust emissions shown in columns J and K.

CO2e emissions are estimated by multiplying mass emissions for each GHG by its global warming potential (GWP), 1 , 25 and 298 for CO2, CH4 and N2O, respectively. Total CO2e is then estimated by summing CO2e estimates over all GHGs.

Total Emission Estimates by Phase for -> SNOW Sports Museum														
Project Phases (Tons for all except CO2e. Metric tonnes for CO2e)	ROG (tons/phase)	CO (tons/phase)	NOx (tons/phase)	Total PM10 (tons/phase)	Exhaust PM10 (tons/phase)	Fugitive Dust PM10 (tons/phase)	Total PM2.5 (tons/phase)	Exhaust PM2.5 (tons/phase)	Fugitive Dust PM2.5 (tons/phase)	SOx (tons/phase)	CO2 (tons/phase)	CH4 (tons/phase)	N2O (tons/phase)	CO2e (MT/phase)
Grubbing/Land Clearing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grading/Excavation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Drainage/Utilities/Sub-Grade	0.00	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.56	0.00	0.00	3.26
Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum (tons/phase)	0.00	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.56	0.00	0.00	3.26
Total (tons/construction project)	0.00	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.56	0.00	0.00	3.26

PM10 and PM2.5 estimates assume 50% control of fugitive dust from watering and associated dust control measures if a minimum number of water trucks are specified.

Total PM10 emissions shown in column F are the sum of exhaust and fugitive dust emissions shown in columns G and H. Total PM2.5 emissions shown in Column I are the sum of exhaust and fugitive dust emissions shown in columns J and K.

CO2e emissions are estimated by multiplying mass emissions for each GHG by its global warming potential (GWP), 1 , 25 and 298 for CO2, CH4 and N2O, respectively. Total CO2e is then estimated by summing CO2e estimates over all GHGs.

The CO2e emissions are reported as metric tons per phase.

SNOW Propane Emissions

Pollutant	Emissions Factor (lbs/1,000 gallons)	Annual Propane Usage (1,000 gallons/yr)	Total Annual Emissions (lbs/yr)	Total Daily Emissions (lbs/day)
PM	0.7	4.222707	2.955895197	0.008098343
NOx	13	4.222707	54.89519651	0.150397799
CO2	12,500	4.222707	52783.84279	144.6132679

MTCO2e/yr = 26.391921

Annual Energy Demand* (kBTU/yr)	Propane Conversion (kBTU/Gallon)	Annual Total Gallons of Propane (gallons/yr)
386,800	91.6	4222.707424

* Based on the CalEEMod total annual natural gas usage for the proposed project

Total Project Emissions

	ROG (lbs/day)	NOx (lbs/day)	PM10 (lbs/day)	CO2e (MT/yr) - Energy
CalEEMod Project Emissions	1.41	1.42	1.92	130.94
Propane Emissions	-	0.150397799	0.008098343	26.391921
Total Project Emissions	**1.41**	**1.570397799**	**1.928098343**	**157.3319214**

Total CO2e (MT/yr): 416.99 + 26.39 = 443.38

APPENDIX D

Environmental Noise Assessment

SNOW Museum Project

Placer County, California

November 23, 2022

Project #220214

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INTRODUCTION

The SNOW Sports Museum Center includes the construction of a single two-level 17,000 sq ft. building. The project is located in Placer County, California at the entrance of Olympic Valley Park, west of Olympic Valley Road. The project will include an outdoor gathering space, a place for events, and 6,000 sq ft. of parking space. Surrounding land uses include single-family residentials located northwest and west of the project site and commercial use directly north of the project site.

Figure 1 shows the project site plan. **Figure 2** shows an aerial photo of the project site.

ENVIRONMENTAL SETTING

BACKGROUND INFORMATION ON NOISE

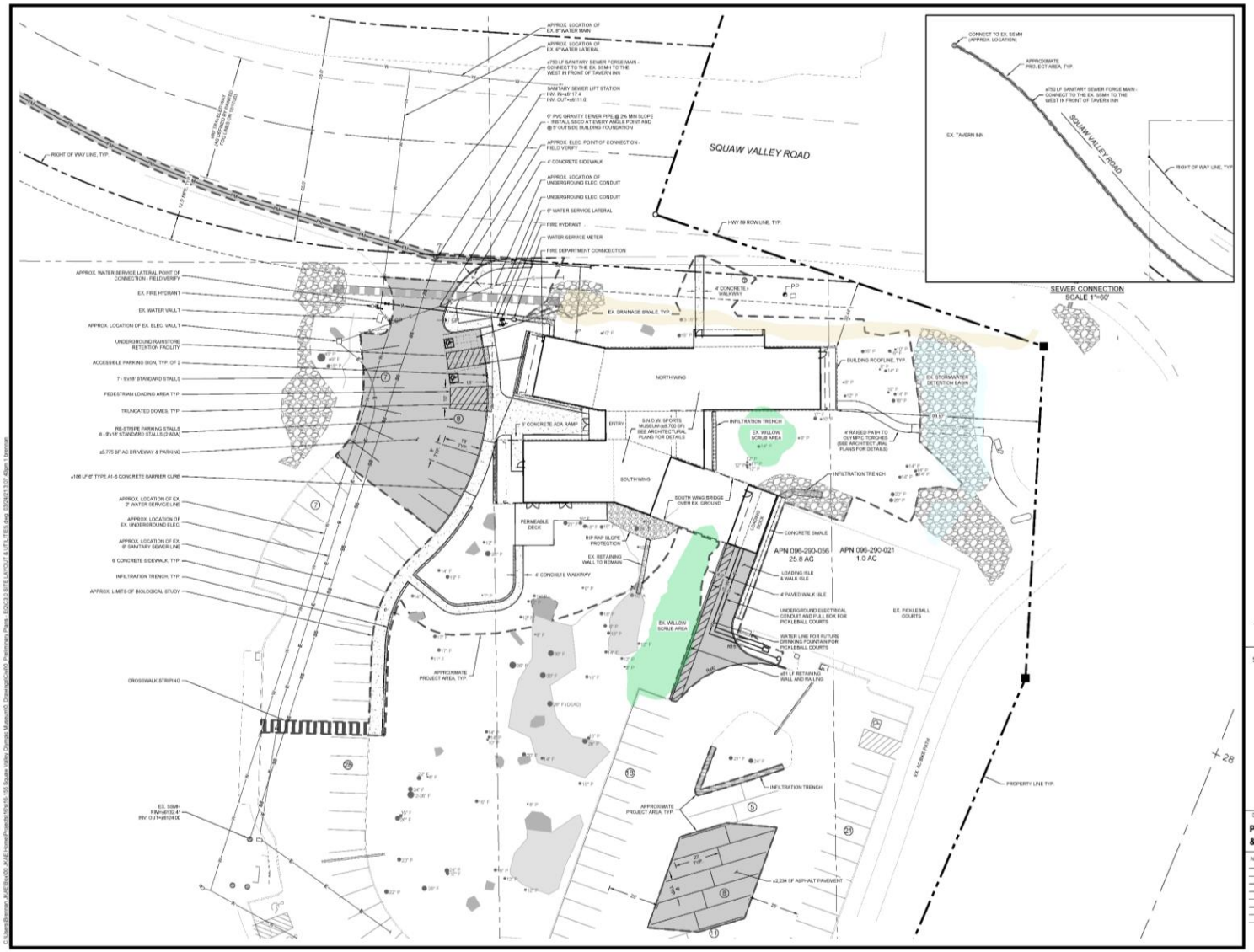
Fundamentals of Acoustics

Acoustics is the science of sound. Sound may be thought of as mechanical energy of a vibrating object transmitted by pressure waves through a medium to human (or animal) ears. If the pressure variations occur frequently enough (at least 20 times per second), then they can be heard and are called sound. The number of pressure variations per second is called the frequency of sound, and is expressed as cycles per second or Hertz (Hz).

Noise is a subjective reaction to different types of sounds. Noise is typically defined as (airborne) sound that is loud, unpleasant, unexpected or undesired, and may therefore be classified as a more specific group of sounds. Perceptions of sound and noise are highly subjective from person to person.

Measuring sound directly in terms of pressure would require a very large and awkward range of numbers. To avoid this, the decibel scale was devised. The decibel scale uses the hearing threshold (20 micropascals), as a point of reference, defined as 0 dB. Other sound pressures are then compared to this reference pressure, and the logarithm is taken to keep the numbers in a practical range. The decibel scale allows a million-fold increase in pressure to be expressed as 120 dB, and changes in levels (dB) correspond closely to human perception of relative loudness.

The perceived loudness of sounds is dependent upon many factors, including sound pressure level and frequency content. However, within the usual range of environmental noise levels, perception of loudness is relatively predictable, and can be approximated by A-weighted sound levels. There is a strong correlation between A-weighted sound levels (expressed as dBA) and the way the human ear perceives sound. For this reason, the A-weighted sound level has become the standard tool of environmental noise assessment.



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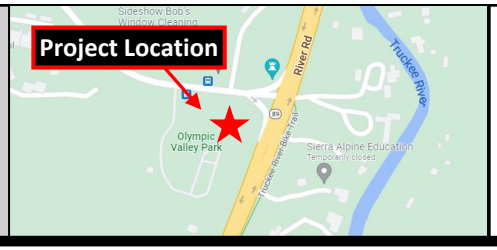
SNOW Museum Project

Placer County, California

Figure 1

Project Site Plan



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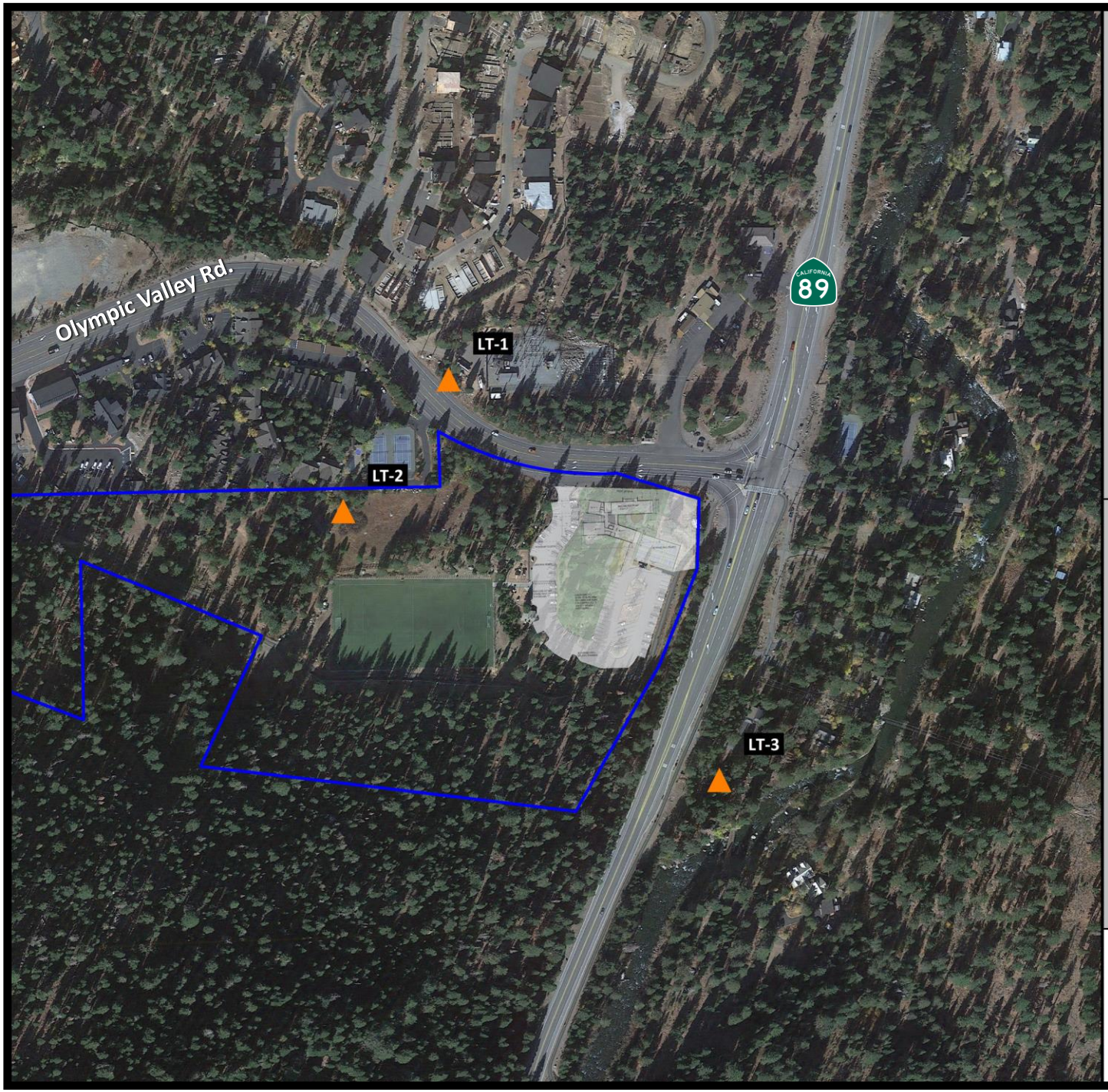

SNOW Museum Project

Placer County, California

Figure 2

Noise Measurement Sites

Legend

- Project Site
- Noise Measurement Site - Long Term

0 ft 250 ft 500 ft

Projection: UTM Zone 10 / WGS84 / meters
Rev. Date: 10/26/2022

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The decibel scale is logarithmic, not linear. In other words, two sound levels 10-dB apart differ in acoustic energy by a factor of 10. When the standard logarithmic decibel is A-weighted, an increase of 10-dBA is generally perceived as a doubling in loudness. For example, a 70-dBA sound is half as loud as an 80-dBA sound, and twice as loud as a 60 dBA sound.

Community noise is commonly described in terms of the ambient noise level, which is defined as the all-encompassing noise level associated with a given environment. A common statistical tool is the average, or equivalent, sound level (L_{eq}), which corresponds to a steady-state A weighted sound level containing the same total energy as a time varying signal over a given time period (usually one hour). The L_{eq} is the foundation of the composite noise descriptor, L_{dn}, and shows very good correlation with community response to noise.

The day/night average level ($_{DN}L$ or L_{dn}) is based upon the average noise level over a 24-hour day, with a +10-decibel weighing applied to noise occurring during nighttime (10:00 p.m. to 7:00 a.m.) hours. The nighttime penalty is based upon the assumption that people react to nighttime noise exposures as though they were twice as loud as daytime exposures. Because L_{dn} represents a 24-hour average, it tends to disguise short-term variations in the noise environment.

Table 1 lists several examples of the noise levels associated with common situations. **Appendix A** provides a summary of acoustical terms used in this report.

TABLE 1: TYPICAL NOISE LEVELS

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
	--110--	Rock Band
Jet Fly-over at 300 m (1,000 ft.)	--100--	
Gas Lawn Mower at 1 m (3 ft.)	--90--	
Diesel Truck at 15 m (50 ft.), at 80 km/hr. (50 mph)	--80--	Food Blender at 1 m (3 ft.) Garbage Disposal at 1 m (3 ft.)
Noisy Urban Area, Daytime Gas Lawn Mower, 30 m (100 ft.)	--70--	Vacuum Cleaner at 3 m (10 ft.)
Commercial Area Heavy Traffic at 90 m (300 ft.)	--60--	Normal Speech at 1 m (3 ft.)
Quiet Urban Daytime	--50--	Large Business Office Dishwasher in Next Room
Quiet Urban Nighttime	--40--	Theater, Large Conference Room (Background)
Quiet Suburban Nighttime	--30--	Library
Quiet Rural Nighttime	--20--	Bedroom at Night, Concert Hall (Background)
	--10--	Broadcast/Recording Studio
Lowest Threshold of Human Hearing	--0--	Lowest Threshold of Human Hearing

Source: Caltrans, Technical Noise Supplement, Traffic Noise Analysis Protocol. September, 2013.

Effects of Noise on People

The effects of noise on people can be placed in three categories:

- Subjective effects of annoyance, nuisance, and dissatisfaction
- Interference with activities such as speech, sleep, and learning
- Physiological effects such as hearing loss or sudden startling

Environmental noise typically produces effects in the first two categories. Workers in industrial plants can experience noise in the last category. There is no completely satisfactory way to measure the subjective effects of noise or the corresponding reactions of annoyance and dissatisfaction. A wide variation in individual thresholds of annoyance exists and different tolerances to noise tend to develop based on an individual's past experiences with noise.

Thus, an important way of predicting a human reaction to a new noise environment is the way it compares to the existing environment to which one has adapted: the so-called ambient noise level. In general, the more a new noise exceeds the previously existing ambient noise level, the less acceptable the new noise will be judged by those hearing it.

With regard to increases in A-weighted noise level, the following relationships occur:

- Except in carefully controlled laboratory experiments, a change of 1-dBA cannot be perceived;
- Outside of the laboratory, a 3-dBA change is considered a just-perceivable difference;
- A change in level of at least 5-dBA is required before any noticeable change in human response would be expected; and
- A 10-dBA change is subjectively heard as approximately a doubling in loudness, and can cause an adverse response.

Stationary point sources of noise – including stationary mobile sources such as idling vehicles – attenuate (lessen) at a rate of approximately 6-dB per doubling of distance from the source, depending on environmental conditions (i.e. atmospheric conditions and either vegetative or manufactured noise barriers, etc.). Widely distributed noises, such as a large industrial facility spread over many acres, or a street with moving vehicles, would typically attenuate at a lower rate.

EXISTING AND FUTURE NOISE AND VIBRATION ENVIRONMENTS

EXISTING NOISE RECEPTORS

Some land uses are considered more sensitive to noise than others. Land uses often associated with sensitive receptors generally include residences, schools, libraries, hospitals, and passive recreational areas. Sensitive noise receptors may also include threatened or endangered noise sensitive biological species, although many jurisdictions have not adopted noise standards for wildlife areas. Noise sensitive land uses are typically given special attention in order to achieve protection from excessive noise.

Sensitivity is a function of noise exposure (in terms of both exposure duration and insulation from noise) and the types of activities involved. In the vicinity of the project site, sensitive land uses include existing single-family residential uses located west and east of the project site.

EXISTING GENERAL AMBIENT NOISE LEVELS

The existing ambient noise environment in the project vicinity is primarily defined by traffic on SR 89. To quantify the existing ambient noise environment in the project vicinity, Saxelby Acoustics conducted continuous (24-hr.) noise level measurements at three locations on the project. Noise measurement locations are shown on **Figure 2**. A summary of the noise level measurement survey results is provided in **Table 2**. **Appendix B** contains the complete results of the noise monitoring.

The sound level meters were programmed to record the maximum, median, and average noise levels at each site during the survey. The maximum value, denoted L_{max}, represents the highest noise level measured. The average value, denoted L_{eq}, represents the energy average of all of the noise received by the sound level meter microphone during the monitoring period. The median value, denoted L_{50}, represents the sound level exceeded 50 percent of the time during the monitoring period.

Larson Davis Laboratories (LDL) model 820 integrating sound level meters were used for the ambient noise level measurement survey. The meters were calibrated before and after use with a CAL 200 acoustical calibrator to ensure the accuracy of the measurements. The equipment used meets all pertinent specifications of the American National Standards Institute for Type 1 sound level meters (ANSI S1.4).

TABLE 2: SUMMARY OF EXISTING BACKGROUND NOISE MEASUREMENT DATA

Location	Date	L_{dn}	Daytime L_{eq}	Daytime L_{50}	Daytime L_{max}	Nighttime L_{eq}	Nighttime L_{50}	Nighttime L_{max}
LT-1: 770 ft. to CL of SR 89.	5/5/22	64	62	55	77	57	46	74
	5/6/22	64	63	57	77	55	45	75
	5/7/22	63	62	55	79	54	44	73
	5/8/22	63	63	52	78	54	42	71
	5/9/22	61	63	50	78	47	37	67
	5/10/22	61	62	51	78	50	36	71
	5/11/22	61	61	53	79	52	39	68
	Average	62.4	62.3	53.3	78.0	52.7	41.3	71.3
LT-2: 900 ft. to CL of SR 89.	5/5/22	54	51	49	64	47	44	58
	5/6/22	52	49	47	62	46	43	58
	5/7/22	50	57	45	63	43	41	56
	5/8/22	49	47	43	61	42	38	57
	5/9/22	45	44	39	62	36	32	51
	5/10/22	45	44	39	62	36	32	51
	5/11/22	45	45	42	60	36	31	50
	Average	48.6	47.2	43.4	62.0	40.9	37.3	54.4
LT-3: 140 ft. to CL of SR 89.	5/5/22	63	59	58	70	56	56	65
	5/6/22	63	59	58	71	57	56	66
	5/7/22	63	58	56	68	56	56	67
	5/8/22	62	57	55	67	55	54	68
	5/9/22	60	56	53	68	53	52	63
	5/10/22	57	54	52	67	50	50	58
	5/11/22	60	57	55	68	52	51	62
	Average	61.1	57.7	55.3	68.4	54.1	53.6	64.1

Notes:

- *All values shown in dBA*
- *Daytime hours: 7:00 a.m. to 10:00 p.m.*
- *Nighttime Hours: 10:00 p.m. to 7:00 a.m.*
- *Source: Saxelby Acoustics 2022*

FUTURE TRAFFIC NOISE ENVIRONMENT AT OFF-SITE RECEPTORS

Off-Site Traffic Noise Impact Assessment Methodology

To assess noise impacts due to project-related traffic increases on the local roadway network, traffic noise levels are predicted at sensitive receptors for existing and future, project and no-project conditions.

Existing and Cumulative noise levels due to traffic are calculated using the Federal Highway Administration Highway Traffic Noise Prediction Model (FHWA RD-77-108). The model is based upon the Calveno reference noise factors for automobiles, medium trucks and heavy trucks, with consideration given to vehicle volume, speed, roadway configuration, distance to the receiver, and the acoustical characteristics of the site.

The FHWA model was developed to predict hourly L_{eq} values for free-flowing traffic conditions. To predict traffic noise levels in terms of L_{dn}, it is necessary to adjust the input volume to account for the day/night distribution of traffic.

Project trip generation volumes were provided by the project traffic engineer (LSC Transportation Consultants, Inc 2022), truck usage and vehicle speeds on the local area roadways were estimated from field observations. The predicted increases in traffic noise levels on the local roadway network for Existing and Cumulative conditions which would result from the project are provided in terms of L_{dn}.

Traffic noise levels are predicted at the sensitive receptors located at the closest typical setback distance along each project-area roadway segment. In some locations sensitive receptors may not receive full shielding from noise barriers or may be located at distances which vary from the assumed calculation distance.

Tables 3 and 4 summarizes the modeled traffic noise levels at the nearest sensitive receptors along each roadway segment in the Project area. **Appendix C** provides the complete inputs and results of the FHWA traffic modeling.

Table 3: Predicted Traffic Noise Level and Project-Related Traffic Noise Level Increases

Roadway	Segment	Predicted Exterior Noise Level (dBA L_{dn}) at Closest Sensitive Receptors		
		Existing No Project	Existing + Project	Change
SR 89	North of Squaw Valley	57.2	57.2	0.0
SR 89	South of Squaw Valley	58.2	58.2	0.0

Table 4: Cumulative Traffic Noise Level and Project-Related Traffic Noise Level Increases

Roadway	Segment	Predicted Exterior Noise Level (dBA L_{dn}) at Closest Sensitive Receptors		
		Cumulative No Project	Cumulative + Project	Change
SR 89	North of Squaw Valley	59.4	59.4	0.0
SR 89	South of Squaw Valley	60.2	60.2	0.0

EVALUATION OF PROJECT OPERATIONAL NOISE AT RESIDENTIAL RECEPTORS

Loading Dock and Truck Circulation Noise Generation

To determine typical noise levels associated with the proposed loading docks, noise level measurement data from a Wal-Mart loading dock was utilized. This data is conservative considering that the Walmart loading dock supports a much larger facility than the proposed project. As such, the noise analysis completed for the loading dock noise is considered a worst-case scenario.

The noise level measurements were conducted at a distance of 100 feet from the center of the two-bay loading dock and circulation area. Activities during the peak hour of loading dock activities included truck arrival/departures, truck idling, truck backing alarms, air brake release, and operation of truck-mounted refrigeration units.

The results of the worst-case loading dock noise measurements indicate that a busy hour generated an average noise level of 61 dBA L_{eq} at a distance of 100 feet from the center of the loading dock truck maneuvering lanes. This analysis assumes that the proposed loading docks could operate at this level of activity only during daytime hours (7:00 a.m. to 10:00 p.m.).

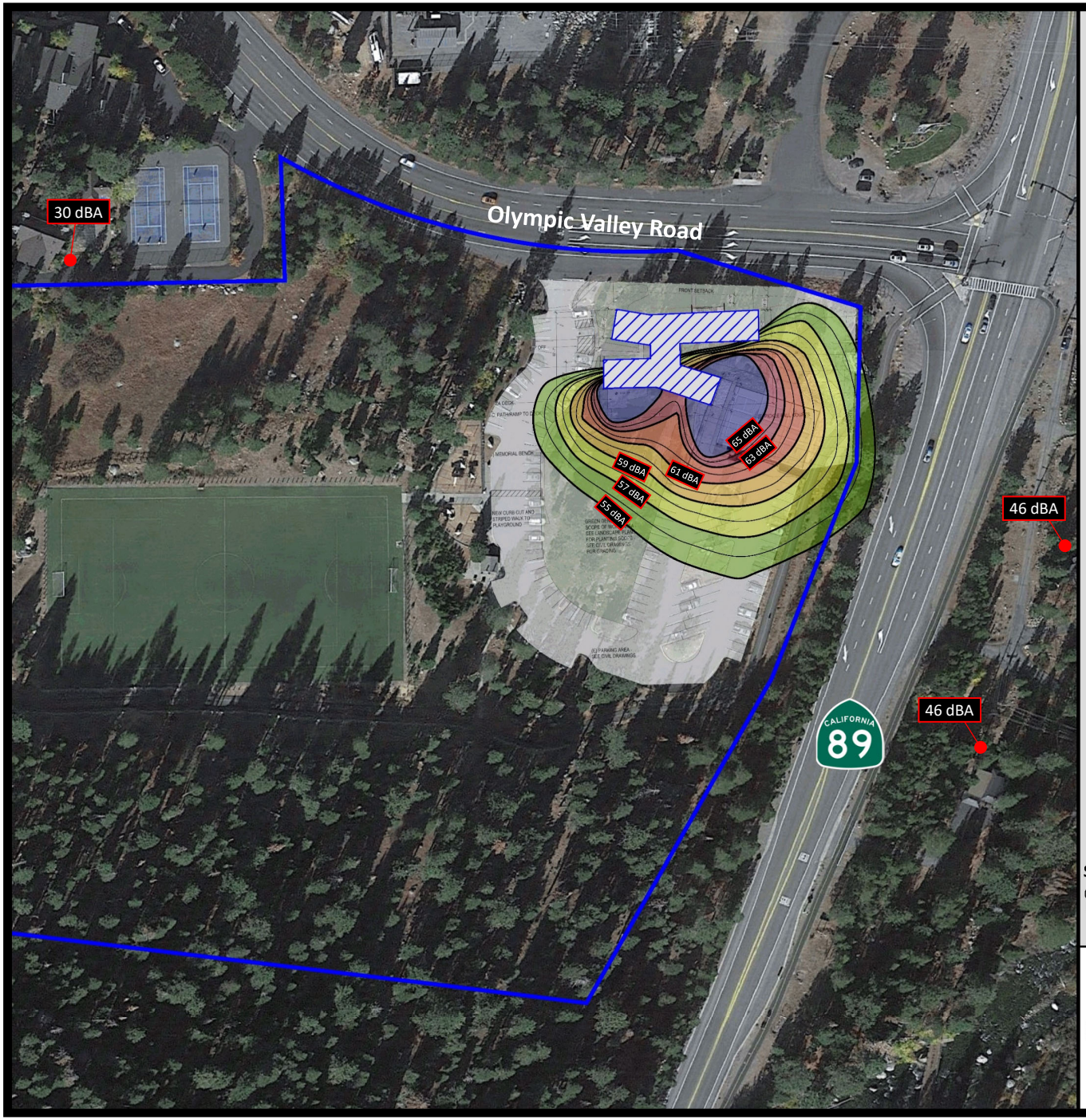
Parking Lot Circulation

Saxelby Acoustics assumed a peak hour movement of 41 vehicles on site (LSC Transportation Consultants, Inc). Based upon noise measurements conducted of vehicle movements in parking lots, the sound exposure level (SEL) for a single passenger vehicle is 71 dBA at a distance of 50 feet.

Event Patio

Saxelby Acoustics assumed 100 people vocalizing at an individual "raised speech" level of 60 dBA L_{eq} at 6 feet (Long, 2014). Based on this individual level, the total L_{eq} for all 100 people was assumed to be 80 dBA L_{eq} at 6 feet. The Event Patio is estimated to exclusively operate during the daytime hours (7:00 a.m. to 10:00 p.m.).

Saxelby Acoustics used the SoundPLAN noise model to calculate noise levels at the nearest sensitive receptors. Input data included the loading docks, parking lot noise generation, event noise, and pickleball activity as discussed above. The project noise level contours for the daytime (7:00 a.m. to 10:00 p.m.) average (L_{eq}) and day/night average (L_{dn}) are shown in **Figure 3** and **Figure 4**, respectively.



SNOW Museum Project

Placer County, California

Figure 3

Daytime Project Noise Contours (dBA L_{eq})

Noise Level, dB(A)	
55 <	<= 57
57 <	<= 59
59 <	<= 61
61 <	<= 63
63 <	<= 65
65 <	

Legend

- Project Building
- Project Boundary

Scale 1:150

0 30 60 120 180 240 feet

N

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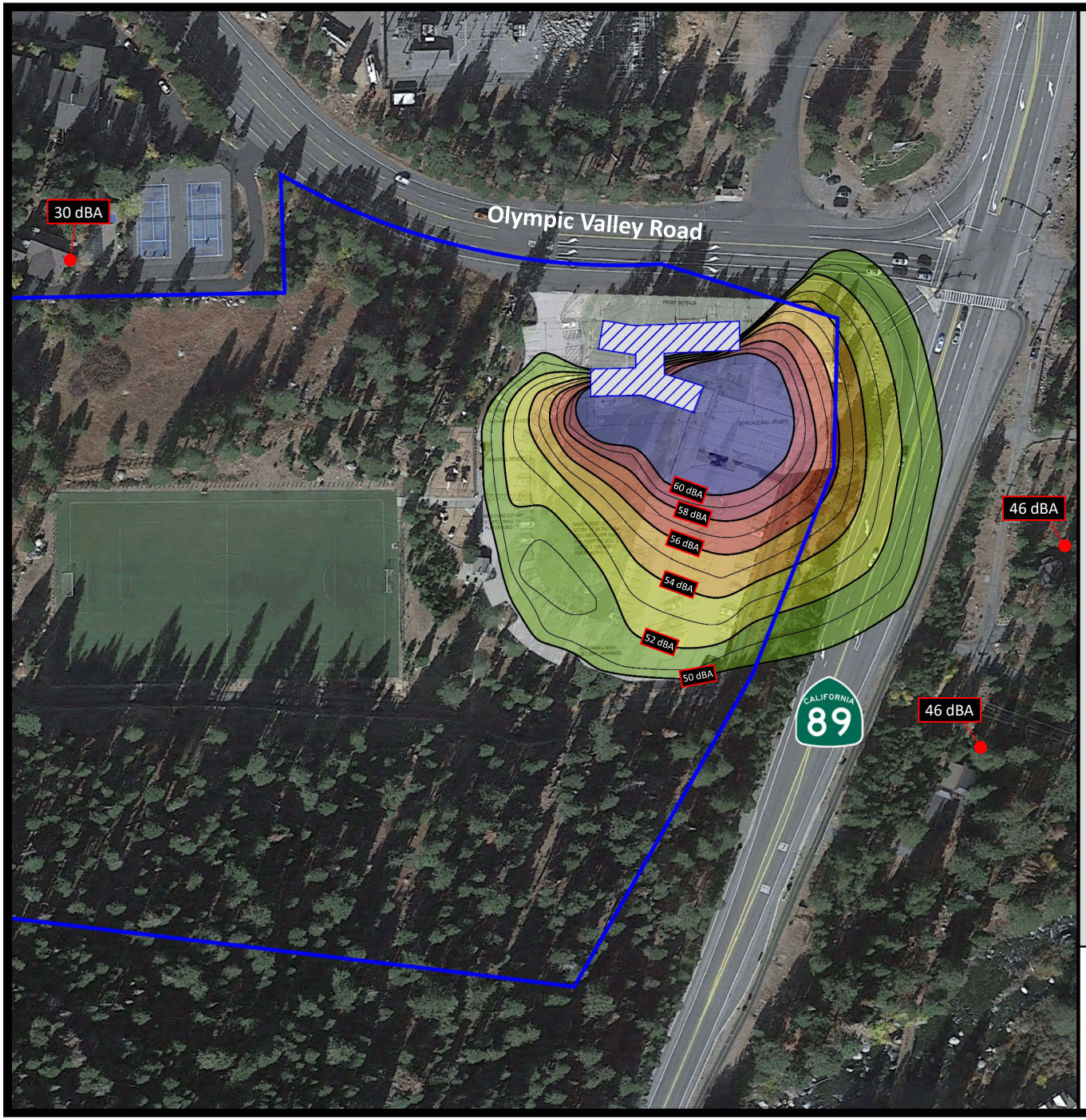

SNOW Museum Project

Placer County, California

Figure 4

Daytime Project Noise Contours (dBA L_{dn})

Noise Level, dB(A)	
50 <	<= 52
52 <	<= 54
54 <	<= 56
56 <	<= 58
58 <	<= 60
60 <	

Legend

- Project Building
- Project Boundary

Scale 1:156

0 30 60 120 180 240 feet

N

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CONSTRUCTION NOISE ENVIRONMENT

The Federal Highway Administration's (FHWA) Roadway Construction Noise Model (RCNM) was used to predict noise levels for standard construction equipment used for roadway improvement projects. The assessment of potential significant noise effects due to construction is based on the standards and procedures described in the Federal Transit Authority (FTA) guidance manual and FHWA's RCNM.

The RCNM is a Windows-based noise prediction model that enables the prediction of construction noise levels for a variety of construction equipment based on a compilation of empirical data and the application of acoustical propagation formulas. It enables the calculation of construction noise levels in more detail than the manual methods, which eliminates the need to collect extensive amounts of project-specific input data. RCNM allows for the modeling of multiple pieces of construction equipment working either independently or simultaneously, the character of noise emission, and the usage factors for each piece of equipment.

Construction noise varies depending on the construction process, type of equipment involved, location of the construction site with respect to sensitive receptors, the schedule proposed to carry out each task (e.g., hours and days of the week), and the duration of the construction work.

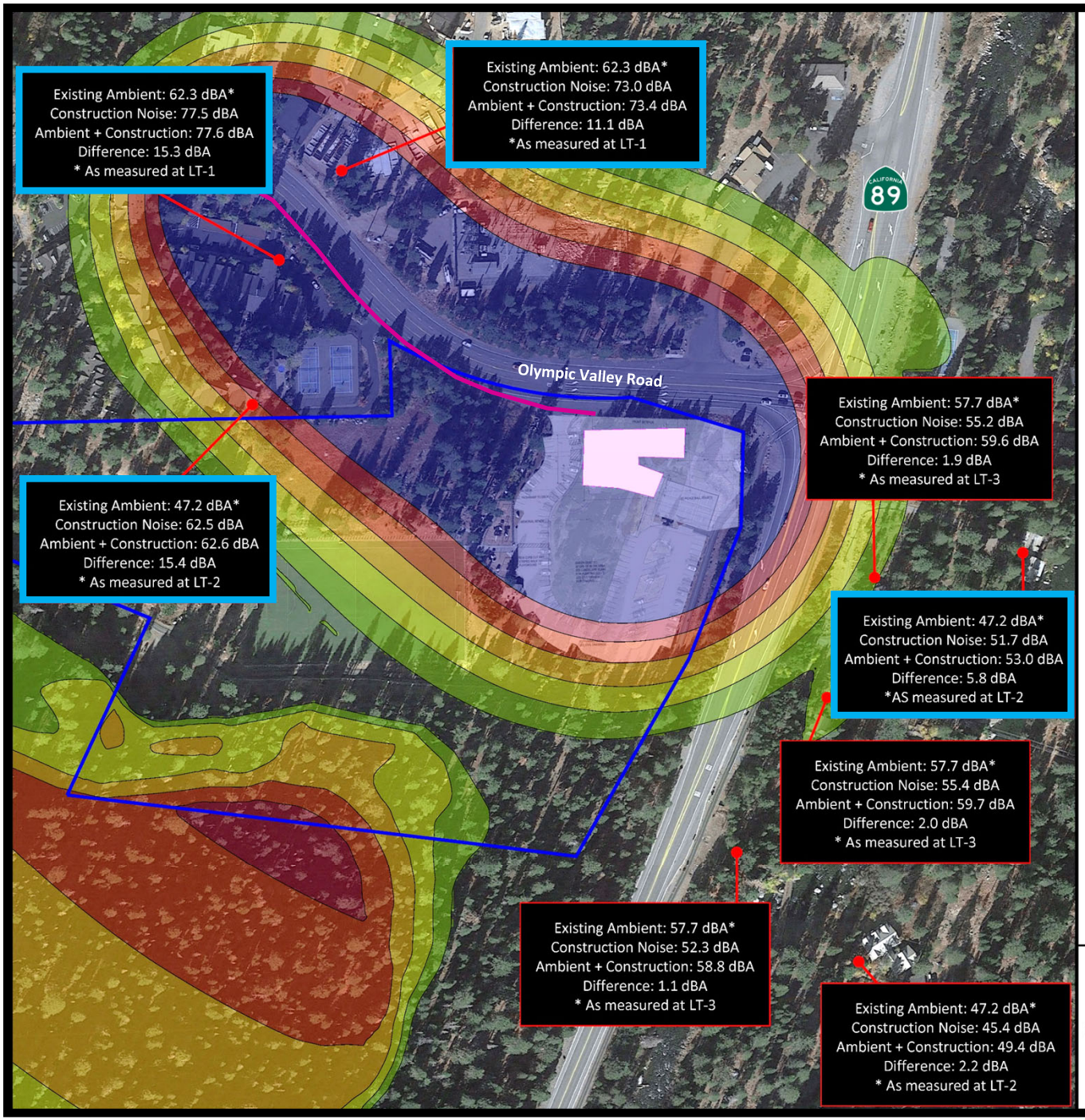
Noise sources in the RCNM database include actual noise levels and equipment usage percentages. This source data was used in this construction noise analysis. **Table 7** shows predicted construction noise levels for each of the project construction phases.

TABLE 5: CONSTRUCTION EQUIPMENT NOISE LEVELS FOR PRIMARY CONSTRUCTION PHASES

Equipment	Quantity	Usage (%)	Maximum, Lmax (dBA at 50 feet)	Hourly Average, Leq (dBA at 50 feet)
Demolition/Off Site Sewer				
Concrete Saw	1	20	90	83
Dozer	1	40	82	78
Tractor/Loader/Backhoe	2	40	84	83
			Total:	**87**
Site Preparation				
Grader	1	40	85	81
Tractor/Loader/Backhoe	1	40	84	80
			Total:	**84**
Grading				
Grader	1	40	85	81
Dozer	1	40	82	78
Tractor/Loader/Backhoe	1	40	84	80
			Total:	**85**
Building Construction				
Crane	1	16	81	73
Fork Lift	2	40	83	82
Tractor/Loader/Backhoe	2	40	84	83
			Total:	**86**
Paving				
Concrete Mixer Truck	4	40	79	81
Paver	1	50	77	74
Roller	1	20	80	73
Tractor/Loader/Backhoe	1	40	84	80
			Total:	**84**
Architectural Coating				
Air Compressor	1	40	79	75
			Total:	**75**

Source: FHWA, Roadway Construction Noise Model (RCNM), January 2006.

Based upon the **Table 5** data, the loudest phase of construction with an average noise exposure of 87 dBA L_{eq} at 50 feet would occur during demolition activities. The next loudest phase would be building construction at 85 dBA L_{eq} at 50 feet. The results of the construction noise analysis are shown graphically on **Figure 5**.



SNOW Museum Project

Placer County, California

Figure 5

Construction Noise Contours (dBA L_{eq})

Noise Level, dB(A)

55 <		<=	57
57 <		<=	59
59 <		<=	61
61 <		<=	63
63 <		<=	65
65 <			

Legend

- Park Boundary
- Receptor
- Off Site Sewer Line (Approx. Location)

Scale 1:245

0 50 100 200 300 400 feet

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CONSTRUCTION VIBRATION ENVIRONMENT

The primary vibration-generating activities associated with the proposed project would occur during construction when activities such as grading, utilities placement, and parking lot construction occur. **Table 6** shows the typical vibration levels produced by construction equipment.

TABLE 6: VIBRATION LEVELS FOR VARIOUS CONSTRUCTION EQUIPMENT

Type of Equipment	Peak Particle Velocity at 25 feet (inches/second)	Peak Particle Velocity at 50 feet (inches/second)	Peak Particle Velocity at 100 feet (inches/second)
Large Bulldozer	0.089	0.031	0.011
Loaded Trucks	0.076	0.027	0.010
Small Bulldozer	0.003	0.001	0.000
Auger/drill Rigs	0.089	0.031	0.011
Jackhammer	0.035	0.012	0.004
Vibratory Hammer	0.070	0.025	0.009
Vibratory Compactor/roller	0.210 (Less than 0.20 at 26 feet)	0.074	0.026

Source: Transit Noise and Vibration Impact Assessment Guidelines. Federal Transit Administration. May 2006.

REGULATORY CONTEXT

FEDERAL

There are no federal regulations related to noise that apply to the Proposed Project.

STATE

California Environmental Quality Act

The California Environmental Quality Act (CEQA) Guidelines, Appendix G, indicate that a significant noise impact may occur if a project exposes persons to noise or vibration levels in excess of local general plans or noise ordinance standards, or cause a substantial permanent or temporary increase in ambient noise levels. CEQA standards are discussed below under the Thresholds of Significance section.

LOCAL

Placer County General Plan

The Placer County General Plan Noise Element outlines criteria for "non-transportation" or "locally regulated" noise sources. The noise level performance standards for non-transportation noise in Placer County are shown in **Table 7**.

TABLE 7: NOISE LEVEL PERFORMANCE STANDARDS, L_{DN}, FOR NEW PROJECTS AFFECTED BY OR INCLUDING NON-TRANSPORTATION NOISE SOURCES

Zone District of Receptor	Property Line of Receiving Use	Interior Spaces
Residential Adjacent to Industrial	60	45
Other Residential	50	45
Office/Professional	70	45
Transient Lodging	65	45
Neighborhood Commercial	70	45
General Commercial	70	45
Heavy Commercial	75	45
Limited Industrial	75	45
Highway Service	75	45
Shopping Center	70	45
Industrial	--	45
Industrial Park	75	45
Industrial Reserve	--	--
Airport	--	45
Unclassified	--	--
Farm	(see footnote)	--
Agriculture Exclusive	(see footnote)	--
Forestry	-	--
Timberland Preserve	--	--
Recreation & Forestry	70	--
Open Space	--	--
Mineral Reserve	--	--

Normally, agricultural uses are noise insensitive and will be treated in this way. However, conflicts with agricultural noise emissions can occur where single-family residences exist within agricultural zone districts. Therefore, where effects of agricultural noise upon residences located in these agricultural zones is a concern, an L_{dn} of 70 dBA will be considered acceptable outdoor exposure at a residence.

Placer County Municipal Code

The Placer County Noise Ordinance (Article 9.36.060 Sound limits for sensitive receptors of the Placer County Code) defines sound level performance standards for sensitive receptors (**Table 8**). The ordinance states that it is unlawful for any person at any location to create any sound, or to allow the creation of any sound, on property owned, leased, occupied, or otherwise controlled by such a person that causes the exterior sound level, when measured at the property line of any affected sensitive receptor, to exceed the ambient sound level by 5 dBA or exceed the sound level standards as set forth in **Table 8**, whichever is greater.

Each of the sound level standards specified in **Table 8** shall be reduced by 5 dBA for simple tone noises, consisting of speech and music. However, in no case shall the sound level standard be lower than the ambient sound level plus 5 dBA.

TABLE 8: PLACER COUNTY NOISE ORDINANCE NOISE LEVEL STANDARDS FOR SENSITIVE RECEPTORS

Sound Level Descriptor	Daytime (7 am to 10 pm)	Nighttime (10 pm to 7 am)
Hourly L_{eq}, dB	55	45
Maximum Level L_{max}, dB	70	65

Per Section 9.36.030 of the Placer County Code (Exemptions), sound or noise emanating from construction activities between the hours of 6:00 AM and 8:00 PM Monday through Friday, and between the hours of 8:00 AM and 8:00 PM Saturday and Sunday, is exempt from Section 9.36.060 of the Placer County Code Noise Ordinance, provided that all construction equipment is fitted with factory installed muffling devices and that all construction equipment is maintained in good working order.

Criteria for Acceptable Vibration

Vibration is like noise in that it involves a source, a transmission path, and a receiver. While vibration is related to noise, it differs in that in that noise is generally considered to be pressure waves transmitted through air, whereas vibration usually consists of the excitation of a structure or surface. As with noise, vibration consists of an amplitude and frequency. A person's perception to the vibration will depend on their individual sensitivity to vibration, as well as the amplitude and frequency of the source and the response of the system which is vibrating.

Vibration can be measured in terms of acceleration, velocity, or displacement. A common practice is to monitor vibration measures in terms of peak particle velocities in inches per second. Standards pertaining to perception as well as damage to structures have been developed for vibration levels defined in terms of peak particle velocities.

Human and structural response to different vibration levels is influenced by a number of factors, including ground type, distance between source and receptor, duration, and the number of perceived vibration events. **Table 9**, which was developed by Caltrans, shows the vibration levels which would normally be required to result in damage to structures. The vibration levels are presented in terms of peak particle velocity in inches per second.

TABLE 9: EFFECTS OF VIBRATION ON PEOPLE AND BUILDINGS

Peak Particle Velocity		Human Reaction	Effect on Buildings
mm/second	in/second		
0.15-0.30	0.006-0.019	Threshold of perception; possibility of intrusion	Vibrations unlikely to cause damage of any type
2.0	0.08	Vibrations readily perceptible	Recommended upper level of the vibration to which ruins and ancient monuments should be subjected
2.5	0.10	Level at which continuous vibrations begin to annoy people	Virtually no risk of "architectural" damage to normal buildings
5.0	0.20	Vibrations annoying to people in buildings (this agrees with the levels established for people standing on bridges and subjected to relative short periods of vibrations)	Threshold at which there is a risk of "architectural" damage to normal dwelling - houses with plastered walls and ceilings. Special types of finish such as lining of walls, flexible ceiling treatment, etc., would minimize "architectural" damage
10-15	0.4-0.6	Vibrations considered unpleasant by people subjected to continuous vibrations and unacceptable to some people walking on bridges	Vibrations at a greater level than normally expected from traffic, but would cause "architectural" dam age and possibly minor structural damage

Source: Transportation Related Earthborne Vibrations. Caltrans. TAV-02-01-R9601. February 20, 2002.

IMPACTS AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE

Appendix G of the CEQA Guidelines states that a project would normally be considered to result in significant noise impacts if noise levels conflict with adopted environmental standards or plans or if noise generated by the project would substantially increase existing noise levels at sensitive receivers on a permanent or temporary basis. Significance criteria for noise impacts are drawn from CEQA Guidelines Appendix G (Items XI [a-f]).

Would the project:

a. Generate 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?

b. Generate excessive groundborne vibration or groundborne noise levels?

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?

Noise Level Increase Criteria for Long-Term Project-Related Noise Level Increases

The California Environmental Quality Act (CEQA) guidelines define a significant impact of a project if it "increases substantially the ambient noise levels for adjoining areas." Generally, a project may have a significant effect on the environment if it will substantially increase the ambient noise levels for adjoining areas or expose people to severe noise levels. In practice, more specific professional standards have been developed. These standards state that a noise impact may be considered significant if it would generate noise that would conflict with local project criteria or ordinances, or substantially increase noise levels at noise sensitive land uses. The potential increase in traffic noise from the project is a factor in determining significance. Research into the human perception of changes in sound level indicates the following:

- A 3-dB change is barely perceptible,
- A 5-dB change is clearly perceptible, and
- A 10-dB change is perceived as being twice or half as loud.

A limitation of using a single noise level increase value to evaluate noise impacts is that it fails to account for pre-project-noise conditions. **Table 10** is based upon recommendations made by the Federal Interagency Committee on Noise (FICON) to provide guidance in the assessment of changes in ambient noise levels resulting from aircraft operations. The recommendations are based upon studies that relate aircraft noise levels to the percentage of persons highly annoyed by the noise. Although the FICON recommendations were specifically developed to assess aircraft noise impacts, it has been accepted that they are applicable to all sources of noise described in terms of cumulative noise exposure metrics such as the L_{dn}.

TABLE 10: SIGNIFICANCE OF CHANGES IN NOISE EXPOSURE

Ambient Noise Level Without Project, L_{dn}	Increase Required for Significant Impact
<60 dB	+5.0 dB or more
60-65 dB	+3.0 dB or more
>65 dB	+1.5 dB or more

Source: Federal Interagency Committee on Noise (FICON)

Based on the **Table 10** data, an increase in the traffic noise level of 5 dB or more would be significant where the pre-project noise levels are less than 60 dB L_{dn}, or 3 dB or more where existing noise levels are between 60 to 65 dB L_{dn}. Extending this concept to higher noise levels, an increase in the traffic noise level of 1.5 dB or more may be significant where the pre-project traffic noise level exceeds 65 dB L_{dn}. The rationale for the **Table 10** criteria is that, as ambient noise levels increase, a smaller increase in noise resulting from a project is sufficient to cause annoyance.

Noise Level Increase Criteria for Short-Term Project-Related Noise Level Increases

Placer County has no specific threshold for evaluating noise increases due to short-term construction projects. The Placer County code Section 9.36.030 exempts sound or noise emanating from construction activities between the hours of 6:00 AM and 8:00 PM Monday through Friday, and between the hours of 8:00 AM and 8:00 PM Saturday and Sunday, provided that all construction equipment is fitted with factory installed muffling devices and that all construction equipment is maintained in good working order.

For CEQA purposes Saxelby Acoustics recommended using a 5.0 dBA increase threshold for evaluating construction-related noise increases. This is consistent with the Placer County code which limits noise increases to 5.0 dBA over ambient.

PROJECT-SPECIFIC IMPACTS AND MITIGATION MEASURES

Impact 1: Would the project generate 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?

Traffic Noise Increases at Off-Site Receptors

As discussed, the substantial increase criteria range between +1.5 dBA to +5 dBA, depending on the existing noise levels. Under the proposed project, the maximum increase in traffic noise at the nearest sensitive receptor is predicted to be 0.0 dBA as shown in **Tables 3 and 4**.

Therefore, impacts resulting from increased traffic noise would be considered ***less-than-significant***.

Operational Noise at Sensitive Receptors

The Placer County noise level standards require that new projects in the vicinity of existing sensitive receptors generate noise levels no greater than 55 dBA L_{eq} during daytime (7:00 a.m. to 10:00 p.m.) hours and a day/night average of 50 dBA L_{dn}.

As shown in **Figure 3,** the proposed project is predicted to comply with the County's daytime (7:00 a.m. to 10:00 p.m.) L_{eq} noise level standards without any additional noise control measures.

As shown in **Figure 4,** the proposed project is predicted to comply with the County's non-transportation day/night average L_{dn} noise level standards without any additional noise control measures.

The project will comply with the County's daytime L_{eq} and the County's non-transportation day/night average L_{dn} standard. Therefore, impacts resulting from operational noise would be considered ***less-than-significant.***

Construction Noise

During the construction phases of the project, noise from construction activities would add to the noise environment in the immediate project vicinity. Based on **Figure 5**, the proposed project is predicted to generate construction noise levels ranging between 45.4-77.5 dBA L_{eq} at the nearest noise-sensitive receptors. Average daytime (L_{eq}) ambient noise levels were found to be between approximately 47.2-62.3 dBA L_{eq} in the vicinity of these uses. Therefore, the proposed project construction could result in periods of typical construction noise of up to +15.3 dBA higher than ambient noise in the project area.

The Placer County Municipal Code limits hours of construction activities when construction is located 500 feet or closer to a residential zone. Construction is limited to between the hours of 6:00 AM and 8:00 PM Monday through Friday, and between the hours of 8:00 AM and 8:00 PM Saturday and Sunday.

Construction activities could result in periods of noise which exceed existing noise levels by up to 15 dBA. This exceeds the 5 dBA increase criteria recommended for CEQA evaluation of short-term noise increases due to construction activity.

Although construction activities are temporary in nature and would occur during normal daytime working hours, construction-related noise including off-site sewer improvements, could result in disturbance to existing noise-sensitive land uses in the project vicinity Therefore, impacts resulting from noise levels temporarily exceeding the threshold of significance due to construction would be considered ***potentially significant***.

Therefore, additional noise control measures would be required to limit the noise increase to 5 dBA, or less. In order to reduce construction noise levels, evaluation of the use of temporary noise barriers was modeled. The results of the construction noise analysis are shown graphically on **Figure 6**. The Figure 6 data indicate that use of temporary noise barriers can be used to limit construction noise increases to less than 5 dBA at sensitive receptors located around the project site.

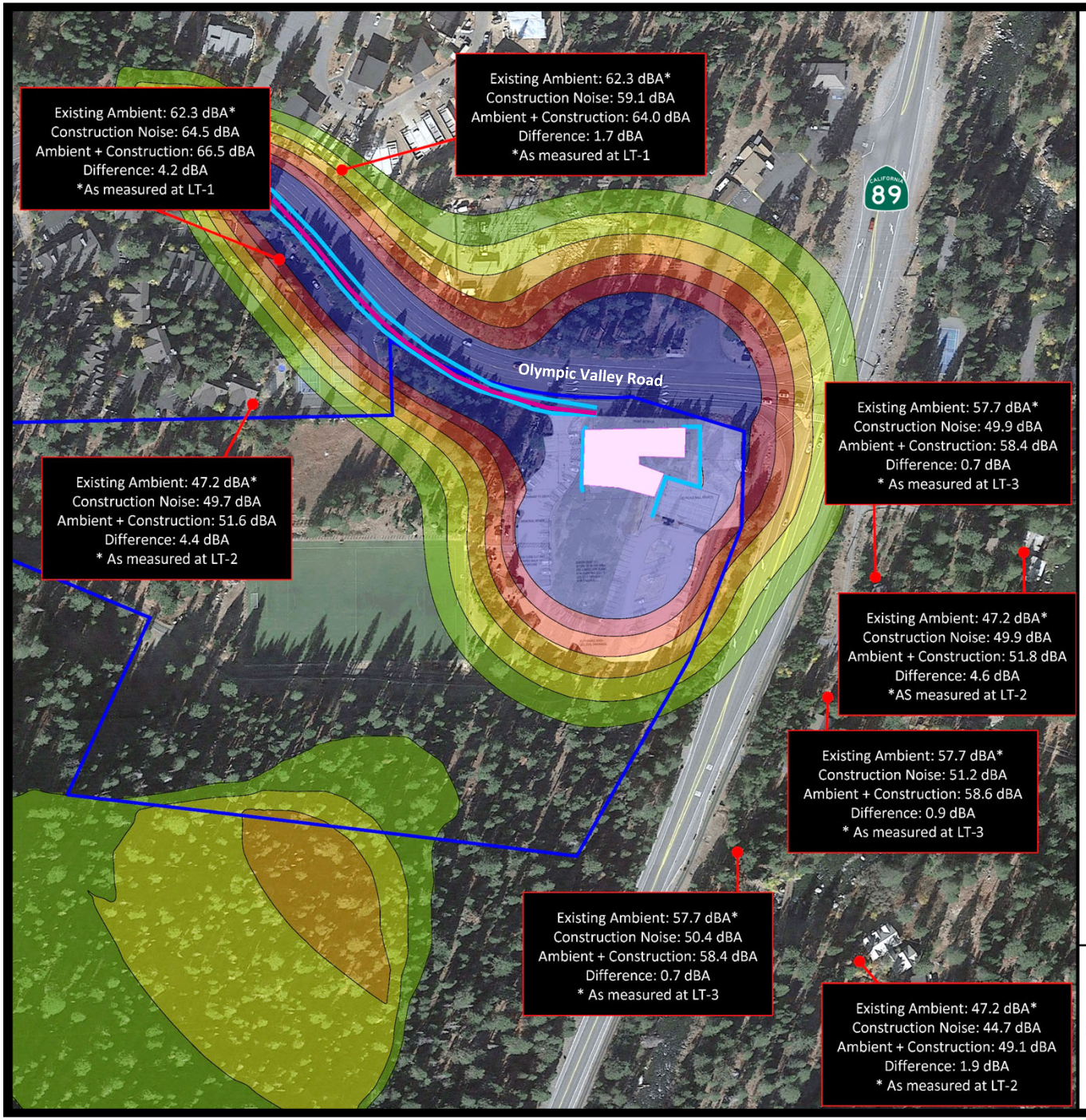
Mitigation Measure

Implementation of the following mitigation measures would reduce the above impact to a *less-than-significant* level.

1a: Prior to issuance of a grading permit, the project applicant shall prepare a construction noise management plan that identifies measures to be taken to minimize construction noise on surrounding sensitive land uses and include specific noise management measures to be included within the project plans and specifications, subject to review and approval by the County Planning Division. The project applicant shall demonstrate, to the satisfaction of the County that the project complies with the following:

- *Construction activities shall only take place between the hours limited 6:00 a.m. to 8:00 p.m. on weekdays, and 8:00 a.m. to 8:00 p.m. on Saturday and Sunday.*
- *All heavy construction equipment used on the proposed project shall be maintained in good operating condition, with all internal combustion, engine-driven equipment fitted with intake and exhaust mufflers that are in good condition.*

- *All mobile or fixed noise producing equipment used on the proposed project that is regulated for noise output by a local, state, or federal agency shall comply with such regulations while in the source of project activity.*
- *Where feasible, electrically-powered equipment shall be used instead of pneumatic or internal combustion powered equipment.*
- *All stationary noise-generating equipment shall be located as far away as possible from neighboring property lines.*
- *Signs prohibiting unnecessary idling of internal combustion engines shall be posted.*
- *The use of noise-producing signals, including horns, whistles, alarms and bells shall be for safety warning purposes only.*
- *The proposed project shall incorporate use 8-foot-tall temporary sound barriers along the west and east boundaries of the construction site. The approximate locations of the sound wall is shown on* ***Figure 6.*** *The sound barrier fencing should consist of ½" plywood or minimum STC 27 sound curtains placed to shield nearby sensitive receptors. The plywood barrier should be free from gaps, openings, or penetrations to ensure maximum performance.*
- *The proposed project shall incorporate use of 6-foot-tall temporary sound barriers along the north and south sides of the off-site sewer improvement route. The approximate locations of the sound walls are shown on* ***Figure 6.*** *The sound barrier fencing should consist of ½" plywood or minimum STC 27 sound curtains placed to shield nearby sensitive receptors. The plywood barrier should be free from gaps, openings, or penetrations to ensure maximum performance.*



SNOW Museum Project

Placer County, California

Figure 6

Construction Noise Contours (dBA L_{eq}) – with Temporary Sound Walls

Noise Level, dB(A)

55 <		<=	57
57 <		<=	59
59 <		<=	61
61 <		<=	63
63 <		<=	65
65 <			

Legend

- Park Boundary
- Receptor
- Temporary Sound Wall
- Off Site Sewer Line (Approx. Location)

Scale 1:245

0 50 100 200 300 400 feet

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Impact 2: ***Would the project generate excessive groundborne vibration or groundborne noise levels?***

Construction vibration impacts include human annoyance and building structural damage. Human annoyance occurs when construction vibration rises significantly above the threshold of perception. Building damage can take the form of cosmetic or structural.

The **Table 4** data indicate that construction vibration levels anticipated for the project are less than the 0.2 in/sec threshold at distances of 26 feet. The proposed project on-site construction would occur at distances of 250 feet, or more, from the nearest adjacent single-family residential uses. Off-site sewer improvements would occur at a distance of approximately 50 feet, or more. At these distances construction vibrations are not predicted to exceed the 0.2 in/sec threshold. Therefore, this is a ***less-than-significant*** impact.

Impact 3: ***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?***

There are no airports within 2 miles of the project site. Therefore, this impact is not applicable to the proposed project.

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Appendix A: Acoustical Terminology

Acoustics	The science of sound.
Ambient Noise	The distinctive acoustical characteristics of a given space consisting of all noise sources audible at that location. In many cases, the term ambient is used to describe an existing or pre-project condition such as the setting in an environmental noise study.
ASTC	Apparent Sound Transmission Class. Similar to STC but includes sound from flanking paths and correct for room reverberation. A larger number means more attenuation. The scale, like the decibel scale for sound, is logarithmic.
Attenuation	The reduction of an acoustic signal.
A-Weighting	A frequency-response adjustment of a sound level meter that conditions the output signal to approximate human response.
Decibel or dB	Fundamental unit of sound, A Bell is defined as the logarithm of the ratio of the sound pressure squared over the reference pressure squared. A Decibel is one-tenth of a Bell.
CNEL	Community Noise Equivalent Level. Defined as the 24-hour average noise level with noise occurring during evening hours (7 - 10 p.m.) weighted by +5 dBA and nighttime hours weighted by +10 dBA.
DNL	See definition of Ldn.
IIC	Impact Insulation Class. An integer-number rating of how well a building floor attenuates impact sounds, such as footsteps. A larger number means more attenuation. The scale, like the decibel scale for sound, is logarithmic.
Frequency	The measure of the rapidity of alterations of a periodic signal, expressed in cycles per second or hertz (Hz).
Ldn	Day/Night Average Sound Level. Similar to CNEL but with no evening weighting.
Leq	Equivalent or energy-averaged sound level.
Lmax	The highest root-mean-square (RMS) sound level measured over a given period of time.
L(n)	The sound level exceeded a described percentile over a measurement period. For instance, an hourly L50 is the sound level exceeded 50% of the time during the one-hour period.
Loudness	A subjective term for the sensation of the magnitude of sound.
NIC	Noise Isolation Class. A rating of the noise reduction between two spaces. Similar to STC but includes sound from flanking paths and no correction for room reverberation.
NNIC	Normalized Noise Isolation Class. Similar to NIC but includes a correction for room reverberation.
Noise	Unwanted sound.
NRC	Noise Reduction Coefficient. NRC is a single-number rating of the sound-absorption of a material equal to the arithmetic mean of the sound-absorption coefficients in the 250, 500, 1000, and 2,000 Hz octave frequency bands rounded to the nearest multiple of 0.05. It is a representation of the amount of sound energy absorbed upon striking a particular surface. An NRC of 0 indicates perfect reflection; an NRC of 1 indicates perfect absorption.
RT60	The time it takes reverberant sound to decay by 60 dB once the source has been removed.
Sabin	The unit of sound absorption. One square foot of material absorbing 100% of incident sound has an absorption of 1 Sabin.
SEL	Sound Exposure Level. SEL is a rating, in decibels, of a discrete event, such as an aircraft flyover or train pass by, that compresses the total sound energy into a one-second event.
SPC	Speech Privacy Class. SPC is a method of rating speech privacy in buildings. It is designed to measure the degree of speech privacy provided by a closed room, indicating the degree to which conversations occurring within are kept private from listeners outside the room.
STC	Sound Transmission Class. STC is an integer rating of how well a building partition attenuates airborne sound. It is widely used to rate interior partitions, ceilings/floors, doors, windows and exterior wall configurations. The STC rating is typically used to rate the sound transmission of a specific building element when tested in laboratory conditions where flanking paths around the assembly don't exist. A larger number means more attenuation. The scale, like the decibel scale for sound, is logarithmic.
Threshold of Hearing	The lowest sound that can be perceived by the human auditory system, generally considered to be 0 dB for persons with perfect hearing.
Threshold of Pain	Approximately 120 dB above the threshold of hearing.
Impulsive	Sound of short duration, usually less than one second, with an abrupt onset and rapid decay.
Simple Tone	Any sound which can be judged as audible as a single pitch or set of single pitches.

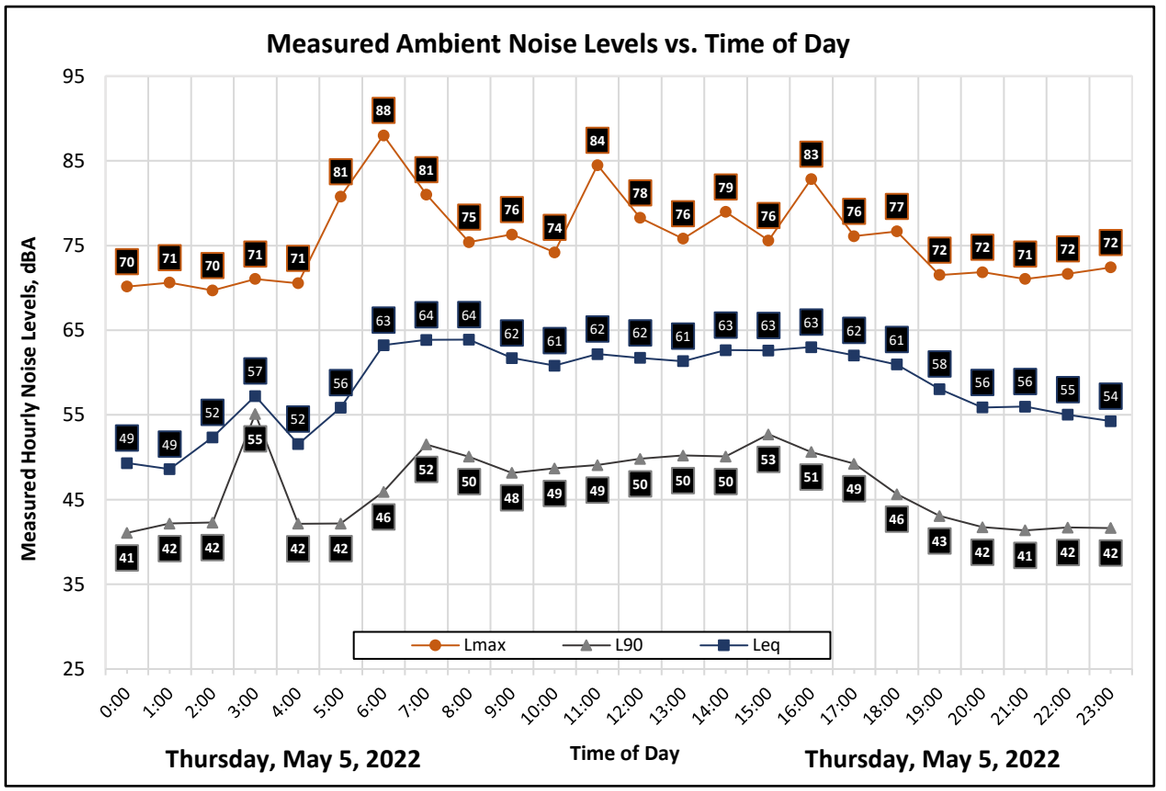
Appendix B: Continuous Ambient Noise Measurement Results

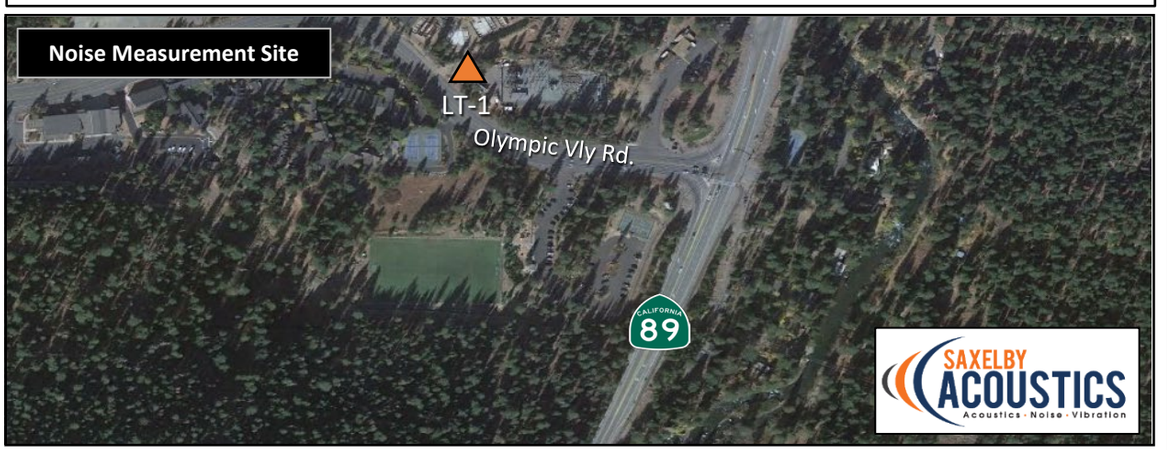
Appendix B1a: Continuous Noise Monitoring Results

Site: LT-1
Project: SNOW Museum Project
Location: Northern Project Boundary
Coordinates: 39.2054768°, -120.2019974°
Meter: LDL 820-6
Calibrator: CAL200

Date	Time	Measured Level, dBA			
		L_{eq}	L_{max}	L_{50}	L_{90}
Thursday, May 5, 2022	0:00	49	70	42	41
Thursday, May 5, 2022	1:00	49	71	43	42
Thursday, May 5, 2022	2:00	52	70	44	42
Thursday, May 5, 2022	3:00	57	71	56	55
Thursday, May 5, 2022	4:00	52	71	43	42
Thursday, May 5, 2022	5:00	56	81	44	42
Thursday, May 5, 2022	6:00	63	88	54	46
Thursday, May 5, 2022	7:00	64	81	60	52
Thursday, May 5, 2022	8:00	64	75	60	50
Thursday, May 5, 2022	9:00	62	76	55	48
Thursday, May 5, 2022	10:00	61	74	55	49
Thursday, May 5, 2022	11:00	62	84	57	49
Thursday, May 5, 2022	12:00	62	78	58	50
Thursday, May 5, 2022	13:00	61	76	57	50
Thursday, May 5, 2022	14:00	63	79	58	50
Thursday, May 5, 2022	15:00	63	76	60	53
Thursday, May 5, 2022	16:00	63	83	59	51
Thursday, May 5, 2022	17:00	62	76	58	49
Thursday, May 5, 2022	18:00	61	77	55	46
Thursday, May 5, 2022	19:00	58	72	48	43
Thursday, May 5, 2022	20:00	56	72	46	42
Thursday, May 5, 2022	21:00	56	71	45	41
Thursday, May 5, 2022	22:00	55	72	44	42
Thursday, May 5, 2022	23:00	54	72	44	42

Statistics	Leq	Lmax	L50	L90
Day Average	62	77	55	48
Night Average	57	74	46	44
Day Low	56	71	45	41
Day High	64	84	60	53
Night Low	49	70	42	41
Night High	63	88	56	55
Ldn	64	Day %		85
CNEL	64	Night %		15



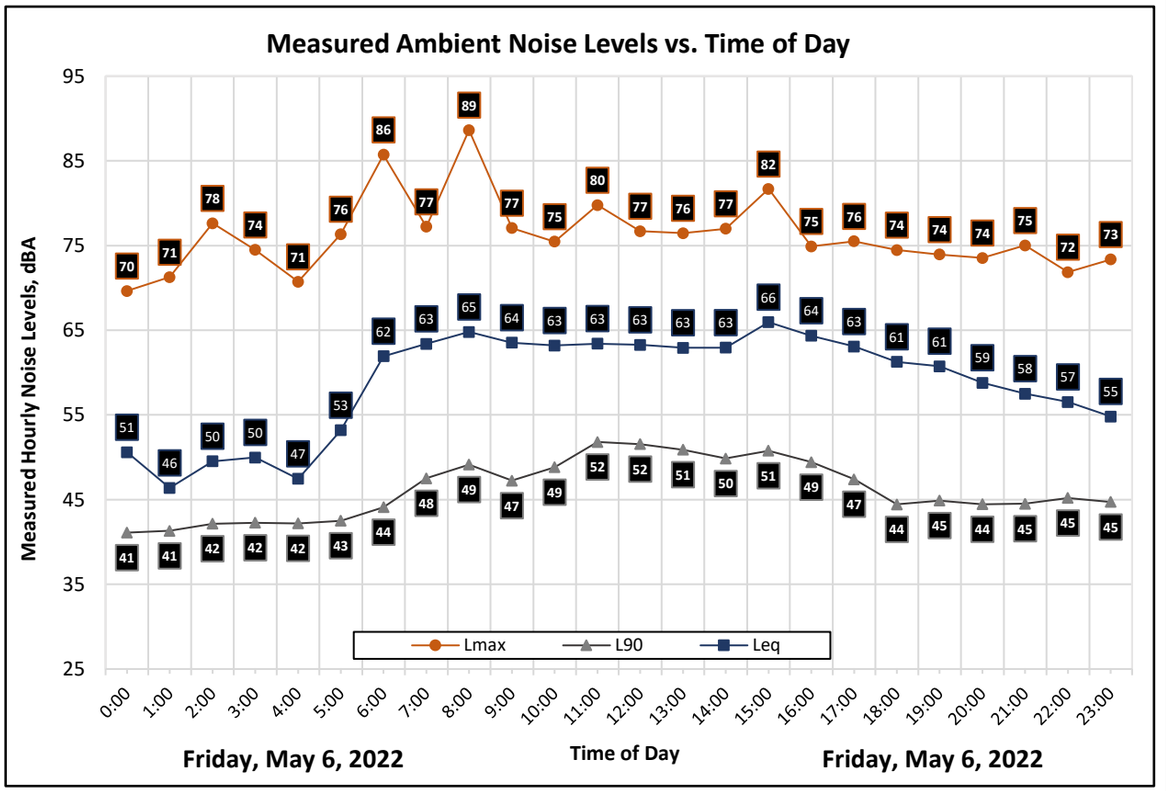


Appendix B1b: Continuous Noise Monitoring Results

Site: LT-1
Project: SNOW Museum Project
Location: Northern Project Boundary
Coordinates: 39.2054768°, -120.2019974°
Meter: LDL 820-6
Calibrator: CAL200

Date	Time	Measured Level, dBA			
		L_{eq}	L_{max}	L_{50}	L_{90}
Friday, May 6, 2022	0:00	51	70	42	41
Friday, May 6, 2022	1:00	46	71	42	41
Friday, May 6, 2022	2:00	50	78	43	42
Friday, May 6, 2022	3:00	50	74	43	42
Friday, May 6, 2022	4:00	47	71	43	42
Friday, May 6, 2022	5:00	53	76	44	43
Friday, May 6, 2022	6:00	62	86	50	44
Friday, May 6, 2022	7:00	63	77	57	48
Friday, May 6, 2022	8:00	65	89	60	49
Friday, May 6, 2022	9:00	64	77	58	47
Friday, May 6, 2022	10:00	63	75	59	49
Friday, May 6, 2022	11:00	63	80	60	52
Friday, May 6, 2022	12:00	63	77	60	52
Friday, May 6, 2022	13:00	63	76	60	51
Friday, May 6, 2022	14:00	63	77	60	50
Friday, May 6, 2022	15:00	66	82	64	51
Friday, May 6, 2022	16:00	64	75	61	49
Friday, May 6, 2022	17:00	63	76	57	47
Friday, May 6, 2022	18:00	61	74	50	44
Friday, May 6, 2022	19:00	61	74	50	45
Friday, May 6, 2022	20:00	59	74	48	44
Friday, May 6, 2022	21:00	58	75	48	45
Friday, May 6, 2022	22:00	57	72	48	45
Friday, May 6, 2022	23:00	55	73	47	45

Statistics	Leq	Lmax	L50	L90
Day Average	63	77	57	48
Night Average	55	75	45	43
Day Low	58	74	48	44
Day High	66	89	64	52
Night Low	46	70	42	41
Night High	62	86	50	45
Ldn	64	Day %		92
CNEL	64	Night %		8

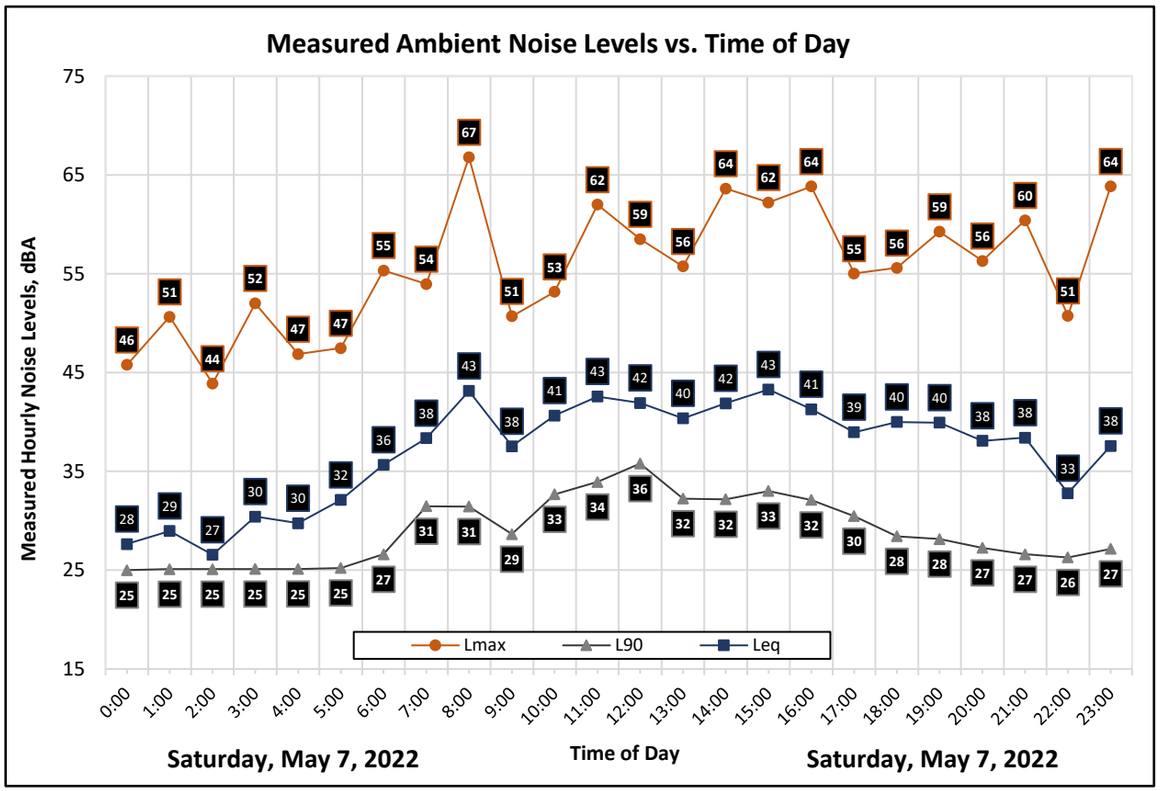


Appendix B1c: Continuous Noise Monitoring Results

Site: LT-1
Project: SNOW Museum Project
Location: Northern Project Boundary
Coordinates: 39.2054768°, -120.2019974°
Meter: LDL 820-6
Calibrator: CAL200

Date	Time	Measured Level, dBA			
		L_{eq}	L_{max}	L_{50}	L_{90}
Saturday, May 7, 2022	0:00	28	46	26	25
Saturday, May 7, 2022	1:00	29	51	26	25
Saturday, May 7, 2022	2:00	27	44	26	25
Saturday, May 7, 2022	3:00	30	52	26	25
Saturday, May 7, 2022	4:00	30	47	26	25
Saturday, May 7, 2022	5:00	32	47	26	25
Saturday, May 7, 2022	6:00	36	55	32	27
Saturday, May 7, 2022	7:00	38	54	37	31
Saturday, May 7, 2022	8:00	43	67	37	31
Saturday, May 7, 2022	9:00	38	51	35	29
Saturday, May 7, 2022	10:00	41	53	39	33
Saturday, May 7, 2022	11:00	43	62	39	34
Saturday, May 7, 2022	12:00	42	59	40	36
Saturday, May 7, 2022	13:00	40	56	39	32
Saturday, May 7, 2022	14:00	42	64	40	32
Saturday, May 7, 2022	15:00	43	62	40	33
Saturday, May 7, 2022	16:00	41	64	38	32
Saturday, May 7, 2022	17:00	39	55	37	30
Saturday, May 7, 2022	18:00	40	56	35	28
Saturday, May 7, 2022	19:00	40	59	36	28
Saturday, May 7, 2022	20:00	38	56	33	27
Saturday, May 7, 2022	21:00	38	60	30	27
Saturday, May 7, 2022	22:00	33	51	28	26
Saturday, May 7, 2022	23:00	38	64	29	27

Statistics	Leq	Lmax	L50	L90
Day Average	41	58	37	31
Night Average	33	51	27	26
Day Low	38	51	30	27
Day High	43	67	40	36
Night Low	27	44	26	25
Night High	38	64	32	27
Ldn	41	Day %		92
CNEL	42	Night %		8

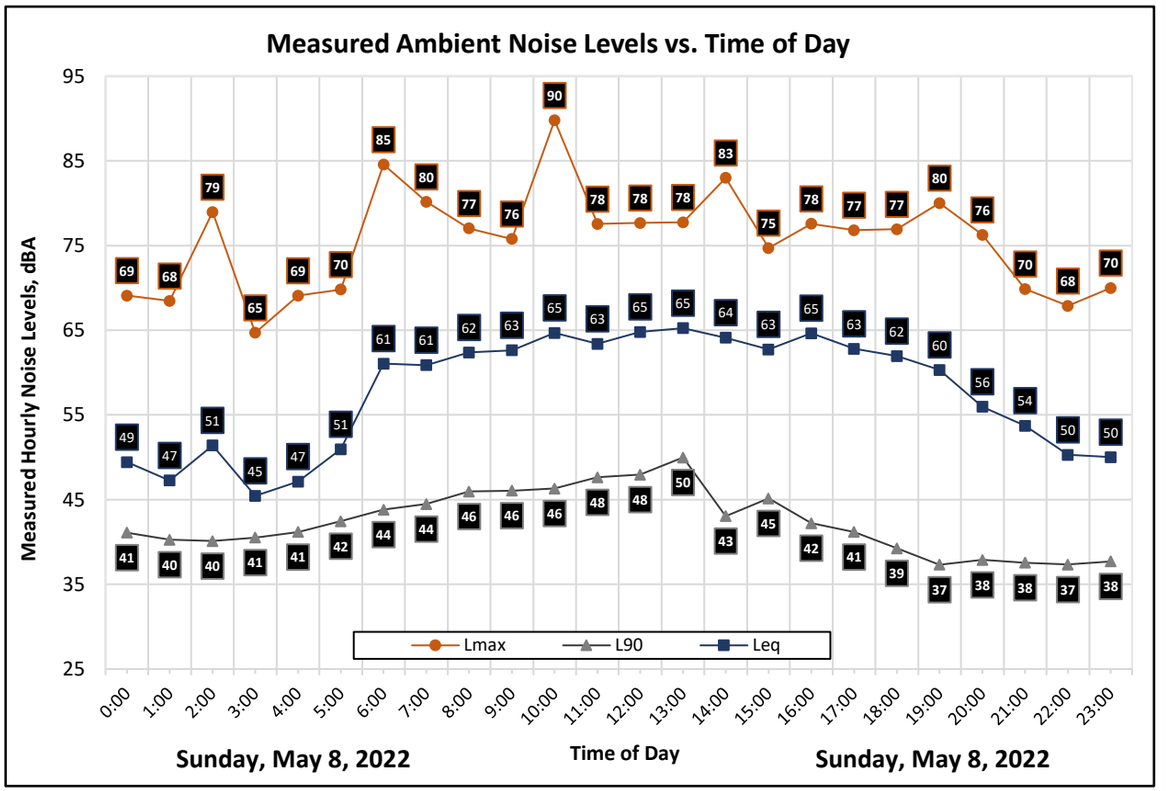


Appendix B1d: Continuous Noise Monitoring Results

Site: LT-1
Project: SNOW Museum Project
Location: Northern Project Boundary
Coordinates: 39.2054768°, -120.2019974°
Meter: LDL 820-6
Calibrator: CAL200

Date	Time	Measured Level, dBA			
		L_{eq}	L_{max}	L_{50}	L_{90}
Sunday, May 8, 2022	0:00	49	69	42	41
Sunday, May 8, 2022	1:00	47	68	42	40
Sunday, May 8, 2022	2:00	51	79	42	40
Sunday, May 8, 2022	3:00	45	65	42	41
Sunday, May 8, 2022	4:00	47	69	43	41
Sunday, May 8, 2022	5:00	51	70	45	42
Sunday, May 8, 2022	6:00	61	85	47	44
Sunday, May 8, 2022	7:00	61	80	50	44
Sunday, May 8, 2022	8:00	62	77	55	46
Sunday, May 8, 2022	9:00	63	76	57	46
Sunday, May 8, 2022	10:00	65	90	59	46
Sunday, May 8, 2022	11:00	63	78	60	48
Sunday, May 8, 2022	12:00	65	78	61	48
Sunday, May 8, 2022	13:00	65	78	63	50
Sunday, May 8, 2022	14:00	64	83	56	43
Sunday, May 8, 2022	15:00	63	75	56	45
Sunday, May 8, 2022	16:00	65	78	53	42
Sunday, May 8, 2022	17:00	63	77	47	41
Sunday, May 8, 2022	18:00	62	77	45	39
Sunday, May 8, 2022	19:00	60	80	40	37
Sunday, May 8, 2022	20:00	56	76	40	38
Sunday, May 8, 2022	21:00	54	70	40	38
Sunday, May 8, 2022	22:00	50	68	39	37
Sunday, May 8, 2022	23:00	50	70	39	38

Statistics	Leq	Lmax	L50	L90
Day Average	63	78	52	43
Night Average	54	71	42	40
Day Low	54	70	40	37
Day High	65	90	63	50
Night Low	45	65	39	37
Night High	61	85	47	44
Ldn	63	Day %		94
CNEL	63	Night %		6

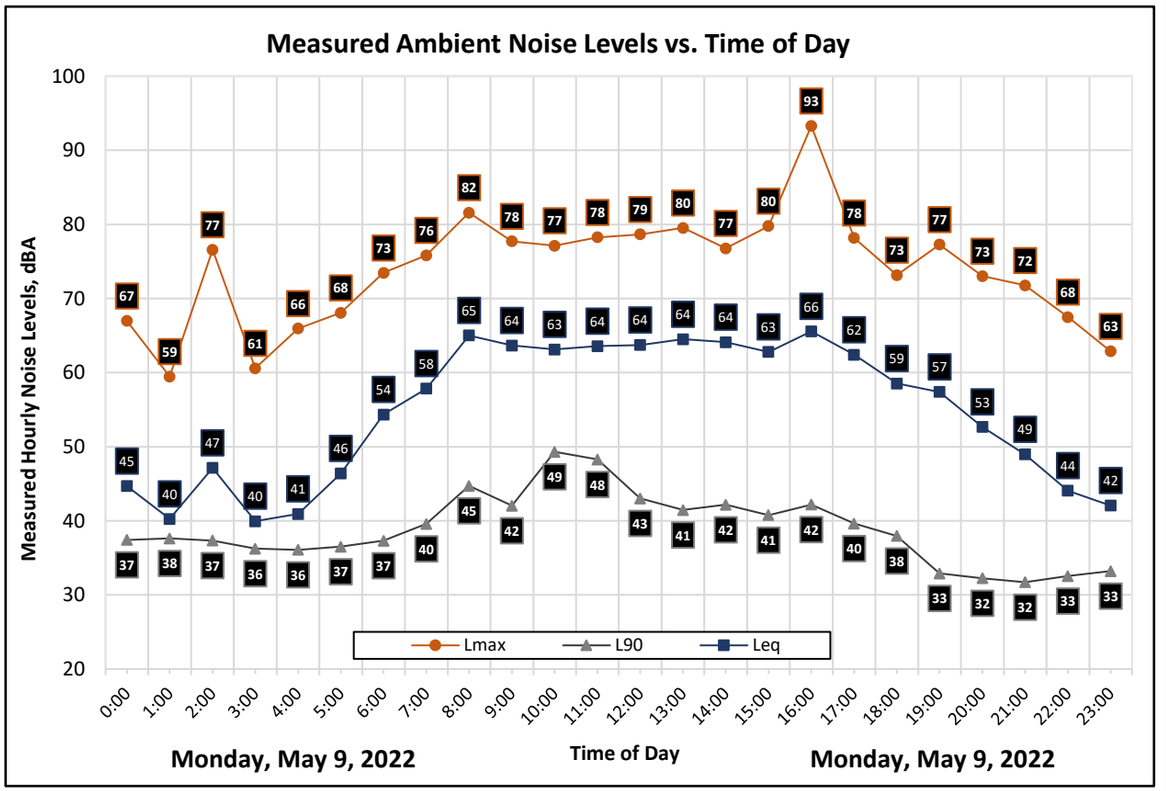


Appendix B1e: Continuous Noise Monitoring Results

Site: LT-1
Project: SNOW Museum Project
Location: Northern Project Boundary
Coordinates: 39.2054768°, -120.2019974°
Meter: LDL 820-6
Calibrator: CAL200

Date	Time	Measured Level, dBA			
		L_{eq}	L_{max}	L_{50}	L_{90}
Monday, May 9, 2022	0:00	45	67	39	37
Monday, May 9, 2022	1:00	40	59	39	38
Monday, May 9, 2022	2:00	47	77	39	37
Monday, May 9, 2022	3:00	40	61	37	36
Monday, May 9, 2022	4:00	41	66	37	36
Monday, May 9, 2022	5:00	46	68	38	37
Monday, May 9, 2022	6:00	54	73	40	37
Monday, May 9, 2022	7:00	58	76	50	40
Monday, May 9, 2022	8:00	65	82	59	45
Monday, May 9, 2022	9:00	64	78	54	42
Monday, May 9, 2022	10:00	63	77	57	49
Monday, May 9, 2022	11:00	64	78	56	48
Monday, May 9, 2022	12:00	64	79	57	43
Monday, May 9, 2022	13:00	64	80	55	41
Monday, May 9, 2022	14:00	64	77	58	42
Monday, May 9, 2022	15:00	63	80	56	41
Monday, May 9, 2022	16:00	66	93	58	42
Monday, May 9, 2022	17:00	62	78	52	40
Monday, May 9, 2022	18:00	59	73	41	38
Monday, May 9, 2022	19:00	57	77	37	33
Monday, May 9, 2022	20:00	53	73	35	32
Monday, May 9, 2022	21:00	49	72	34	32
Monday, May 9, 2022	22:00	44	68	34	33
Monday, May 9, 2022	23:00	42	63	34	33

Statistics	Leq	Lmax	L50	L90
Day Average	63	78	50	41
Night Average	47	67	37	36
Day Low	49	72	34	32
Day High	66	93	59	49
Night Low	40	59	34	33
Night High	54	77	40	38
Ldn	61	Day %		98
CNEL	61	Night %		2

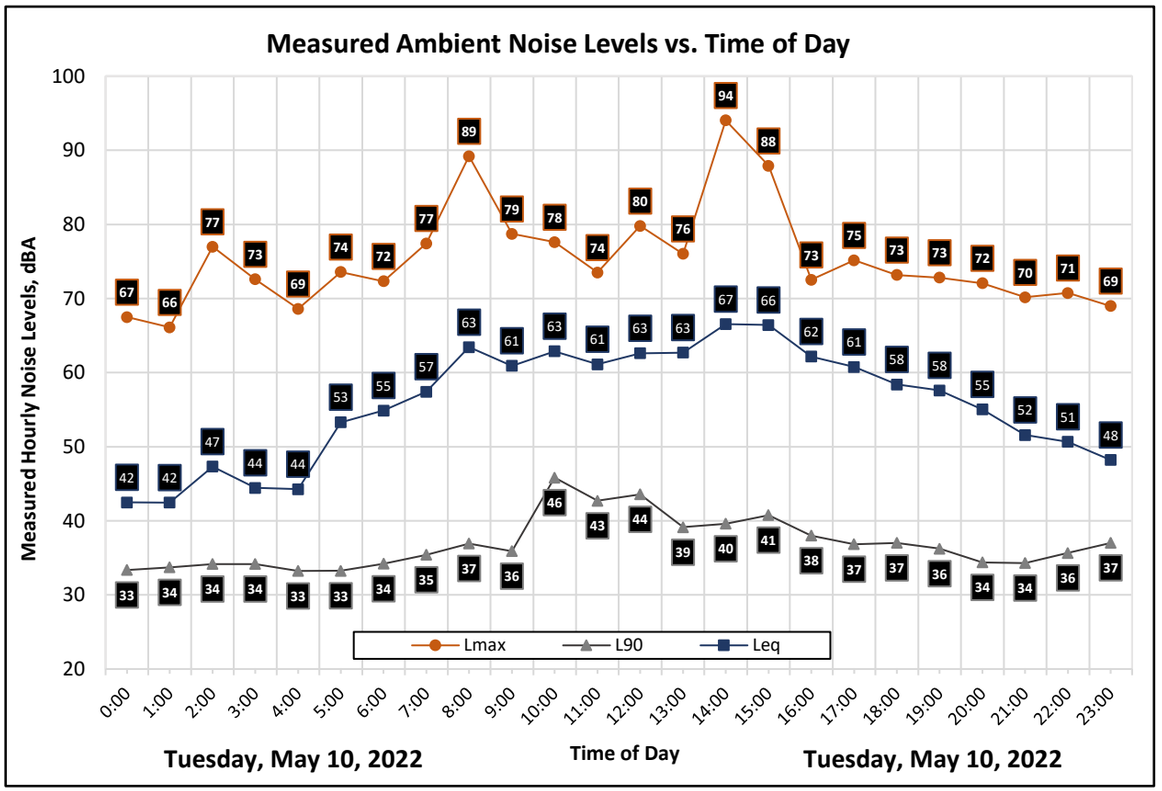


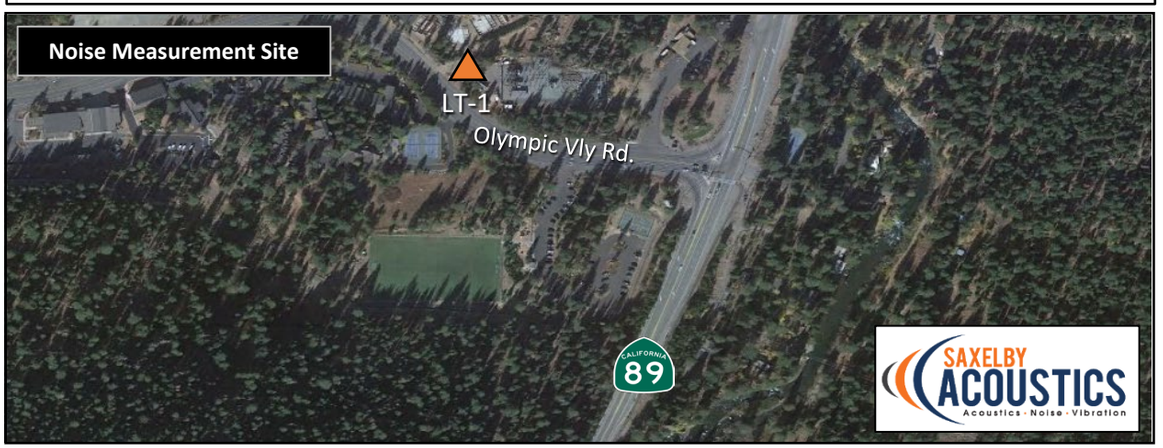
Appendix B1f: Continuous Noise Monitoring Results

Site: LT-1
Project: SNOW Museum Project
Location: Northern Project Boundary
Coordinates: 39.2054768°, -120.2019974°
Meter: LDL 820-6
Calibrator: CAL200

Date	Time	Measured Level, dBA			
		L_{eq}	L_{max}	L_{50}	L_{90}
Tuesday, May 10, 2022	0:00	42	67	34	33
Tuesday, May 10, 2022	1:00	42	66	35	34
Tuesday, May 10, 2022	2:00	47	77	35	34
Tuesday, May 10, 2022	3:00	44	73	35	34
Tuesday, May 10, 2022	4:00	44	69	34	33
Tuesday, May 10, 2022	5:00	53	74	34	33
Tuesday, May 10, 2022	6:00	55	72	37	34
Tuesday, May 10, 2022	7:00	57	77	49	35
Tuesday, May 10, 2022	8:00	63	89	55	37
Tuesday, May 10, 2022	9:00	61	79	52	36
Tuesday, May 10, 2022	10:00	63	78	54	46
Tuesday, May 10, 2022	11:00	61	74	54	43
Tuesday, May 10, 2022	12:00	63	80	56	44
Tuesday, May 10, 2022	13:00	63	76	55	39
Tuesday, May 10, 2022	14:00	67	94	60	40
Tuesday, May 10, 2022	15:00	66	88	61	41
Tuesday, May 10, 2022	16:00	62	73	58	38
Tuesday, May 10, 2022	17:00	61	75	53	37
Tuesday, May 10, 2022	18:00	58	73	42	37
Tuesday, May 10, 2022	19:00	58	73	44	36
Tuesday, May 10, 2022	20:00	55	72	38	34
Tuesday, May 10, 2022	21:00	52	70	36	34
Tuesday, May 10, 2022	22:00	51	71	37	36
Tuesday, May 10, 2022	23:00	48	69	38	37

Statistics	Leq	Lmax	L50	L90
Day Average	62	78	51	38
Night Average	50	71	36	34
Day Low	52	70	36	34
Day High	67	94	61	46
Night Low	42	66	34	33
Night High	55	77	38	37
Ldn	61	Day %		97
CNEL	62	Night %		3



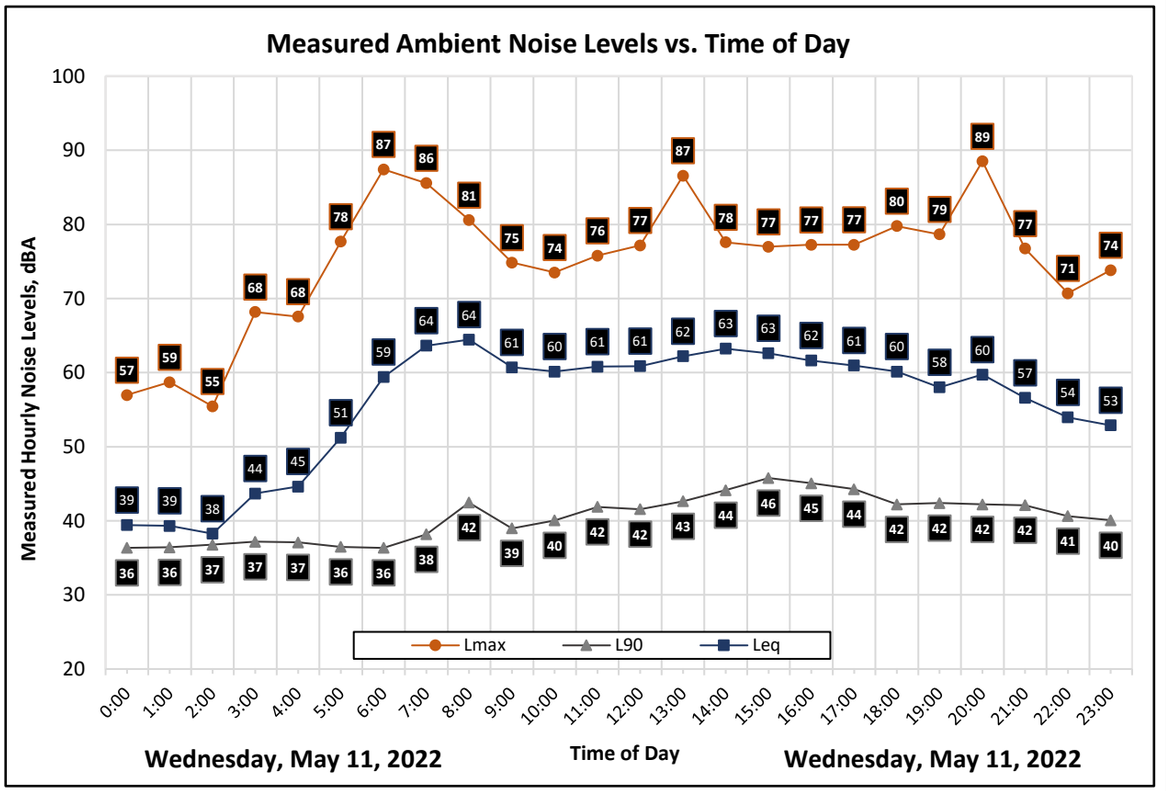


Appendix B1g: Continuous Noise Monitoring Results

Site: LT-1
Project: SNOW Museum Project
Location: Northern Project Boundary
Coordinates: 39.2054768°, -120.2019974°
Meter: LDL 820-6
Calibrator: CAL200

Date	Time	Measured Level, dBA			
		L_{eq}	L_{max}	L_{50}	L_{90}
Wednesday, May 11, 2022	0:00	39	57	37	36
Wednesday, May 11, 2022	1:00	39	59	37	36
Wednesday, May 11, 2022	2:00	38	55	37	37
Wednesday, May 11, 2022	3:00	44	68	38	37
Wednesday, May 11, 2022	4:00	45	68	38	37
Wednesday, May 11, 2022	5:00	51	78	38	36
Wednesday, May 11, 2022	6:00	59	87	40	36
Wednesday, May 11, 2022	7:00	64	86	54	38
Wednesday, May 11, 2022	8:00	64	81	60	42
Wednesday, May 11, 2022	9:00	61	75	51	39
Wednesday, May 11, 2022	10:00	60	74	51	40
Wednesday, May 11, 2022	11:00	61	76	54	42
Wednesday, May 11, 2022	12:00	61	77	54	42
Wednesday, May 11, 2022	13:00	62	87	53	43
Wednesday, May 11, 2022	14:00	63	78	59	44
Wednesday, May 11, 2022	15:00	63	77	58	46
Wednesday, May 11, 2022	16:00	62	77	57	45
Wednesday, May 11, 2022	17:00	61	77	56	44
Wednesday, May 11, 2022	18:00	60	80	50	42
Wednesday, May 11, 2022	19:00	58	79	47	42
Wednesday, May 11, 2022	20:00	60	89	45	42
Wednesday, May 11, 2022	21:00	57	77	45	42
Wednesday, May 11, 2022	22:00	54	71	43	41
Wednesday, May 11, 2022	23:00	53	74	42	40

Statistics	Leq	Lmax	L50	L90
Day Average	61	79	53	42
Night Average	52	68	39	37
Day Low	57	74	45	38
Day High	64	89	60	46
Night Low	38	55	37	36
Night High	59	87	43	41
Ldn	61	Day %		94
CNEL	62	Night %		6

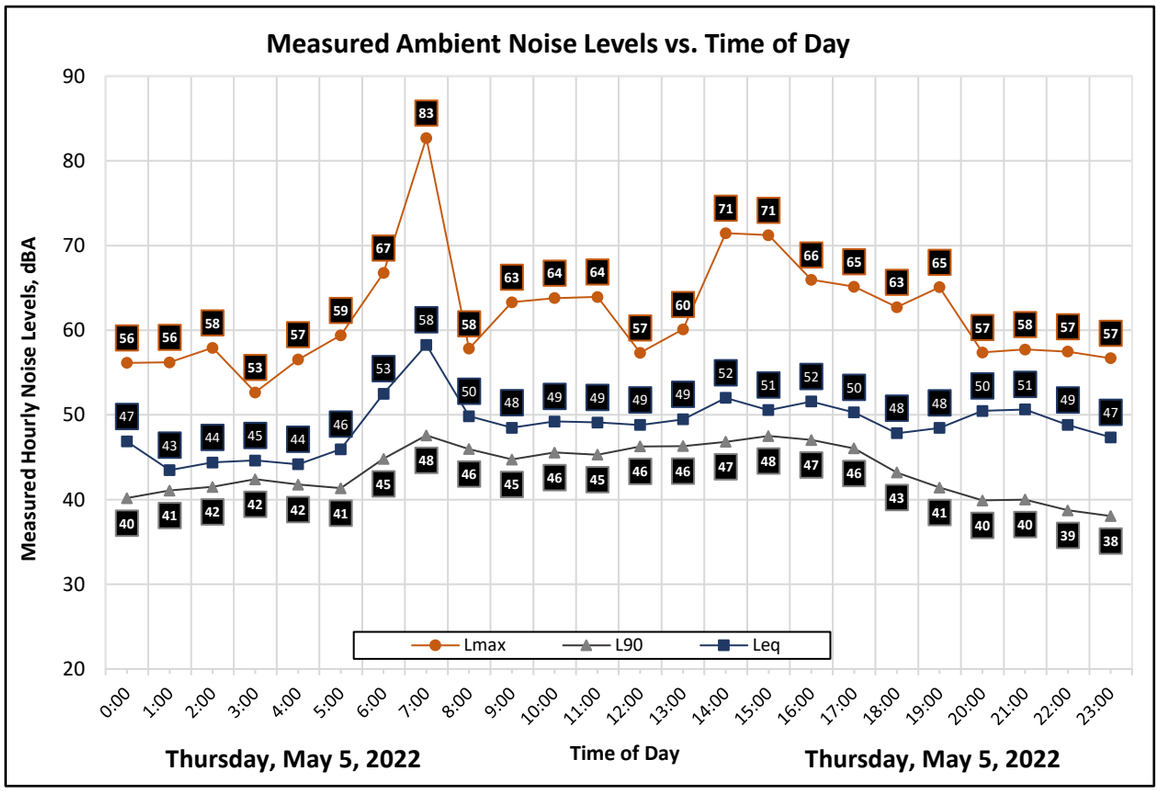


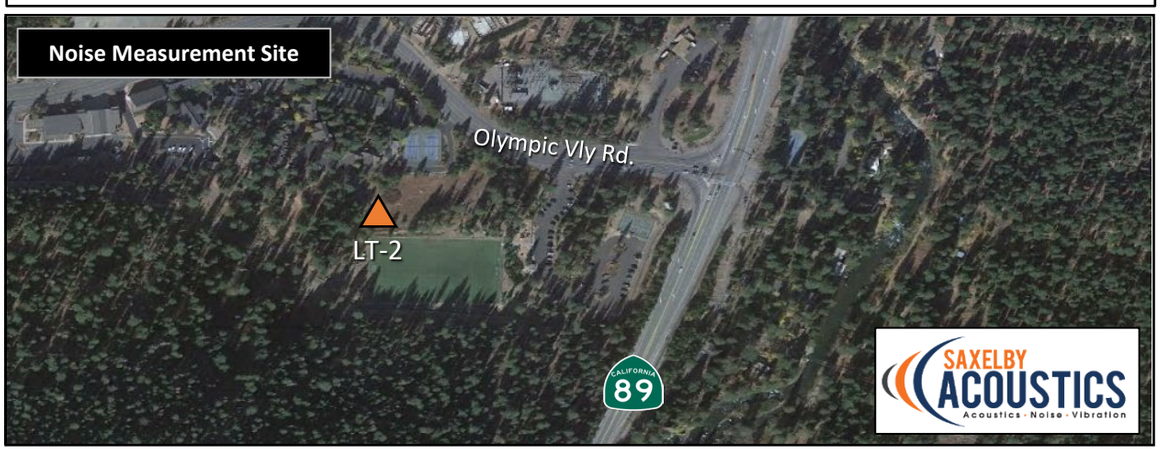
Appendix B2a: Continuous Noise Monitoring Results

Site: LT-2
Project: SNOW Museum Project
Location: West of the Project Boundary
Coordinates: 39.2046589°, -120.2028932°
Meter: LDL 820-7
Calibrator: CAL200

Date	Time	Measured Level, dBA			
		L_{eq}	L_{max}	L_{50}	L_{90}
Thursday, May 5, 2022	0:00	47	56	43	40
Thursday, May 5, 2022	1:00	43	56	43	41
Thursday, May 5, 2022	2:00	44	58	43	42
Thursday, May 5, 2022	3:00	45	53	44	42
Thursday, May 5, 2022	4:00	44	57	43	42
Thursday, May 5, 2022	5:00	46	59	44	41
Thursday, May 5, 2022	6:00	53	67	50	45
Thursday, May 5, 2022	7:00	58	83	51	48
Thursday, May 5, 2022	8:00	50	58	49	46
Thursday, May 5, 2022	9:00	48	63	48	45
Thursday, May 5, 2022	10:00	49	64	48	46
Thursday, May 5, 2022	11:00	49	64	48	45
Thursday, May 5, 2022	12:00	49	57	48	46
Thursday, May 5, 2022	13:00	49	60	48	46
Thursday, May 5, 2022	14:00	52	71	49	47
Thursday, May 5, 2022	15:00	51	71	50	48
Thursday, May 5, 2022	16:00	52	66	49	47
Thursday, May 5, 2022	17:00	50	65	49	46
Thursday, May 5, 2022	18:00	48	63	47	43
Thursday, May 5, 2022	19:00	48	65	46	41
Thursday, May 5, 2022	20:00	50	57	49	40
Thursday, May 5, 2022	21:00	51	58	49	40
Thursday, May 5, 2022	22:00	49	57	45	39
Thursday, May 5, 2022	23:00	47	57	43	38

Statistics	Leq	Lmax	L50	L90
Day Average	51	64	49	45
Night Average	47	58	44	41
Day Low	48	57	46	40
Day High	58	83	51	48
Night Low	43	53	43	38
Night High	53	67	50	45
Ldn	54	Day %		83
CNEL	55	Night %		17



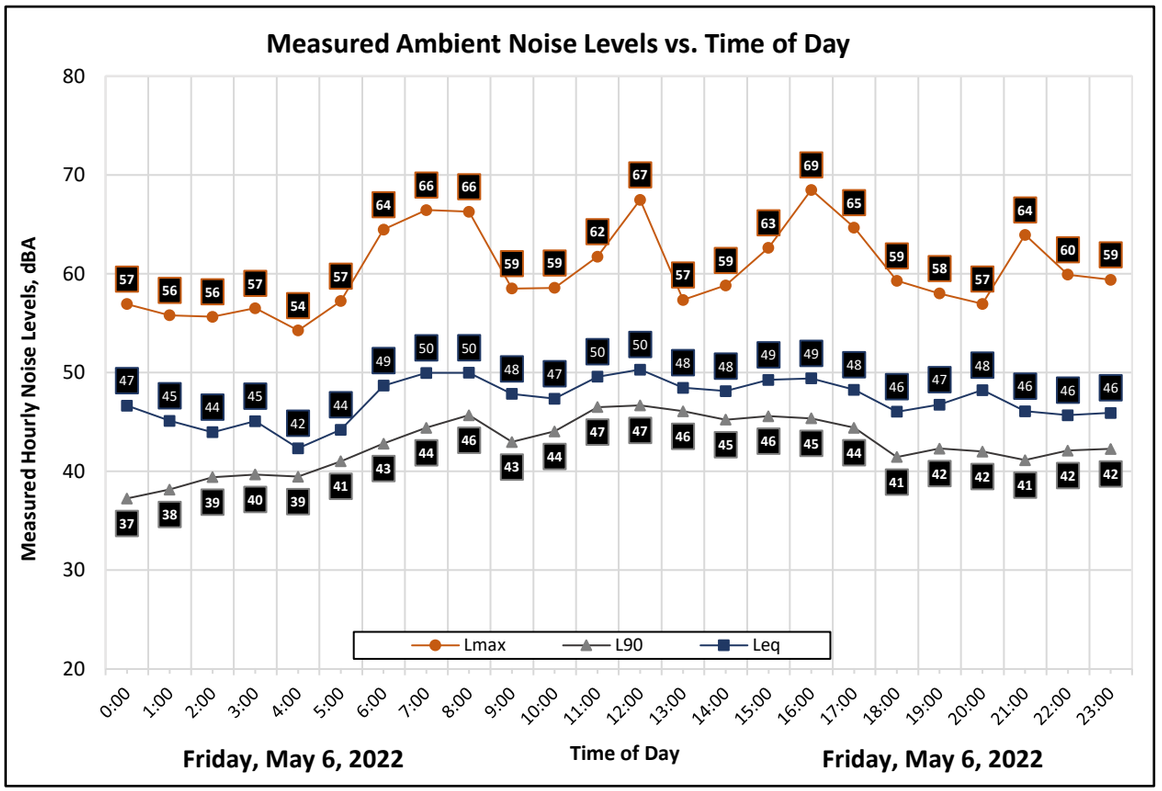


Appendix B2b: Continuous Noise Monitoring Results

Site: LT-2
Project: SNOW Museum Project
Location: West of the Project Boundary
Coordinates: 39.2046589°, -120.2028932°
Meter: LDL 820-7
Calibrator: CAL200

Date	Time	Measured Level, dBA			
		L_{eq}	L_{max}	L_{50}	L_{90}
Friday, May 6, 2022	0:00	47	57	41	37
Friday, May 6, 2022	1:00	45	56	40	38
Friday, May 6, 2022	2:00	44	56	41	39
Friday, May 6, 2022	3:00	45	57	41	40
Friday, May 6, 2022	4:00	42	54	41	39
Friday, May 6, 2022	5:00	44	57	43	41
Friday, May 6, 2022	6:00	49	64	47	43
Friday, May 6, 2022	7:00	50	66	48	44
Friday, May 6, 2022	8:00	50	66	49	46
Friday, May 6, 2022	9:00	48	59	47	43
Friday, May 6, 2022	10:00	47	59	47	44
Friday, May 6, 2022	11:00	50	62	49	47
Friday, May 6, 2022	12:00	50	67	49	47
Friday, May 6, 2022	13:00	48	57	48	46
Friday, May 6, 2022	14:00	48	59	47	45
Friday, May 6, 2022	15:00	49	63	48	46
Friday, May 6, 2022	16:00	49	69	48	45
Friday, May 6, 2022	17:00	48	65	47	44
Friday, May 6, 2022	18:00	46	59	45	41
Friday, May 6, 2022	19:00	47	58	46	42
Friday, May 6, 2022	20:00	48	57	46	42
Friday, May 6, 2022	21:00	46	64	44	41
Friday, May 6, 2022	22:00	46	60	45	42
Friday, May 6, 2022	23:00	46	59	44	42

Statistics	Leq	Lmax	L50	L90
Day Average	49	62	47	44
Night Average	46	58	43	40
Day Low	46	57	44	41
Day High	50	69	49	47
Night Low	42	54	40	37
Night High	49	64	47	43
Ldn	52	Day %		79
CNEL	53	Night %		21

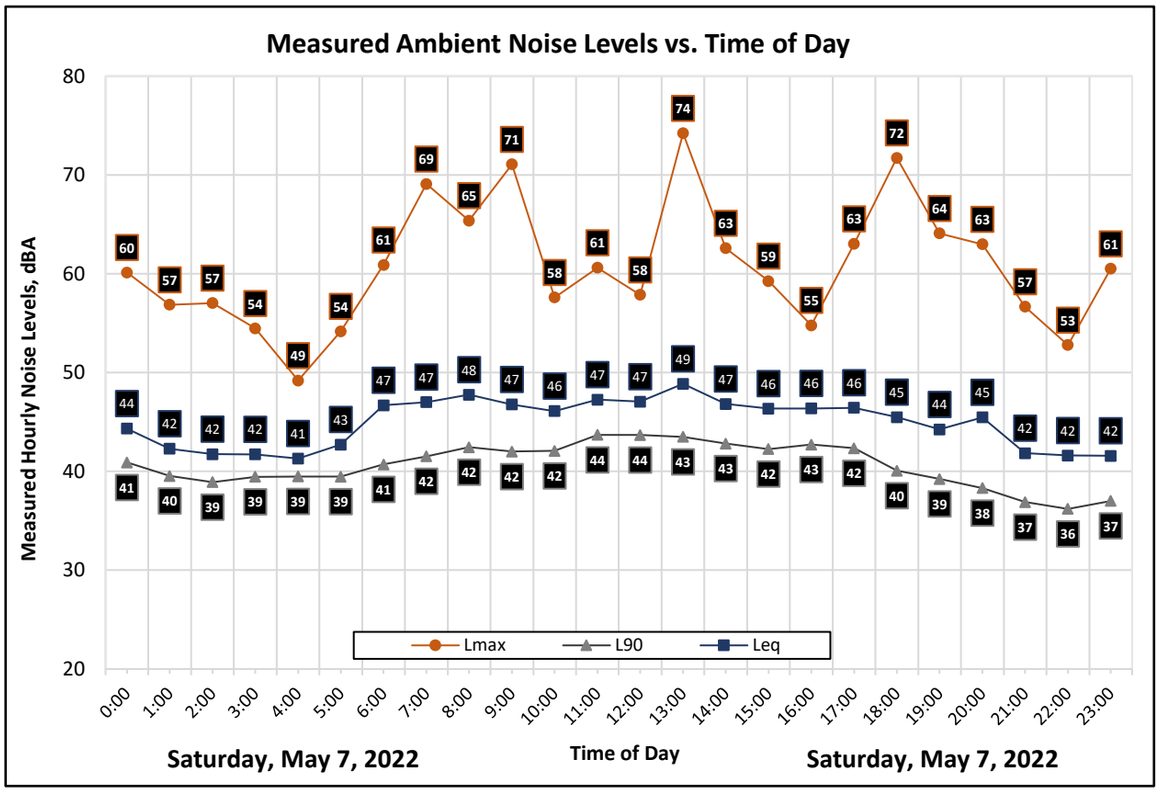


Appendix B2c: Continuous Noise Monitoring Results

Site: LT-2
Project: SNOW Museum Project
Location: West of the Project Boundary
Coordinates: 39.2046589°, -120.2028932°
Meter: LDL 820-7
Calibrator: CAL200

Date	Time	Measured Level, dBA			
		L_{eq}	L_{max}	L_{50}	L_{90}
Saturday, May 7, 2022	0:00	44	60	43	41
Saturday, May 7, 2022	1:00	42	57	41	40
Saturday, May 7, 2022	2:00	42	57	40	39
Saturday, May 7, 2022	3:00	42	54	41	39
Saturday, May 7, 2022	4:00	41	49	41	39
Saturday, May 7, 2022	5:00	43	54	41	39
Saturday, May 7, 2022	6:00	47	61	44	41
Saturday, May 7, 2022	7:00	47	69	45	42
Saturday, May 7, 2022	8:00	48	65	46	42
Saturday, May 7, 2022	9:00	47	71	45	42
Saturday, May 7, 2022	10:00	46	58	45	42
Saturday, May 7, 2022	11:00	47	61	46	44
Saturday, May 7, 2022	12:00	47	58	46	44
Saturday, May 7, 2022	13:00	49	74	46	43
Saturday, May 7, 2022	14:00	47	63	46	43
Saturday, May 7, 2022	15:00	46	59	45	42
Saturday, May 7, 2022	16:00	46	55	46	43
Saturday, May 7, 2022	17:00	46	63	45	42
Saturday, May 7, 2022	18:00	45	72	43	40
Saturday, May 7, 2022	19:00	44	64	43	39
Saturday, May 7, 2022	20:00	45	63	43	38
Saturday, May 7, 2022	21:00	42	57	40	37
Saturday, May 7, 2022	22:00	42	53	39	36
Saturday, May 7, 2022	23:00	42	61	39	37

Statistics	Leq	Lmax	L50	L90
Day Average	47	63	45	42
Night Average	43	56	41	39
Day Low	42	55	40	37
Day High	49	74	46	44
Night Low	41	49	39	36
Night High	47	61	44	41
Ldn	50	Day %		80
CNEL	50	Night %		20

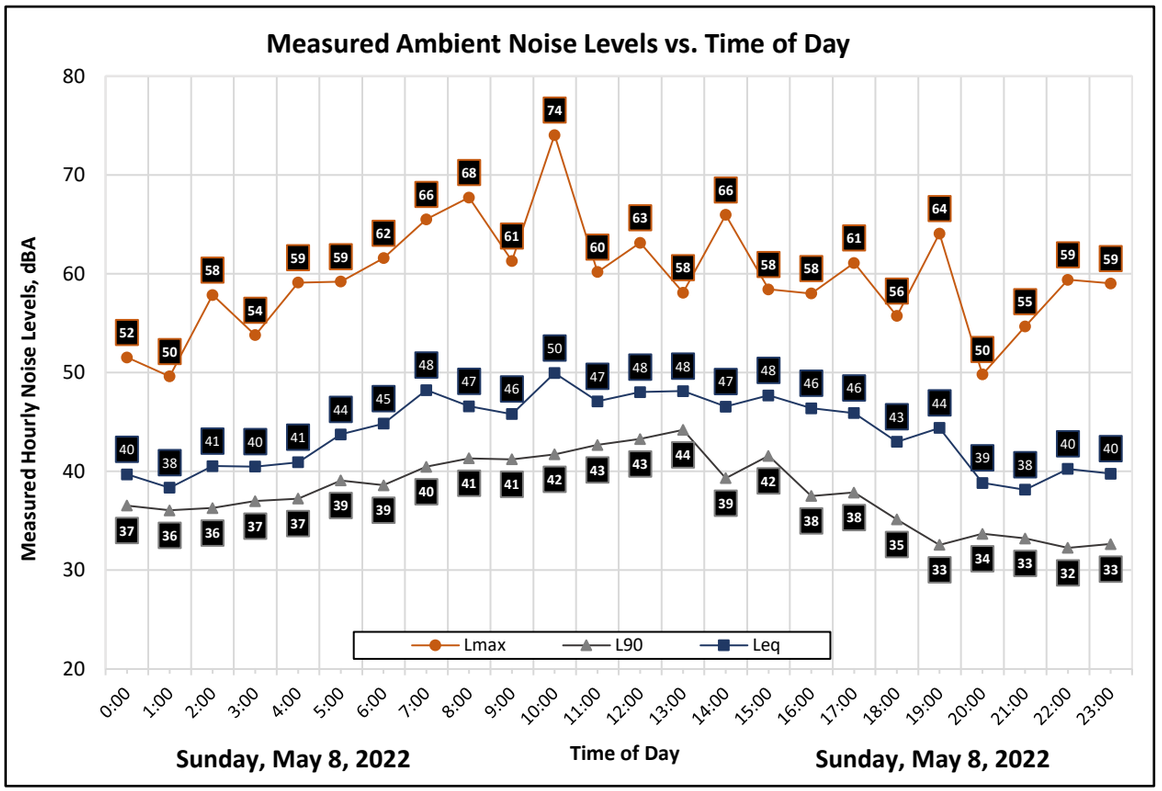


Appendix B2d: Continuous Noise Monitoring Results

Site: LT-2
Project: SNOW Museum Project
Meter: LDL 820-7
Location: West of the Project Boundary
Calibrator: CAL200
Coordinates: 39.2046589°, -120.2028932°

Date	Time	Measured Level, dBA			
		L_{eq}	L_{max}	L_{50}	L_{90}
Sunday, May 8, 2022	0:00	40	52	38	37
Sunday, May 8, 2022	1:00	38	50	37	36
Sunday, May 8, 2022	2:00	41	58	38	36
Sunday, May 8, 2022	3:00	40	54	39	37
Sunday, May 8, 2022	4:00	41	59	40	37
Sunday, May 8, 2022	5:00	44	59	42	39
Sunday, May 8, 2022	6:00	45	62	43	39
Sunday, May 8, 2022	7:00	48	66	45	40
Sunday, May 8, 2022	8:00	47	68	45	41
Sunday, May 8, 2022	9:00	46	61	45	41
Sunday, May 8, 2022	10:00	50	74	46	42
Sunday, May 8, 2022	11:00	47	60	46	43
Sunday, May 8, 2022	12:00	48	63	47	43
Sunday, May 8, 2022	13:00	48	58	48	44
Sunday, May 8, 2022	14:00	47	66	44	39
Sunday, May 8, 2022	15:00	48	58	46	42
Sunday, May 8, 2022	16:00	46	58	44	38
Sunday, May 8, 2022	17:00	46	61	43	38
Sunday, May 8, 2022	18:00	43	56	40	35
Sunday, May 8, 2022	19:00	44	64	37	33
Sunday, May 8, 2022	20:00	39	50	37	34
Sunday, May 8, 2022	21:00	38	55	36	33
Sunday, May 8, 2022	22:00	40	59	35	32
Sunday, May 8, 2022	23:00	40	59	35	33

Statistics	Leq	Lmax	L50	L90
Day Average	47	61	43	39
Night Average	42	57	38	36
Day Low	38	50	36	33
Day High	50	74	48	44
Night Low	38	50	35	32
Night High	45	62	43	39
Ldn	49	Day %		86
CNEL	49	Night %		14

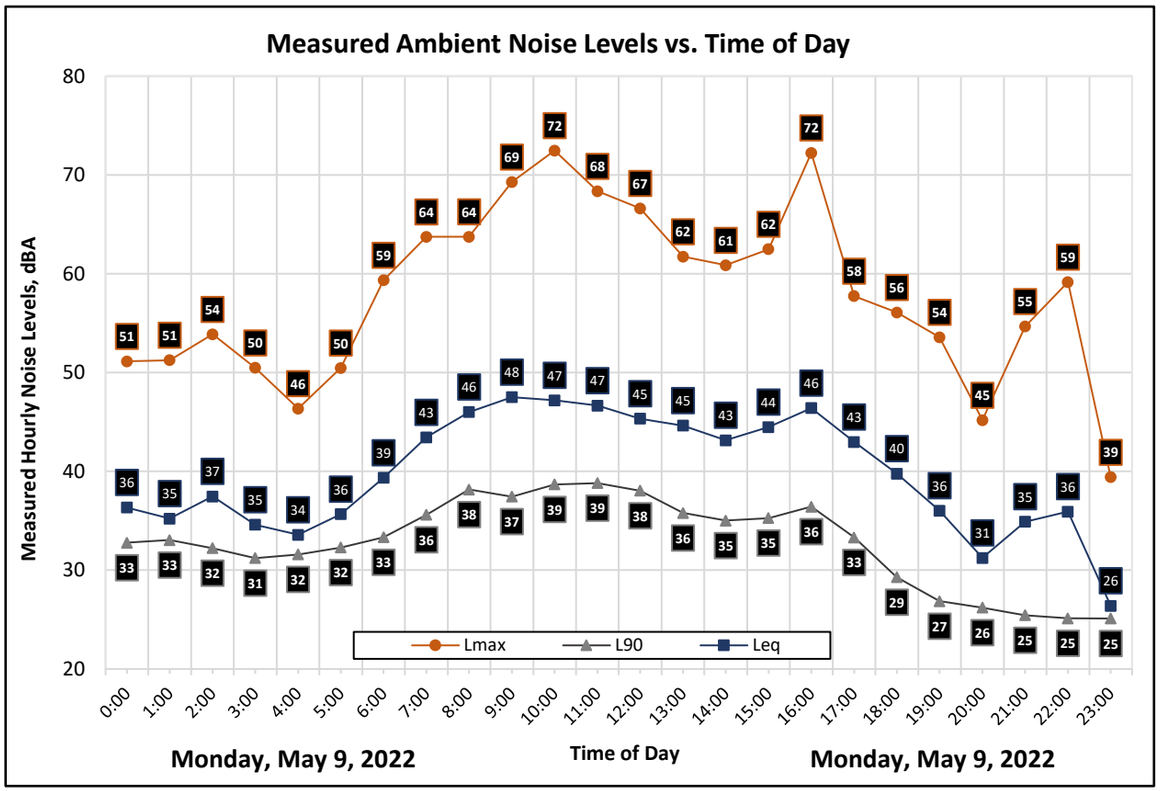


Appendix B2e: Continuous Noise Monitoring Results

Site: LT-2
Project: SNOW Museum Project
Location: West of the Project Boundary
Coordinates: 39.2046589°, -120.2028932°
Meter: LDL 820-7
Calibrator: CAL200

Date	Time	Measured Level, dBA			
		L_{eq}	L_{max}	L_{50}	L_{90}
Monday, May 9, 2022	0:00	36	51	34	33
Monday, May 9, 2022	1:00	35	51	34	33
Monday, May 9, 2022	2:00	37	54	34	32
Monday, May 9, 2022	3:00	35	50	32	31
Monday, May 9, 2022	4:00	34	46	33	32
Monday, May 9, 2022	5:00	36	50	34	32
Monday, May 9, 2022	6:00	39	59	37	33
Monday, May 9, 2022	7:00	43	64	41	36
Monday, May 9, 2022	8:00	46	64	44	38
Monday, May 9, 2022	9:00	48	69	43	37
Monday, May 9, 2022	10:00	47	72	44	39
Monday, May 9, 2022	11:00	47	68	44	39
Monday, May 9, 2022	12:00	45	67	43	38
Monday, May 9, 2022	13:00	45	62	42	36
Monday, May 9, 2022	14:00	43	61	41	35
Monday, May 9, 2022	15:00	44	62	42	35
Monday, May 9, 2022	16:00	46	72	42	36
Monday, May 9, 2022	17:00	43	58	41	33
Monday, May 9, 2022	18:00	40	56	35	29
Monday, May 9, 2022	19:00	36	54	30	27
Monday, May 9, 2022	20:00	31	45	28	26
Monday, May 9, 2022	21:00	35	55	28	25
Monday, May 9, 2022	22:00	36	59	26	25
Monday, May 9, 2022	23:00	26	39	26	25

Statistics	Leq	Lmax	L50	L90
Day Average	44	62	39	34
Night Average	36	51	32	31
Day Low	31	45	28	25
Day High	48	72	44	39
Night Low	26	39	26	25
Night High	39	59	37	33
Ldn	45	Day %		93
CNEL	45	Night %		7

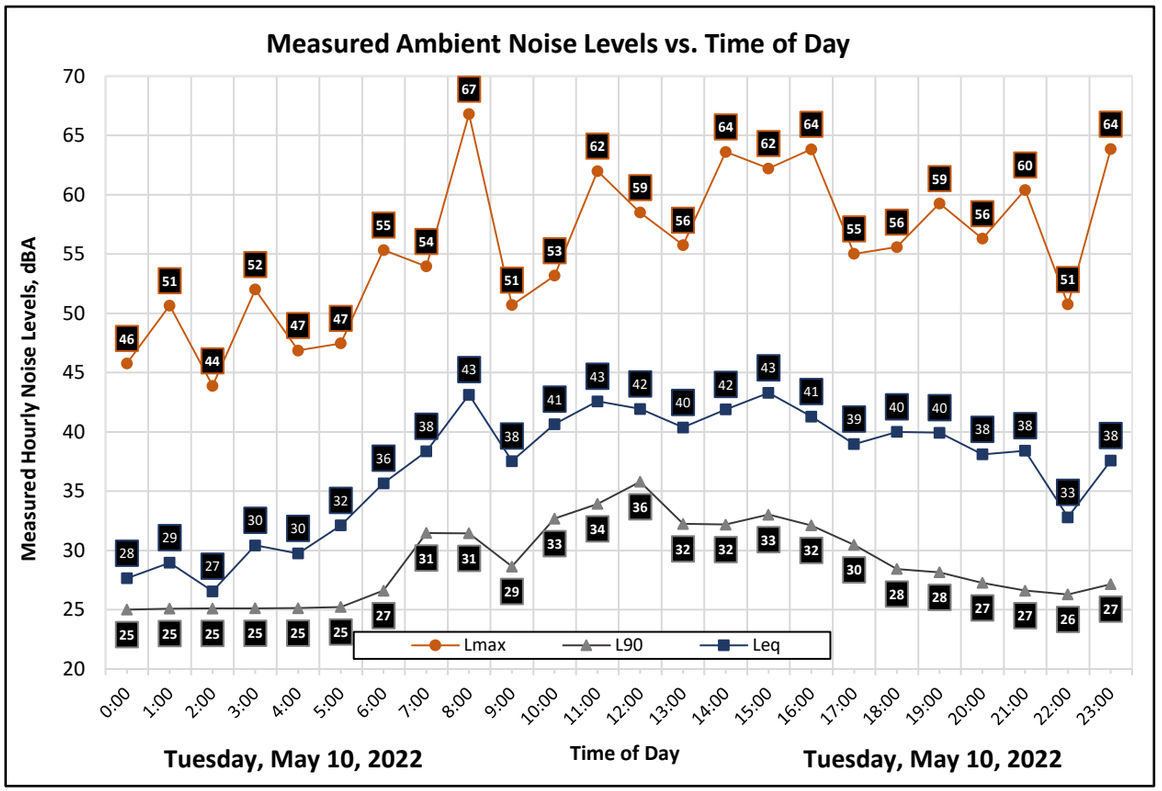


Appendix B2f: Continuous Noise Monitoring Results

Site: LT-2
Project: SNOW Museum Project
Location: West of the Project Boundary
Coordinates: 39.2046589°, -120.2028932°
Meter: LDL 820-7
Calibrator: CAL200

Date	Time	Measured Level, dBA			
		L_{eq}	L_{max}	L_{50}	L_{90}
Tuesday, May 10, 2022	0:00	28	46	26	25
Tuesday, May 10, 2022	1:00	29	51	26	25
Tuesday, May 10, 2022	2:00	27	44	26	25
Tuesday, May 10, 2022	3:00	30	52	26	25
Tuesday, May 10, 2022	4:00	30	47	26	25
Tuesday, May 10, 2022	5:00	32	47	26	25
Tuesday, May 10, 2022	6:00	36	55	32	27
Tuesday, May 10, 2022	7:00	38	54	37	31
Tuesday, May 10, 2022	8:00	43	67	37	31
Tuesday, May 10, 2022	9:00	38	51	35	29
Tuesday, May 10, 2022	10:00	41	53	39	33
Tuesday, May 10, 2022	11:00	43	62	39	34
Tuesday, May 10, 2022	12:00	42	59	40	36
Tuesday, May 10, 2022	13:00	40	56	39	32
Tuesday, May 10, 2022	14:00	42	64	40	32
Tuesday, May 10, 2022	15:00	43	62	40	33
Tuesday, May 10, 2022	16:00	41	64	38	32
Tuesday, May 10, 2022	17:00	39	55	37	30
Tuesday, May 10, 2022	18:00	40	56	35	28
Tuesday, May 10, 2022	19:00	40	59	36	28
Tuesday, May 10, 2022	20:00	38	56	33	27
Tuesday, May 10, 2022	21:00	38	60	30	27
Tuesday, May 10, 2022	22:00	33	51	28	26
Tuesday, May 10, 2022	23:00	38	64	29	27

Statistics	Leq	Lmax	L50	L90
Day Average	41	58	37	31
Night Average	33	51	27	26
Day Low	38	51	30	27
Day High	43	67	40	36
Night Low	27	44	26	25
Night High	38	64	32	27
Ldn	41	Day %		92
CNEL	42	Night %		8

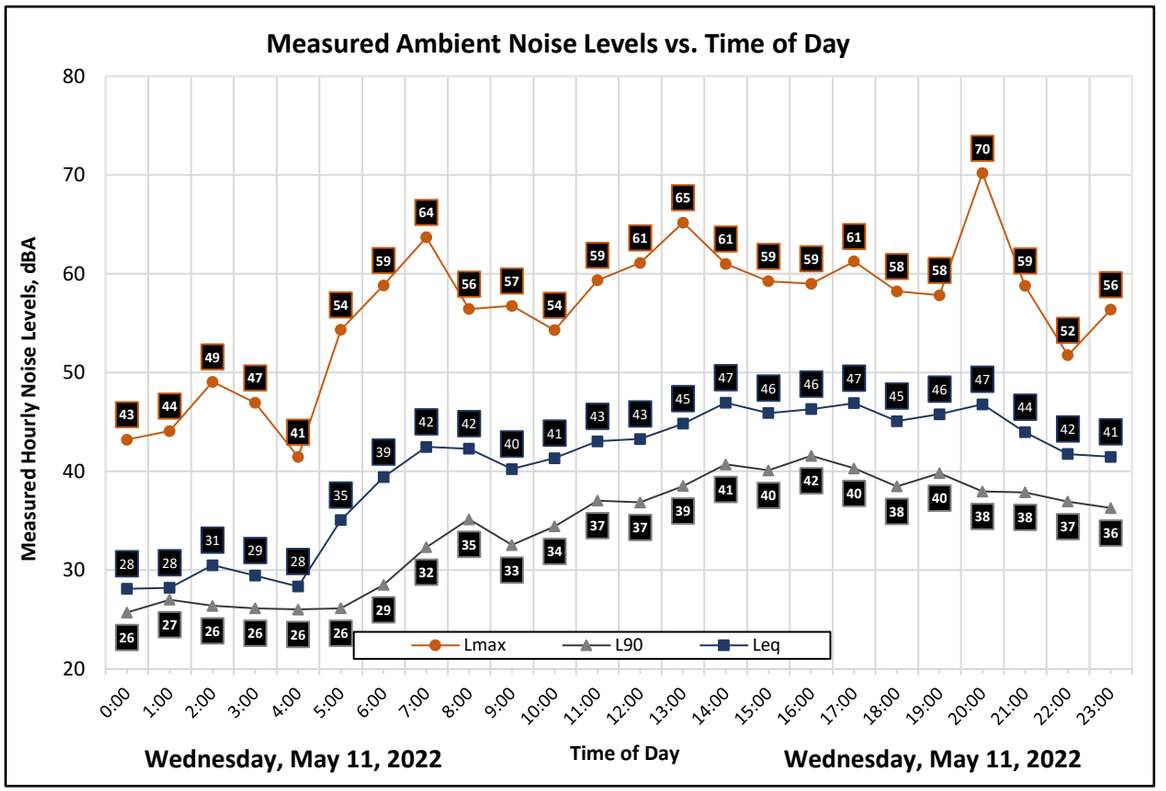


Appendix B2g: Continuous Noise Monitoring Results

Site: LT-2
Project: SNOW Museum Project
Location: West of the Project Boundary
Coordinates: 39.2046589°, -120.2028932°
Meter: LDL 820-7
Calibrator: CAL200

Date	Time	Measured Level, dBA			
		L_{eq}	L_{max}	L_{50}	L_{90}
Wednesday, May 11, 2022	0:00	28	43	27	26
Wednesday, May 11, 2022	1:00	28	44	28	27
Wednesday, May 11, 2022	2:00	31	49	27	26
Wednesday, May 11, 2022	3:00	29	47	27	26
Wednesday, May 11, 2022	4:00	28	41	27	26
Wednesday, May 11, 2022	5:00	35	54	29	26
Wednesday, May 11, 2022	6:00	39	59	35	29
Wednesday, May 11, 2022	7:00	42	64	39	32
Wednesday, May 11, 2022	8:00	42	56	40	35
Wednesday, May 11, 2022	9:00	40	57	38	33
Wednesday, May 11, 2022	10:00	41	54	40	34
Wednesday, May 11, 2022	11:00	43	59	42	37
Wednesday, May 11, 2022	12:00	43	61	42	37
Wednesday, May 11, 2022	13:00	45	65	42	39
Wednesday, May 11, 2022	14:00	47	61	46	41
Wednesday, May 11, 2022	15:00	46	59	45	40
Wednesday, May 11, 2022	16:00	46	59	45	42
Wednesday, May 11, 2022	17:00	47	61	45	40
Wednesday, May 11, 2022	18:00	45	58	43	38
Wednesday, May 11, 2022	19:00	46	58	44	40
Wednesday, May 11, 2022	20:00	47	70	42	38
Wednesday, May 11, 2022	21:00	44	59	42	38
Wednesday, May 11, 2022	22:00	42	52	39	37
Wednesday, May 11, 2022	23:00	41	56	38	36

Statistics	Leq	Lmax	L50	L90
Day Average	45	60	42	38
Night Average	36	50	31	29
Day Low	40	54	38	32
Day High	47	70	46	42
Night Low	28	41	27	26
Night High	41	59	39	37
Ldn	45	Day %		94
CNEL	46	Night %		6

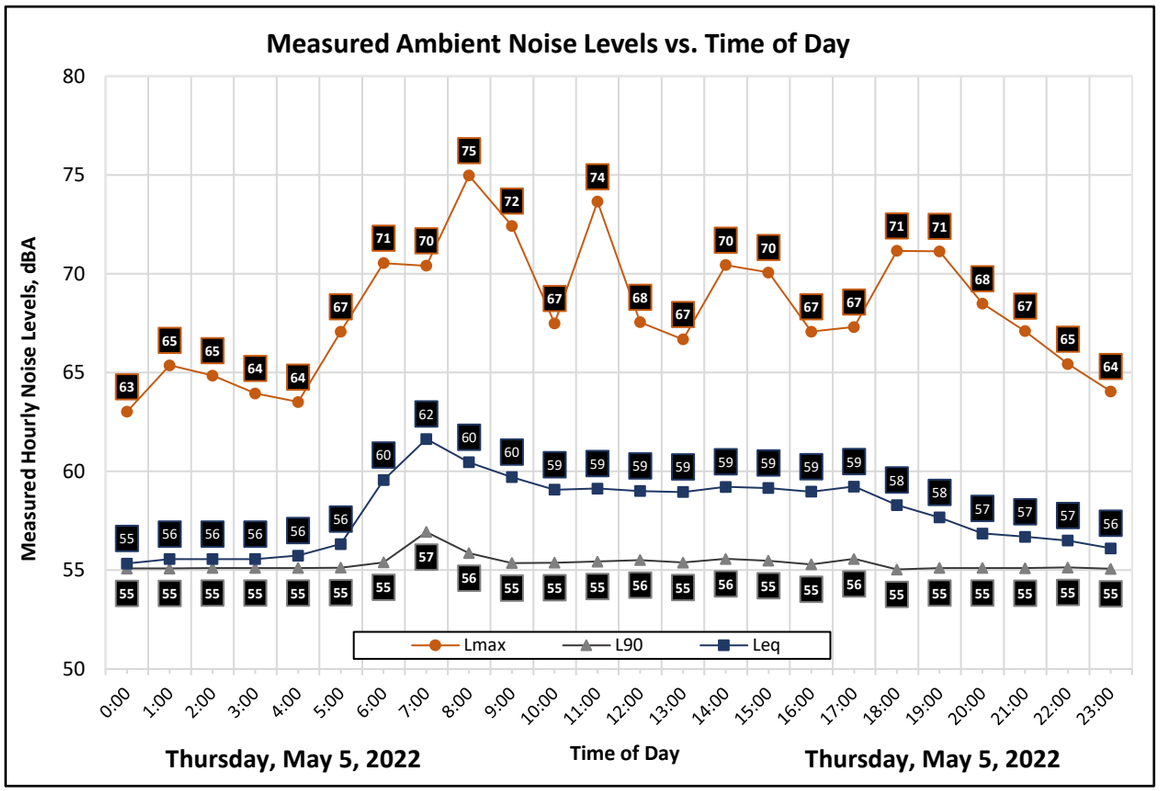


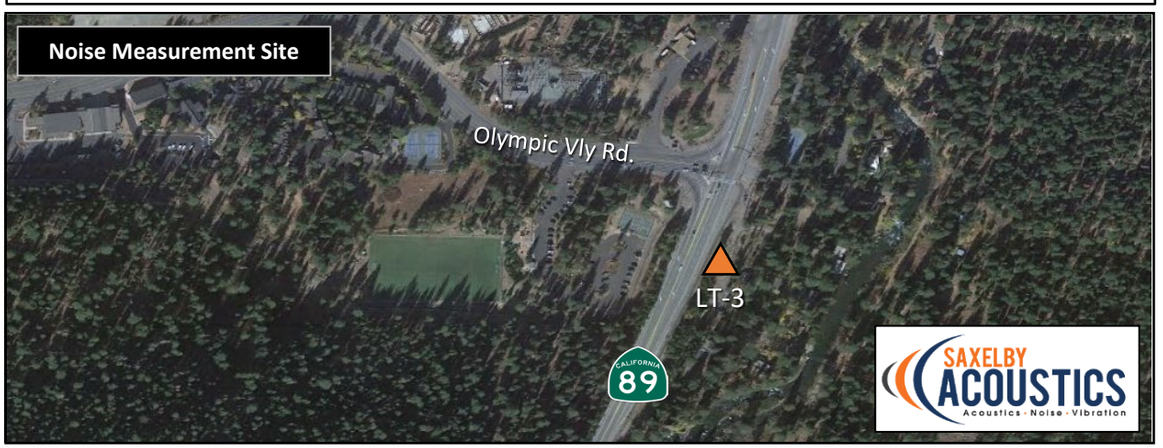
Appendix B3a: Continuous Noise Monitoring Results

Site: LT-2
Project: SNOW Museum Project
Location: East of the Project Boundary
Coordinates: 39.2028727°, -120.1998811°
Meter: LDL 820-7
Calibrator: CAL200

Date	Time	Measured Level, dBA			
		L_{eq}	L_{max}	L_{50}	L_{90}
Thursday, May 5, 2022	0:00	55	63	56	55
Thursday, May 5, 2022	1:00	56	65	56	55
Thursday, May 5, 2022	2:00	56	65	56	55
Thursday, May 5, 2022	3:00	56	64	56	55
Thursday, May 5, 2022	4:00	56	64	56	55
Thursday, May 5, 2022	5:00	56	67	56	55
Thursday, May 5, 2022	6:00	60	71	57	55
Thursday, May 5, 2022	7:00	62	70	60	57
Thursday, May 5, 2022	8:00	60	75	59	56
Thursday, May 5, 2022	9:00	60	72	58	55
Thursday, May 5, 2022	10:00	59	67	58	55
Thursday, May 5, 2022	11:00	59	74	58	55
Thursday, May 5, 2022	12:00	59	68	58	56
Thursday, May 5, 2022	13:00	59	67	58	55
Thursday, May 5, 2022	14:00	59	70	58	56
Thursday, May 5, 2022	15:00	59	70	58	55
Thursday, May 5, 2022	16:00	59	67	58	55
Thursday, May 5, 2022	17:00	59	67	58	56
Thursday, May 5, 2022	18:00	58	71	57	55
Thursday, May 5, 2022	19:00	58	71	56	55
Thursday, May 5, 2022	20:00	57	68	56	55
Thursday, May 5, 2022	21:00	57	67	56	55
Thursday, May 5, 2022	22:00	57	65	56	55
Thursday, May 5, 2022	23:00	56	64	56	55

Statistics	Leq	Lmax	L50	L90
Day Average	59	70	58	55
Night Average	56	65	56	55
Day Low	57	67	56	55
Day High	62	75	60	57
Night Low	55	63	56	55
Night High	60	71	57	55
Ldn	63	Day %		78
CNEL	63	Night %		22



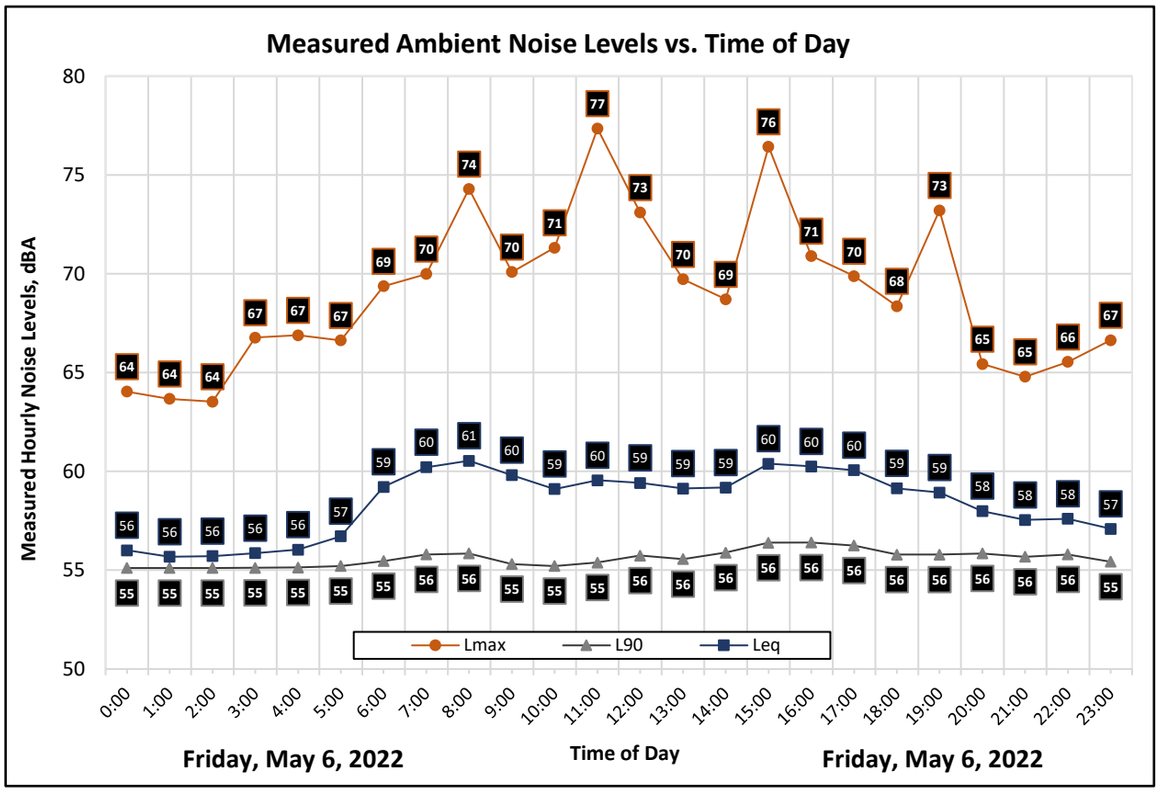


Appendix B3b: Continuous Noise Monitoring Results

Site: LT-3
Project: SNOW Museum Project
Location: East of the Project Boundary
Coordinates: 39.2028727°, -120.1998811°
Meter: LDL 820-8
Calibrator: CAL200

Date	Time	Measured Level, dBA			
		L_{eq}	L_{max}	L_{50}	L_{90}
Friday, May 6, 2022	0:00	56	64	56	55
Friday, May 6, 2022	1:00	56	64	56	55
Friday, May 6, 2022	2:00	56	64	56	55
Friday, May 6, 2022	3:00	56	67	56	55
Friday, May 6, 2022	4:00	56	67	56	55
Friday, May 6, 2022	5:00	57	67	56	55
Friday, May 6, 2022	6:00	59	69	57	55
Friday, May 6, 2022	7:00	60	70	58	56
Friday, May 6, 2022	8:00	61	74	59	56
Friday, May 6, 2022	9:00	60	70	58	55
Friday, May 6, 2022	10:00	59	71	58	55
Friday, May 6, 2022	11:00	60	77	58	55
Friday, May 6, 2022	12:00	59	73	58	56
Friday, May 6, 2022	13:00	59	70	58	56
Friday, May 6, 2022	14:00	59	69	58	56
Friday, May 6, 2022	15:00	60	76	60	56
Friday, May 6, 2022	16:00	60	71	59	56
Friday, May 6, 2022	17:00	60	70	59	56
Friday, May 6, 2022	18:00	59	68	57	56
Friday, May 6, 2022	19:00	59	73	57	56
Friday, May 6, 2022	20:00	58	65	57	56
Friday, May 6, 2022	21:00	58	65	57	56
Friday, May 6, 2022	22:00	58	66	57	56
Friday, May 6, 2022	23:00	57	67	56	55

Statistics	Leq	Lmax	L50	L90
Day Average	59	71	58	56
Night Average	57	66	56	55
Day Low	58	65	57	55
Day High	61	77	60	56
Night Low	56	64	56	55
Night High	59	69	57	56
Ldn	63	Day %		78
CNEL	64	Night %		22

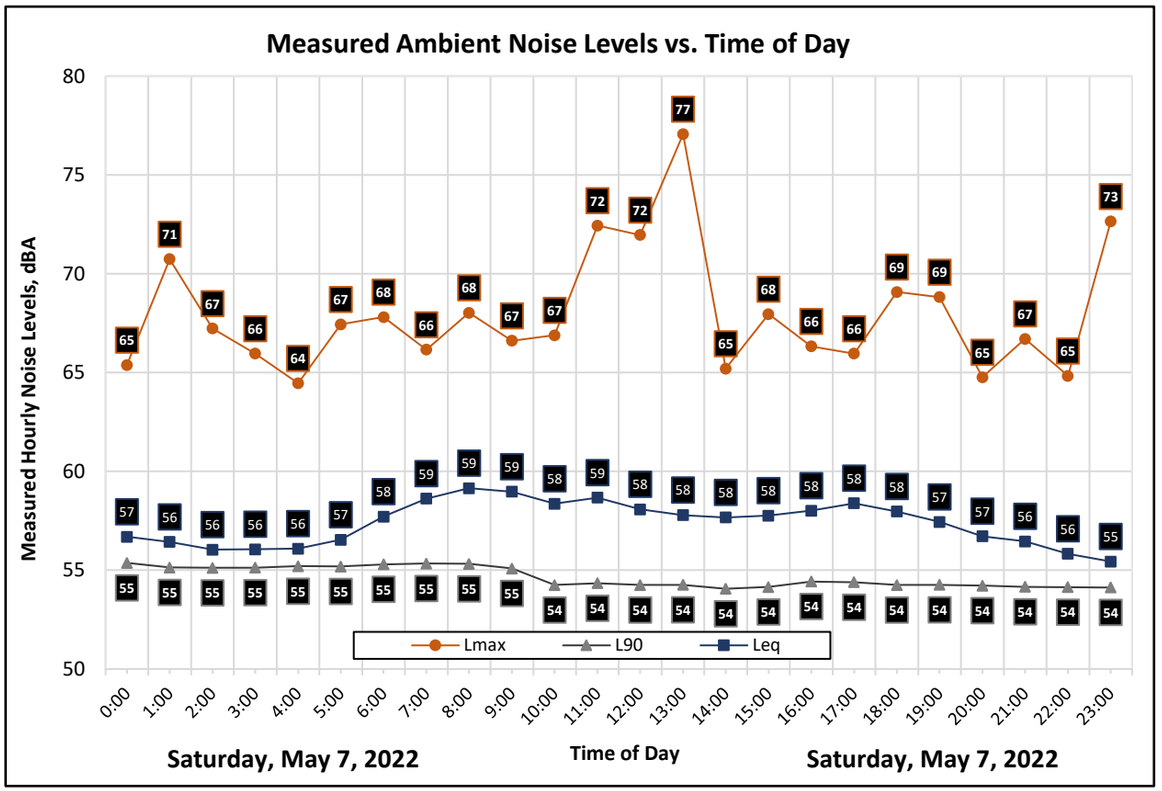


Appendix B3c: Continuous Noise Monitoring Results

Site: LT-3
Project: SNOW Museum Project
Location: East of the Project Boundary
Coordinates: 39.2028727°, -120.1998811°
Meter: LDL 820-8
Calibrator: CAL200

Date	Time	Measured Level, dBA			
		L_{eq}	L_{max}	L_{50}	L_{90}
Saturday, May 7, 2022	0:00	57	65	56	55
Saturday, May 7, 2022	1:00	56	71	56	55
Saturday, May 7, 2022	2:00	56	67	56	55
Saturday, May 7, 2022	3:00	56	66	56	55
Saturday, May 7, 2022	4:00	56	64	56	55
Saturday, May 7, 2022	5:00	57	67	56	55
Saturday, May 7, 2022	6:00	58	68	56	55
Saturday, May 7, 2022	7:00	59	66	57	55
Saturday, May 7, 2022	8:00	59	68	57	55
Saturday, May 7, 2022	9:00	59	67	57	55
Saturday, May 7, 2022	10:00	58	67	57	54
Saturday, May 7, 2022	11:00	59	72	57	54
Saturday, May 7, 2022	12:00	58	72	57	54
Saturday, May 7, 2022	13:00	58	77	56	54
Saturday, May 7, 2022	14:00	58	65	57	54
Saturday, May 7, 2022	15:00	58	68	57	54
Saturday, May 7, 2022	16:00	58	66	57	54
Saturday, May 7, 2022	17:00	58	66	57	54
Saturday, May 7, 2022	18:00	58	69	56	54
Saturday, May 7, 2022	19:00	57	69	56	54
Saturday, May 7, 2022	20:00	57	65	55	54
Saturday, May 7, 2022	21:00	56	67	55	54
Saturday, May 7, 2022	22:00	56	65	55	54
Saturday, May 7, 2022	23:00	55	73	55	54

Statistics	Leq	Lmax	L50	L90
Day Average	58	68	56	54
Night Average	56	67	56	55
Day Low	56	65	55	54
Day High	59	77	57	55
Night Low	55	64	55	54
Night High	58	73	56	55
Ldn	63	Day %		73
CNEL	63	Night %		27

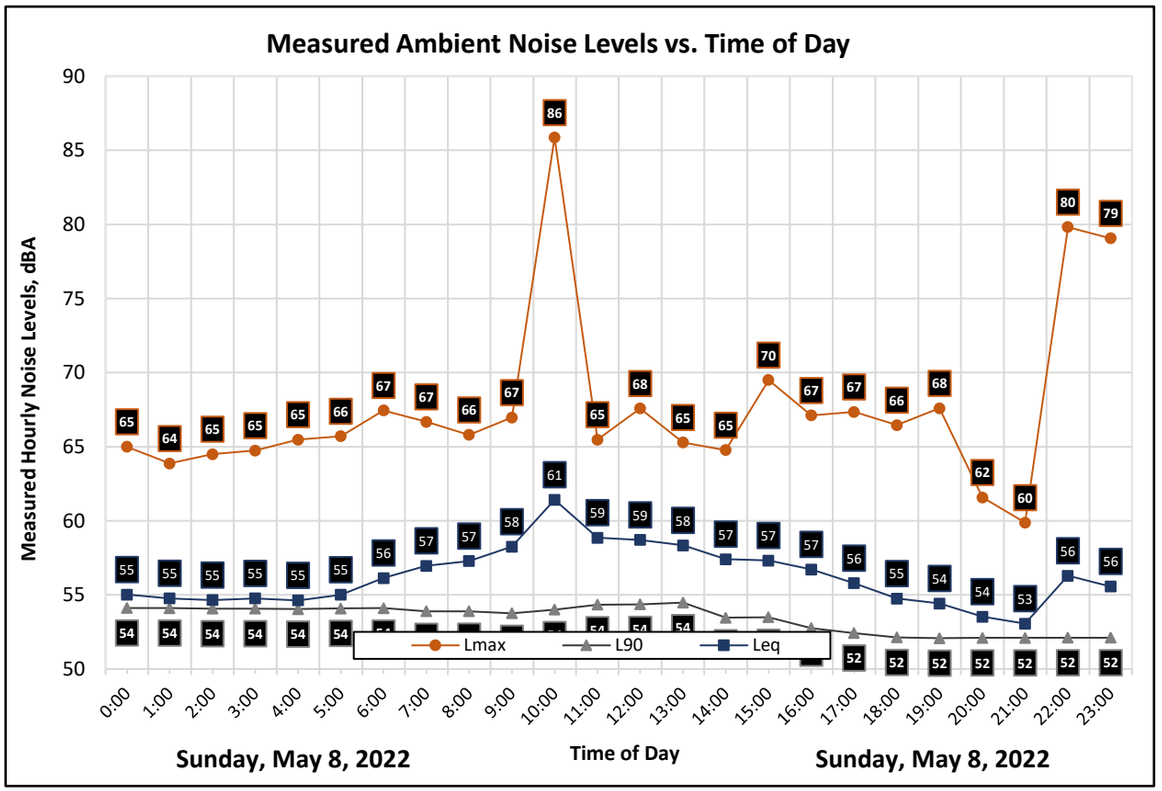


Appendix B3d: Continuous Noise Monitoring Results

Site: LT-3
Project: SNOW Museum Project
Location: East of the Project Boundary
Coordinates: 39.2028727°, -120.1998811°
Meter: LDL 820-8
Calibrator: CAL200

Date	Time	Measured Level, dBA			
		L_{eq}	L_{max}	L_{50}	L_{90}
Sunday, May 8, 2022	0:00	55	65	55	54
Sunday, May 8, 2022	1:00	55	64	55	54
Sunday, May 8, 2022	2:00	55	65	55	54
Sunday, May 8, 2022	3:00	55	65	55	54
Sunday, May 8, 2022	4:00	55	65	55	54
Sunday, May 8, 2022	5:00	55	66	55	54
Sunday, May 8, 2022	6:00	56	67	55	54
Sunday, May 8, 2022	7:00	57	67	55	54
Sunday, May 8, 2022	8:00	57	66	55	54
Sunday, May 8, 2022	9:00	58	67	56	54
Sunday, May 8, 2022	10:00	61	86	57	54
Sunday, May 8, 2022	11:00	59	65	58	54
Sunday, May 8, 2022	12:00	59	68	57	54
Sunday, May 8, 2022	13:00	58	65	57	54
Sunday, May 8, 2022	14:00	57	65	55	53
Sunday, May 8, 2022	15:00	57	70	56	53
Sunday, May 8, 2022	16:00	57	67	54	53
Sunday, May 8, 2022	17:00	56	67	54	52
Sunday, May 8, 2022	18:00	55	66	53	52
Sunday, May 8, 2022	19:00	54	68	53	52
Sunday, May 8, 2022	20:00	54	62	53	52
Sunday, May 8, 2022	21:00	53	60	53	52
Sunday, May 8, 2022	22:00	56	80	53	52
Sunday, May 8, 2022	23:00	56	79	53	52

Statistics	Leq	Lmax	L50	L90
Day Average	57	67	55	53
Night Average	55	68	54	54
Day Low	53	60	53	52
Day High	61	86	58	54
Night Low	55	64	53	52
Night High	56	80	55	54
Ldn	62	Day %		76
CNEL	62	Night %		24

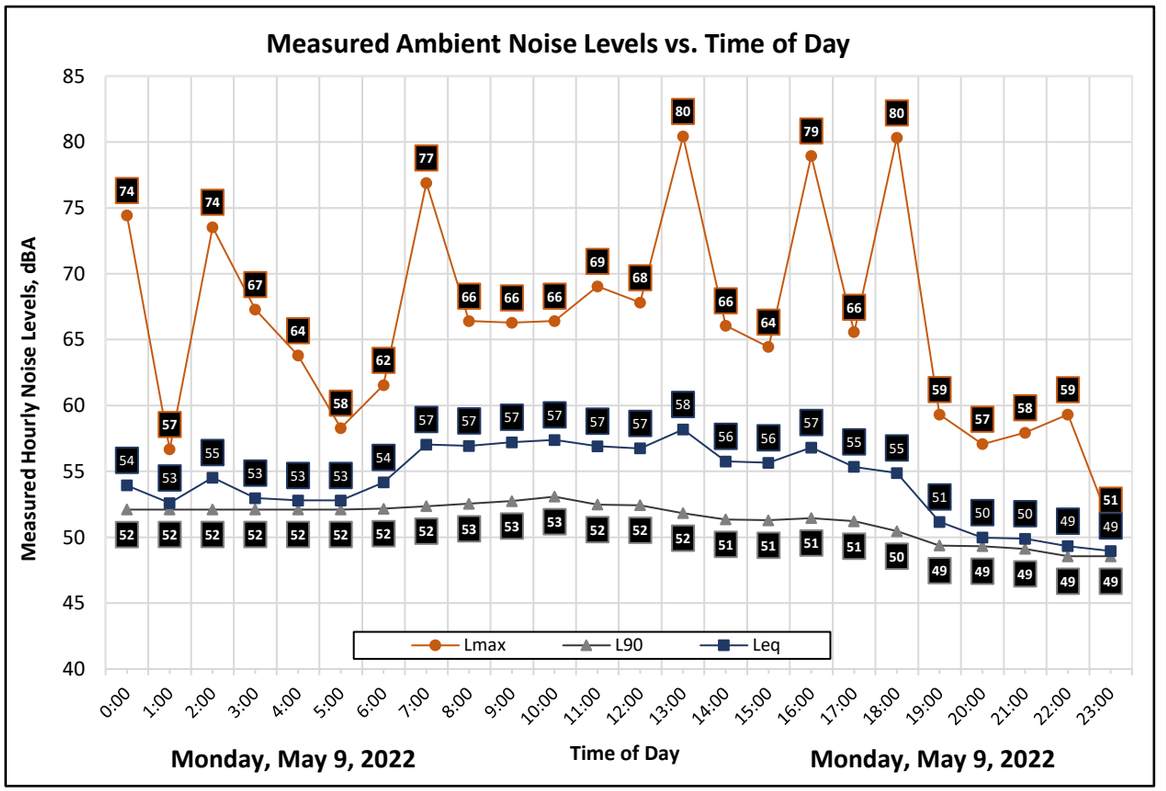


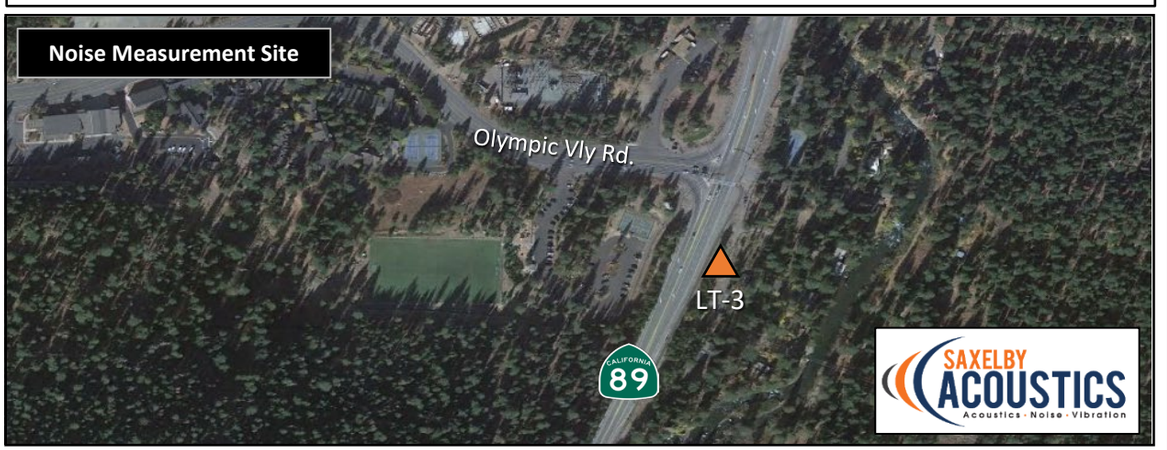
Appendix B3e: Continuous Noise Monitoring Results

Site: LT-3
Project: SNOW Museum Project
Meter: LDL 820-8
Location: East of the Project Boundary
Calibrator: CAL200
Coordinates: 39.2028727°, -120.1998811°

Date	Time	Measured Level, dBA			
		L_{eq}	L_{max}	L_{50}	L_{90}
Monday, May 9, 2022	0:00	54	74	53	52
Monday, May 9, 2022	1:00	53	57	53	52
Monday, May 9, 2022	2:00	55	74	53	52
Monday, May 9, 2022	3:00	53	67	53	52
Monday, May 9, 2022	4:00	53	64	53	52
Monday, May 9, 2022	5:00	53	58	53	52
Monday, May 9, 2022	6:00	54	62	53	52
Monday, May 9, 2022	7:00	57	77	54	52
Monday, May 9, 2022	8:00	57	66	56	53
Monday, May 9, 2022	9:00	57	66	55	53
Monday, May 9, 2022	10:00	57	66	55	53
Monday, May 9, 2022	11:00	57	69	55	52
Monday, May 9, 2022	12:00	57	68	54	52
Monday, May 9, 2022	13:00	58	80	54	52
Monday, May 9, 2022	14:00	56	66	54	51
Monday, May 9, 2022	15:00	56	64	54	51
Monday, May 9, 2022	16:00	57	79	54	51
Monday, May 9, 2022	17:00	55	66	53	51
Monday, May 9, 2022	18:00	55	80	52	50
Monday, May 9, 2022	19:00	51	59	50	49
Monday, May 9, 2022	20:00	50	57	50	49
Monday, May 9, 2022	21:00	50	58	50	49
Monday, May 9, 2022	22:00	49	59	49	49
Monday, May 9, 2022	23:00	49	51	49	49

Statistics	Leq	Lmax	L50	L90
Day Average	56	68	53	51
Night Average	53	63	52	51
Day Low	50	57	50	49
Day High	58	80	56	53
Night Low	49	51	49	49
Night High	55	74	53	52
Ldn	60	Day %		78
CNEL	60	Night %		22



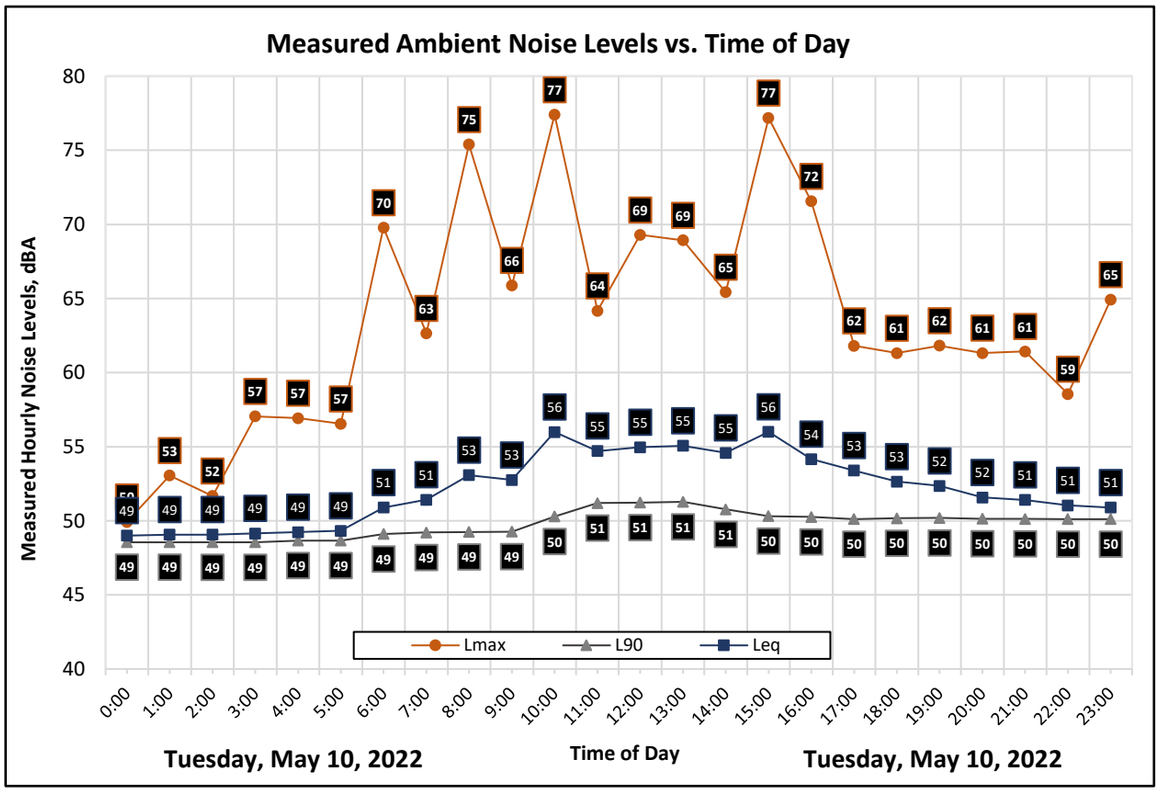


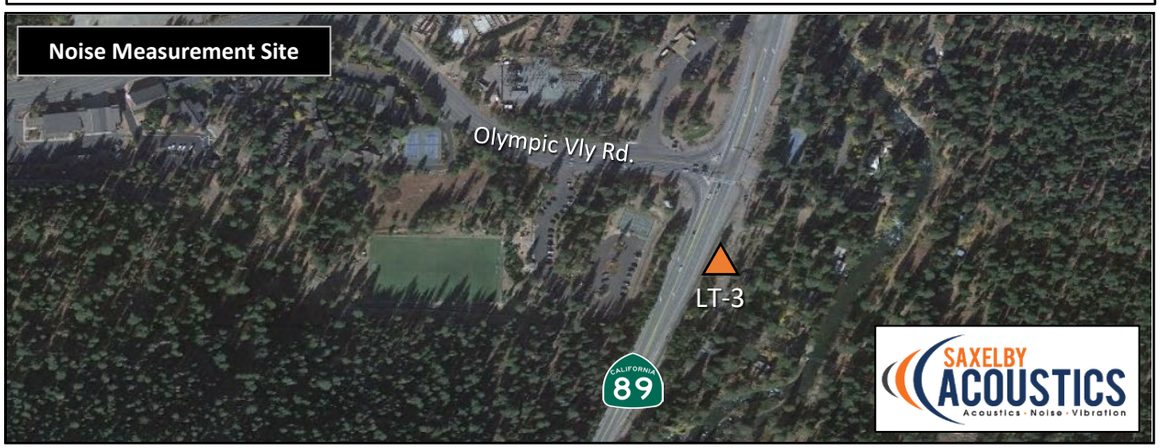
Appendix B3f: Continuous Noise Monitoring Results

Site: LT-3
Project: SNOW Museum Project
Location: East of the Project Boundary
Coordinates: 39.2028727°, -120.1998811°
Meter: LDL 820-8
Calibrator: CAL200

Date	Time	Measured Level, dBA			
		L_{eq}	L_{max}	L_{50}	L_{90}
Tuesday, May 10, 2022	0:00	49	50	49	49
Tuesday, May 10, 2022	1:00	49	53	49	49
Tuesday, May 10, 2022	2:00	49	52	49	49
Tuesday, May 10, 2022	3:00	49	57	49	49
Tuesday, May 10, 2022	4:00	49	57	49	49
Tuesday, May 10, 2022	5:00	49	57	49	49
Tuesday, May 10, 2022	6:00	51	70	50	49
Tuesday, May 10, 2022	7:00	51	63	50	49
Tuesday, May 10, 2022	8:00	53	75	51	49
Tuesday, May 10, 2022	9:00	53	66	51	49
Tuesday, May 10, 2022	10:00	56	77	53	50
Tuesday, May 10, 2022	11:00	55	64	53	51
Tuesday, May 10, 2022	12:00	55	69	53	51
Tuesday, May 10, 2022	13:00	55	69	53	51
Tuesday, May 10, 2022	14:00	55	65	53	51
Tuesday, May 10, 2022	15:00	56	77	53	50
Tuesday, May 10, 2022	16:00	54	72	53	50
Tuesday, May 10, 2022	17:00	53	62	52	50
Tuesday, May 10, 2022	18:00	53	61	51	50
Tuesday, May 10, 2022	19:00	52	62	51	50
Tuesday, May 10, 2022	20:00	52	61	51	50
Tuesday, May 10, 2022	21:00	51	61	51	50
Tuesday, May 10, 2022	22:00	51	59	51	50
Tuesday, May 10, 2022	23:00	51	65	51	50

Statistics	Leq	Lmax	L50	L90
Day Average	54	67	52	50
Night Average	50	58	50	49
Day Low	51	61	50	49
Day High	56	77	53	51
Night Low	49	50	49	49
Night High	51	70	51	50
Ldn	57	Day %		83
CNEL	57	Night %		17



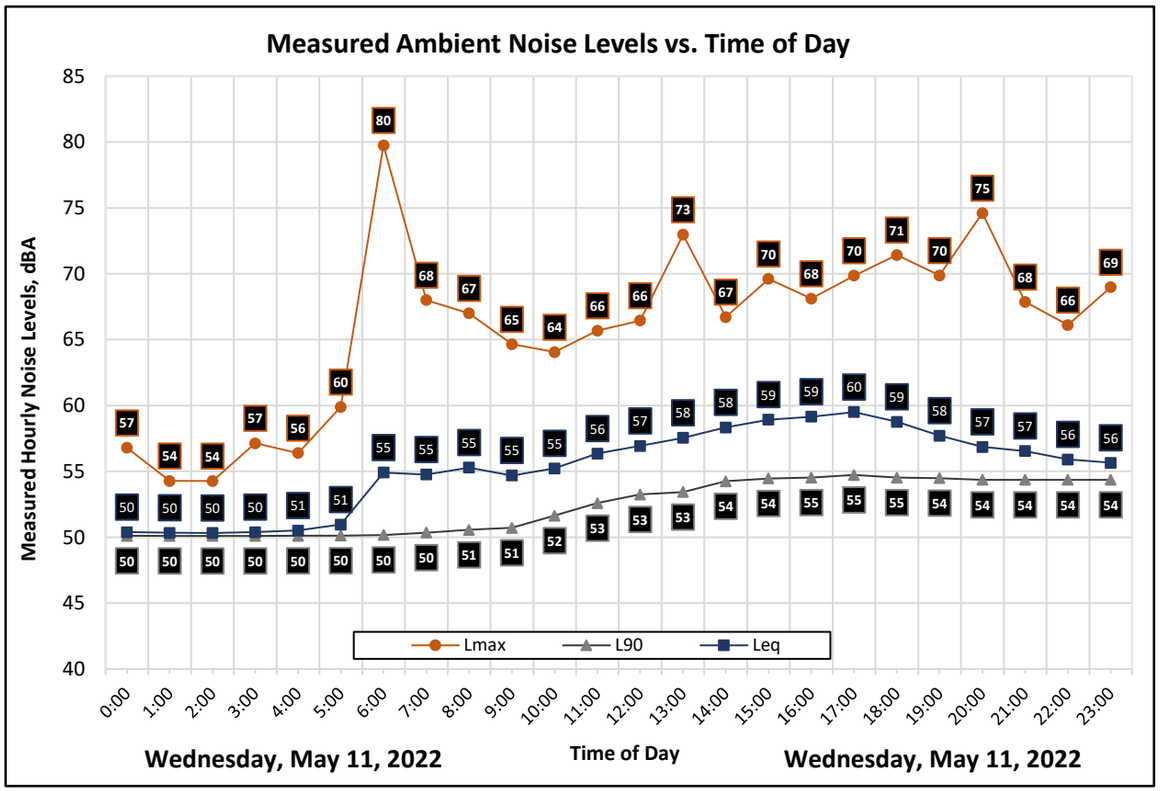


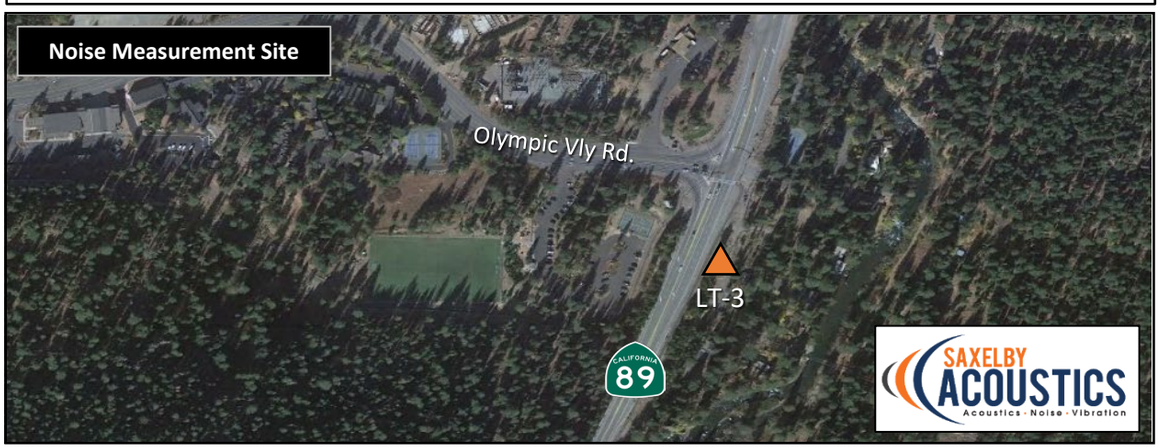
Appendix B3g: Continuous Noise Monitoring Results

Site: LT-3
Project: SNOW Museum Project
Meter: LDL 820-8
Location: East of the Project Boundary
Calibrator: CAL200
Coordinates: 39.2028727°, -120.1998811°

Date	Time	Measured Level, dBA			
		L_{eq}	L_{max}	L_{50}	L_{90}
Wednesday, May 11, 2022	0:00	50	57	51	50
Wednesday, May 11, 2022	1:00	50	54	51	50
Wednesday, May 11, 2022	2:00	50	54	51	50
Wednesday, May 11, 2022	3:00	50	57	51	50
Wednesday, May 11, 2022	4:00	51	56	51	50
Wednesday, May 11, 2022	5:00	51	60	51	50
Wednesday, May 11, 2022	6:00	55	80	51	50
Wednesday, May 11, 2022	7:00	55	68	53	50
Wednesday, May 11, 2022	8:00	55	67	54	51
Wednesday, May 11, 2022	9:00	55	65	53	51
Wednesday, May 11, 2022	10:00	55	64	54	52
Wednesday, May 11, 2022	11:00	56	66	55	53
Wednesday, May 11, 2022	12:00	57	66	55	53
Wednesday, May 11, 2022	13:00	58	73	56	53
Wednesday, May 11, 2022	14:00	58	67	57	54
Wednesday, May 11, 2022	15:00	59	70	58	54
Wednesday, May 11, 2022	16:00	59	68	58	55
Wednesday, May 11, 2022	17:00	60	70	58	55
Wednesday, May 11, 2022	18:00	59	71	56	55
Wednesday, May 11, 2022	19:00	58	70	56	54
Wednesday, May 11, 2022	20:00	57	75	55	54
Wednesday, May 11, 2022	21:00	57	68	55	54
Wednesday, May 11, 2022	22:00	56	66	55	54
Wednesday, May 11, 2022	23:00	56	69	55	54

Statistics	Leq	Lmax	L50	L90
Day Average	57	68	55	53
Night Average	52	62	51	51
Day Low	55	64	53	50
Day High	60	75	58	55
Night Low	50	54	51	50
Night High	56	80	55	54
Ldn	60	Day %		86
CNEL	60	Night %		14





Appendix C: Traffic Noise Calculation Inputs and Results

Appendix C-1
FHWA-RD-77-108 Highway Traffic Noise Prediction Model

Project #: 220214
Description: SNOW Museum Project - Existing
Ldn/CNEL: Ldn
Hard/Soft: Soft

Segment	Roadway	Segment	ADT	Day %	Eve %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance	Offset (dB)	Contours (ft.) - No Offset 60 dBA	65 dBA	70 dBA	Level, dBA
1	SR 89	North of Squaw Valley	16,700	86	0	14	1.0%	1.0%	50	370	0	242	112	52	57.2
2	SR 89	South of Squaw Valley	14,480	86	0	14	1.0%	1.0%	50	290	0	220	102	47	58.2

SAXELBY ACOUSTICS
Acoustics · Noise · Vibration

Appendix C-2

FHWA-RD-77-108 Highway Traffic Noise Prediction Model

Project #: 220214
Description: SNOW Museum Project - Existing + Project
Ldn/CNEL: Ldn
Hard/Soft: Soft

Segment	Roadway	Segment	ADT	Day %	Eve %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance	Offset (dB)	Contours (ft.) - No Offset 60 dBA	65 dBA	70 dBA	Level, dBA
1	SR 89	North of Squaw Valley	16,760	86	0	14	1.0%	1.0%	50	370	0	242	112	52	57.2
2	SR 89	South of Squaw Valley	14,540	86	0	14	1.0%	1.0%	50	290	0	220	102	47	58.2

SAXELBY ACOUSTICS
Acoustics · Noise · Vibration

Appendix C-3

FHWA-RD-77-108 Highway Traffic Noise Prediction Model

Project #: 220214
Description: SNOW Museum Project - Future
Ldn/CNEL: Ldn
Hard/Soft: Soft

Segment	Roadway	Segment	ADT	Day %	Eve %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance	Offset (dB)	Contours (ft.) - No Offset 60 dBA	65 dBA	70 dBA	Level, dBA
1	SR 89	North of Squaw Valley	27,600	86	0	14	1.0%	1.0%	50	370	0	338	157	73	59.4
2	SR 89	South of Squaw Valley	22,950	86	0	14	1.0%	1.0%	50	290	0	299	139	64	60.2

SAXELBY ACOUSTICS
Acoustics · Noise · Vibration

Appendix C-4

FHWA-RD-77-108 Highway Traffic Noise Prediction Model

Project #: 220214
Description: SNOW Museum Project - Future + Project
Ldn/CNEL: Ldn
Hard/Soft: Soft

Segment	Roadway	Segment	ADT	Day %	Eve %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance	Offset (dB)	Contours (ft.) - No Offset 60 dBA	65 dBA	70 dBA	Level, dBA
1	SR 89	North of Squaw Valley	27,660	86	0	14	1.0%	1.0%	50	370	0	338	157	73	59.4
2	SR 89	South of Squaw Valley	23,010	86	0	14	1.0%	1.0%	50	290	0	299	139	64	60.2

APPENDIX E

Squaw Valley Olympic Museum
Transportation Impact Analysis

Prepared for the

Squaw Valley Ski
Museum Foundation

Prepared by LSC Transportation Consultants

SQUAW VALLEY OLYMPIC MUSEUM – TRANSPORTATION IMPACT ANALYSIS STUDY

Prepared for

Squaw Valley Ski Museum Foundation
PO Box 2697
Olympic Valley, CA 96145
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Prepared by

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February 21, 2020

LSC #197460

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Section 1
INTRODUCTION

This engineering report documents the findings and conclusions of a transportation impact analysis for the Squaw Valley Olympic Museum Relocation project, which is located in the Olympic Valley area of Placer County, California. The site is located in the existing Squaw Valley Park parking lot on the south side of Squaw Valley Road immediately west of State Route 89, as illustrated in Figure 1. The purpose of this engineering study is to determine the impacts of the traffic generated by the project on the surrounding roadway infrastructure, as well as other transportation-related factors. This study determines if mitigation is required to allow transportation facilities to operate in conformance with adopted standards and consistent with pertinent policies under the current adopted Placer County and Caltrans standards.

SCOPE OF STUDY

This traffic engineering study analyzes traffic data, intersection and roadway capacity, level of service, parking impacts and traffic impacts of the proposed project in accordance with the requirements of the Placer County and Caltrans standards. The study also includes an evaluation of daily Vehicle Miles Traveled (VMT) impacts over the course of a winter and summer day. Based upon input provided by Placer County staff, the following intersections were identified for quantitative analysis:

- State Route (SR) 89/Squaw Valley Road
- Squaw Valley Road/Squaw Park Driveway (site access intersection)

The following roadway segments were identified for analysis:

- SR 89 north of Squaw Valley Road
- SR 89 south of Squaw Valley Road

This analysis considers the following four scenarios:

1. Existing Year without Project
2. Existing Year with Project
3. Future Cumulative (20-Year Horizon) without Project
4. Future Cumulative with Project

The results of this transportation study are used to develop recommendations to mitigate project transportation impacts.

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Section 2
EXISTING CONDITIONS

This section documents the existing setting and operational traffic conditions in the vicinity of the project site, providing a foundation for comparison to future conditions. Existing roadway conditions were studied to identify if the roadways are currently operating in a safe and efficient manner. The study area and the intersections evaluated are shown in Figure 1.

EXISTING SETTING

The Squaw Valley area is located in the eastern portion of Placer County to the south of Truckee and northwest of Lake Tahoe. Year-round recreational activities, including skiing, snowboarding, hiking, biking, and golf are provided in the Squaw Valley area, as well as shopping, dining and lodging opportunities.

Existing Roadways

The roadways within the study area are described below.

State Route 89

State Route (SR) 89 is a two-lane roadway connecting Truckee, California, and the Interstate 80 corridor to the north with Squaw Valley, Alpine Meadows, and Tahoe City, California, to the south. Traffic volumes along SR 89 exhibit strong seasonal variation, with congestion occurring during winter peak demand periods when adverse weather and ski area activity creates strongly peaked periods of traffic demand. Caltrans reports that the peak month Average Daily Traffic (ADT) on SR 89 in the project vicinity is 15,000 vehicles per day to the north of its intersection with Squaw Valley Road and 13,300 vehicles per day to the south of Squaw Valley Road (Caltrans Traffic and Vehicle Data Systems Unit, 2017). The posted speed limit along SR 89 north of its intersection with Squaw Valley Road is 55 miles per hour. The posted speed limit is reduced to 45 miles per hour immediately south of the SR 89/Squaw Valley Road intersection.

Squaw Valley Road

Squaw Valley Road is an arterial roadway connecting SR 89 on the east to the Squaw Valley Ski Resort and the associated residential, commercial, and resort areas on the west. The posted speed limit along Squaw Valley Road is 35 miles per hour. Residential street intersections along this roadway are controlled by stop signs on the side-street approaches. A traffic management program conducted by Squaw Valley Ski Resort is in place on peak days of winter traffic. Within the vicinity of the project site, Squaw Valley Road provides two westbound travel lanes and two eastbound travel lanes.

The existing lane configuration and traffic control at the study intersections are illustrated in Figure 1.

Traffic Analysis Periods

Impacts on study roadways are determined by measuring the effect that site-generated traffic has on traffic operations at key intersections and along roadways during the following analysis periods:

Figure 1
Intersection Lane Configuration and Control
LEGEND
Turning Movement
Stop Sign
Traffic Signal
1 SR 89/Squaw Valley Rd.
Squaw Valley Rd.
89
2 Squaw Valley Rd/ 7 Eleven Driveway
Driveway
Squaw Valley Rd.
3 Squaw Valley Rd./ Squaw Park Driveway
Squaw Valley Rd.
Driveway
SQUAW VALLEY RD
RIVER RD
89
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

- Winter Sunday PM Peak Hour (consistent with other recent EIRs)
- Summer Friday PM Peak Hour (consistent with other recent EIRs)
- Summer Weekend Mid-Day Peak Hour

The winter peak hour is technically defined as the 30th-highest hour of travel demand during the ski season (Placer County, 2003). The 30th-highest winter hour generally corresponds to busy (but not the busiest) weekend days during ski season during the hours that ski areas are opening and closing, respectively, and skiers arriving and departing ski areas mix with local and inter-regional traffic. It is not necessary to analyze winter AM conditions, given that the site-generated volumes are expected to be higher in the PM and that the proposed museum wouldn't open until 10 AM (whereas the winter AM peak-hour traffic on Squaw Valley Road typically occurs from 8:30 to 9:30 AM, according to the Base-to-Base Gondola EIR, 'winter Saturday AM' scenario).

Summer peak is defined as the peak times of travel within the study area during the summer months, which generally occurs on Fridays (consistent with the Placer County standard summer analysis period). As both existing traffic volumes and expected museum traffic activity are greater in the PM peak hour on summer weekdays, the traffic analysis focuses on PM peak hour conditions. The summer weekend peak period is also included because summer peak-hour volumes at the SR 89 / Squaw Valley Road intersection and at the Squaw Valley Park site tend to be highest on weekends, with the peak hour occurring between 11 AM and 1 PM.

Both winter and summer Average Daily Traffic (ADT) volumes are analyzed along SR 89.

Existing Traffic Volumes

Existing winter and summer traffic volumes are derived from a combination of recent traffic count data, traffic volumes collected from other recent studies and traffic volumes estimated to be generated by existing park sporting events.

Winter Pear-Hour Traffic Volumes

The existing winter Sunday PM peak-hour traffic volumes for the SR 89/Squaw Valley Road intersection are provided in the approved *Base-to-Base Gondola Project Draft EIS/EIR* (SE Group and Ascent Environmental, Inc., April 27, 2018). These volumes were developed based upon traffic counts conducted over several weekends from January through April of 2017. The traffic pattern during this period reflects a large volume of vehicles traveling northbound on SR 89 as visitors are leaving the Tahoe Basin at the end of the weekend. In addition, a significant volume of eastbound skier traffic is departing Squaw Valley during this period, with the majority of the vehicles turning left onto SR 89 toward Truckee. The PM peak-hour traffic volumes on the 7-11/retail shops driveway are estimated, for use in the traffic simulation model. Finally, the site driveway is open and plowed in the winter, with an estimated 10 vehicles entering and 10 exiting during the PM peak hour. The existing winter PM peak-hour intersection traffic volumes are shown in Figure 2.

Summer Peak-Hour Traffic Volumes

A review of Caltrans hourly traffic count data along SR 89 at a point between Squaw Valley Road and Pole Creek (to the north) on Fridays, Saturdays and Sundays in July 2019 indicates

that the summer peak-hour traffic volumes on SR 89 are highest on weekends (with Sundays having the highest total two-way volume), although the peak-hour volumes on Friday, Saturday, and Sunday are within 3 percent of one another. The Friday PM peak hour typically occurs from 3-4 PM. The peak hour on Saturday and Sunday typically occurs from 11 AM to 12 PM. The proposed museum is anticipated to be open daily from 10 AM to 6 PM. To ensure that the peak traffic period is observed, and to catch busy conditions on the driveways, intersection turning-movement counts were conducted on Friday August 16, 2019 from 3 PM to 5 PM and on Saturday August 17, 2019 from 10 AM to 1 PM at the following intersections:

- SR 89 / Squaw Valley Road
- Squaw Valley Road / Squaw Valley Park

Turns to/from the 7-11/bike rental driveway on the north side of Squaw Valley Road were also recorded. The count data is contained in Appendix A.

Existing Sporting Events

It is also necessary to ensure the "design days" used in this study reflect busy conditions at the existing sports field. On the Friday of the traffic counts, the Squaw Valley Ski Team had the field reserved from 4-6 PM. However, no organized activity was observed to occur at the field. Based on a review of the field reservations data from the summers of 2017, 2018 and 2019, a typical busy summer Friday is assumed to include activities at the field from 4-6 PM, such as two 1-hour soccer or lacrosse practices back-to-back, with about 15 persons per practice (including players, coaches and spectators). On the Saturday of the traffic counts, there were no reservations for the field. Based on the park reservations data, a typical busy summer Saturday is assumed to have a sporting event from 10 AM – 2 PM, such as a soccer or lacrosse tournament. To be conservative (conservatively high traffic and parking volumes), 3 games are assumed to occur during this period with 15 players, 1 coach and 15 spectators per team. The estimated trip generation of the sporting events is discussed in Section 3.

Lastly, the traffic activity associated with the pickleball courts is already reflected in the traffic count data.

Summer Peak-Hour Design Volumes

The summer Friday PM peak period is characterized by a large volume of southbound traffic on SR 89 (reflecting visitors arriving to the Tahoe Basin for the weekend). Adding the summer Friday PM peak-hour traffic generated by the sports field activities to the Friday PM peak-hour count data yields the existing summer Friday PM intersection traffic volumes shown in Figure 2. Similarly, adding the summer weekend mid-day peak-hour traffic generated by the sporting event to the count data results in the existing weekend mid-day peak-hour volumes shown in Figure 2.

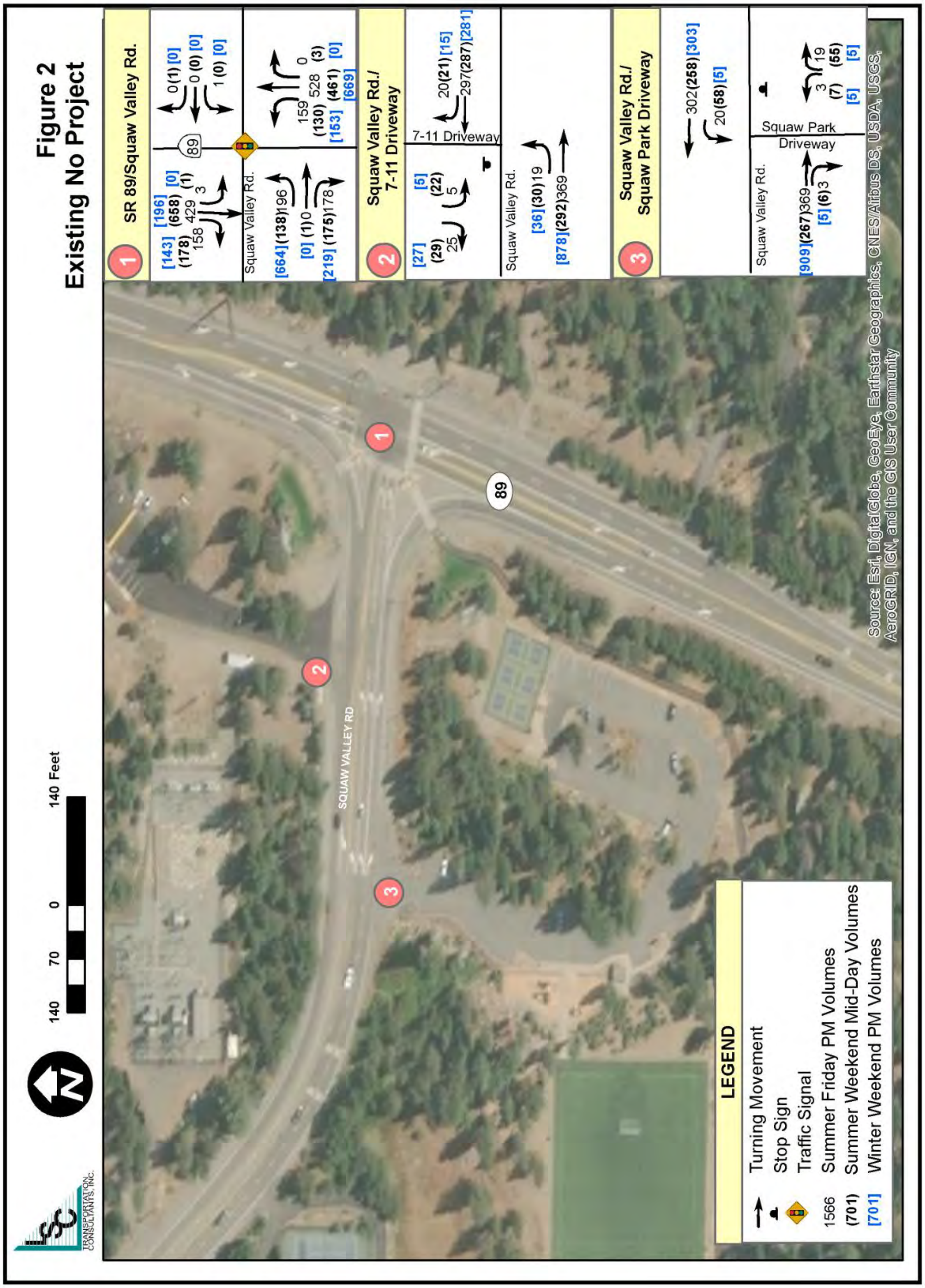

Figure 2
Existing No Project
140 70 0 140 Feet
SR 89/Squaw Valley Rd.
Squaw Valley Rd./
7-11 Driveway
Squaw Valley Rd./
Squaw Park Driveway
Squaw Valley Rd.
7-11 Driveway
Squaw Park
Driveway
SQUAW VALLEY RD
LEGEND
Turning Movement
Stop Sign
Traffic Signal
1566 Summer Friday PM Volumes
(701) Summer Weekend Mid-Day Volumes
[701] Winter Weekend PM Volumes
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Existing Daily Traffic Volumes

Finally, Average Daily Traffic volumes on SR 89 are estimated, for purposes of the roadway capacity analysis. Consistent with other recent traffic studies in the Squaw Valley area, the ADT is estimated by applying a factor to the peak-hour volume. This factor is estimated based on data obtained from Caltrans at various locations, as well as daily winter counts conducted on Squaw Valley Road. The existing ADT on SR 89 to the north of Squaw Valley Road tends to be higher than that to the south. The ADT to the north falls between 15,000 and 17,000 on typical busy days, while the ADT to the south ranges from about 13,000 to 15,000.

Existing Transit Services

There are a number of publicly operated or funded transit programs serving the Squaw Valley area:

- Tahoe Area Regional Transit (TART), operated by Placer County Department of Public Works, serves stops along SR 89 at Squaw Valley Road and at the Village at Squaw Valley area as part of the Highway 89 Route between Tahoe City and Truckee. This service is operated in both directions every hour 6:00 AM to 7:00 PM. All TART services were recently made free to passengers.

- The "Night Rider" service operated under contract of the Truckee-North Tahoe Transportation Management Association provides hourly evening service from these stops to Squaw Valley and Tahoe City (and beyond) as late as 2:00 AM in summer and winter.

In addition, the following private transit services are provided in the vicinity of the project site:

- Squaw Valley Ski Resort operates the "Squaw-Alpine Express" every 20 minutes during periods of ski lift operations between the Squaw Valley Village area and the Alpine Meadows Ski Resort base area.

- The Resort at Squaw Creek operates a shuttle service between the Resort and the Squaw Valley Village area, throughout the year.

- The Mountaineer offers an intra-valley transit program in partnership with Downtowner and the non-profit Squaw Alpine Transit Company (SATCo). Mountaineer provides free transportation for residents and guests visiting Squaw Valley and Alpine Meadows. It operates during the winter ski season (currently from December 13, 2019 - April 12, 2020) with the following hours:

    - Squaw Valley Hours: 7 AM - 10 PM daily
    - Alpine Meadows Hours: 8 AM – 5 PM Saturday & Sunday
    - Alpine Meadows Additional Dates: 12/26, 12/27, 12/30, 12/31, 1/20, 2/17

  In 2019 (December 1 to April 30), this service had over 81,000 passengers and over 43,000 rides. Of the rides in Squaw Valley, roughly 40 percent originated in the Village area and the remainder were fairly evenly-disbursed throughout the valley. For destinations, roughly 40 percent of rides ended in the Village area, 12 percent ended at the Resort at Squaw Creek and the remainder were fairly evenly-disbursed throughout the valley.

- The “North Lake Tahoe Express” is a shuttle service connecting the North Tahoe area (including Squaw Valley) with the Reno Tahoe International Airport. This service operates four runs per day in each direction during the summer and winter seasons, and three runs per day in the spring and fall. It provides an opportunity for visitors to access the Squaw Valley area, without the need to rent a car.

Public transit stops are provided on both sides of Squaw Valley Road, adjacent to the project site. A shelter and a bus pullout are provided at the stop on the north side.

Existing Bicycle and Pedestrian Facilities

The Tahoe City Public Utility District’s Truckee River Trail parallels SR 89 between Tahoe City and Squaw Valley Road, crossing Squaw Valley Road at grade on the south leg of the SR 89/Squaw Valley Road intersection. The trail continues westward through the project site (and along the south side of the fire station) and through Squaw Valley paralleling Squaw Valley Road from Squaw Creek Road to a point opposite the eastern driveway of the post office (east of Far East Road). This consists of a paved Class I facility popular with both cyclists and pedestrians. In addition, a portion of Squaw Valley Road between SR 89 and Squaw Creek Road (including the project frontage) is striped as a Class II facility. At present, there is a Class II bicycle lane along the SR 89 corridor between Squaw Valley and Truckee, though Placer County is actively pursuing construction of a Class I facility along this corridor.

Existing Traffic and Parking Management Plan

Under an agreement with Placer County signed in 1998, the Squaw Valley Development Company actively manages traffic on Squaw Valley Road on peak winter days. This includes providing a second travel lane in the peak direction (westbound in the morning and eastbound in the afternoon) between the base area and Squaw Creek Road, and provision of flaggers at key residential intersections. Partial or full implementation of the management plan is dependent on expected traffic volumes.

Existing Driver Sight Distance

Driver sight distance conditions at the site driveway are reviewed. Within the site vicinity, Squaw Valley Road consists of two through lanes in each direction and has a posted speed limit of 35 mph. No driver sight distance concerns are identified for turns made from the site driveway. However, the sight distance for drivers making a left turn into the site is evaluated. There is no designated left-turn lane on Squaw Valley Road for turns entering the site. The intersection sight distance (ISD) for drivers in the westbound travel lane on Squaw Valley Road making a left turn into the site is approximately 425 feet. The ISD is limited to 425 feet by existing trees along the north side of Squaw Valley Road and the horizontal curvature of the roadway. Left-turning drivers need sufficient sight distance to decide when to turn left across the lanes used by opposing traffic. According to the American Association of State Highway Transportation Officials’ (AASHTO) *A Policy on Geometric Design of Highways and Streets, 7th Edition* (2018), the minimum ISD value for left turns from Squaw Valley Road is calculated to be 355 feet, assuming a design speed of 40 mph. As such, the existing ISD meets and exceeds the minimum distance.

Existing Parking Conditions

The existing Squaw Valley Park parking lot has a total of 116 spaces (61 in the upper/western area and 55 in the lower/eastern area). These figures reflect conditions with the recently completed “pickle ball” courts. Parking counts were conducted by LSC staff in August of 2019. The counts occurred on a Friday, Saturday, and Sundays from 9:00 AM to 6:30 PM (Sunday count was 9:00AM to 4:30 PM) at half-hour intervals. Prior to the counts, an inventory of available spaces was performed. The parking count data is included in Appendix A. The peak parking demand was observed to occur on Saturday August 17, 2019 at 1:00 and 3:30 PM, when 58 vehicles (53% utilization) were observed to be parked. In previous years, the existing parking lot was closed and gated during the winter season. However, since the winter of 2017/2018, the parking lot has been open and plowed. The soccer fields and playground are not plowed and do not generate traffic during the winter months. It is assumed that a small number of vehicles will use the parking lot as a meeting place, for snow play, or for parking to visit the Olympic torches at the corner of SR 89 and Squaw Valley Road.

Section 3
TRAFFIC GENERATION

The project location, the size of the project, and the time of the project completion are all important elements that need to be considered to determine the safety and capacity impacts of the development. It is also important to examine how the project will operate with the existing transportation system, estimate how much new traffic it will generate, identify how it would impact existing traffic patterns, and identify how traffic generated by the project site will be distributed. First, the trip generation of existing sporting events is analyzed. Next, the trip generation of the proposed project is estimated.

TRIP GENERATION OF EXISTING SPORTING EVENTS

The first step in the analysis of traffic associated with existing sporting events is to prepare an estimate of the number of one-way vehicle-trips generated by the events. Trip generation is the evaluation of the number of vehicle-trips that would either have an origin or destination at the project site. The trip generation of the sporting events is evaluated for a summer Friday and a summer weekend day. A detailed analysis is performed to estimate the vehicular trip generation of the field based on the number of players, coaches and spectators, factored by expected travel modes and vehicle occupancy rates. The following assumptions are applied:

- A typical busy summer Friday is assumed to include activities at the field from 4-6 PM, such as two 1-hour soccer or lacrosse practices back-to-back, with about 15 persons per practice (including players, coaches and spectators).

- For the existing recreation field, an occupancy rate of 1.8 players per vehicle is assumed for a weekday practice. This assumes about half the players carpool to/from practice. Approximately 75% of parents are assumed to drop off their children and return after practice to pick them up.

- Two Friday practices are assumed to occur on the field consecutively. The vehicle trips of the two practices overlap, as one practice starts immediately after the other practice ends.

- A typical busy summer Saturday is assumed to have a sporting event from 10 AM to 2 PM, such as a soccer or lacrosse tournament. To be conservative (conservatively high traffic and parking volumes), 3 one-hour games are assumed to occur consecutively during this period with a 30-minute break in between games.

- Approximately 15 players, 1 coach and 15 spectators per team are assumed.

- For weekend games, an average occupancy rate of 2.5 persons per vehicle is assumed. Approximately 90% of drivers (parents and/or spectators) are assume to stay for the entirety of the game.

Multiplying the number of persons by the number of one-way trips, dividing by the average vehicle occupancy rate and adding vehicle trips reflecting drop-off/pick-up activity yields a total of approximately 28 one-way vehicle trips (14 entering and 14 exiting) at the site driveway during the course of the Friday PM peak hour and approximately 59 one-way vehicle trips (30 entering and 29 exiting) during the Saturday mid-day peak hour. These volumes are added to the existing summer volumes to identify existing background conditions.

TRIP GENERATION OF PROPOSED MUSEUM

Project Description

The proposed museum building would provide about 15,000 square feet of use area for museum operations and a limited number of special events. The museum is anticipated to be open daily from 10 AM to 6 PM. A total of 6 employees (3 full-time and 3 part-time) are expected to report to the site over the course of a busy day. Visitation levels at the museum would vary by season, day of week, and time of day. Consistent with typical tourism trends, the highest visitation levels would generally occur during winter and summer peak/holiday periods. Friday through Sunday would typically be busier than Monday through Thursday.

Based on visitation data provided by Squaw Valley Ski Museum Foundation staff, approximately 300 visitors are anticipated over the course of a peak winter Sunday, and 225 on a peak summer day. Over the course of a peak day, the number of visitors at the museum would be highest during the afternoon period from about 3 PM to 6 PM. In addition, an average of 6 special events per year would be held at the museum, with up to 100 guests per event. Special events would occur in the evening, between 6 PM and 10 PM, in order to avoid peak traffic periods.

Access to the museum would be provided via the existing Squaw Valley Park driveway located on the south side of Squaw Valley Road immediately west of its intersection with SR 89. The existing parking lot would serve both the park and the museum.

Trip Generation of Museum

The first step in the analysis of future traffic impacts is to prepare an estimate of the number of one-way vehicle-trips generated by the proposed project. While standard trip generation rates for a museum are provided in the Institute of Transportation Engineers (ITE) *Trip Generation, 10th Edition* (2017) manual, the rates are based on data collected at only one museum. In order to provide a more accurate estimate of site-generated traffic, a detailed analysis is performed to estimate the vehicular trip generation of the museum based on the number of employees, visitors, and service vehicles, factored by expected travel modes and vehicle occupancy rates. The trip generation of the project is evaluated for typical museum operations on a winter Sunday, a summer Friday and a summer weekend day.

The trip generation analysis is summarized in Table 1. The following assumptions are applied:

- Some visitors are expected to make trips to/from the site via non-auto modes, such as transit trips. Considering the site's location along the TART transit route and the winter Mountaineer and Squaw Valley-Alpine Meadows skier shuttle service, approximately 4 percent of visitor trips to/from the museum during the winter are assumed to be made by non-auto modes. Given that the site is also served by a Class I trail (bike path) in the summer, approximately 15 percent of visitor trips on a summer day are assumed to be made via non-auto modes.

- About 5 percent of employee trips are assumed to be made via non-auto modes during the winter and summer.

TABLE 1: Squaw Valley Olympic Museum - Trip Generation at Site Driveway

Description	ITE Code	ITE Land Use	Quantity	Units	Gener Daily	Peak In	Peak Out	Peak Total	Trips at PM Peak Hour Daily	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total
Proposed Project [3]												
Squaw Valley Olympic Museum												
- Peak Summer Friday	-	-	15.00	KSF	person trip analysis				203	6	22	28
- Peak Summer Saturday					person trip analysis				268	7	30	37
- Peak Winter Sunday	-	-	15.00	KSF	person trip analysis				301	8	33	41

KSF = 1,000 square feet of floor area

Note: Excludes special events at museum.

Note 1: Trip generation rates are based on a person-trip analysis as Trip Generation, 10th Edition (ITE, 2017) does not have sufficient data.

Note 2: These are not all "new" trips to the roadway network. See discussion in text report.

Note 3: Attendees are per practice/game. During the peak hour there is overlap of attendees between practices/games, plus percentage of parents dropping off and picking up

Source: LSC Transportation Consultants, Inc.

- An average vehicle occupancy rate of 2.1 visitors per vehicle is assumed, consistent with other recent studies. Museum employees traveling via private automobile are assumed to have an average vehicle occupancy rate of 1 employee per vehicle, conservatively.

- About half of the employees are assumed to make one round-trip off the site during the work day for lunch, errands, etc.

- Approximately 2 service/delivery vehicles are anticipated to visit the site over the course of a busy day.

Trip Generation at Site Driveway

Multiplying the number of person-trips by the auto mode split and dividing by the average vehicle occupancy rate yields the number of one-way vehicle trips generated at the site driveway. Adding the visitor, employee, and service/delivery vehicle trips yields a total of approximately 301 daily one-way vehicle trips on a winter Sunday, 203 daily trips on a summer Friday and 268 daily trips on a summer Saturday. Note that these are not all 'new' trips on the surrounding roadway network, as discussed later in this chapter.

To estimate the portion of total daily trips that occur during the PM peak hours, an average 'PM-to-daily' trip factor of approximately 13.7 percent is applied. This factor is derived from a review of PM-to-daily factors for similar land use types in the ITE Trip Generation manual. The resulting number of PM peak-hour one-way trips generated by the proposed museum is approximately 41 (8 entering and 33 exiting) on a winter Sunday, 28 (6 entering and 22 exiting) on a summer Friday and 37 (7 entering and 30 exiting) during the weekend mid-day peak hour.

Trip Generation of Special Events

Museum staff indicates that special events are planned to occur in the evening starting at or after 6 PM. The following assumptions are applied:

- A special event is assumed to have 100 guests and about 10 staff.

- Considering that special events would occur in the evening and that guests could be coming from outside Squaw Valley, all guests are assumed to arrive via automobile. About 5 percent of event staff trips are assumed to be made via non-auto modes during the winter and summer.

- An additional 2 service/delivery vehicles are assumed to be associated with a special event.

Multiplying the number of person-trips by the auto mode split and dividing by the average vehicle occupancy rate yields the number of one-way vehicle trips generated at the site driveway. Adding the guest, staff, and service/delivery vehicle trips yields a total of approximately 119 daily one-way vehicle trips generated at the site driveway by a special event.

TRIP DISTRIBUTION AND ASSIGNMENT

The distribution of traffic arriving and departing the site is estimated based on existing traffic patterns, regional access patterns, and the location of the site relative to residential, commercial and recreational uses. The majority (60% - 65%) of existing sporting event trips are assumed to be made to/from points south on SR 89 (such as the Tahoe City area).

The estimated distribution pattern for the museum project-generated trips during the winter and summer is shown in Table 2. During the winter, more than half (approximately 65 percent) of trips entering the site are estimated to be made from points in Squaw Valley. More than half (60 percent) of trips leaving the site are assumed to head north on SR 89 toward Truckee. During the summer Friday PM, 45 percent of inbound project trips are estimated to come from Truckee, while 35 percent would come from the Lake Tahoe area). These percentages are reversed for outbound trips, with 45 percent going toward Lake Tahoe and 35 percent toward Truckee. The estimated trip distribution for a summer Saturday is fairly similar, as shown in the table.

TABLE 2: Squaw Valley Olympic Museum - Trip Distribution

	Distribution of Project Traffic					
	Winter Sunday		Summer Friday		Summer Saturday	
Origin/Destination	Inbound	Outbound	Inbound	Outbound	Inbound	Outbound
Squaw Valley Rd West of Project	65%	10%	15%	15%	20%	20%
Seven 11/Retail Center	5%	5%	5%	5%	5%	5%
SR 89 North of Squaw Valley Rd	14%	60%	45%	35%	38%	38%
SR 89 South of Squaw Valley Rd	16%	25%	35%	45%	37%	37%
TOTAL	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

Source: LSC Transportation Consultants, Inc.

Adjustment for Pass-by Trips

A portion of trips associated with the museum are expected to be "pass-by" trips, or trips attracted from traffic passing the site on SR 89 or Squaw Valley Road. Pass-by trips generate traffic on the access driveway, but do not add new traffic on regional roadways (as they are made by vehicles already passing by the site that will divert to the new land use as part of a longer trip). As an example, tourists passing by the site along SR 89 might decide to stop at the site, thereby generating new trips on Squaw Valley Road and the site access driveway but not generating new trips along SR 89. (This is technically called a "diverted-link" trip, given that the site driveway does not front on the highway. However, for simplicity, it is referred to as a pass-by trip.)

Data on the proportion of trips that are pass-by have been collected for a variety of land uses. As examples, the following are the average observed pass-by percentages as reported in the ITE *Trip Generation Handbook*:

- Variety Store – 34 percent
- Supermarket – 36 percent
- Shopping Center (Saturday, Mid-day) – 26 percent

Unfortunately, there is no available published data on the pass-by proportion for a museum. In estimating an appropriate value, the following was considered:

- The proposed museum is relatively modest in size compared with a large museum in an urban area. Rather than being a day-long activity, a relatively short stay can be expected[1]. This would indicate that many visitors will stop by the museum as part of longer trips with multiple destinations.

- The location along the access route to Squaw Valley, Alpine Meadows (and other ski areas) means that much of the traffic on the adjacent roadways consists of skiers that would have a relatively high level of interest in visiting a museum dedicated to the Winter Olympics. In particular, a pattern of stopping by the museum at the end of a ski day would be expected.

- Many summer visitors to the region make multiple stops as part of a day trip exploring the area. The Museum would be a logical additional stop along a longer such trip.

The portion of pass-by trips generated during typical operations at the museum is estimated as follows:

On a busy **winter Sunday**:

- The portion of museum trips coming from Truckee and stopping at the museum as a part of a longer trip to Lake Tahoe is expected to be relatively minimal.

- The portion of museum trips coming from Lake Tahoe (or Alpine Meadows) and stopping at the museum as a part of a longer trip to Truckee is expected to be about 10 percent.

[1] As an example, surveys of visitors to the existing Tahoe Maritime Museum indicate an average length of stay of 2 hours.

- The portion of museum patrons already turning onto Squaw Valley Road to enter Squaw Valley and stopping at the museum on their way into Squaw Valley is estimated to be about 10 percent.

- The portion of museum patrons exiting Squaw Valley that are stopping at the museum is expected to be about 20 percent.

Overall, about 16 percent of project-generated external trips on a winter Sunday are estimated to consist of pass-by traffic.

On a busy **summer day**:

- The portion of museum trips coming from Truckee and stopping at the museum as a part of a longer trip to Lake Tahoe is expected to be about 25 percent.

- The portion of museum trips coming from Lake Tahoe and stopping at the museum as a part of a longer trip to Truckee is expected to be about 25 percent.

- The propensity for museum patrons already entering Squaw Valley and stopping at the museum on their way into Squaw Valley is estimated to be about 20 percent.

- The propensity for museum patrons to stop at the museum on their way out of Squaw Valley during the summer is expected to be about 15 percent.

Overall, about 25 percent of project-generated external trips on a summer day are estimated to consist of pass-by traffic.

New Trips on Regional Roadways

The project trips are assigned to the study intersections by applying the trip distribution pattern to the project trips from Table 1. The reductions for pass-by trips are allocated to the various roadways based on existing traffic patterns. Subtracting the number of pass-by trips from the total external trips yields the number of “new” trips generated on external roadways. The proposed project is estimated to generate approximately 278 new one-way daily vehicle trips on the adjacent roadways over the course of a busy winter Sunday, and 177 new trips on a busy summer day, without a special event.

Applying the distribution patterns presented in Table 2 to the project-generated trips shown in Table 1 yields the resulting project-generated winter PM and summer PM intersection turning movement volumes illustrated in Figure 3. In order to remain conservative in the traffic operational analysis, no pass-by reductions are applied to the peak-hour intersection volumes, considering that the site-generated volumes are relatively low. Adding the project-generated volumes to the existing volumes (including sporting events) yields the total traffic volumes with the project, which are shown in Figure 4.

Figure 3
Project Generated
140 70 0 140 Feet
1 SR 89/Squaw Valley Rd.
2 Squaw Valley Rd./ 7-11 Driveway
3 Squaw Valley Rd./ Squaw Park Driveway
Squaw Valley Rd.
7-11 Driveway
Squaw Park Driveway
SQUAW VALLEY RD
89
LEGEND
Turning Movement
Stop Sign
Traffic Signal
1566 Summer Friday PM Volumes
(701) Summer Weekend Mid-Day Volumes
[701] Winter Weekend PM Volumes
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Figure 4
Existing Plus Project
LSC TRANSPORTATION CONSULTANTS, INC.
140 70 0 140 Feet
SQUAW VALLEY RD
89
1
2
3
1 SR 89/Squaw Valley Rd.
[144] [196] (181) (658) [0] (1) 161 429 3
0 (1) [0]
0 (0) [0]
1 (0) [0]
Squaw Valley Rd.
[683] (149) 204
[0] (1) 0
[227] (186) 188
161 (133) [154] 528 (461) [699] 0 (3) [0]
2 Squaw Valley Rd./ 7-11 Driveway
[27] (29) 25
[6] (22) 5
7-11 Driveway
20 (21) [15]
302 (293) [283]
Squaw Valley Rd.
[38] (32) 20
[905] (314) 387
3 Squaw Valley Rd./ Squaw Park Driveway
302 (258) [303]
25 (64) [7]
Squaw Valley Rd.
Squaw Park Driveway
[909] (267) 369
[10] (7) 4
6 (13) [8] 38 (79) [34]
LEGEND
Turning Movement
Stop Sign
Traffic Signal
1566 Summer Friday PM Volumes
(701) Summer Weekend Mid-Day Volumes
[701] Winter Weekend PM Volumes
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Section 4
FUTURE CUMULATIVE CONDITIONS

The potential transportation impacts of the proposed museum project are evaluated under long-term (20-year horizon) cumulative conditions. First, future cumulative traffic volumes are estimated without the project. Next, future cumulative volumes with the project are estimated.

FUTURE CUMULATIVE TRAFFIC VOLUMES

The future cumulative winter peak-hour traffic volumes provided in the *Base-to-Base Gondola EIR* (SE Group & Ascent Environmental, Inc., April 5, 2019) ('future plus project' scenario) are used as the basis for the long-term future winter volumes for this study.

The future cumulative summer peak-hour traffic volumes provided in the approved *Village at Squaw Valley Specific Plan EIR* (Ascent Environmental, Inc., May 2015) ('future plus Village project' scenario) are used as the basis for the long-term future summer Friday volumes for this study. Those volume forecasts assume a 20-percent growth in traffic levels on SR 89, in accordance with the *State Route 89 Transportation Corridor Concept Report* (Caltrans, 2012), as well as 569 new dwelling units in Olympic Valley. As summer weekend volumes are not provided in that EIR, it is necessary to estimate them as a part of this study. These volumes are estimated by adjusting the future Friday PM volumes based on a comparison of the existing summer Friday PM volumes and the existing weekend mid-day volumes. Finally, the traffic volumes estimated to be generated by existing sporting events at the park are added to the background volumes. No future changes to the park facilities and activities are assumed.

The resulting future cumulative intersection volumes without the proposed project are shown in Figure 5. Adding the project-generated volumes to these volumes yields the 'future with project' volumes presented in Figure 6.

Figure 5
Future No Project
140 70 0 140 Feet
LSC TRANSPORTATION CONSULTANTS, INC.
1 SR 89/Squaw Valley Rd.
[194] [246]
(409) (938) [0]
340 611 (3)
3
1 (1) [0]
2 (2) [0]
0 (0) [0]
89
Squaw Valley Rd.
[1135] (490) 406
[0] (2) 2
[344] (400) 328
318 611 1
(390) (533) (1)
[178] [662] [0]
2 Squaw Valley Rd./ 7-11 Driveway
[27] [5]
(29) (22)
25 5
20 (21) [15]
640 (780) [357]
7-11 Driveway
Squaw Valley Rd.
[36] (30) 19
[1474] (870) 731
3 Squaw Valley Rd./ Squaw Park Driveway
645 (751) [379]
20 (58) [5]
Squaw Park Driveway
Squaw Valley Rd.
[1505] (845) 731
[5] (6) 3
3 19
(7) (55)
[5] [5]
SQUAW VALLEY RD
89
LEGEND
Turning Movement
Stop Sign
Traffic Signal
1566 Summer Friday PM Volumes
(701) Summer Weekend Mid-Day Volumes
[701] Winter Weekend PM Volumes
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

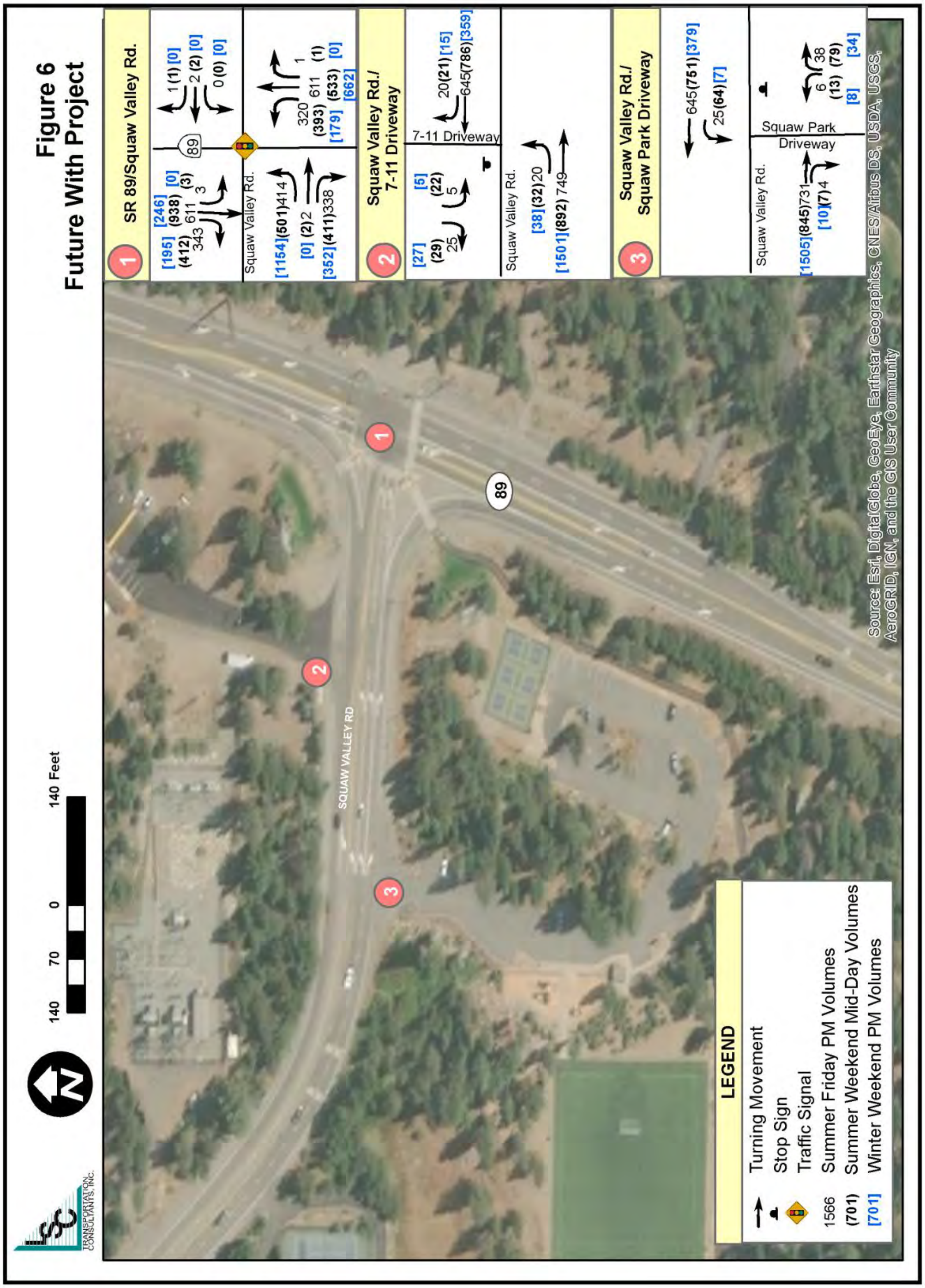
Figure 6
Future With Project
140 70 0 140 Feet
1 SR 89/Squaw Valley Rd.
2 Squaw Valley Rd./ 7-11 Driveway
3 Squaw Valley Rd./ Squaw Park Driveway
Squaw Valley Rd.
7-11 Driveway
Squaw Park Driveway
SQUAW VALLEY RD
LEGEND
Turning Movement
Stop Sign
Traffic Signal
1566 Summer Friday PM Volumes
(701) Summer Weekend Mid-Day Volumes
[701] Winter Weekend PM Volumes
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

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Section 5
LEVEL OF SERVICE AND ROADWAY CAPACITY

DESCRIPTION

Traffic operations at the study intersections are assessed in terms of Level of Service (LOS) and delay. LOS is a concept that was developed by transportation engineers to quantify the level of operation of intersections and roadways (*Highway Capacity Manual*, Transportation Research Board, 2010). LOS measures are classified in grades "A" through "F," indicating the range of operation. LOS "A" signifies the best level of operation, while "F" represents the worst. A detailed description of LOS criteria is provided in Appendix B.

For signalized intersections, LOS is primarily measured in terms of average delay per vehicle entering the intersection. LOS at unsignalized intersections is quantified in terms of delay per vehicle for movements yielding the right-of-way. Unsignalized intersection LOS is based upon the theory of gap acceptance for side-street stop sign-controlled approaches, while signalized intersection LOS is based upon the assessment of volume-to-capacity ratios and control delay.

LEVEL OF SERVICE STANDARDS

The LOS thresholds applicable to the study area are discussed below.

Caltrans

According to the *SR 89 Transportation Corridor Concept Report* (Caltrans District 3, April, 2012), the minimum acceptable LOS along SR 89 over the next 20 years is "E."

Placer County

Placer County defines its LOS standard as "D" for locations within one-half mile of a state highway, and "C" for other locations in the study area. Roadway LOS is measured according to ADT per travel lane, using a lookup table provided in the *Placer County Congestion Management Plan*. For the study area, Placer County requires evaluation of summer or winter ADT, whichever is higher. According to County policy, the County's LOS standards for the state highway system shall be no worse than those adopted in the Placer County Congestion Management Program (CMP). The LOS standard in the CMP for roadways and signalized intersections located along state highways is "E." If worst movement LOS at an unsignalized intersection in Placer County exceeds LOS standards, a "Peak-Hour" signal warrant analysis, consistent with the Manual of Uniform Traffic Control Devices (MUTCD), is required. If the intersection attains minimum signal warrant volumes, mitigation is required.

The segments of SR 89 (located in Placer County) are measured against the Caltrans standard of LOS E, as Placer County typically defers to Caltrans LOS standards on State facilities.

Placer County may allow exceptions to its LOS standards where it finds that the improvements or other measures required to achieve the LOS standards is unacceptable based on established criteria. In allowing any exceptions to established LOS standards, the County shall consider the following factors:

- The number of hours per day that the intersection or roadway segment would operate the conditions worse than the standard.

- The ability of the required improvement to significantly reduce peak-hour delay and improve traffic operations.

- The right-of-way needs and the physical impacts on surrounding properties.

- The visual aesthetics of the required improvement and its impact on community identity and character.

- Environmental impacts including air quality and noise impacts.

- Construction and right-of-way acquisition costs.

- The impacts on general safety.

- The impacts of the required construction phasing and traffic maintenance.

- The impacts on quality of life as perceived by residents.

- Consideration of other environmental, social or economic factors on which the County may base findings to allow exceedance of the standards.

Exceptions to the standards will only be allowed after all feasible measures and options are explored, including alternative forms of transportation.

Finally, Placer County recently adopted an "Impact Analysis Methodology of Assessment" for County roadways and intersections (including State facilities) to ensure that mitigation measures are proportionate to the level of impact a specific project has on an intersection or roadway. The methodology document is included in Appendix C. This methodology establishes guidelines for when a project may be considered to exceed the minimum LOS policies.

For roadway segments, *"a project may be considered to exceed the minimum LOS policies if:*

1. *A roadway segment operating at or above the established Placer County policy without the project traffic trips will decrease to an unacceptable LOS with the project;* ***or***

2. *A roadway segment currently operating below the established acceptable LOS policy will experience an increase in V/C (volume to capacity) ratio of 0.05 or greater with the project;* ***or***

3. *A roadway segment currently operating below the established acceptable LOS policy experiences an increase in ADT of 100 or more project generated trips, per lane."*

For signalized intersections, *"a project may be considered to exceed the minimum LOS policies if:*

1. *An intersection operating at or above the established Placer County policies without the project traffic trips will decrease to an unacceptable LOS with the project;* ***or***

2. *An intersection currently operating below the established acceptable LOS policy will experience an increase in V/C (volume to capacity) ratio of 0.05 (5%) or greater;* ***or***

3. *An intersection currently operating below the established acceptable LOS policy will experience an increase in overall average intersection delay of 4 seconds or greater."*

For unsignalized intersections, *"a project may be considered to exceed the minimum LOS policies if:*

1. *An all way stop or side street controlled intersection, which currently operates at or above the established Placer County policies without the project, will deteriorate to an unacceptable LOS with the project and cause the intersection to meet MUTCD traffic signal warrant(s)* ***or***

2. *An all way stop or side street controlled intersection which currently operates below the established acceptable LOS policy and meets MUTCD traffic signal warrant(s) will experience an increase of 2.5 seconds or more with the project.*

Further consideration will be given in situations where the existing level of service is just above or at the approved minimum level of service and any increase in vehicle trips, or even daily fluctuations in traffic, will deteriorate the level of service to an unacceptable level. In such cases, it may be determined by the County that part (2) or (3) of the above exceptions is more applicable and should be used to analyze a proposed project's impacts."

ANALYSIS METHODOLOGY AND ASSUMPTIONS

In order to reflect the effects of the downstream lane drop on SR 89 to the north of Squaw Valley Road, the yield-controlled right-turn movements, and the queuing between the closely-spaced intersections along Squaw Valley Road, a microscopic traffic simulation was created for the study area using the SimTraffic software package (Version 10, TrafficWare). The intersection LOS analysis is based on the results of the simulation. Computer output of the simulation runs is provided in Appendix D.

INTERSECTION LEVEL OF SERVICE ANALYSIS

Intersection LOS is evaluated at the signalized SR 89/Squaw Valley Road intersection and at the unsignalized "T" intersection formed by the site driveway and Squaw Valley Road. These intersections are evaluated to determine existing and future cumulative operational conditions during the winter PM, summer PM and summer weekend mid-day peak hours, with and without the proposed project. The results are summarized in Table 3.

Existing Year Intersection LOS

As indicated, the two intersections currently operate at an acceptable LOS C or better during the winter and summer peak hours. Implementation of the proposed project under existing year conditions would not affect the LOS at the SR 89/Squaw Valley Road intersection, although the average vehicular delays would increase slightly. The site access intersection would operate at an acceptable LOS C or better. As such, no intersection LOS deficiencies are identified under existing year conditions, with or without the proposed project.

Table 3: Squaw Valley Olympic Museum - Intersection LOS Summary

Scenario	Intersection	Control	No Project Delay (sec/veh)	No Project LOS	With Project Delay (sec/veh)	With Project LOS
Existing Year						
Winter PM	SR 89 / Squaw Valley Road [1]	Signal	14.3	B	14.5	B
Winter PM	Squaw / Site Access [2]	Stop	15.6	C	9.1	A
Summer Friday PM	SR 89 / Squaw Valley Road [1]	Signal	9.5	A	9.6	A
Summer Friday PM	Squaw / Site Access [2]	Stop	3.8	A	4.1	A
Summer Weekend Mid-Day	SR 89 / Squaw Valley Road [1]	Signal	10.4	B	12.0	B
Summer Weekend Mid-Day	Squaw / Site Access [2]	Stop	3.8	A	4.3	A
Future Year						
Winter PM	SR 89 / Squaw Valley Road [1]	Signal	31.6	C	31.2	C
Winter PM	Squaw / Site Access [2]	Stop	**OVF**	**F**	**OVF**	**F**
Summer PM	SR 89 / Squaw Valley Road [1]	Signal	34.7	C	29.3	C
Summer PM	Squaw / Site Access [2]	Stop	8.7	A	11.1	B

BOLD text indicates that LOS standard has been exceeded.

OVF = Overflow. Overflow indicates a delay greater than 200 seconds per vehicle, which cannot be accurately calculated.

NOTE: Future summer weekend LOS would be no worse than summer Friday, as the volumes would be lower.

NOTE 1: Level of service for signalized intersections is reported for the total intersection.

NOTE 2: Level of service for unsignalized intersections is reported for the worst movement.

Source: LSC Transportation Consultants, Inc. *Squaw Olympic.xlsx*

Future Cumulative Intersection LOS

Although the forecasted growth in background traffic (including traffic generated by the approved Village at Squaw Valley Specific Plan Project and the proposed Base-to-Base Gondola Project) would cause the LOS to degrade under some scenarios, the SR 89/Squaw Valley Road intersection would continue to operate within the applicable LOS thresholds without the proposed project. However, the forecasted growth in background traffic would degrade the site access approach on Squaw Valley Road to LOS F during winter PM peak periods when skier traffic is exiting the valley. Although average driver delays would increase slightly with implementation of the proposed project, the SR 89/Squaw Valley Road intersection would continue to operate at an acceptable LOS, while the site driveway would continue to operate at LOS F in the winter PM. No LOS deficiencies are identified during the summer, with or without the project.

According to the County's methodology of assessment for unsignalized intersections, "a project may be considered to exceed the minimum LOS policies if a side-street-controlled intersection (such as the site access intersection) which currently operates below the established acceptable LOS policy and meets MUTCD traffic signal warrant(s) will experience an increase in delay of 2.5 seconds or more with the project. As the 'future with project' peak-hour traffic volumes at this intersection do not meet the MUTCD's peak-hour volume signal warrant criteria, the proposed project would not exceed the County's minimum LOS policies at the Squaw Valley Road/Site Access intersection.

INTERSECTION QUEUING ANALYSIS

Traffic queues at specific intersections that exceed the storage capacity of turn lanes or ramps, or that block turn movements at important nearby intersections or driveways can cause operational problems beyond those identified in the LOS analysis. The 95th-percentile traffic queue lengths (the length that is only exceeded 5 percent of the time during the analysis period) were reviewed at intersection locations where queuing could potentially interfere with adjacent roads or driveways. The results of the simulation indicate no existing traffic queuing concerns at the two study intersections, except left turns from the 7-11 driveway onto Squaw Valley Road are currently hindered by the eastbound traffic queues forming at the signal during winter PM periods. Implementation of the proposed project in the existing year is not expected to materially affect the traffic queue lengths during winter or summer PM peak periods.

Under future cumulative conditions without the proposed project, eastbound traffic queues on Squaw Valley Road are expected to be notably longer than under existing year conditions. Left turns from the 7-11 driveway would continue to be hindered by this queue during winter periods. These turns would also be hindered during summer peak periods. Additionally, the 95th-percentile queues on eastbound Squaw Valley Road would block turns from the site driveway during winter PM peak periods, as well as left turns into the site. The average (50th-percentile) queues would not be expected to block the site driveway. Finally, although the 95th-percentile queue lengths in the northbound and southbound left-turn lanes on SR 89 would exceed the available storage length during some future peak periods, the proposed project would not be expected to exacerbate this issue.

ROADWAY CAPACITY

Roadway capacity is evaluated in order to determine whether a specific roadway segment should be widened to accommodate existing or future traffic volumes. Different methodologies can be employed to determine capacity, but generally, the calculation will incorporate a series of factors including roadway facility type, evaluation period, and level of service thresholds. The roadway LOS was determined by applying the Placer County standard to the Average Daily Traffic volume (ADT). Placer County policy on roadway LOS defers to the Caltrans concept LOS standard for state highways. Therefore, the roadway LOS for SR 89 is evaluated against the Caltrans LOS standard of LOS E. The LOS threshold and estimated ADT for SR 89 north and south of Squaw Valley Road are shown in Table 4, along with the maximum allowable traffic volumes to obtain the LOS threshold. As shown in the table, SR 89 would operate within the LOS thresholds under all existing year scenarios, with or without the proposed project.

Roadway LOS under future cumulative conditions is summarized in Table 5. SR 89 would continue to operate within the LOS thresholds under all winter future cumulative analysis periods, with or without the proposed project. However, summer future cumulative conditions exceed the threshold at SR 89 immediately north of Squaw Valley Road, due to growth in future background traffic. According to the County's methodology of assessment for roadway segments, *"a project may be considered to exceed the minimum LOS policies if:*

1. *A roadway segment operating at or above the established Placer County policy without the project traffic trips will decrease to an unacceptable LOS with the project;* ***or***

2. *A roadway segment currently operating below the established acceptable LOS policy will experience an increase in V/C (volume to capacity) ratio of 0.05 or greater with the project;* ***or***

3. *A roadway segment currently operating below the established acceptable LOS policy experiences an increase in ADT of 100 or more project generated trips, per lane."*

Condition 1 does not apply to this segment, as it operates below the standard under 'future no project' conditions. Condition 2 is not met, as the increase in V/C due to the project is calculated to be less than 0.01. Regarding Condition 3, the increase in ADT on this segment in the summer is estimated to be about 70, which is less than the 100 ADT threshold. Therefore, the proposed project would not exceed the County's minimum LOS policies on SR 89 immediately north of Squaw Valley Road.

TABLE 4: 2019 Squaw Valley Olympic Museum - Existing Roadway LOS

Roadway Segments	Classification	LOS Threshold	Peak-Hour Two Way Volume	Peak-Hour Peak-Direction Volume	ADT	Maximum Allowable Two-way ADT to Obtain LOS Threshold	LOS Threshold Exceeded?
Existing No Project							
Winter							
SR 89 immediately north of Squaw Valley Rd	Rural Highway-Level	E	1,702	1,363	15,370	25,000	No
SR 89 immediately south of Squaw Valley Rd	Rural Highway-Level	E	1,267	852	14,490	25,000	No
Summer Friday PM							
SR 89 immediately north of Squaw Valley Rd	Rural Highway-Level	E	1,314	724	15,270	25,000	No
SR 89 immediately south of Squaw Valley Rd	Rural Highway-Level	E	1,295	687	13,140	25,000	No
Summer Weekend Mid-Day							
SR 89 immediately north of Squaw Valley Rd	Rural Highway-Level	E	1,437	837	16,700	25,000	No
SR 89 immediately south of Squaw Valley Rd	Rural Highway-Level	E	1,427	833	14,480	25,000	No
Existing With Project							
Winter							
SR 89 immediately north of Squaw Valley Rd	Rural Highway-Level	E	n/a	n/a	15,473	25,000	No
SR 89 immediately south of Squaw Valley Rd	Rural Highway-Level	E	n/a	n/a	14,547	25,000	No
Summer Friday PM							
SR 89 immediately north of Squaw Valley Rd	Rural Highway-Level	E	n/a	n/a	15,341	25,000	No
SR 89 immediately south of Squaw Valley Rd	Rural Highway-Level	E	n/a	n/a	13,211	25,000	No
Summer Weekend Mid-Day							
SR 89 immediately north of Squaw Valley Rd	Rural Highway-Level	E	n/a	n/a	16,771	25,000	No
SR 89 immediately south of Squaw Valley Rd	Rural Highway-Level	E	n/a	n/a	14,551	25,000	No

Source: LSC Transportation Consultants, Inc.

TABLE 5: Squaw Valley Olympic Museum - Future Cumulative Roadway LOS

Roadway Segments	Classification	LOS Threshold	Peak-Hour Two Way Volume	Peak-Hour Peak-Direction Volume	ADT	Maximum Allowable Two-way ADT to Obtain LOS Threshold	LOS Threshold Exceeded?
Future Without Project							
Winter							
SR 89 immediately north of Squaw Valley Rd	Rural Highway-Level	E	2,237	1,797	20,210	25,000	No
SR 89 immediately south of Squaw Valley Rd	Rural Highway-Level	E	1,430	840	16,350	25,000	No
Summer							
SR 89 immediately north of Squaw Valley Rd	Rural Highway-Level	E	2,374	1,350	27,600	25,000	**Yes**
SR 89 immediately south of Squaw Valley Rd	Rural Highway-Level	E	2,262	1,338	22,950	25,000	No
Future With Project							
Winter							
SR 89 immediately north of Squaw Valley Rd	Rural Highway-Level	E	n/a	n/a	20,313	25,000	No
SR 89 immediately south of Squaw Valley Rd	Rural Highway-Level	E	n/a	n/a	16,407	25,000	No
Summer							
SR 89 immediately north of Squaw Valley Rd	Rural Highway-Level	E	n/a	n/a	27,671	25,000	**Yes**
SR 89 immediately south of Squaw Valley Rd	Rural Highway-Level	E	n/a	n/a	23,021	25,000	No

Note: 'With Project' ADT calculated from daily project-generated volumes less pass by, then added to 'No Project' ADT.

Source: LSC Transportation Consultants, Inc.

In this section, parking demand is calculated under typical busy museum operations, without a special event. Next, an analysis of special event parking demand is provided. Finally, the parking demand is compared to the parking supply, in order to determine the overall parking balance on the site. Bicycle parking requirements are also addressed.

PARKING ANALYSIS

Parking Demand

The Placer County Zoning Code (Section 17.54.060) provides a standard parking rate for a museum of 1 space per 400 square feet of use area. Appling this rate to the proposed museum square footage of 15,000 square feet yields a total parking demand of 38 spaces.

The parking demand of the proposed project can also be estimated based on the anticipated visitation and employee activity, factored by expected travel modes and vehicle occupancy rates. A review of the visitation data provided by the Museum Foundation indicates a maximum of 425 visitors over the course of a peak winter day (Saturday), with only 305 on a peak summer Saturday. Applying the assumptions regarding employees, travel modes, and vehicle occupancy rates, as described in the trip generation analysis in Section 3, approximately 205 vehicles (199 visitor vehicles plus 6 employee vehicles) would be parked at the museum over the course of a peak winter day, and approximately 129 vehicles (123 visitor vehicles and 6 employee vehicles) over the course of a peak summer Saturday. As the parking demand is higher on a summer Saturday verses a summer Friday, only the summer weekend parking demand is analyzed.

As not all vehicles will be at the museum at the same time, an hourly distribution of parked vehicles is estimated, based upon a review of the actual parking accumulation at the nearby Tahoe Maritime Museum, standard ITE hourly parking accumulation for the Museum land use and existing hourly traffic patterns in Squaw Valley. The resulting hourly distribution is applied to the number of visitor vehicles with the assumption that the average duration of museum visits is about 1.5 hours. The resulting parking accumulation for visitor vehicles on peak winter and summer days is shown in Tables 6 and 7 and illustrated in Figures 7 and 8, respectively. The 'running total' column shows how many cars are parked on site every half hour. As shown, the peak parking demand for visitors is approximately 40 vehicles in the winter (at about 2:30 PM) and 28 in the summer (at about 2:30 PM).

Next, employee vehicles entering and exiting the site were estimated, as shown in the middle columns of the tables. As shown, the peak parking demand for employees is 6 vehicles. Adding the visitor and employee peak parking demand together yields a total peak parking demand of 46 vehicles in the winter and 34 during the summer peak period (without a museum special event).

In addition to the parking demand of the Museum, the background parking accumulation is added to the shared parking demand calculations. The peak winter parking demand (Table 6) includes an estimated 10 occupied parking spaces due to the plowed parking lot. As a result, the peak parking demand occurs at 2:30 PM with a total of 56 cars parked on the site. For a summer Saturday, the existing parking counts as well as the calculated sports field parking demand is listed in Table 7. The peak parking demand on a summer Saturday occurs at 1:00

PM, with a total of 108 parked cars. The detailed parking analysis for this specific museum project yields a higher parking demand in the winter than in the summer. However, with the addition of background parking demand, more spaces are required in the summer.

As indicated by the standard rates in the County Code, 38 spaces are required. Based on peak time-of-day parking calculations, 46 and 34 spaces are demanded by the project in the winter and summer, respectively. In order to remain conservative with respect to parking needs, the highest figures of 46 spaces in the winter and 38 spaces in the summer are applied in this study.

TABLE 6: Squaw Valley Olympic Museum - Parking Accumulation - Peak Winter Day

		Visitor Vehicles			Employee Vehicles			Total SVOM Parking Demand 1	Existing Winter Parking 2	
Hour		In	Out	Running Total	In	Out	Running Total			**Total**
9:00 AM	9:30 AM	0	0	0	1	0	1	1	10	11
9:30 AM	10:00 AM	0	0	0	2	0	3	3	10	13
10:00 AM	10:30 AM	6	0	10	0	0	3	13	10	23
10:30 AM	11:00 AM	6	0	16	0	0	3	19	10	29
11:00 AM	11:30 AM	12	6	22	2	0	5	27	10	37
11:30 AM	12:00 PM	12	6	28	1	0	6	34	10	44
12:00 PM	12:30 PM	14	12	30	0	3	3	33	10	43
12:30 PM	1:00 PM	14	12	32	0	0	3	35	10	45
1:00 PM	1:30 PM	16	14	34	3	0	6	40	10	50
1:30 PM	2:00 PM	16	14	36	0	1	5	41	10	51
2:00 PM	2:30 PM	18	16	38	1	0	6	44	10	54
2:30 PM	3:00 PM	18	16	40	0	0	6	46	10	**56**
3:00 PM	3:30 PM	16	18	38	0	1	5	43	10	53
3:30 PM	4:00 PM	16	18	36	0	0	5	41	10	51
4:00 PM	4:30 PM	12	16	32	0	1	4	36	10	46
4:30 PM	5:00 PM	12	16	28	0	0	4	32	10	42
5:00 PM	5:30 PM	6	12	22	0	1	3	25	10	35
5:30 PM	6:00 PM	5	12	15	0	1	2	17	10	27
6:00 PM	6:30 PM	0	11	4	0	1	1	5	10	15
6:30 PM	7:00 PM	0	0	0	0	1	0	0	10	10
Total		199	199		10	10				

Note: Does not include a special event.

Note 1: Excluded museum deliveries and service vehicles.

Note 2: Existing Winter Parking Demand Estimated. SV Park has only recently been opened during the Winter. With no amenities visitation/parking volumes are estimated to be low.

Note: Peak Parking Demand Shaded

Source: LSC Transportation Consultants INC

Parking Demand of Museum Special Events

The parking demand of a museum special event with 100 guests is calculated using the same methodology. The results are presented in Table 8. Applying the travel mode and vehicle occupancy assumptions explained in the trip generation analysis for special events yields a total of approximately 58 parking spaces (48 guest spaces and 10 employee spaces) needed for a special event.

Overall Parking Demand

As the Squaw Valley Park is most oriented to non-winter activities, the overall peak parking demand is expected to occur during the summer season. Table 9 presents a summary of the overall parking demand at the project site on a peak summer day. Note that the observed parking demand of the park (58 spaces) includes the spaces utilized for the playground/tot lot area, bike trailhead parking, and pickle ball courts on a busy summer day. Nineteen (19) spaces are added to account for the parking demand of the existing sports field. (Due to the days when the counts where conducted, their parking volumes were not assumed to be captured in the observed parking demand.) Adding the 58 spaces observed to be needed for the existing park and 19 spaces for the sports field to the 38 spaces needed for the proposed museum yields a total parking demand of approximately 115 spaces during the peak period on a typical busy summer Saturday (without a museum special event).

TABLE 7: Squaw Valley Olympic Museum - Parking Accumulation - Peak Summer Weekend Day

Hour		Visitor Vehicles In	Visitor Vehicles Out	Visitor Vehicles Running Total	Employee Vehicles In	Employee Vehicles Out	Employee Vehicles Running Total	Total SVOM Parking Demand	Sports Field Vehicles In	Sports Field Vehicles Out	Sports Field Vehicles Running Total	Existing Parking Counts	Total
9:00 AM	9:30 AM	0	0	0	1	0	1	1	2	0	2	9	12
9:30 AM	10:00 AM	0	0	0	2	0	3	3	15	0	17	12	32
10:00 AM	10:30 AM	4	0	10	0	0	3	13	4	2	19	25	57
10:30 AM	11:00 AM	4	0	14	0	0	3	17	6	18	7	37	61
11:00 AM	11:30 AM	7	4	17	2	0	5	22	15	5	17	42	81
11:30 AM	12:00 PM	7	4	20	1	0	6	26	4	2	19	53	98
12:00 PM	12:30 PM	9	7	22	0	3	3	25	6	18	7	54	86
12:30 PM	1:00 PM	9	7	24	0	0	3	27	15	5	17	57	101
1:00 PM	1:30 PM	10	9	25	3	0	6	31	4	2	19	58	**108**
1:30 PM	2:00 PM	10	9	26	0	1	5	31	4	18	5	48	84
2:00 PM	2:30 PM	11	10	27	1	0	6	33	0	5	0	49	82
2:30 PM	3:00 PM	11	10	28	0	0	6	34	0	0	0	48	82
3:00 PM	3:30 PM	10	11	27	0	1	5	32	0	0	0	55	87
3:30 PM	4:00 PM	10	11	26	0	0	5	31	0	0	0	58	89
4:00 PM	4:30 PM	7	10	23	0	1	4	27	0	0	0	55	82
4:30 PM	5:00 PM	7	10	20	0	0	4	24	0	0	0	46	70
5:00 PM	5:30 PM	4	7	17	0	1	3	20	0	0	0	44	64
5:30 PM	6:00 PM	3	7	13	0	1	2	15	0	0	0	38	53
6:00 PM	6:30 PM	0	7	6	0	1	1	7	0	0	0	35	42
6:30 PM	7:00 PM	0	0	0	0	1	0	0	0	0	0	31	31
Total		123	123		10	10							

Note: Does not include a special event at the museum

Note: Peak Parking Demand Shaded

Note: Excluded museum delivery and service vehicles.

Source: LSC Transportation Consultants INC

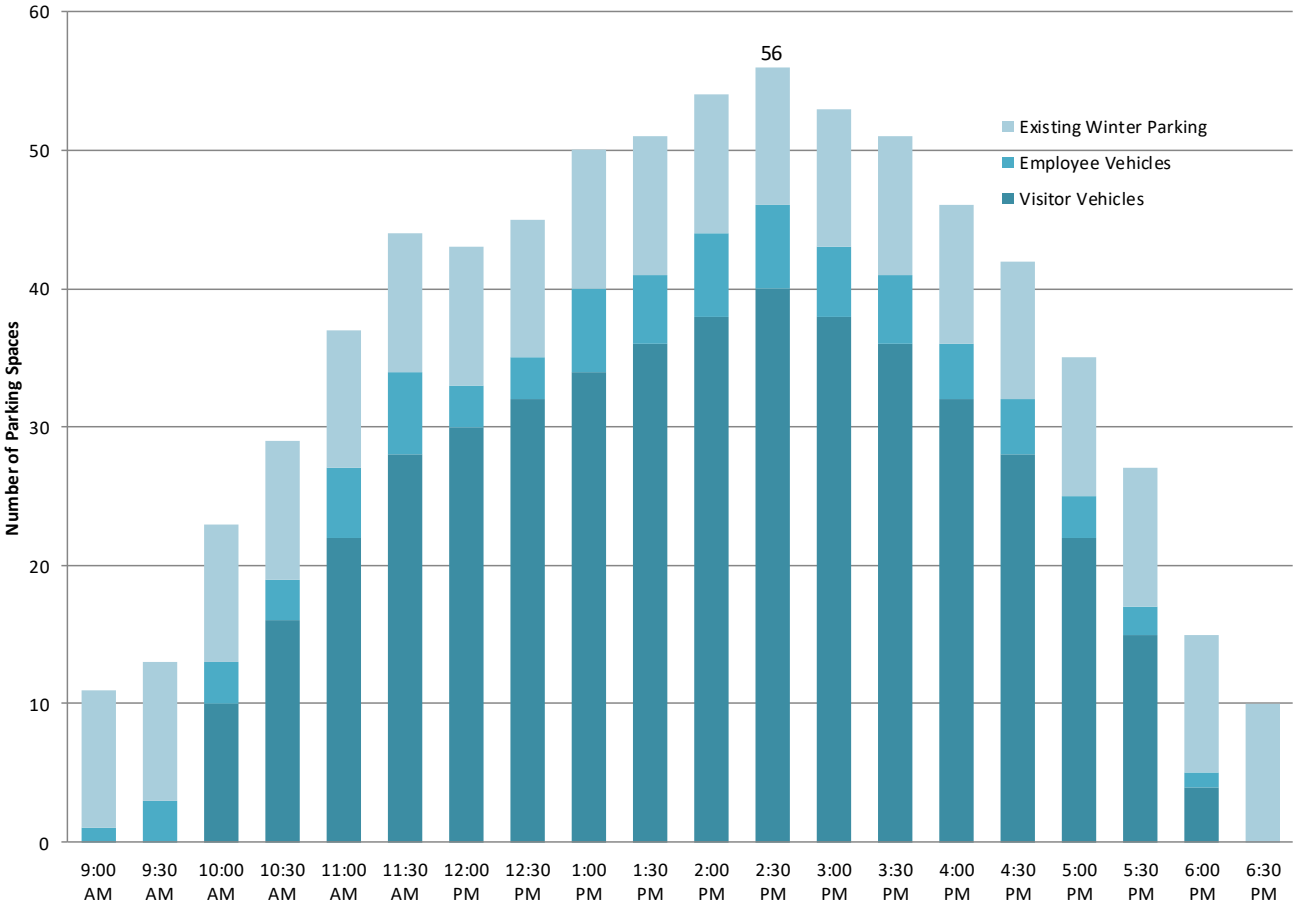
Parking Supply

The existing surface parking lot at Squaw Valley Park contains approximately 116 spaces. This figure reflects conditions with the recently completed pickle ball courts. Subtracting the 115 spaces estimated to be needed for typical museum and park uses (including trailhead parking) from the total 116 spaces yields an overall parking surplus of approximately 1 space. Assuming the proposed project would not eliminate more than 1 existing parking space, no parking

concerns are identified during typical busy operations at the proposed museum site. Note that the parking demand of the sports field are for soccer or lacrosse games typically occurring on a Saturday in the summer. There may be times when special events occur at the park, which may generate a higher parking demand.

As shown in the column of Table 9 labeled “Special Event”, museum special events would occur at the museum after 6 PM (with up to 100 guests). During a museum special event, there would be an overall parking surplus of about 23 or 48 spaces in the summer and winter, respectively. Adequate parking conditions are expected to be provided during special events at the museum.

Figure 7: Squaw Olympic Museum - Winter Parking Accumulation



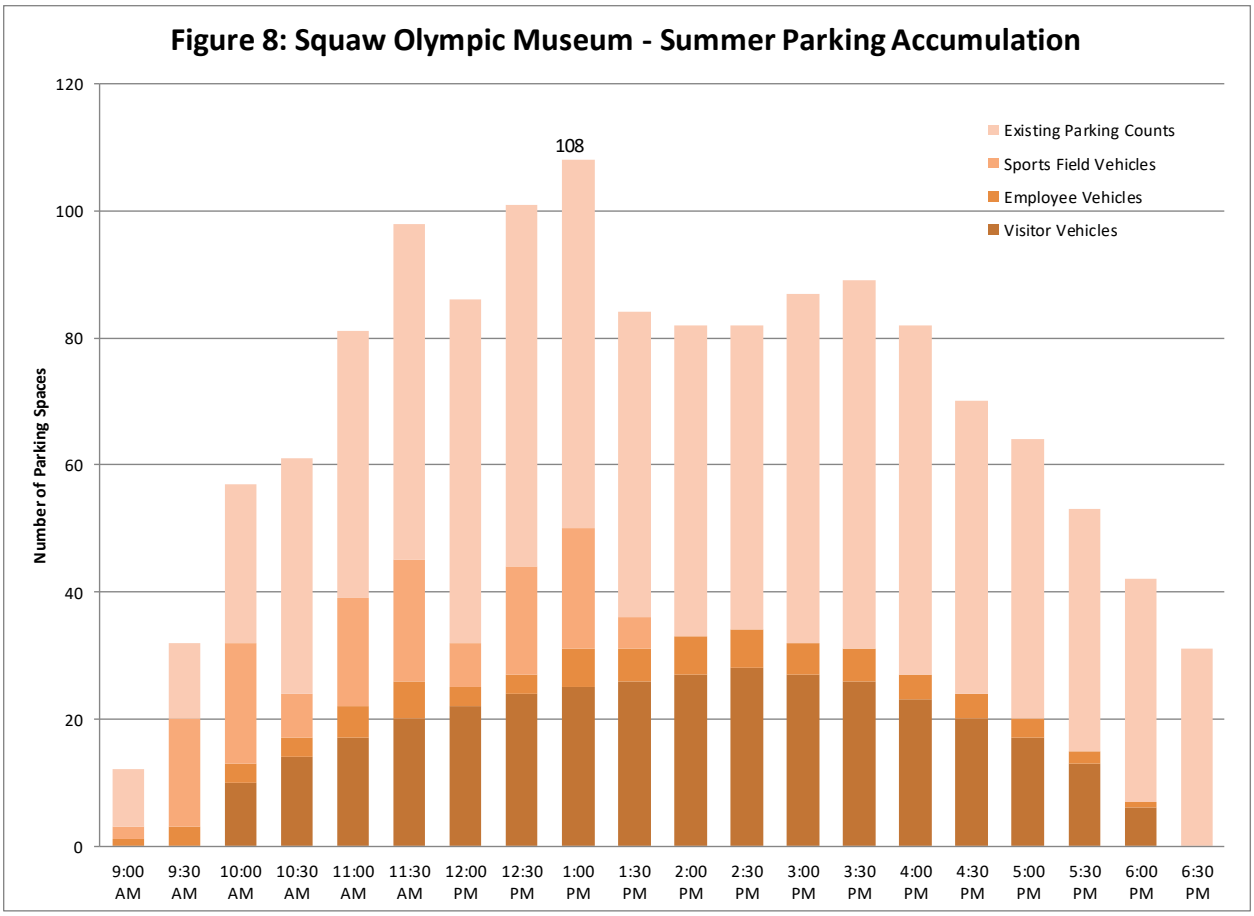


TABLE 8: Special Event Parking

Total Persons	Type of Persons	Auto Mode Split	Average Vehicle Occupancy	Parking Spaces Needed
100	Visitors	1.0	2.10	48
10	Employees	0.95	1	10
	Total			**58**

TABLE 9: Overall Parking Balance

Description	Parking Spaces: Summer Without Event	Summer With Museum Special Event (after 6 PM)	Winter Without Event	Winter With Museum Special Event (after 6 PM)
Parking Demand of Proposed Museum	38	58	46	58
Observed Parking Demand of Existing Uses in 2019	58	35	0	0
Additional parking demand of sporting event (Summer). Snow play (winter)	19	0	10	10
Total Parking Demand	*115*	*93*	*56*	*68*
Total Parking Supply	*116*	*116*	*116*	*116*
Parking Balance	**1**	**23**	**60**	**48**

Note: As the Squaw Valley Park was not opened in the winter until recently, winter parking counts were not conducted. Winter parking volumes are estimated.

Source: LSC Transportation Consultants, Inc. SquawOlympic2019V2.xlsx

Bicycle Parking

Bicycle parking requirements for the proposed project are provided in Section 17.54.050 of the County Code, which indicates that parking lots with 20 or more spaces shall provide one bicycle rack for each 20 parking spaces required. Given that the proposed museum requires approximately 38 spaces in summer, one bike rack is required to be provided. The rack shall be designed to provide a minimum of four bicycle spaces and so that a bicycle can be locked to the rack.

The following potential areas of transportation impacts are considered in this section:

- Traffic Volume Impacts on SR 89
- Intersection LOS
- Intersection Queuing
- Roadway LOS
- Driver Sight Distance
- VMT Impacts in Tahoe Basin
- Parking
- Transit impacts

TRAFFIC VOLUME IMPACTS ON SR 89

Adding the traffic volumes generated by the proposed project to the existing traffic on SR 89 yields the projected traffic volumes presented in Figure 4. Comparison with the existing volumes indicates that the proposed project will add up to 21 vehicles to any segment of SR 89 during the peak hours (occurring in the winter), which equates to about 1 vehicle every 3 minutes, on average. The percent increase in total two-way peak-hour traffic volumes on any segment of SR 89 is estimated to be a maximum of approximately 1.4 percent (occurring in the winter).

INTERSECTION LOS

No intersection LOS concerns are identified under existing year conditions, with or without the proposed project. Under future cumulative conditions, the Squaw Valley Road/Site Access intersection is shown to operate at LOS F during winter PM peak periods when skier traffic is exiting the valley. However, as the peak-hour traffic volumes at this intersection do not meet the MUTCD's peak-hour volume signal warrant criteria, the proposed project would not exceed the County's minimum LOS policies at this intersection. As such, no intersection LOS mitigation measures are necessary under typical museum operations.

On a busy winter day, a 100-person event with the majority of guests arriving after 6:00 PM is not expected to result in delays exceeding those already occurring in the peak hours. During the non-winter seasons, a 100-person event would not be expected to result in any intersection LOS concerns, even if the event lets out during the summer PM peak hour.

INTERSECTION QUEUING

The results of the simulation indicate left turns from the 7-11 driveway onto Squaw Valley Road are currently hindered by the eastbound traffic queues forming at the signal during winter PM periods. No additional traffic queuing issues are identified in the site vicinity under existing winter and summer "design hour" conditions. Note that the simulation model does not reflect conditions during winter storm events. Implementation of the proposed project in the existing year is not expected to materially affect the traffic queue lengths during winter or summer peak periods.

Under future cumulative conditions without the proposed project, left turns from the 7-11 driveway would continue to be hindered by the eastbound traffic queues on Squaw Valley Road during winter PM peak periods. These turns would also be hindered during summer PM peak periods. With the proposed project, the 95th-percentile queues in the eastbound left-turn lanes would interfere with turns from the site driveway during winter PM peak periods, as well as left turns into the site. Average (50th-percentile) queues would not be expected to block the site driveway. Furthermore, the number of vehicles turning left from the site driveway during peak periods is expected to be relatively low (less than one vehicle every 8 minutes, on average). Finally, the proposed project is not expected to exacerbate any queuing issues on the SR 89 approaches to Squaw Valley Road. As such, the proposed project is considered to have a minimal impact on intersection traffic queues.

ROADWAY LOS

The study roadway (SR 89) is shown to operate within the established LOS standards under all existing year scenarios. SR 89 would continue to operate within the LOS thresholds under all winter future cumulative analysis periods, with or without the proposed project. However, summer future cumulative conditions exceed the threshold at SR 89 immediately north of Squaw Valley Road, due to growth in future background traffic. The proposed project would not exceed the County's minimum LOS policies for this roadway segment. As such, no roadway LOS mitigation measures are expected to be necessary.

DRIVER SIGHT DISTANCE

As discussed in Section 2, no driver sight distance concerns are identified at the site access location. As such, the proposed project is expected to provide adequate sight distance conditions. As such, the proposed project is expected to provide adequate sight distance conditions, so long as the final landscaping plans do not include features that would hinder the driver sight distance.

VMT IMPACTS

The effect of the project on winter and summer daily Vehicle Miles Traveled (VMT) is estimated, based on the number of "new" trips made to/from the site and the length of these vehicle trips. Table 10 presents the VMT analysis. As discussed in Section 3, the proposed project is estimated to generate approximately 278 "new" one-way trips on the adjacent roadway network over the course of a busy winter day and 177 one-way trips on a busy summer day, without a special event at the museum. The VMT generated by these trips is estimated by multiplying the number of trips by the average trip length. The estimated origins/destinations for trips made to/from the project site are shown in the table. In the winter, most of these trips are expected to be made to/from either Squaw Valley or the Truckee area. In the summer, 45 percent are assumed to be made to/from the Lake Tahoe Basin and 37 percent to/from Truckee. Applying the trip distribution pattern to the total daily trips yields the number of trips made to/from each area, as shown in the upper right portion of the table.

The average trip lengths are shown in the lower middle column of the table. The Tahoe Basin boundary is located at a point on SR 89 south of Alpine Meadows Road (and north of Fir Crags Road). The average trip length between the Basin boundary on SR 89 and each origin/destination point is also shown. Multiplying the trip lengths by the number of trips yields the daily VMT shown in the lower right portion of the table. As indicated, the proposed project is

expected to increase daily VMT by approximately 2,611 over the course of a winter day and 1,997 over the course of a summer day. Additionally, the VMT within California is tracked separately from Nevada. As shown in the lower rows of Table 10, approximately 2,434 VMT would impact California roads in the winter and 1,872 VMT in the summer. The remaining VMT would impact roads in Nevada. VMT thresholds and mitigation requirements will be determined by County staff.

TABLE 10: Squaw Valley Olympic Museum- VMT Impacts

Origin/Destination	Project Trip Distribution		Number of "New" Daily One-Way Trips (Non-Passby)	
	Winter	Summer	Winter	Summer
Sacramento/Roseville	2%	2%	6	4
Squaw Valley	38%	15%	105	26
South Lake Tahoe	1%	2%	3	4
Emerald Bay	1%	2%	3	4
North on SR89/Truckee	34%	37%	94	65
West Shore	3%	4%	8	7
Tahoe City	13%	25%	36	44
Carnelian Bay	1%	1%	3	2
Kings Beach/ Crystal Bay	4%	8%	11	14
Incline Village/East Shore	2%	3%	6	5
Reno, NV	1%	1%	3	2
Total	***100%***	***100%***	***278***	***177***

Origins/Destination	Trip Length (Miles)	Daily VMT	
Sacramento/Roseville	90	540	360
Squaw Valley	2	210	52
South Lake Tahoe	35	104	138
Emerald Bay	22	66	88
SR89 North/Truckee	11	1,034	715
West Shore	9	69	60
Tahoe City	4	144	176
Carnelian Bay	11	32	21
Kings Beach/ Crystal Bay	14	151	192
Incline Village/East Shore - CA[1]	14	84	70
Incline Village/East Shore - NV[1]	7	42	35
Reno, NV	45	135	90
CA VMT Impact		**2,434**	**1,872**
NV VMT Impact		**177**	**125**
Total VMT Impact		**2,611**	**1,997**

NOTE: VMT = Vehicle Miles Traveled

NOTE 1: Incline Village/ East Shore VMT is broken up between miles in California and miles in Nevada.

Source: LSC Transportation Consultants, Inc.

PARKING IMPACTS

The maximum overall parking demand at the park site with implementation of the museum project is approximately 115 spaces during the peak period on a typical busy summer Saturday

(without a museum special event). Subtracting the 115 spaces estimated to be needed for typical museum and park uses (including trailhead parking) from the total 116 existing spaces yields an overall parking surplus of approximately 1 space. Assuming the proposed project would not eliminate more than 1 existing parking space, no parking concerns are identified during typical busy operations at the proposed museum site. Note that the parking demand of the sports field are for soccer or lacrosse games typically occurring on a Saturday in the summer. (There may be times when special events occur at the park, which may generate a higher parking demand.)

As shown in the column of Table 9 labeled "Special Event", museum special events would occur at the museum During a museum special event (after 6 PM, with up to 100 guests), there would be an overall parking surplus of about 23 or 48 spaces in the summer or winter, respectively. Adequate parking conditions are expected to be provided during special events at the museum. In conclusion, no parking concerns are expected during typical museum operations. Furthermore, adequate parking conditions are expected to be provided during special events at the museum.

Lastly, one bicycle rack is required to be provided at the proposed museum. The rack shall be designed to provide a minimum of four bicycle spaces and so that a bicycle can be locked to the rack.

TRANSIT IMPACTS

There is available capacity on the existing transit system to accommodate additional riders during the proposed museum operating hours. The project would increase ridership at a location that is conveniently served by transit. This impact would be beneficial.

The need for the site plans to accommodate on-site bus circulation and parking is considered. As a museum is proposed, it can be expected that buses (such as private shuttle buses and/or school buses) would need to be accommodated on the site. It is recommended that the proposed site plan provide adequate maneuvering space for a full-size bus to turn around.

MITIGATION SUMMARY

- Pursuant to the Placer County Countywide Traffic Impact Fee Program, new development within the County is required to mitigate impacts to the roadway system by paying a traffic mitigation fee. This fee is currently assessed at a rate of $5,440 per Dwelling Unit Equivalent (DUE) for new land uses in the Tahoe Region.

- It should be ensured that the final landscaping plans do not hinder the driver sight distance at the site access location.

- VMT thresholds and mitigation requirements will be determined by County staff.

- It is recommended that the proposed site plan provide adequate maneuvering space for a full-size bus to turn around.

No additional mitigation measures are identified as a part of this study.

Appendix A
Traffic and Parking Count Data

Table A1: 7-11 & SV Parking Entrance

16-Aug	NB- Squaw Park				SB- 7 Eleven				EB- SVR				WB- SVR					
Friday	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Left	Thru	Right	Ped*	Left	Thru	Right	Ped	Total	hour
3:00 PM	0	0	5	1	2	0	2	0	10	88	3	0	2	72	4	0	188	687
3:15 PM	0	0	1	2	3	0	1	0	5	67	1	0	4	66	2	2	150	701
3:30 PM	1	0	2	0	0	0	5	0	2	86	0	0	0	72	7	3	175	713
3:45 PM	0	0	0	0	3	0	8	0	6	90	0	0	0	67	0	0	174	719
4:00 PM	0	0	0	0	1	0	3	0	5	98	1	0	1	83	10	0	202	767
4:15 PM	2	0	3	0	1	0	6	0	4	78	2	0	5	58	3	3	162	
4:30 PM	0	0	1	0	1	0	4	0	5	96	2	0	1	65	6	3	181	
4:45 PM	2	0	0	2	4	0	9	2	12	94	3	0	2	87	9	3	222	
PM Peak hour	3	0	5	0	5	0	22	0	17	352	3	0	6	280	20	6	713	
17-Aug	NB- Squaw Park				SB- 7 Eleven				EB- SVR				WB- SVR					
Saturday	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Left	Thru	Right	Ped*	Left	Thru	Right	Ped	Total	hour
10:00 AM	0	0	6	2	4	3	2	6	4	62	1	1	11	59	3	2	155	677
10:15 AM	0	0	7	1	4	0	5	8	6	68	2	2	1	75	6	8	174	678
10:30 AM	0	0	3	1	6	3	10	5	4	69	0	4	3	75	4	2	177	676
10:45 AM	1	0	5	5	2	1	0	5	4	72	0	0	10	70	6	5	171	666
11:00 AM	0	0	11	2	2	0	6	3	5	65	0	4	6	58	3	2	156	684
11:15 AM	1	0	4	0	2	0	5	0	4	72	2	0	6	74	2	0	172	656
11:30 AM	2	0	2	0	9	1	2	13	5	70	1	0	8	62	5	1	167	635
11:45 AM	0	2	14	3	7	4	6	8	12	65	1	1	4	68	6	11	189	611
12:00 PM	2	0	8	1	4	1	4	4	2	49	3	6	4	48	3	5	128	603
12:15 PM	3	0	0	0	2	0	3	1	3	61	1	1	6	65	7	2	151	
12:30 PM	3	1	1	0	6	0	3	1	3	56	3	5	6	56	5	2	143	
12:45 PM	1	0	3	1	5	0	5	5	4	73	2	0	4	82	2	4	181	
PM Peak hour	7	2	24	4	22	6	15	26	22	245	6	8	22	243	21	19	635	

Table A2: SVR/SR-89

16-Aug	NB-SR89				SB-SR89				EB-SVR				WB-Driveway					
Friday	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Left	Thru	Right	Ped*	Left	Thru	Right	Ped	Total	hour
3:00 PM	30	100	0	7	1	130	39	0	59	0	40	0	0	0	0	0	399	1598
3:15 PM	34	126	0	5	0	87	33	0	34	0	28	0	0	0	0	0	342	1609
3:30 PM	35	160	0	13	1	126	45	0	57	0	47	0	0	0	0	0	471	1609
3:45 PM	38	122	0	15	1	100	41	0	44	0	40	1	0	0	0	0	386	1558
4:00 PM	37	131	0	20	1	100	34	0	57	0	50	5	0	0	0	0	410	1603
4:15 PM	32	114	0	21	0	102	28	0	35	0	30	3	1	0	0	0	342	
4:30 PM	33	113	0	8	0	141	30	0	60	0	43	1	0	0	0	0	420	
4:45 PM	40	117	0	16	0	140	55	0	39	1	39	3	0	0	0	0	431	
PM Peak hour	142	527	0	69	3	428	148	0	193	0	167	9	1	0	0	0	1609	

17-Aug	NB-SR89				SB-SR89				EB-SVR				WB-Driveway					
Saturday	Left	Thru	Right	Ped	Left	Thru	Right	Ped	Left	Thru	Right	Ped*	Left	Thru	Right	Ped	Total	hour
10:00 AM	30	89	0	30	0	160	38	0	32	1	39	6	0	0	0	0	389	1612
10:15 AM	42	102	1	15	0	172	42	0	21	0	50	2	0	1	0	0	431	1623
10:30 AM	32	86	0	34	0	150	42	0	26	0	41	12	0	0	0	0	377	1597
10:45 AM	31	82	0	36	0	173	55	0	24	0	49	4	1	0	0	0	415	1625
11:00 AM	25	106	0	57	0	154	41	0	29	0	44	4	0	1	0	0	400	1655
11:15 AM	28	88	0	28	1	161	50	0	29	0	47	0	0	0	1	0	405	1626
11:30 AM	31	88	2	53	0	156	45	0	35	0	48	2	0	0	0	0	405	1691
11:45 AM	22	96	0	45	0	188	57	0	40	1	41	11	0	0	0	0	445	1643
12:00 PM	25	89	1	47	0	165	29	0	24	0	37	1	0	0	1	0	371	1598
12:15 PM	33	184	0	59	1	149	44	0	31	0	28	14	0	0	0	0	470	
12:30 PM	33	82	0	99	0	144	40	1	24	0	34	4	0	0	0	0	357	
12:45 PM	31	93	0	51	0	152	46	0	38	0	39	8	1	0	0	0	400	
Mid-Day Peak hour	111	457	3	204	1	658	175	0	130	1	154	28	0	0	1	0	1691	1691

Table B1: Friday Parking Counts

Jon	Friday		8/9/2019									
	Lot A			Lot B			On Street Parking				Total	
	Reg	HC	Unm	Reg	HC	Unm	NE	NW	SE	SW	Marked	w/ Unmarked
Inventory	57	4		53	1						110	110
9:00 AM	6		1	1	1	2					7	10
9:30 AM	7		1	5	1	2					12	15
10:00 AM	7		1	9	1	2					16	19
10:30 AM	12			12	1						24	24
11:00 AM	11			12	1						23	23
11:30 AM	15			12			1				27	28
12:00 PM	17			9							26	26
12:30 PM	19			7							26	26
1:00 PM	16			5							21	21
1:30 PM	17			5							22	22
2:00 PM	14		1	5							19	20
2:30 PM	10			5							15	15
3:00 PM	9			5							14	14
3:30 PM	6			5							11	11
4:00 PM	5			5							10	10
4:30 PM	5			3							8	8
5:00 PM	7			2							9	9
5:30 PM	8			3							11	11
6:00 PM	6			4							10	10
6:30 PM	3			3							6	6
Max	19	0	1	12	1	2	1	0	0	0	27	28
% use	33%	0%		23%	100%						25%	25%

Note: SV Ski Team had field reserved on 8/9/19 from 4-6PM.

Reg: Regular marked spaces; HC: Handicap; Unm: Parking at unmarked spaces

Table B2: Saturday Parking Counts

Saturday	8/17/2019											
	Lot A			Lot B			On Street Parking				Total	
	Reg	HC	Unm	Reg	HC	Unm	NE	NW	SE	SW	Marked	w/ Unmarked
Inventory	57	4		53	1						110	110
9:00 AM	5			4	1						9	9
9:30 AM	5			7	1						12	12
10:00 AM	16			9	1						25	25
10:30 AM	25			12	1						37	37
11:00 AM	30			12	1						42	42
11:30 AM	35			18	1						53	53
12:00 PM	40			14							54	54
12:30 PM	39			18							57	57
1:00 PM	39			19							**58**	**58**
1:30 PM	28		1	20							48	49
2:00 PM	28			21		1					49	50
2:30 PM	24			24							48	48
3:00 PM	21			34							55	55
3:30 PM	24			34							**58**	**58**
4:00 PM	20			35							55	55
4:30 PM	14			32							46	46
5:00 PM	15			29							44	44
5:30 PM	13			25							38	38
6:00 PM	11			24							35	35
Max	40	0	1	35	1	1	0	0	0	0	58	58
% use	70%	0%		66%	100%						53%	53%

Note: No park reservations on Saturday 8/17/19.

No event occurred on Saturday

Table B3: Sunday Parking Counts

Zandra	Sunday		8/11/2019									
	Lot A			Lot B			On Street Parking				Total	
	Reg	HC	Unm	Reg	HC	Unm	NE	NW	SE	SW	Marked	w/ Unmarked
Inventory	57	4		53	2						110	110
9:00 AM	9			8							17	17
9:30 AM	12			11							23	23
10:00 AM	12			14		1	2				26	29
10:30 AM	15			15							30	30
11:00 AM	16			22							38	38
11:30 AM	22			24							46	46
12:00 PM	30	1		21							**51**	**51**
12:30 PM	29	1		21						1	50	**51**
1:00 PM	27			19						1	46	47
1:30 PM	26			17						1	43	44
2:00 PM	26			18						1	44	45
2:30 PM	27			16						1	43	44
3:00 PM	23			16						1	39	40
3:30 PM	15		1	13						1	28	30
4:00 PM	13		1	8						1	21	23
4:30 PM	14	1		6			1			1	20	22
Max	30	1	1	24	0	1	2	0	0	1	51	51
% use	53%	25%		45%	0%						46%	46%

Note: No reservations on Sunday 8/11/19.

Appendix B
LOS Descriptions

DESCRIPTIONS OF LEVELS OF SERVICE

The concept of level of service is defined as a qualitative measure describing operational conditions within a traffic stream, and their perception by motorists and/or passengers. A level of service definition generally describes these conditions in terms of such factors as speed and travel time, freedom to maneuver, traffic interruptions, comfort and convenience, and safety. Six levels of service are defined for each type of facility for which analysis procedures are available. They are given letter designations, from A to F, with level of service A representing the best operating conditions and level of service F the worst.

Level of Service Definitions

In general, the various levels of service are defined as follows for uninterrupted flow facilities:

- **Level of service A** represents free flow. Individual users are virtually unaffected by the presence of others in the traffic stream. Freedom to select desired speeds and to maneuver within the traffic stream is extremely high. The general level of comfort and convenience provided to the motorist, passenger, or pedestrian is excellent.

- **Level of service B** is in the range of stable flow, but the presence of other users in the traffic stream begins to be noticeable. Freedom to select desired speeds is relatively unaffected, but there is a slight decline in the freedom to maneuver within the traffic stream from LOS A. The level of comfort and convenience provided is somewhat less than at LOS A, because the presence of others in the traffic stream begins to affect individual behavior.

- **Level of service C** is in the range of stable flow, but marks the beginning of the range of flow in which the operation of individual users becomes significantly affected by interactions with others in the traffic stream. The selection of speed is now affected by the presence of others, and maneuvering within the traffic stream requires substantial vigilance on the part of the user. The general level of comfort and convenience declines noticeably at this level.

- **Level of Service D** represents high-density, but stable, flow. Speed and freedom to maneuver are severely restricted, and the driver or pedestrian experiences a generally poor level of comfort and convenience. Small increases in traffic flow will generally cause operational problems at this level.

- **Level of service E** represents operating conditions at or near the capacity level. All speeds are reduced to a low, but relatively uniform value. Freedom to maneuver within the traffic stream is extremely difficult, and it is generally accomplished by forcing a vehicle or pedestrian to “give way” to accommodate such maneuvers. Comfort and convenience levels are extremely poor, and driver or pedestrian frustration is generally high. Operations at this level are usually unstable, because small increases in flow or minor perturbations within the traffic stream will cause breakdowns.

- **Level of service F** is used to define forced or breakdown flow. This condition exists wherever the amount of traffic approaching a point exceeds the amount which can traverse the point. Queues form behind such locations. Operations within the queue are characterized by stop-and-go waves, and they are extremely unstable. Vehicles may progress at reasonable speeds for several hundred feet or more, then be required to stop in a cyclic fashion. Level of service F is used to describe the operating conditions within the queue, as well as the point of the breakdown. It should be noted, however, that in many cases operating conditions of vehicles or pedestrians discharged from the queue may be quite good. Nevertheless, it is the point at which arrival flow exceeds discharge flow which causes the queue to form, and level of service F is an appropriate designation for such points.

Appendix C
Placer County Methodology of Assessment

MEMORANDUM

DEPARTMENT OF PUBLIC WORKS AND FACILITIES
County of Placer

TO: Placer County Public Works DATE: October 5, 2015

FROM: Ken Grehm, Director

SUBJECT: **IMPACT ANALYSIS METHODOLOGY OF ASSESSMENT**

Placer County, along with surrounding jurisdictions, has experienced significant growth in recent years. The resulting traffic volume increases on County roadways and intersections have outpaced available roadway and intersection infrastructure construction activities. Achieving Level of Service (LOS) policy(s), as shown in the current Placer County General Plan, various Community Plans, and Specific Plans, remains the goal on all Placer County roadway facilities.

Due to overall decreases in operational efficiency and infrastructure construction timing throughout the County, some of the existing transportation networks are occasionally overburdened and traffic operations have declined. Development project proposals which would generate small amounts of new traffic are more and more often expected to fund large improvements because nearby roadways or intersections already operate just within or below the County LOS policies. Available roadway and/or intersection capacities for small increases in traffic volumes can be limited without relatively large infrastructure upgrade requirements. This can cause smaller development projects to become economically infeasible.

Placer County has developed the following methodology of assessment of project impact(s) for County roadway segments and/or intersections associated with LOS standards as defined in the General Plan, Community Plans, and Specific Plans within Placer County. The goal of this methodology of assessment is to ensure that project associated construction mitigation(s) are proportionate to the level of impact a specific project has on an intersection or roadway.

Traffic Impact Analysis:

If necessary, a traffic impact analysis shall be performed which includes the following analysis scenarios; Existing, Existing plus Project, Cumulative, and Cumulative plus Project. The project applicant/consultant shall consult with the Department of Public Works and Facilities prior to beginning the Traffic Impact Analysis (TIA) to finalize a scope of work.

Roadway Segment Assessment Methodology:

A project may be considered to exceed the minimum LOS policies if;

1) A roadway segment operating at or above the established Placer County policy without the project traffic trips will decrease to an unacceptable LOS with the project; **or**

2) A roadway segment currently operating below the established acceptable LOS policy will experience an increase in V/C (volume to capacity) ratio of 0.05 or greater with the project; **or**

3) A roadway segment currently operating below the established acceptable LOS policy experience an increase in ADT of 100 or more project generated trips, per lane.

Signalized Intersection Assessment Methodology:

A project may be considered to exceed the minimum LOS policies if;

1) An intersection operating at or above the established Placer County policies without the project traffic trips will decrease to an unacceptable LOS with the project; **or**

2) An intersection currently operating below the established acceptable LOS policy will experience an increase in the V/C (volume to capacity) ratio of 0.05 (5%) or greater; **or**

3) An intersection currently operating below the established acceptable LOS policy will experience an increase in overall average intersection delay of 4 seconds or greater.

Unsignalized Intersection Assessment Methodology:

A project may be considered to exceed the minimum LOS policies if;

1) An all way stop or side street controlled intersection, which currently operates at or above the established Placer County policies without the project, will deteriorate to an unacceptable LOS with the project and cause the intersection to meet MUTCD traffic signal warrant(s)[1] **or**

2) An all way stop or side street controlled intersection which currently operates below the established acceptable LOS policy and meets MUTCD signal warrant(s)[1] will experience an increase of 2.5 seconds[2] or more with the project.

Further consideration will be given in situations where the existing level of service is just above or at the approved minimum level of service and any increase in vehicle trips, or even daily fluctuations in traffic, will deteriorate the level of service to an unacceptable level. In such cases, it may be determined by the County that part (2) or (3) of the above exceptions is more applicable and should be used to analyze a proposed project's impacts.

1 Applicable MUTCD signal warrants to be determined in consultation with DPW Transportation staff. (2010 HCM)

2 Intersection delay for all-way stop intersections to be defined as the "overall intersection delay". Intersection delay for side street stop intersections to be defined as the "overall weighted average delay for movements yielding the ROW." (2010 HCM)

Appendix D
Traffic Simulation Output

1: SR 89 & Squaw Valley Rd Performance by movement

Movement	EBL	EBT	EBR	NBL	NBT	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (hr)	2.6	0.0	0.1	1.1	3.4	1.0	0.1	8.3
Total Del/Veh (s)	13.7	1.0	1.9	27.3	17.7	17.9	2.2	14.3
Avg Speed (mph)	7	20	14	9	15	10	20	11
Vehicles Entered	688	1	219	144	680	200	147	2079
Vehicles Exited	688	1	219	145	678	200	148	2079
Hourly Exit Rate	688	1	219	145	678	200	148	2079
Input Volume	664	1	219	153	699	202	143	2081
% of Volume	104	100	100	95	97	99	103	100

2: External Performance by approach

Approach	WB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.0	0.0
Total Del/Veh (s)	0.2	0.2
Avg Speed (mph)	34	34
Vehicles Entered	306	306
Vehicles Exited	306	306
Hourly Exit Rate	306	306
Input Volume	308	308
% of Volume	99	99

3: External Performance by approach

Approach	NB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	1.2	1.2
Total Del/Veh (s)	3.2	3.2
Avg Speed (mph)	36	36
Vehicles Entered	1395	1395
Vehicles Exited	1396	1396
Hourly Exit Rate	1396	1396
Input Volume	1403	1403
% of Volume	100	100

4: External Performance by approach

Approach	SB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.0	0.0
Total Del/Veh (s)	0.4	0.4
Avg Speed (mph)	45	45
Vehicles Entered	412	412
Vehicles Exited	412	412
Hourly Exit Rate	412	412
Input Volume	415	415
% of Volume	99	99

6: Squaw Valley Rd & 7-11 driveway Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.1	0.0
Total Delay (hr)	0.0	0.4	0.3	0.0	0.0	0.0	0.7
Total Del/Veh (s)	4.8	1.5	3.5	2.7	19.8	3.5	2.1
Avg Speed (mph)	14	26	13	11	7	14	20
Vehicles Entered	31	903	279	14	5	26	1258
Vehicles Exited	31	903	280	14	5	26	1259
Hourly Exit Rate	31	903	280	14	5	26	1259
Input Volume	36	879	281	15	5	27	1243
% of Volume	86	103	100	93	100	96	101

7: External Performance by approach

Approach	NB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.0	0.0
Total Del/Veh (s)	0.3	0.3
Avg Speed (mph)	22	22
Vehicles Entered	45	45
Vehicles Exited	45	45
Hourly Exit Rate	45	45
Input Volume	51	51
% of Volume	88	88

8: Site access & Squaw Valley Rd Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Delay (hr)	0.1	0.0	0.0	0.0	0.0	0.0	0.1
Denied Del/Veh (s)	0.5	0.2	0.0	0.0	0.1	0.1	0.3
Total Delay (hr)	0.2	0.0	0.0	0.0	0.0	0.0	0.3
Total Del/Veh (s)	0.8	0.6	6.6	0.5	23.6	7.5	0.9
Avg Speed (mph)	33	27	12	29	6	11	32
Vehicles Entered	928	3	5	302	6	6	1250
Vehicles Exited	927	3	5	302	6	6	1249
Hourly Exit Rate	927	3	5	302	6	6	1249
Input Volume	909	5	5	304	5	5	1233
% of Volume	102	60	100	99	120	120	101

9: External Performance by approach

Approach	SB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.0	0.0
Total Del/Veh (s)	0.4	0.4
Avg Speed (mph)	21	21
Vehicles Entered	8	8
Vehicles Exited	8	8
Hourly Exit Rate	8	8
Input Volume	10	10
% of Volume	80	80

10: Bend Performance by approach

Approach	NB	SB	All
Denied Delay (hr)	0.2	0.0	0.2
Denied Del/Veh (s)	0.9	0.0	0.6
Total Delay (hr)	0.4	1.0	1.4
Total Del/Veh (s)	1.9	8.6	4.1
Avg Speed (mph)	23	20	21
Vehicles Entered	824	411	1235
Vehicles Exited	825	412	1237
Hourly Exit Rate	825	412	1237
Input Volume	852	415	1267
% of Volume	97	99	98

11: Bend Performance by approach

Approach	NB	SB	All
Denied Delay (hr)	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0
Total Delay (hr)	2.6	0.1	2.7
Total Del/Veh (s)	7.0	1.0	5.8
Avg Speed (mph)	17	33	18
Vehicles Entered	1366	342	1708
Vehicles Exited	1365	341	1706
Hourly Exit Rate	1365	341	1706
Input Volume	1363	339	1702
% of Volume	100	101	100

12: SR 89 Performance by movement

Movement	EBL	EBR	NBL	NBT	SBT	SBR	All
Denied Delay (hr)	2.9	0.5	0.0	0.0	0.0	0.0	3.4
Denied Del/Veh (s)	230.1	232.3	0.0	0.0	0.3	0.3	6.7
Total Delay (hr)	5.3	0.8	0.0	0.7	0.2	0.0	6.9
Total Del/Veh (s)	461.1	453.4	2.2	1.9	1.9	0.1	13.9
Avg Speed (mph)	0	0	13	24	41	34	8
Vehicles Entered	39	6	6	1383	335	26	1795
Vehicles Exited	34	6	6	1383	336	26	1791
Hourly Exit Rate	34	6	6	1383	336	26	1791
Input Volume	45	6	5	1379	333	27	1795
% of Volume	76	100	120	100	101	96	100

13: External Performance by approach

Approach	WB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.0	0.0
Total Del/Veh (s)	0.1	0.1
Avg Speed (mph)	21	21
Vehicles Entered	31	31
Vehicles Exited	31	31
Hourly Exit Rate	31	31
Input Volume	32	32
% of Volume	97	97

Total Network Performance

Denied Delay (hr)	3.7
Denied Del/Veh (s)	5.9
Total Delay (hr)	21.8
Total Del/Veh (s)	34.5
Avg Speed (mph)	18
Vehicles Entered	2235
Vehicles Exited	2234
Hourly Exit Rate	2234
Input Volume	11540
% of Volume	19

Intersection: 1: SR 89 & Squaw Valley Rd

Movement	EB	EB	NB	NB	NB	SB
Directions Served	L	LT	L	T	TR	T
Maximum Queue (ft)	209	164	171	293	248	169
Average Queue (ft)	135	97	77	155	98	71
95th Queue (ft)	194	159	135	257	218	134
Link Distance (ft)	156	156		488		260
Upstream Blk Time (%)	4	0				
Queuing Penalty (veh)	10	1				
Storage Bay Dist (ft)			500		300	
Storage Blk Time (%)				0		0
Queuing Penalty (veh)				1		1

Intersection: 6: Squaw Valley Rd & 7-11 driveway

Movement	EB	EB	SB
Directions Served	LT	T	LR
Maximum Queue (ft)	105	30	62
Average Queue (ft)	20	1	21
95th Queue (ft)	69	18	50
Link Distance (ft)	176	176	332
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 8: Site access & Squaw Valley Rd

Movement	WB	NB
Directions Served	LT	LR
Maximum Queue (ft)	39	32
Average Queue (ft)	3	8
95th Queue (ft)	20	26
Link Distance (ft)	176	284
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 12: SR 89

Movement	EB	NB	NB	B11	B11
Directions Served	LR	L	T	T	
Maximum Queue (ft)	200	24	48	343	261
Average Queue (ft)	149	2	4	56	18
95th Queue (ft)	249	13	25	242	124
Link Distance (ft)	198		76	260	260
Upstream Blk Time (%)	40			1	0
Queuing Penalty (veh)	0			9	1
Storage Bay Dist (ft)		75			
Storage Blk Time (%)					
Queuing Penalty (veh)					

Network Summary

Network wide Queuing Penalty: 23

1: SR 89 & Squaw Valley Rd Performance by movement

Movement	EBL	EBT	EBR	WBL	NBL	NBT	SBL	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0		0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0
Total Delay (hr)	0.8	0.0	0.1	0.0	0.8	0.9	0.0	1.5	0.1	4.4
Total Del/Veh (s)	15.5		1.8	23.2	18.1	6.5	28.8	12.8	2.4	9.5
Avg Speed (mph)	7	34	14	2	12	28	6	13	19	16
Vehicles Entered	194	0	181	1	164	521	3	427	159	1650
Vehicles Exited	193	0	181	1	164	521	3	426	158	1647
Hourly Exit Rate	193	0	181	1	164	521	3	426	158	1647
Input Volume	196	1	178	1	159	528	3	441	158	1665
% of Volume	98	0	102	100	103	99	100	97	100	99

2: External Performance by approach

Approach	WB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.0	0.0
Total Del/Veh (s)	0.2	0.2
Avg Speed (mph)	34	34
Vehicles Entered	310	310
Vehicles Exited	311	311
Hourly Exit Rate	311	311
Input Volume	305	305
% of Volume	102	102

3: External Performance by approach

Approach	NB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.2	0.2
Total Del/Veh (s)	0.9	0.9
Avg Speed (mph)	45	45
Vehicles Entered	758	758
Vehicles Exited	757	757
Hourly Exit Rate	757	757
Input Volume	764	764
% of Volume	99	99

4: External Performance by approach

Approach	SB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.1	0.1
Total Del/Veh (s)	0.5	0.5
Avg Speed (mph)	45	45
Vehicles Entered	598	598
Vehicles Exited	598	598
Hourly Exit Rate	598	598
Input Volume	608	608
% of Volume	98	98

5: External Performance by approach

Approach	EB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.0	0.0
Total Del/Veh (s)	1.1	1.1
Avg Speed (mph)	16	16
Vehicles Entered	3	3
Vehicles Exited	3	3
Hourly Exit Rate	3	3
Input Volume	3	3
% of Volume	100	100

6: Squaw Valley Rd & 7-11 driveway Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.1	0.0
Total Delay (hr)	0.0	0.1	0.3	0.0	0.0	0.0	0.5
Total Del/Veh (s)	4.6	1.0	3.8	2.0	14.8	3.1	2.4
Avg Speed (mph)	14	27	13	12	9	14	17
Vehicles Entered	17	371	299	23	4	27	741
Vehicles Exited	17	370	299	23	4	27	740
Hourly Exit Rate	17	370	299	23	4	27	740
Input Volume	19	369	297	20	5	25	735
% of Volume	89	100	101	115	80	108	101

7: External Performance by approach

Approach	NB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.0	0.0
Total Del/Veh (s)	0.2	0.2
Avg Speed (mph)	22	22
Vehicles Entered	40	40
Vehicles Exited	41	41
Hourly Exit Rate	41	41
Input Volume	39	39
% of Volume	105	105

8: Site access & Squaw Valley Rd Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.3	0.1	0.0	0.0	0.1	0.1	0.2
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Total Del/Veh (s)	0.3	0.0	3.1	0.5	7.2	3.2	0.6
Avg Speed (mph)	34	28	16	29	11	13	31
Vehicles Entered	366	3	19	307	4	21	720
Vehicles Exited	367	3	19	308	4	21	722
Hourly Exit Rate	367	3	19	308	4	21	722
Input Volume	369	3	20	303	3	19	717
% of Volume	99	100	95	102	133	111	101

9: External Performance by approach

Approach	SB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.0	0.0
Total Del/Veh (s)	0.3	0.3
Avg Speed (mph)	22	22
Vehicles Entered	22	22
Vehicles Exited	22	22
Hourly Exit Rate	22	22
Input Volume	23	23
% of Volume	96	96

10: Bend Performance by approach

Approach	NB	SB	All
Denied Delay (hr)	0.1	0.0	0.1
Denied Del/Veh (s)	0.6	0.0	0.3
Total Delay (hr)	0.3	1.3	1.6
Total Del/Veh (s)	1.8	7.5	4.5
Avg Speed (mph)	24	23	23
Vehicles Entered	687	597	1284
Vehicles Exited	686	598	1284
Hourly Exit Rate	686	598	1284
Input Volume	687	608	1295
% of Volume	100	98	99

11: Bend Performance by approach

Approach	NB	SB	All
Denied Delay (hr)	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0
Total Delay (hr)	0.5	0.2	0.7
Total Del/Veh (s)	2.3	1.3	1.9
Avg Speed (mph)	29	30	29
Vehicles Entered	714	580	1294
Vehicles Exited	714	580	1294
Hourly Exit Rate	714	580	1294
Input Volume	724	590	1314
% of Volume	99	98	98

12: SR 89 Performance by movement

Movement	EBL	EBR	NBL	NBT	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.1	0.0	0.1
Denied Del/Veh (s)	0.1	0.1	0.0	0.0	0.5	0.4	0.2
Total Delay (hr)	0.3	0.0	0.0	0.1	0.4	0.0	0.9
Total Del/Veh (s)	23.9	9.2	4.1	0.6	2.6	0.4	2.3
Avg Speed (mph)	4	9	10	39	38	30	32
Vehicles Entered	48	6	5	724	573	28	1384
Vehicles Exited	48	6	5	724	573	28	1384
Hourly Exit Rate	48	6	5	724	573	28	1384
Input Volume	45	6	5	735	584	25	1400
% of Volume	107	100	100	99	98	112	99

13: External Performance by approach

Approach	WB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.0	0.0
Total Del/Veh (s)	0.1	0.1
Avg Speed (mph)	19	19
Vehicles Entered	33	33
Vehicles Exited	32	32
Hourly Exit Rate	32	32
Input Volume	30	30
% of Volume	107	107

Total Network Performance

Denied Delay (hr)	0.2
Denied Del/Veh (s)	0.5
Total Delay (hr)	8.4
Total Del/Veh (s)	16.8
Avg Speed (mph)	25
Vehicles Entered	1794
Vehicles Exited	1790
Hourly Exit Rate	1790
Input Volume	8898
% of Volume	20

Intersection: 1: SR 89 & Squaw Valley Rd

Movement	EB	EB	WB	NB	NB	NB	SB	SB	SB	B11
Directions Served	L	LT	LTR	L	T	TR	L	T	R	T
Maximum Queue (ft)	110	91	24	133	149	104	58	210	52	30
Average Queue (ft)	61	20	1	69	56	11	4	96	2	2
95th Queue (ft)	95	60	11	114	113	55	32	184	37	31
Link Distance (ft)	156	156	94		488			260		76
Upstream Blk Time (%)								1	0	0
Queuing Penalty (veh)								4	0	3
Storage Bay Dist (ft)				500		300	160		280	
Storage Blk Time (%)								2	0	
Queuing Penalty (veh)								3	0	

Intersection: 6: Squaw Valley Rd & 7-11 driveway

Movement	EB	SB
Directions Served	LT	LR
Maximum Queue (ft)	52	61
Average Queue (ft)	9	21
95th Queue (ft)	35	49
Link Distance (ft)	176	332
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 8: Site access & Squaw Valley Rd

Movement	WB	NB
Directions Served	LT	LR
Maximum Queue (ft)	40	32
Average Queue (ft)	6	13
95th Queue (ft)	26	33
Link Distance (ft)	176	284
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 10: Bend

Movement	SB
Directions Served	T
Maximum Queue (ft)	77
Average Queue (ft)	3
95th Queue (ft)	54
Link Distance (ft)	488
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 12: SR 89

Movement	EB	NB	NB	SB
Directions Served	LR	L	T	TR
Maximum Queue (ft)	74	31	11	19
Average Queue (ft)	33	3	0	1
95th Queue (ft)	67	16	6	16
Link Distance (ft)	198		76	479
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)		75		
Storage Blk Time (%)				
Queuing Penalty (veh)				

Network Summary

Network wide Queuing Penalty: 10

1: SR 89 & Squaw Valley Rd Performance by movement

Movement	EBL	EBT	EBR	WBR	NBL	NBT	NBR	SBL	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.0	0.0	0.0		0.3	0.0	0.1
Total Delay (hr)	0.6	0.0	0.1	0.0	0.6	0.7	0.0	0.0	2.9	0.2	5.0
Total Del/Veh (s)	16.6	5.9	1.8	3.9	16.5	5.3	1.3		15.6	3.1	10.4
Avg Speed (mph)	6	12	14	8	13	31	28	10	11	18	15
Vehicles Entered	136	3	178	1	138	449	4	0	659	179	1747
Vehicles Exited	136	3	178	1	138	449	4	0	660	180	1749
Hourly Exit Rate	136	3	178	1	138	449	4	0	660	180	1749
Input Volume	138	2	175	1	130	461	3	1	678	178	1767
% of Volume	99	150	102	100	106	97	133	0	97	101	99

2: External Performance by approach

Approach	WB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.0	0.0
Total Del/Veh (s)	0.2	0.2
Avg Speed (mph)	34	34
Vehicles Entered	278	278
Vehicles Exited	279	279
Hourly Exit Rate	279	279
Input Volume	265	265
% of Volume	105	105

3: External Performance by approach

Approach	NB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.1	0.1
Total Del/Veh (s)	0.8	0.8
Avg Speed (mph)	46	46
Vehicles Entered	628	628
Vehicles Exited	628	628
Hourly Exit Rate	628	628
Input Volume	640	640
% of Volume	98	98

4: External Performance by approach

Approach	SB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.1	0.1
Total Del/Veh (s)	0.5	0.5
Avg Speed (mph)	43	43
Vehicles Entered	818	818
Vehicles Exited	818	818
Hourly Exit Rate	818	818
Input Volume	833	833
% of Volume	98	98

5: External Performance by approach

Approach	EB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.0	0.0
Total Del/Veh (s)	0.7	0.7
Avg Speed (mph)	16	16
Vehicles Entered	6	6
Vehicles Exited	6	6
Hourly Exit Rate	6	6
Input Volume	5	5
% of Volume	120	120

6: Squaw Valley Rd & 7-11 driveway Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.1	0.0
Total Delay (hr)	0.0	0.1	0.3	0.0	0.1	0.0	0.6
Total Del/Veh (s)	4.5	1.2	4.0	2.8	12.9	3.9	3.0
Avg Speed (mph)	14	24	12	11	9	14	15
Vehicles Entered	33	295	299	20	21	30	698
Vehicles Exited	33	295	300	20	21	31	700
Hourly Exit Rate	33	295	300	20	21	31	700
Input Volume	30	293	288	21	22	29	683
% of Volume	110	101	104	95	95	107	102

7: External Performance by approach

Approach	NB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.0	0.0
Total Del/Veh (s)	0.3	0.3
Avg Speed (mph)	22	22
Vehicles Entered	53	53
Vehicles Exited	53	53
Hourly Exit Rate	53	53
Input Volume	51	51
% of Volume	104	104

8: Site access & Squaw Valley Rd Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.5	0.3	0.0	0.0	0.1	0.1	0.2
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.2
Total Del/Veh (s)	0.4	0.2	3.0	0.7	8.8	3.1	1.0
Avg Speed (mph)	34	27	16	28	10	14	28
Vehicles Entered	274	8	57	273	7	53	672
Vehicles Exited	274	8	58	273	7	53	673
Hourly Exit Rate	274	8	58	273	7	53	673
Input Volume	267	6	58	259	7	55	652
% of Volume	103	133	100	105	100	96	103

9: External Performance by approach

Approach	SB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.0	0.0
Total Del/Veh (s)	0.3	0.3
Avg Speed (mph)	22	22
Vehicles Entered	65	65
Vehicles Exited	65	65
Hourly Exit Rate	65	65
Input Volume	64	64
% of Volume	102	102

10: Bend Performance by approach

Approach	NB	SB	All
Denied Delay (hr)	0.1	0.0	0.1
Denied Del/Veh (s)	0.5	0.0	0.2
Total Delay (hr)	0.3	1.8	2.1
Total Del/Veh (s)	1.8	7.9	5.4
Avg Speed (mph)	24	23	23
Vehicles Entered	591	820	1411
Vehicles Exited	591	818	1409
Hourly Exit Rate	591	818	1409
Input Volume	594	833	1427
% of Volume	99	98	99

11: Bend Performance by approach

Approach	NB	SB	All
Denied Delay (hr)	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0
Total Delay (hr)	0.3	0.4	0.7
Total Del/Veh (s)	1.9	1.9	1.9
Avg Speed (mph)	31	25	29
Vehicles Entered	585	823	1408
Vehicles Exited	586	822	1408
Hourly Exit Rate	586	822	1408
Input Volume	600	837	1437
% of Volume	98	98	98

12: SR 89 Performance by movement

Movement	EBL	EBR	NBL	NBT	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.2	0.0	0.2
Denied Del/Veh (s)	0.1	0.1	0.0	0.0	0.8	0.9	0.5
Total Delay (hr)	0.7	0.0	0.0	0.1	0.9	0.0	1.7
Total Del/Veh (s)	54.7	23.3	9.8	0.4	3.9	0.6	4.1
Avg Speed (mph)	2	4	6	41	33	27	26
Vehicles Entered	44	7	5	596	816	36	1504
Vehicles Exited	44	7	5	595	816	37	1504
Hourly Exit Rate	44	7	5	595	816	37	1504
Input Volume	45	6	5	609	831	46	1542
% of Volume	98	117	100	98	98	80	98

13: External Performance by approach

Approach	WB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.0	0.0
Total Del/Veh (s)	0.2	0.2
Avg Speed (mph)	19	19
Vehicles Entered	42	42
Vehicles Exited	42	42
Hourly Exit Rate	42	42
Input Volume	51	51
% of Volume	82	82

Total Network Performance

Denied Delay (hr)	0.4
Denied Del/Veh (s)	0.7
Total Delay (hr)	10.7
Total Del/Veh (s)	19.7
Avg Speed (mph)	24
Vehicles Entered	1923
Vehicles Exited	1923
Hourly Exit Rate	1923
Input Volume	9417
% of Volume	20

Intersection: 1: SR 89 & Squaw Valley Rd

Movement	EB	EB	WB	NB	NB	NB	SB	SB	SB	B11
Directions Served	L	LT	LTR	L	T	TR	L	T	R	T
Maximum Queue (ft)	99	74	24	128	106	44	10	312	206	64
Average Queue (ft)	49	16	1	59	40	5	0	157	22	4
95th Queue (ft)	84	51	10	103	85	26	5	281	142	36
Link Distance (ft)	156	156	94		488			260		76
Upstream Blk Time (%)								2	0	0
Queuing Penalty (veh)								14	0	3
Storage Bay Dist (ft)				500		300	160		280	
Storage Blk Time (%)								8	0	
Queuing Penalty (veh)								15	1	

Intersection: 6: Squaw Valley Rd & 7-11 driveway

Movement	EB	SB
Directions Served	LT	LR
Maximum Queue (ft)	67	68
Average Queue (ft)	14	28
95th Queue (ft)	46	51
Link Distance (ft)	176	332
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 8: Site access & Squaw Valley Rd

Movement	WB	NB
Directions Served	LT	LR
Maximum Queue (ft)	40	52
Average Queue (ft)	13	23
95th Queue (ft)	40	42
Link Distance (ft)	176	284
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 12: SR 89

Movement	EB	NB	NB	SB
Directions Served	LR	L	T	TR
Maximum Queue (ft)	103	30	12	24
Average Queue (ft)	42	4	0	1
95th Queue (ft)	89	20	6	17
Link Distance (ft)	198		76	479
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)		75		
Storage Blk Time (%)				
Queuing Penalty (veh)				

Network Summary

Network wide Queuing Penalty: 33

1: SR 89 & Squaw Valley Rd Performance by movement

Movement	EBL	EBT	EBR	NBL	NBT	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (hr)	2.7	0.0	0.1	1.1	3.5	1.0	0.1	8.5
Total Del/Veh (s)	14.0	2.2	1.9	27.2	18.0	18.4	2.1	14.5
Avg Speed (mph)	7	19	14	9	15	9	20	11
Vehicles Entered	696	2	231	145	701	193	142	2110
Vehicles Exited	695	2	231	145	700	194	142	2109
Hourly Exit Rate	695	2	231	145	700	194	142	2109
Input Volume	683	1	227	154	699	202	144	2110
% of Volume	102	200	102	94	100	96	99	100

2: External Performance by approach

Approach	WB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.0	0.0
Total Del/Veh (s)	0.2	0.2
Avg Speed (mph)	34	34
Vehicles Entered	296	296
Vehicles Exited	297	297
Hourly Exit Rate	297	297
Input Volume	311	311
% of Volume	95	95

3: External Performance by approach

Approach	NB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	1.3	1.3
Total Del/Veh (s)	3.3	3.3
Avg Speed (mph)	36	36
Vehicles Entered	1414	1414
Vehicles Exited	1415	1415
Hourly Exit Rate	1415	1415
Input Volume	1423	1423
% of Volume	99	99

4: External Performance by approach

Approach	SB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.1	0.1
Total Del/Veh (s)	0.4	0.4
Avg Speed (mph)	45	45
Vehicles Entered	420	420
Vehicles Exited	419	419
Hourly Exit Rate	419	419
Input Volume	423	423
% of Volume	99	99

6: Squaw Valley Rd & 7-11 driveway Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.1	0.0
Total Delay (hr)	0.0	0.4	0.3	0.0	0.0	0.0	0.7
Total Del/Veh (s)	4.7	1.5	3.5	2.3	22.0	2.7	2.1
Avg Speed (mph)	14	25	13	12	7	15	20
Vehicles Entered	30	926	272	15	3	22	1268
Vehicles Exited	31	925	274	15	3	22	1270
Hourly Exit Rate	31	925	274	15	3	22	1270
Input Volume	38	905	283	15	5	27	1273
% of Volume	82	102	97	100	60	81	100

7: External Performance by approach

Approach	NB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.0	0.0
Total Del/Veh (s)	0.4	0.4
Avg Speed (mph)	22	22
Vehicles Entered	45	45
Vehicles Exited	45	45
Hourly Exit Rate	45	45
Input Volume	53	53
% of Volume	85	85

8: Site access & Squaw Valley Rd Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Delay (hr)	0.1	0.0	0.0	0.0	0.0	0.0	0.1
Denied Del/Veh (s)	0.5	0.2	0.0	0.0	0.1	0.1	0.3
Total Delay (hr)	0.2	0.0	0.0	0.0	0.0	0.1	0.4
Total Del/Veh (s)	0.9	0.2	7.9	0.5	16.0	7.6	1.1
Avg Speed (mph)	33	29	11	29	7	10	31
Vehicles Entered	926	7	6	290	7	32	1268
Vehicles Exited	924	7	6	291	6	32	1266
Hourly Exit Rate	924	7	6	291	6	32	1266
Input Volume	909	10	7	304	8	34	1272
% of Volume	102	70	86	96	75	94	100

9: External Performance by approach

Approach	SB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.0	0.0
Total Del/Veh (s)	0.3	0.3
Avg Speed (mph)	21	21
Vehicles Entered	13	13
Vehicles Exited	13	13
Hourly Exit Rate	13	13
Input Volume	17	17
% of Volume	76	76

10: Bend Performance by approach

Approach	NB	SB	All
Denied Delay (hr)	0.2	0.0	0.2
Denied Del/Veh (s)	0.9	0.0	0.6
Total Delay (hr)	0.4	1.0	1.5
Total Del/Veh (s)	1.9	8.8	4.2
Avg Speed (mph)	23	20	21
Vehicles Entered	846	419	1265
Vehicles Exited	846	420	1266
Hourly Exit Rate	846	420	1266
Input Volume	853	423	1276
% of Volume	99	99	99

11: Bend Performance by approach

Approach	NB	SB	All
Denied Delay (hr)	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0
Total Delay (hr)	2.7	0.1	2.8
Total Del/Veh (s)	7.0	1.0	5.9
Avg Speed (mph)	17	34	18
Vehicles Entered	1395	330	1725
Vehicles Exited	1392	330	1722
Hourly Exit Rate	1392	330	1722
Input Volume	1382	340	1722
% of Volume	101	97	100

12: SR 89 Performance by movement

Movement	EBL	EBR	NBL	NBT	SBT	SBR	All
Denied Delay (hr)	3.7	0.4	0.0	0.0	0.0	0.0	4.2
Denied Del/Veh (s)	326.8	217.5	0.0	0.0	0.3	0.3	8.3
Total Delay (hr)	6.4	1.1	0.0	0.8	0.2	0.0	8.5
Total Del/Veh (s)	661.7	647.5	2.8	2.0	1.9	0.1	16.8
Avg Speed (mph)	0	0	13	24	41	34	7
Vehicles Entered	32	6	6	1408	325	28	1805
Vehicles Exited	27	5	6	1409	325	28	1800
Hourly Exit Rate	27	5	6	1409	325	28	1800
Input Volume	46	7	5	1398	333	27	1816
% of Volume	59	71	120	101	98	104	99

13: External Performance by approach

Approach	WB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.0	0.0
Total Del/Veh (s)	0.1	0.1
Avg Speed (mph)	21	21
Vehicles Entered	34	34
Vehicles Exited	34	34
Hourly Exit Rate	34	34
Input Volume	32	32
% of Volume	106	106

Total Network Performance

Denied Delay (hr)	4.5
Denied Del/Veh (s)	7.1
Total Delay (hr)	23.8
Total Del/Veh (s)	37.4
Avg Speed (mph)	18
Vehicles Entered	2263
Vehicles Exited	2253
Hourly Exit Rate	2253
Input Volume	11728
% of Volume	19

Intersection: 1: SR 89 & Squaw Valley Rd

Movement	EB	EB	NB	NB	NB	SB
Directions Served	L	LT	L	T	TR	T
Maximum Queue (ft)	216	160	160	305	256	159
Average Queue (ft)	140	100	77	159	97	69
95th Queue (ft)	201	154	134	256	208	130
Link Distance (ft)	156	156		488		260
Upstream Blk Time (%)	4	0				
Queuing Penalty (veh)	13	1				
Storage Bay Dist (ft)			500		300	
Storage Blk Time (%)				0	0	0
Queuing Penalty (veh)				1	0	0

Intersection: 6: Squaw Valley Rd & 7-11 driveway

Movement	EB	EB	WB	SB
Directions Served	LT	T	TR	LR
Maximum Queue (ft)	93	25	13	67
Average Queue (ft)	21	1	0	20
95th Queue (ft)	68	14	5	49
Link Distance (ft)	176	176	156	332
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 8: Site access & Squaw Valley Rd

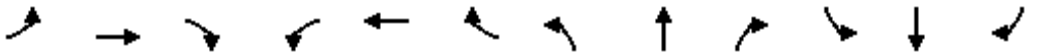
Movement	WB	NB
Directions Served	LT	LR
Maximum Queue (ft)	51	63
Average Queue (ft)	5	20
95th Queue (ft)	27	45
Link Distance (ft)	176	284
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 12: SR 89

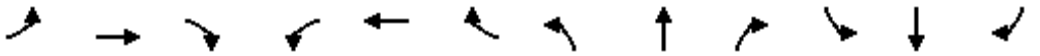
Movement	EB	NB	NB	B11	B11
Directions Served	LR	L	T	T	
Maximum Queue (ft)	217	33	49	323	245
Average Queue (ft)	176	2	6	55	13
95th Queue (ft)	262	15	31	242	108
Link Distance (ft)	198		76	260	260
Upstream Blk Time (%)	66			1	0
Queuing Penalty (veh)	0			9	1
Storage Bay Dist (ft)		75			
Storage Blk Time (%)					
Queuing Penalty (veh)					

Network Summary

Network wide Queuing Penalty: 26



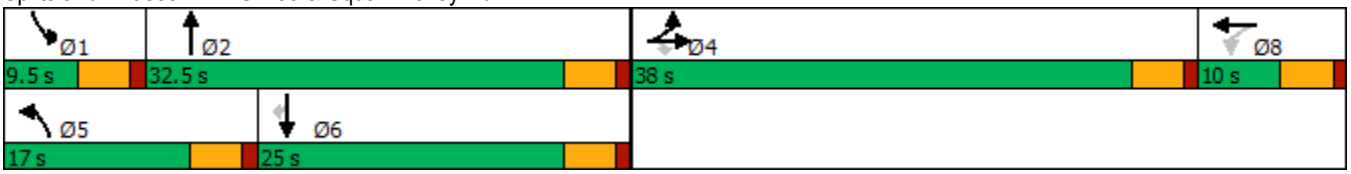
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	683	0	227	0	0	0	154	699	0	0	196	144
Future Volume (vph)	683	0	227	0	0	0	154	699	0	0	196	144
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	500		300	160		280
Storage Lanes	1		1	0		0	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00
Frt			0.850									0.850
Flt Protected	0.950	0.950					0.950					
Satd. Flow (prot)	1681	1681	1583	0	1863	0	1770	3438	0	1863	1810	1583
Flt Permitted	0.950	0.950					0.950					
Satd. Flow (perm)	1681	1681	1583	0	1863	0	1770	3438	0	1863	1810	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			247									182
Link Speed (mph)		35			25			55			55	
Link Distance (ft)		233			143			555			325	
Travel Time (s)		4.5			3.9			6.9			4.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	5%	2%	2%	5%	2%
Adj. Flow (vph)	742	0	247	0	0	0	167	760	0	0	213	157
Shared Lane Traffic (%)	50%											
Lane Group Flow (vph)	371	371	247	0	0	0	167	760	0	0	213	157
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2		1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100		20	100		20	100	20
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	0
Detector 1 Position(ft)	0	0	0	0	0		0	0		0	0	0
Detector 1 Size(ft)	20	6	20	20	6		20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Split	NA	Perm				Prot	NA		Prot	NA	Perm
Protected Phases	4	4			8		5	2		1	6	

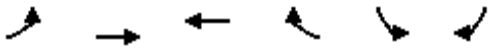


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases			4	8								6
Detector Phase	4	4	4	8	8		5	2		1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	10.0	10.0		9.5	22.5		9.5	22.5	22.5
Total Split (s)	38.0	38.0	38.0	10.0	10.0		17.0	32.5		9.5	25.0	25.0
Total Split (%)	42.2%	42.2%	42.2%	11.1%	11.1%		18.9%	36.1%		10.6%	27.8%	27.8%
Maximum Green (s)	33.5	33.5	33.5	5.5	5.5		12.5	28.0		5.0	20.5	20.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5		4.5		4.5	4.5		4.5	4.5	4.5
Lead/Lag							Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None	None	None	None		None	Min		None	Min	Min
Walk Time (s)	7.0	7.0	7.0					7.0			7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0					11.0			11.0	11.0
Pedestrian Calls (#/hr)	0	0	0					0			0	0
Act Effct Green (s)	21.3	21.3	21.3				10.8	28.5			12.9	12.9
Actuated g/C Ratio	0.36	0.36	0.36				0.18	0.48			0.22	0.22
v/c Ratio	0.61	0.61	0.34				0.52	0.46			0.54	0.32
Control Delay	21.0	21.0	3.6				31.9	12.4			28.4	5.1
Queue Delay	0.0	0.0	0.0				0.0	0.0			0.0	0.0
Total Delay	21.0	21.0	3.6				31.9	12.4			28.4	5.1
LOS	C	C	A				C	B			C	A
Approach Delay		16.6						15.9			18.6	
Approach LOS		B						B			B	
Queue Length 50th (ft)	111	111	0				54	88			69	0
Queue Length 95th (ft)	221	221	40				139	177			154	33
Internal Link Dist (ft)		153			63			475			245	
Turn Bay Length (ft)							500					280
Base Capacity (vph)	1004	1004	1045				394	1846			661	694
Starvation Cap Reductn	0	0	0				0	0			0	0
Spillback Cap Reductn	0	0	0				0	0			0	0
Storage Cap Reductn	0	0	0				0	0			0	0
Reduced v/c Ratio	0.37	0.37	0.24				0.42	0.41			0.32	0.23

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 59.3			
Natural Cycle: 70			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.61			
Intersection Signal Delay: 16.6		Intersection LOS: B	
Intersection Capacity Utilization 53.7%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 1: SR 89 & Squaw Valley Rd



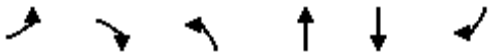


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	38	905	283	15	5	27
Future Volume (vph)	38	905	283	15	5	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.91	0.91	1.00	1.00	1.00	1.00
Frt			0.993		0.885	
Flt Protected		0.998			0.993	
Satd. Flow (prot)	0	5075	1850	0	1637	0
Flt Permitted		0.998			0.993	
Satd. Flow (perm)	0	5075	1850	0	1637	0
Link Speed (mph)		35	35		20	
Link Distance (ft)		210	233		372	
Travel Time (s)		4.1	4.5		12.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	41	984	308	16	5	29
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1025	324	0	34	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 47.4%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	909	10	7	303	8	34
Future Volume (vph)	909	10	7	303	8	34
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	80		0	0
Storage Lanes		0	0		1	0
Taper Length (ft)			25		25	
Lane Util. Factor	0.91	0.91	0.95	0.95	1.00	1.00
Frt	0.998				0.891	
Flt Protected				0.999	0.990	
Satd. Flow (prot)	5075	0	0	3536	1643	0
Flt Permitted				0.999	0.990	
Satd. Flow (perm)	5075	0	0	3536	1643	0
Link Speed (mph)	35			35	20	
Link Distance (ft)	785			210	348	
Travel Time (s)	15.3			4.1	11.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	988	11	8	329	9	37
Shared Lane Traffic (%)						
Lane Group Flow (vph)	999	0	0	337	46	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 27.8%		ICU Level of Service A	
Analysis Period (min) 15			



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	46	7	5	1377	333	27
Future Volume (vph)	46	7	5	1377	333	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	75			0
Storage Lanes	1	0	1			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.981				0.990	
Flt Protected	0.959		0.950			
Satd. Flow (prot)	1752	0	1770	1863	1844	0
Flt Permitted	0.959		0.950			
Satd. Flow (perm)	1752	0	1770	1863	1844	0
Link Speed (mph)	30			55	55	
Link Distance (ft)	236			130	511	
Travel Time (s)	5.4			1.6	6.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	50	8	5	1497	362	29
Shared Lane Traffic (%)						
Lane Group Flow (vph)	58	0	5	1497	391	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 82.5%		ICU Level of Service E	
Analysis Period (min) 15			

1: SR 89 & Squaw Valley Rd Performance by movement

Movement	EBL	EBR	WBL	NBL	NBT	SBL	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (hr)	0.9	0.1	0.0	0.8	1.0	0.0	1.6	0.1	4.5
Total Del/Veh (s)	15.7	1.9		18.2	6.8	25.3	12.8	2.4	9.6
Avg Speed (mph)	7	14	2	12	27	7	13	19	16
Vehicles Entered	201	192	0	163	513	2	438	160	1669
Vehicles Exited	201	192	0	164	511	2	437	160	1667
Hourly Exit Rate	201	192	0	164	511	2	437	160	1667
Input Volume	204	188	1	161	528	3	441	161	1687
% of Volume	99	102	0	102	97	67	99	99	99

2: External Performance by approach

Approach	WB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.0	0.0
Total Del/Veh (s)	0.2	0.2
Avg Speed (mph)	34	34
Vehicles Entered	313	313
Vehicles Exited	315	315
Hourly Exit Rate	315	315
Input Volume	308	308
% of Volume	102	102

3: External Performance by approach

Approach	NB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.2	0.2
Total Del/Veh (s)	1.0	1.0
Avg Speed (mph)	45	45
Vehicles Entered	747	747
Vehicles Exited	747	747
Hourly Exit Rate	747	747
Input Volume	767	767
% of Volume	97	97

4: External Performance by approach

Approach	SB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.1	0.1
Total Del/Veh (s)	0.5	0.5
Avg Speed (mph)	44	44
Vehicles Entered	617	617
Vehicles Exited	617	617
Hourly Exit Rate	617	617
Input Volume	618	618
% of Volume	100	100

5: External Performance by approach

Approach	EB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.0	0.0
Total Del/Veh (s)	1.1	1.1
Avg Speed (mph)	16	16
Vehicles Entered	2	2
Vehicles Exited	2	2
Hourly Exit Rate	2	2
Input Volume	3	3
% of Volume	67	67

6: Squaw Valley Rd & 7-11 driveway Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.1	0.0
Total Delay (hr)	0.0	0.1	0.3	0.0	0.0	0.0	0.5
Total Del/Veh (s)	5.0	1.1	3.6	3.0	10.9	2.8	2.4
Avg Speed (mph)	13	26	13	11	10	15	17
Vehicles Entered	20	387	306	17	6	27	763
Vehicles Exited	20	386	305	17	6	27	761
Hourly Exit Rate	20	386	305	17	6	27	761
Input Volume	20	387	302	20	5	25	759
% of Volume	100	100	101	85	120	108	100

7: External Performance by approach

Approach	NB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.0	0.0
Total Del/Veh (s)	0.3	0.3
Avg Speed (mph)	22	22
Vehicles Entered	38	38
Vehicles Exited	37	37
Hourly Exit Rate	37	37
Input Volume	40	40
% of Volume	92	92

8: Site access & Squaw Valley Rd Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.4	0.1	0.0	0.0	0.1	0.1	0.2
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.2
Total Del/Veh (s)	0.3	0.3	3.3	0.6	8.2	3.5	0.8
Avg Speed (mph)	34	28	15	29	11	13	30
Vehicles Entered	363	3	25	307	6	43	747
Vehicles Exited	364	3	25	307	6	43	748
Hourly Exit Rate	364	3	25	307	6	43	748
Input Volume	369	4	25	302	6	38	744
% of Volume	99	75	100	102	100	113	101

9: External Performance by approach

Approach	SB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.0	0.0
Total Del/Veh (s)	0.3	0.3
Avg Speed (mph)	22	22
Vehicles Entered	28	28
Vehicles Exited	28	28
Hourly Exit Rate	28	28
Input Volume	29	29
% of Volume	97	97

10: Bend Performance by approach

Approach	NB	SB	All
Denied Delay (hr)	0.1	0.0	0.1
Denied Del/Veh (s)	0.6	0.0	0.3
Total Delay (hr)	0.3	1.3	1.7
Total Del/Veh (s)	1.8	7.7	4.6
Avg Speed (mph)	24	23	23
Vehicles Entered	675	617	1292
Vehicles Exited	676	617	1293
Hourly Exit Rate	676	617	1293
Input Volume	689	618	1307
% of Volume	98	100	99

11: Bend Performance by approach

Approach	NB	SB	All
Denied Delay (hr)	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0
Total Delay (hr)	0.5	0.2	0.7
Total Del/Veh (s)	2.4	1.2	1.9
Avg Speed (mph)	28	31	29
Vehicles Entered	712	588	1300
Vehicles Exited	712	588	1300
Hourly Exit Rate	712	588	1300
Input Volume	732	593	1325
% of Volume	97	99	98

12: SR 89 Performance by movement

Movement	EBL	EBR	NBL	NBT	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.1	0.0	0.1
Denied Del/Veh (s)	0.1	0.1	0.0	0.0	0.5	0.5	0.2
Total Delay (hr)	0.3	0.0	0.0	0.1	0.4	0.0	0.8
Total Del/Veh (s)	26.6	10.7	3.8	0.6	2.5	0.2	2.1
Avg Speed (mph)	4	8	11	38	38	31	33
Vehicles Entered	37	5	3	726	584	24	1379
Vehicles Exited	37	5	3	726	583	24	1378
Hourly Exit Rate	37	5	3	726	583	24	1378
Input Volume	40	6	5	742	587	25	1405
% of Volume	92	83	60	98	99	96	98

13: External Performance by approach

Approach	WB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.0	0.0
Total Del/Veh (s)	0.1	0.1
Avg Speed (mph)	19	19
Vehicles Entered	27	27
Vehicles Exited	27	27
Hourly Exit Rate	27	27
Input Volume	30	30
% of Volume	90	90

Total Network Performance

Denied Delay (hr)	0.2
Denied Del/Veh (s)	0.5
Total Delay (hr)	8.6
Total Del/Veh (s)	17.0
Avg Speed (mph)	25
Vehicles Entered	1802
Vehicles Exited	1801
Hourly Exit Rate	1801
Input Volume	9022
% of Volume	20

Intersection: 1: SR 89 & Squaw Valley Rd

Movement	EB	EB	WB	NB	NB	NB	SB	SB	B11
Directions Served	L	LT	LTR	L	T	TR	L	T	T
Maximum Queue (ft)	115	96	9	160	119	91	22	216	9
Average Queue (ft)	61	23	0	71	59	10	2	100	0
95th Queue (ft)	100	67	5	126	108	45	13	178	6
Link Distance (ft)	156	156	94		488			260	76
Upstream Blk Time (%)	0							0	
Queuing Penalty (veh)	0							1	
Storage Bay Dist (ft)				500		300	160		
Storage Blk Time (%)								1	
Queuing Penalty (veh)								2	

Intersection: 6: Squaw Valley Rd & 7-11 driveway

Movement	EB	SB
Directions Served	LT	LR
Maximum Queue (ft)	57	49
Average Queue (ft)	9	22
95th Queue (ft)	37	46
Link Distance (ft)	176	332
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 8: Site access & Squaw Valley Rd

Movement	WB	NB
Directions Served	LT	LR
Maximum Queue (ft)	45	59
Average Queue (ft)	9	21
95th Queue (ft)	35	43
Link Distance (ft)	176	284
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

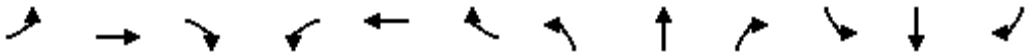
Intersection: 12: SR 89

Movement	EB	NB	NB
Directions Served	LR	L	T
Maximum Queue (ft)	78	24	6
Average Queue (ft)	30	2	0
95th Queue (ft)	64	13	4
Link Distance (ft)	198		76
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)		75	
Storage Blk Time (%)			
Queuing Penalty (veh)			

Network Summary

Network wide Queuing Penalty: 3

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	204	0	188	1	0	0	161	528	0	3	429	161
Future Volume (vph)	204	0	188	1	0	0	161	528	0	3	429	161
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	500		300	160		280
Storage Lanes	1		1	0		0	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00
Frt			0.850									0.850
Flt Protected	0.950	0.950			0.950		0.950			0.950		
Satd. Flow (prot)	1681	1681	1583	0	1770	0	1770	3438	0	1770	1810	1583
Flt Permitted	0.950	0.950					0.950			0.950		
Satd. Flow (perm)	1681	1681	1583	0	1863	0	1770	3438	0	1770	1810	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			221									189
Link Speed (mph)		35			25			55			55	
Link Distance (ft)		233			143			555			325	
Travel Time (s)		4.5			3.9			6.9			4.0	
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	5%	2%	2%	5%	2%
Adj. Flow (vph)	240	0	221	1	0	0	189	621	0	4	505	189
Shared Lane Traffic (%)	50%											
Lane Group Flow (vph)	120	120	221	0	1	0	189	621	0	4	505	189
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2		1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100		20	100		20	100	20
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	0
Detector 1 Position(ft)	0	0	0	0	0		0	0		0	0	0
Detector 1 Size(ft)	20	6	20	20	6		20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Split	NA	Perm	Perm	NA		Prot	NA		Prot	NA	Perm
Protected Phases	4	4			8		5	2		1	6	



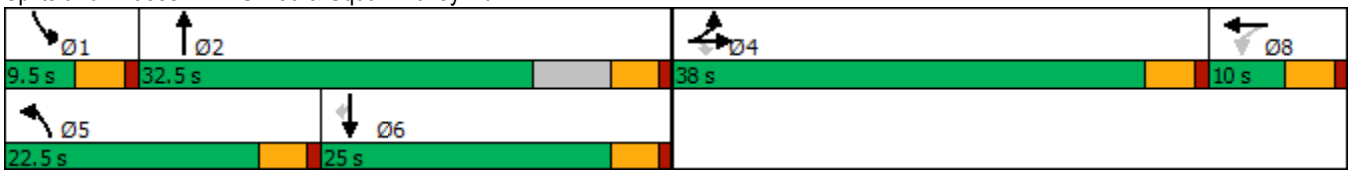
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases			4	8								6
Detector Phase	4	4	4	8	8		5	2		1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	10.0	10.0		22.5	22.5		9.5	22.5	22.5
Total Split (s)	38.0	38.0	38.0	10.0	10.0		22.5	32.5		9.5	25.0	25.0
Total Split (%)	39.8%	39.8%	39.8%	10.5%	10.5%		23.6%	34.0%		9.9%	26.2%	26.2%
Maximum Green (s)	33.5	33.5	33.5	5.5	5.5		18.0	28.0		5.0	20.5	20.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5		4.5		4.5	4.5		4.5	4.5	4.5
Lead/Lag							Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None	None	None	None		None	Min		None	Min	Min
Walk Time (s)	7.0	7.0	7.0					7.0				
Flash Dont Walk (s)	11.0	11.0	11.0					11.0				
Pedestrian Calls (#/hr)	0	0	0					69				
Act Effct Green (s)	10.2	10.2	10.2		5.7		11.6	35.9		5.1	21.1	21.1
Actuated g/C Ratio	0.17	0.17	0.17		0.10		0.20	0.62		0.09	0.36	0.36
v/c Ratio	0.41	0.41	0.48		0.01		0.54	0.29		0.03	0.77	0.27
Control Delay	27.3	27.3	8.0		30.0		28.3	7.8		30.7	30.1	4.8
Queue Delay	0.0	0.0	0.0		0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	27.3	27.3	8.0		30.0		28.3	7.8		30.7	30.1	4.8
LOS	C	C	A		C		C	A		C	C	A
Approach Delay		18.1			30.0			12.6			23.3	
Approach LOS		B			C			B			C	
Queue Length 50th (ft)	36	36	0		0		55	34		1	136	0
Queue Length 95th (ft)	95	95	45		5		132	140		10	#420	39
Internal Link Dist (ft)		153			63			475			245	
Turn Bay Length (ft)							500			160		280
Base Capacity (vph)	994	994	1027		180		562	2133		156	655	693
Starvation Cap Reductn	0	0	0		0		0	0		0	0	0
Spillback Cap Reductn	0	0	0		0		0	0		0	0	0
Storage Cap Reductn	0	0	0		0		0	0		0	0	0
Reduced v/c Ratio	0.12	0.12	0.22		0.01		0.34	0.29		0.03	0.77	0.27

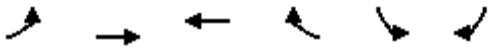
Intersection Summary			
Area Type:	Other		
Cycle Length: 95.5			
Actuated Cycle Length: 58.3			
Natural Cycle: 80			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.77			
Intersection Signal Delay: 17.7		Intersection LOS: B	
Intersection Capacity Utilization 49.6%		ICU Level of Service A	
Analysis Period (min) 15			

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 1: SR 89 & Squaw Valley Rd



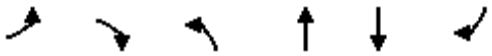


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	20	387	302	20	5	25
Future Volume (vph)	20	387	302	20	5	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.91	0.91	1.00	1.00	1.00	1.00
Frt			0.991		0.888	
Flt Protected		0.998			0.992	
Satd. Flow (prot)	0	5075	1846	0	1641	0
Flt Permitted		0.998			0.992	
Satd. Flow (perm)	0	5075	1846	0	1641	0
Link Speed (mph)		35	35		20	
Link Distance (ft)		210	233		372	
Travel Time (s)		4.1	4.5		12.7	
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Adj. Flow (vph)	24	455	355	24	6	29
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	479	379	0	35	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 32.6%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	369	4	25	302	6	38
Future Volume (vph)	369	4	25	302	6	38
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	80		0	0
Storage Lanes		0	0		1	0
Taper Length (ft)			25		25	
Lane Util. Factor	0.91	0.91	0.95	0.95	1.00	1.00
Frt	0.998				0.883	
Flt Protected				0.996	0.993	
Satd. Flow (prot)	5075	0	0	3525	1633	0
Flt Permitted				0.996	0.993	
Satd. Flow (perm)	5075	0	0	3525	1633	0
Link Speed (mph)	35			35	20	
Link Distance (ft)	785			210	348	
Travel Time (s)	15.3			4.1	11.9	
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Adj. Flow (vph)	434	5	29	355	7	45
Shared Lane Traffic (%)						
Lane Group Flow (vph)	439	0	0	384	52	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 29.6%		ICU Level of Service A	
Analysis Period (min) 15			



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	40	6	5	727	587	25
Future Volume (vph)	40	6	5	727	587	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	75			0
Storage Lanes	1	0	1			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.981				0.995	
Flt Protected	0.959		0.950			
Satd. Flow (prot)	1752	0	1770	1863	1853	0
Flt Permitted	0.959		0.950			
Satd. Flow (perm)	1752	0	1770	1863	1853	0
Link Speed (mph)	30			55	55	
Link Distance (ft)	236			130	511	
Travel Time (s)	5.4			1.6	6.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	43	7	5	790	638	27
Shared Lane Traffic (%)						
Lane Group Flow (vph)	50	0	5	790	665	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	48.3%	ICU Level of Service	A
Analysis Period (min)	15		

1: SR 89 & Squaw Valley Rd Performance by movement

Movement	EBL	EBT	EBR	WBR	NBL	NBT	NBR	SBL	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.6	0.3	0.3
Total Delay (hr)	0.7	0.0	0.1	0.0	0.7	0.7	0.0	0.0	3.7	0.2	6.1
Total Del/Veh (s)	16.8	3.0	1.8	4.6	18.2	5.4	2.1	30.1	19.2	3.9	12.0
Avg Speed (mph)	6	16	14	7	12	30	26	5	9	16	14
Vehicles Entered	145	3	190	1	137	465	4	1	697	184	1827
Vehicles Exited	145	3	190	1	137	465	4	1	697	183	1826
Hourly Exit Rate	145	3	190	1	137	465	4	1	697	183	1826
Input Volume	149	2	186	1	133	461	3	1	678	181	1795
% of Volume	97	150	102	100	103	101	133	100	103	101	102

2: External Performance by approach

Approach	WB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.0	0.0
Total Del/Veh (s)	0.2	0.2
Avg Speed (mph)	34	34
Vehicles Entered	275	275
Vehicles Exited	275	275
Hourly Exit Rate	275	275
Input Volume	271	271
% of Volume	101	101

3: External Performance by approach

Approach	NB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.2	0.2
Total Del/Veh (s)	0.8	0.8
Avg Speed (mph)	46	46
Vehicles Entered	651	651
Vehicles Exited	652	652
Hourly Exit Rate	652	652
Input Volume	651	651
% of Volume	100	100

4: External Performance by approach

Approach	SB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.1	0.1
Total Del/Veh (s)	0.6	0.6
Avg Speed (mph)	43	43
Vehicles Entered	866	866
Vehicles Exited	866	866
Hourly Exit Rate	866	866
Input Volume	844	844
% of Volume	103	103

5: External Performance by approach

Approach	EB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.0	0.0
Total Del/Veh (s)	0.5	0.5
Avg Speed (mph)	15	15
Vehicles Entered	5	5
Vehicles Exited	5	5
Hourly Exit Rate	5	5
Input Volume	5	5
% of Volume	100	100

6: Squaw Valley Rd & 7-11 driveway Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.1	0.0
Total Delay (hr)	0.0	0.1	0.3	0.0	0.1	0.0	0.6
Total Del/Veh (s)	5.0	1.1	4.0	3.0	12.6	4.0	3.0
Avg Speed (mph)	12	24	12	11	9	14	15
Vehicles Entered	31	316	300	22	21	29	719
Vehicles Exited	31	315	299	22	21	29	717
Hourly Exit Rate	31	315	299	22	21	29	717
Input Volume	32	314	294	21	22	29	712
% of Volume	97	100	102	105	95	100	101

7: External Performance by approach

Approach	NB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.0	0.0
Total Del/Veh (s)	0.3	0.3
Avg Speed (mph)	22	22
Vehicles Entered	52	52
Vehicles Exited	53	53
Hourly Exit Rate	53	53
Input Volume	53	53
% of Volume	100	100

8: Site access & Squaw Valley Rd Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.5	0.1	0.0	0.0	0.1	0.1	0.2
Total Delay (hr)	0.0	0.0	0.1	0.0	0.0	0.1	0.2
Total Del/Veh (s)	0.3	0.0	3.3	0.7	7.5	3.8	1.3
Avg Speed (mph)	34	28	15	28	11	13	27
Vehicles Entered	263	6	61	264	14	83	691
Vehicles Exited	264	6	62	264	14	83	693
Hourly Exit Rate	264	6	62	264	14	83	693
Input Volume	267	7	64	259	13	79	689
% of Volume	99	86	97	102	108	105	101

9: External Performance by approach

Approach	SB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.0	0.0
Total Del/Veh (s)	0.3	0.3
Avg Speed (mph)	22	22
Vehicles Entered	67	67
Vehicles Exited	67	67
Hourly Exit Rate	67	67
Input Volume	71	71
% of Volume	94	94

10: Bend Performance by approach

Approach	NB	SB	All
Denied Delay (hr)	0.1	0.0	0.1
Denied Del/Veh (s)	0.5	0.0	0.2
Total Delay (hr)	0.3	2.0	2.3
Total Del/Veh (s)	1.8	8.3	5.6
Avg Speed (mph)	24	23	23
Vehicles Entered	606	866	1472
Vehicles Exited	606	866	1472
Hourly Exit Rate	606	866	1472
Input Volume	597	844	1441
% of Volume	102	103	102

11: Bend Performance by approach

Approach	NB	SB	All
Denied Delay (hr)	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0
Total Delay (hr)	0.3	0.6	0.9
Total Del/Veh (s)	2.0	2.5	2.3
Avg Speed (mph)	31	22	27
Vehicles Entered	611	858	1469
Vehicles Exited	612	857	1469
Hourly Exit Rate	612	857	1469
Input Volume	611	840	1451
% of Volume	100	102	101

12: SR 89 Performance by movement

Movement	EBL	EBR	NBL	NBT	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.2	0.0	0.2
Denied Del/Veh (s)	0.1	0.1	0.0	0.0	0.8	0.8	0.5
Total Delay (hr)	0.6	0.1	0.0	0.1	1.1	0.0	1.9
Total Del/Veh (s)	54.5	37.2	8.8	0.5	4.7	1.1	4.3
Avg Speed (mph)	2	3	6	40	31	26	26
Vehicles Entered	40	6	3	623	852	38	1562
Vehicles Exited	40	6	4	624	852	38	1564
Hourly Exit Rate	40	6	4	624	852	38	1564
Input Volume	45	6	5	620	834	46	1556
% of Volume	89	100	80	101	102	83	101

13: External Performance by approach

Approach	WB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.0	0.0
Total Del/Veh (s)	0.2	0.2
Avg Speed (mph)	18	18
Vehicles Entered	41	41
Vehicles Exited	41	41
Hourly Exit Rate	41	41
Input Volume	51	51
% of Volume	80	80

Total Network Performance

Denied Delay (hr)	0.5
Denied Del/Veh (s)	0.8
Total Delay (hr)	12.4
Total Del/Veh (s)	22.1
Avg Speed (mph)	22
Vehicles Entered	2000
Vehicles Exited	1999
Hourly Exit Rate	1999
Input Volume	9590
% of Volume	21

Intersection: 1: SR 89 & Squaw Valley Rd

Movement	EB	EB	WB	NB	NB	NB	SB	SB	SB	B11
Directions Served	L	LT	LTR	L	T	TR	L	T	R	T
Maximum Queue (ft)	94	75	18	140	117	48	16	331	208	115
Average Queue (ft)	50	16	1	63	44	5	1	190	48	13
95th Queue (ft)	84	52	10	112	91	26	8	335	213	76
Link Distance (ft)	156	156	94		488			260		76
Upstream Blk Time (%)								5	0	2
Queuing Penalty (veh)								43	0	17
Storage Bay Dist (ft)				500		300	160		280	
Storage Blk Time (%)								15	0	
Queuing Penalty (veh)								28	2	

Intersection: 6: Squaw Valley Rd & 7-11 driveway

Movement	EB	WB	SB
Directions Served	LT	TR	LR
Maximum Queue (ft)	60	13	69
Average Queue (ft)	15	0	28
95th Queue (ft)	46	6	55
Link Distance (ft)	176	156	332
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 8: Site access & Squaw Valley Rd

Movement	WB	NB
Directions Served	LT	LR
Maximum Queue (ft)	60	74
Average Queue (ft)	16	30
95th Queue (ft)	46	53
Link Distance (ft)	176	284
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

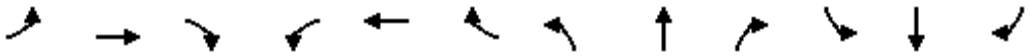
Intersection: 12: SR 89

Movement	EB	NB	NB	SB
Directions Served	LR	L	T	TR
Maximum Queue (ft)	103	24	6	106
Average Queue (ft)	38	3	0	5
95th Queue (ft)	81	17	4	51
Link Distance (ft)	198		76	479
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)		75		
Storage Blk Time (%)				
Queuing Penalty (veh)				

Network Summary

Network wide Queuing Penalty: 89

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	149	1	186	0	0	1	133	461	3	1	658	181
Future Volume (vph)	149	1	186	0	0	1	133	461	3	1	658	181
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	500		300	160		280
Storage Lanes	1		1	0		0	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00
Frt			0.850		0.865			0.999				0.850
Flt Protected	0.950	0.953					0.950			0.950		
Satd. Flow (prot)	1681	1686	1583	0	1611	0	1770	3435	0	1770	1810	1583
Flt Permitted	0.950	0.953					0.950			0.950		
Satd. Flow (perm)	1681	1686	1583	0	1611	0	1770	3435	0	1770	1810	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			207		445			1				171
Link Speed (mph)		35			25			55			55	
Link Distance (ft)		233			143			555			325	
Travel Time (s)		4.5			3.9			6.9			4.0	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	5%	2%	2%	5%	2%
Adj. Flow (vph)	166	1	207	0	0	1	148	512	3	1	731	201
Shared Lane Traffic (%)	50%											
Lane Group Flow (vph)	83	84	207	0	1	0	148	515	0	1	731	201
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2		1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100		20	100		20	100	20
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	0
Detector 1 Position(ft)	0	0	0	0	0		0	0		0	0	0
Detector 1 Size(ft)	20	6	20	20	6		20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Split	NA	Perm		NA		Prot	NA		Prot	NA	Perm
Protected Phases	4	4			8		5	2		1	6	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases			4	8								6
Detector Phase	4	4	4	8	8		5	2		1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	10.0	10.0		22.5	22.5		9.5	22.5	22.5
Total Split (s)	38.0	38.0	38.0	10.0	10.0		22.5	32.5		9.5	25.0	25.0
Total Split (%)	39.8%	39.8%	39.8%	10.5%	10.5%		23.6%	34.0%		9.9%	26.2%	26.2%
Maximum Green (s)	33.5	33.5	33.5	5.5	5.5		18.0	28.0		5.0	20.5	20.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5		4.5		4.5	4.5		4.5	4.5	4.5
Lead/Lag							Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None	None	None	None		None	Min		None	Min	Min
Walk Time (s)	7.0	7.0	7.0					7.0				
Flash Dont Walk (s)	11.0	11.0	11.0					11.0				
Pedestrian Calls (#/hr)	0	0	0					204				
Act Effct Green (s)	8.5	8.5	8.5		5.7		10.0	33.0		5.2	22.8	22.8
Actuated g/C Ratio	0.16	0.16	0.16		0.11		0.19	0.61		0.10	0.42	0.42
v/c Ratio	0.31	0.32	0.49		0.00		0.45	0.24		0.01	0.95	0.26
Control Delay	25.6	25.6	8.7		0.0		26.0	7.0		28.0	46.3	5.6
Queue Delay	0.0	0.0	0.0		0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	25.6	25.6	8.7		0.0		26.0	7.0		28.0	46.3	5.6
LOS	C	C	A		A		C	A		C	D	A
Approach Delay		16.3						11.2			37.5	
Approach LOS		B						B			D	
Queue Length 50th (ft)	24	24	0		0		40	24		0	~220	5
Queue Length 95th (ft)	73	74	52		0		108	114		5	#646	56
Internal Link Dist (ft)		153			63			475			245	
Turn Bay Length (ft)							500			160		280
Base Capacity (vph)	1083	1086	1093		568		612	2259		170	766	769
Starvation Cap Reductn	0	0	0		0		0	0		0	0	0
Spillback Cap Reductn	0	0	0		0		0	0		0	0	0
Storage Cap Reductn	0	0	0		0		0	0		0	0	0
Reduced v/c Ratio	0.08	0.08	0.19		0.00		0.24	0.23		0.01	0.95	0.26

Intersection Summary			
Area Type:	Other		
Cycle Length: 95.5			
Actuated Cycle Length: 53.7			
Natural Cycle: 100			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.95			
Intersection Signal Delay: 24.6		Intersection LOS: C	
Intersection Capacity Utilization 64.1%		ICU Level of Service C	
Analysis Period (min) 15			

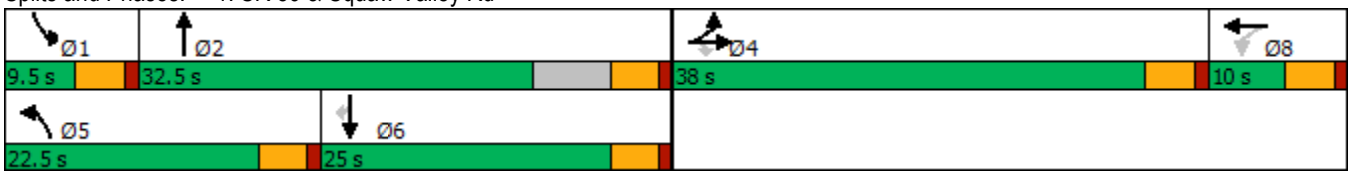
~ Volume exceeds capacity, queue is theoretically infinite.

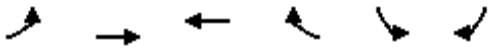
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 1: SR 89 & Squaw Valley Rd



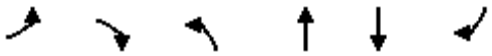


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	32	314	293	21	22	29
Future Volume (vph)	32	314	293	21	22	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.91	0.91	1.00	1.00	1.00	1.00
Frt			0.991		0.923	
Flt Protected		0.995			0.979	
Satd. Flow (prot)	0	5060	1846	0	1683	0
Flt Permitted		0.995			0.979	
Satd. Flow (perm)	0	5060	1846	0	1683	0
Link Speed (mph)		35	35		20	
Link Distance (ft)		210	233		372	
Travel Time (s)		4.1	4.5		12.7	
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Adj. Flow (vph)	38	369	345	25	26	34
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	407	370	0	60	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 36.7%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	267	7	64	258	13	79
Future Volume (vph)	267	7	64	258	13	79
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	80		0	0
Storage Lanes		0	0		1	0
Taper Length (ft)			25		25	
Lane Util. Factor	0.91	0.91	0.95	0.95	1.00	1.00
Frt	0.996				0.884	
Flt Protected				0.990	0.993	
Satd. Flow (prot)	5065	0	0	3504	1635	0
Flt Permitted				0.990	0.993	
Satd. Flow (perm)	5065	0	0	3504	1635	0
Link Speed (mph)	35			35	20	
Link Distance (ft)	785			210	348	
Travel Time (s)	15.3			4.1	11.9	
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Adj. Flow (vph)	314	8	75	304	15	93
Shared Lane Traffic (%)						
Lane Group Flow (vph)	322	0	0	379	108	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 29.9%		ICU Level of Service A	
Analysis Period (min) 15			



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	45	6	5	606	834	46
Future Volume (vph)	45	6	5	606	834	46
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	75			0
Storage Lanes	1	0	1			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.983				0.993	
Flt Protected	0.958		0.950			
Satd. Flow (prot)	1754	0	1770	1863	1850	0
Flt Permitted	0.958		0.950			
Satd. Flow (perm)	1754	0	1770	1863	1850	0
Link Speed (mph)	30			55	55	
Link Distance (ft)	236			130	511	
Travel Time (s)	5.4			1.6	6.3	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	50	7	6	673	927	51
Shared Lane Traffic (%)						
Lane Group Flow (vph)	57	0	6	673	978	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 56.7%		ICU Level of Service B	
Analysis Period (min) 15			

1: SR 89 & Squaw Valley Rd Performance by movement

Movement	EBL	EBT	EBR	NBL	NBT	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
Total Delay (hr)	9.2	0.0	0.2	2.3	9.3	2.0	0.1	23.1
Total Del/Veh (s)	33.3	4.6	2.1	43.6	49.1	27.0	2.4	31.6
Avg Speed (mph)	4	11	13	7	7	7	19	6
Vehicles Entered	988	2	307	185	672	259	188	2601
Vehicles Exited	990	2	307	183	673	260	187	2602
Hourly Exit Rate	990	2	307	183	673	260	187	2602
Input Volume	1135	1	344	178	662	253	194	2767
% of Volume	87	200	89	103	102	103	96	94

2: External Performance by approach

Approach	WB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.0	0.0
Total Del/Veh (s)	0.3	0.3
Avg Speed (mph)	34	34
Vehicles Entered	368	368
Vehicles Exited	368	368
Hourly Exit Rate	368	368
Input Volume	384	384
% of Volume	96	96

3: External Performance by approach

Approach	NB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	2.7	2.7
Total Del/Veh (s)	5.9	5.9
Avg Speed (mph)	29	29
Vehicles Entered	1656	1656
Vehicles Exited	1656	1656
Hourly Exit Rate	1656	1656
Input Volume	1837	1837
% of Volume	90	90

4: External Performance by approach

Approach	SB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.1	0.1
Total Del/Veh (s)	0.5	0.5
Avg Speed (mph)	43	43
Vehicles Entered	559	559
Vehicles Exited	558	558
Hourly Exit Rate	558	558
Input Volume	590	590
% of Volume	95	95

6: Squaw Valley Rd & 7-11 driveway Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.3	0.3
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	4.8	34.4	0.5
Total Delay (hr)	0.4	8.8	0.4	0.0	1.3	4.1	14.9
Total Del/Veh (s)	42.7	24.3	3.8	3.1	1144.5	591.8	31.0
Avg Speed (mph)	3	6	13	11	0	0	4
Vehicles Entered	30	1300	355	16	4	25	1730
Vehicles Exited	30	1294	356	16	2	14	1712
Hourly Exit Rate	30	1294	356	16	2	14	1712
Input Volume	36	1474	358	15	5	27	1915
% of Volume	83	88	99	107	40	52	89

7: External Performance by approach

Approach	NB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.0	0.0
Total Del/Veh (s)	0.8	0.8
Avg Speed (mph)	21	21
Vehicles Entered	46	46
Vehicles Exited	46	46
Hourly Exit Rate	46	46
Input Volume	51	51
% of Volume	90	90

8: Site access & Squaw Valley Rd Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Delay (hr)	61.4	0.2	0.0	0.0	0.0	0.0	61.6
Denied Del/Veh (s)	145.9	110.7	0.0	0.0	0.1	0.1	116.8
Total Delay (hr)	23.4	0.0	0.0	0.1	0.5	0.9	24.9
Total Del/Veh (s)	62.0	10.4	17.8	0.6	413.2	558.3	51.4
Avg Speed (mph)	6	17	6	30	0	0	7
Vehicles Entered	1353	6	4	364	4	6	1737
Vehicles Exited	1323	6	4	364	4	6	1707
Hourly Exit Rate	1323	6	4	364	4	6	1707
Input Volume	1505	5	5	379	5	5	1904
% of Volume	88	120	80	96	80	120	90

9: External Performance by approach

Approach	SB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.0	0.0
Total Del/Veh (s)	0.4	0.4
Avg Speed (mph)	21	21
Vehicles Entered	9	9
Vehicles Exited	9	9
Hourly Exit Rate	9	9
Input Volume	10	10
% of Volume	90	90

10: Bend Performance by approach

Approach	NB	SB	All
Denied Delay (hr)	0.2	0.0	0.2
Denied Del/Veh (s)	0.8	0.0	0.5
Total Delay (hr)	0.5	1.6	2.0
Total Del/Veh (s)	2.0	9.9	5.1
Avg Speed (mph)	23	19	19
Vehicles Entered	857	558	1415
Vehicles Exited	857	559	1416
Hourly Exit Rate	857	559	1416
Input Volume	840	590	1430
% of Volume	102	95	99

11: Bend Performance by approach

Approach	NB	SB	All
Denied Delay (hr)	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0
Total Delay (hr)	6.5	0.1	6.7
Total Del/Veh (s)	14.1	1.2	11.4
Avg Speed (mph)	11	32	12
Vehicles Entered	1663	440	2103
Vehicles Exited	1659	440	2099
Hourly Exit Rate	1659	440	2099
Input Volume	1797	440	2237
% of Volume	92	100	94

12: SR 89 Performance by movement

Movement	EBL	EBR	NBL	NBT	SBT	SBR	All
Denied Delay (hr)	14.4	1.9	0.0	0.0	0.0	0.0	16.3
Denied Del/Veh (s)	1264.9	1117.9	0.0	0.0	0.4	0.3	26.8
Total Delay (hr)	7.2	1.4	0.0	1.4	0.3	0.0	10.2
Total Del/Veh (s)	2341.2	2481.0	3.0	2.9	2.2	0.2	16.9
Avg Speed (mph)	0	0	12	19	40	32	7
Vehicles Entered	9	1	4	1678	439	25	2156
Vehicles Exited	2	1	4	1678	439	25	2149
Hourly Exit Rate	2	1	4	1678	439	25	2149
Input Volume	45	6	5	1812	434	27	2329
% of Volume	4	17	80	93	101	93	92

13: External Performance by approach

Approach	WB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.0	0.0
Total Del/Veh (s)	0.1	0.1
Avg Speed (mph)	20	20
Vehicles Entered	29	29
Vehicles Exited	29	29
Hourly Exit Rate	29	29
Input Volume	32	32
% of Volume	91	91

Total Network Performance

Denied Delay (hr)	78.4
Denied Del/Veh (s)	95.2
Total Delay (hr)	84.6
Total Del/Veh (s)	107.8
Avg Speed (mph)	9
Vehicles Entered	2762
Vehicles Exited	2702
Hourly Exit Rate	2702
Input Volume	15486
% of Volume	17

Intersection: 1: SR 89 & Squaw Valley Rd

Movement	EB	EB	NB	NB	NB	B10	SB	SB
Directions Served	L	LT	L	T	TR	T	T	R
Maximum Queue (ft)	224	218	344	475	324	23	227	104
Average Queue (ft)	188	182	136	266	213	1	112	5
95th Queue (ft)	220	213	269	420	336	15	191	65
Link Distance (ft)	156	156		488		111	260	
Upstream Blk Time (%)	60	46	0	0			0	0
Queuing Penalty (veh)	296	229	0	0			1	0
Storage Bay Dist (ft)			500		300			280
Storage Blk Time (%)			0	8	1		3	0
Queuing Penalty (veh)			0	39	5		5	0

Intersection: 6: Squaw Valley Rd & 7-11 driveway

Movement	EB	EB	EB	WB	SB
Directions Served	LT	T	T	TR	LR
Maximum Queue (ft)	203	238	135	9	303
Average Queue (ft)	170	188	14	0	136
95th Queue (ft)	216	255	92	5	332
Link Distance (ft)	176	176	176	156	332
Upstream Blk Time (%)	16	24	0		11
Queuing Penalty (veh)	83	122	1		0
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 8: Site access & Squaw Valley Rd

Movement	EB	EB	EB	WB	NB
Directions Served	T	T	TR	LT	LR
Maximum Queue (ft)	38	791	784	39	100
Average Queue (ft)	3	634	600	4	33
95th Queue (ft)	22	1059	1103	22	97
Link Distance (ft)		736	736	176	284
Upstream Blk Time (%)		62	45		
Queuing Penalty (veh)		0	0		
Storage Bay Dist (ft)	10				
Storage Blk Time (%)	0	30			
Queuing Penalty (veh)	1	152			

Intersection: 10: Bend

Movement	SB
Directions Served	T
Maximum Queue (ft)	76
Average Queue (ft)	3
95th Queue (ft)	54
Link Distance (ft)	488
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

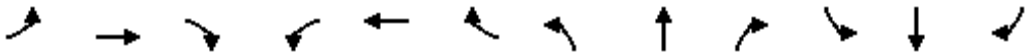
Intersection: 12: SR 89

Movement	EB	NB	NB	B11	B11
Directions Served	LR	L	T	T	
Maximum Queue (ft)	221	24	58	360	362
Average Queue (ft)	187	1	13	325	256
95th Queue (ft)	252	12	47	429	444
Link Distance (ft)	198		76	260	260
Upstream Blk Time (%)	83		0	24	7
Queuing Penalty (veh)	0		0	220	62
Storage Bay Dist (ft)		75			
Storage Blk Time (%)			0		
Queuing Penalty (veh)			0		

Network Summary

Network wide Queuing Penalty: 1214

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1135	0	344	0	0	0	178	662	0	0	246	194
Future Volume (vph)	1135	0	344	0	0	0	178	662	0	0	246	194
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	500		300	160		280
Storage Lanes	1		1	0		0	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00
Frt			0.850									0.850
Flt Protected	0.950	0.950					0.950					
Satd. Flow (prot)	1681	1681	1583	0	1863	0	1770	3438	0	1863	1810	1583
Flt Permitted	0.950	0.950					0.950					
Satd. Flow (perm)	1681	1681	1583	0	1863	0	1770	3438	0	1863	1810	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			374									211
Link Speed (mph)		35			25			55			55	
Link Distance (ft)		233			143			555			325	
Travel Time (s)		4.5			3.9			6.9			4.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	5%	2%	2%	5%	2%
Adj. Flow (vph)	1234	0	374	0	0	0	193	720	0	0	267	211
Shared Lane Traffic (%)	50%											
Lane Group Flow (vph)	617	617	374	0	0	0	193	720	0	0	267	211
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2		1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100		20	100		20	100	20
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	0
Detector 1 Position(ft)	0	0	0	0	0		0	0		0	0	0
Detector 1 Size(ft)	20	6	20	20	6		20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Split	NA	Perm				Prot	NA		Prot	NA	Perm
Protected Phases	4	4			8		5	2		1	6	



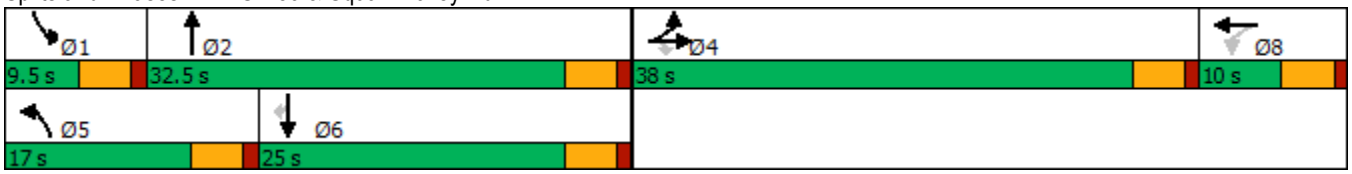
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases			4	8								6
Detector Phase	4	4	4	8	8		5	2		1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	10.0	10.0		9.5	22.5		9.5	22.5	22.5
Total Split (s)	38.0	38.0	38.0	10.0	10.0		17.0	32.5		9.5	25.0	25.0
Total Split (%)	42.2%	42.2%	42.2%	11.1%	11.1%		18.9%	36.1%		10.6%	27.8%	27.8%
Maximum Green (s)	33.5	33.5	33.5	5.5	5.5		12.5	28.0		5.0	20.5	20.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5		4.5		4.5	4.5		4.5	4.5	4.5
Lead/Lag							Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None	None	None	None		None	Min		None	Min	Min
Walk Time (s)	7.0	7.0	7.0					7.0			7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0					11.0			11.0	11.0
Pedestrian Calls (#/hr)	0	0	0					0			0	0
Act Effct Green (s)	33.6	33.6	33.6				11.8	32.0			15.7	15.7
Actuated g/C Ratio	0.45	0.45	0.45				0.16	0.43			0.21	0.21
v/c Ratio	0.82	0.82	0.41				0.69	0.49			0.70	0.42
Control Delay	30.1	30.1	3.3				45.2	16.5			37.9	6.7
Queue Delay	0.0	0.0	0.0				0.0	0.0			0.0	0.0
Total Delay	30.1	30.1	3.3				45.2	16.5			37.9	6.7
LOS	C	C	A				D	B			D	A
Approach Delay		23.9						22.5			24.1	
Approach LOS		C						C			C	
Queue Length 50th (ft)	257	257	0				86	121			116	0
Queue Length 95th (ft)	#500	#500	48				#182	166			192	50
Internal Link Dist (ft)		153			63			475			245	
Turn Bay Length (ft)							500					280
Base Capacity (vph)	756	756	918				297	1514			498	589
Starvation Cap Reductn	0	0	0				0	0			0	0
Spillback Cap Reductn	0	0	0				0	0			0	0
Storage Cap Reductn	0	0	0				0	0			0	0
Reduced v/c Ratio	0.82	0.82	0.41				0.65	0.48			0.54	0.36

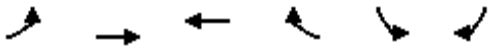
Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 74.7			
Natural Cycle: 90			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.82			
Intersection Signal Delay: 23.5		Intersection LOS: C	
Intersection Capacity Utilization 65.5%		ICU Level of Service C	
Analysis Period (min) 15			

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 1: SR 89 & Squaw Valley Rd



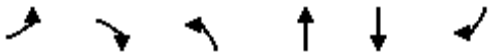


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	36	1474	357	15	5	27
Future Volume (vph)	36	1474	357	15	5	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.91	0.91	1.00	1.00	1.00	1.00
Frt			0.995		0.885	
Flt Protected		0.999			0.993	
Satd. Flow (prot)	0	5080	1853	0	1637	0
Flt Permitted		0.999			0.993	
Satd. Flow (perm)	0	5080	1853	0	1637	0
Link Speed (mph)		35	35		20	
Link Distance (ft)		210	233		372	
Travel Time (s)		4.1	4.5		12.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	39	1602	388	16	5	29
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1641	404	0	34	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 62.2%		ICU Level of Service B	
Analysis Period (min) 15			

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1505	5	5	379	5	5
Future Volume (vph)	1505	5	5	379	5	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	80		0	0
Storage Lanes		0	0		1	0
Taper Length (ft)			25		25	
Lane Util. Factor	0.91	0.91	0.95	0.95	1.00	1.00
Frt					0.932	
Flt Protected				0.999	0.976	
Satd. Flow (prot)	5085	0	0	3536	1694	0
Flt Permitted				0.999	0.976	
Satd. Flow (perm)	5085	0	0	3536	1694	0
Link Speed (mph)	35			35	20	
Link Distance (ft)	785			210	348	
Travel Time (s)	15.3			4.1	11.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1636	5	5	412	5	5
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1641	0	0	417	10	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 39.2%		ICU Level of Service A	
Analysis Period (min) 15			



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	45	6	5	1792	434	27
Future Volume (vph)	45	6	5	1792	434	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	75			0
Storage Lanes	1	0	1			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.983				0.992	
Flt Protected	0.958		0.950			
Satd. Flow (prot)	1754	0	1770	1863	1848	0
Flt Permitted	0.958		0.950			
Satd. Flow (perm)	1754	0	1770	1863	1848	0
Link Speed (mph)	30			55	55	
Link Distance (ft)	236			130	511	
Travel Time (s)	5.4			1.6	6.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	49	7	5	1948	472	29
Shared Lane Traffic (%)						
Lane Group Flow (vph)	56	0	5	1948	501	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 104.3%		ICU Level of Service G	
Analysis Period (min) 15			

1: SR 89 & Squaw Valley Rd Performance by movement

Movement	EBL	EBT	EBR	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.9	0.6	5.5
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	33.1	9.1	7.5
Total Delay (hr)	3.0	0.0	0.2	0.0	0.0	8.8	2.0	0.0	0.0	10.4	1.0	25.5
Total Del/Veh (s)	21.4	17.8	2.0	35.3	5.5	71.8	13.5	2.6	50.0	69.8	16.5	34.7
Avg Speed (mph)	5	7	13	2	7	4	18	23	4	3	7	6
Vehicles Entered	500	2	391	1	1	432	538	2	1	524	220	2612
Vehicles Exited	501	2	391	1	1	431	536	2	1	525	220	2611
Hourly Exit Rate	501	2	391	1	1	431	536	2	1	525	220	2611
Input Volume	490	3	400	2	1	390	533	1	3	966	409	3198
% of Volume	102	67	98	50	100	111	101	200	33	54	54	82

2: External Performance by approach

Approach	WB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.1	0.1
Total Del/Veh (s)	0.4	0.4
Avg Speed (mph)	34	34
Vehicles Entered	619	619
Vehicles Exited	618	618
Hourly Exit Rate	618	618
Input Volume	758	758
% of Volume	82	82

3: External Performance by approach

Approach	NB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.6	0.6
Total Del/Veh (s)	1.9	1.9
Avg Speed (mph)	42	42
Vehicles Entered	1042	1042
Vehicles Exited	1041	1041
Hourly Exit Rate	1041	1041
Input Volume	1066	1066
% of Volume	98	98

4: External Performance by approach

Approach	SB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.2	0.2
Total Del/Veh (s)	0.8	0.8
Avg Speed (mph)	40	40
Vehicles Entered	900	900
Vehicles Exited	900	900
Hourly Exit Rate	900	900
Input Volume	1338	1338
% of Volume	67	67

5: External Performance by approach

Approach	EB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.0	0.0
Total Del/Veh (s)	1.2	1.2
Avg Speed (mph)	16	16
Vehicles Entered	4	4
Vehicles Exited	4	4
Hourly Exit Rate	4	4
Input Volume	6	6
% of Volume	67	67

6: Squaw Valley Rd & 7-11 driveway Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.1	0.0
Total Delay (hr)	0.1	0.5	0.8	0.0	0.2	0.1	1.7
Total Del/Veh (s)	10.9	1.9	4.3	3.9	40.6	10.6	3.7
Avg Speed (mph)	9	24	12	11	4	10	16
Vehicles Entered	29	871	636	17	20	28	1601
Vehicles Exited	29	872	636	17	20	28	1602
Hourly Exit Rate	29	872	636	17	20	28	1602
Input Volume	30	870	780	21	22	29	1752
% of Volume	97	100	82	81	91	97	91

7: External Performance by approach

Approach	NB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.0	0.0
Total Del/Veh (s)	0.4	0.4
Avg Speed (mph)	22	22
Vehicles Entered	46	46
Vehicles Exited	46	46
Hourly Exit Rate	46	46
Input Volume	51	51
% of Volume	90	90

8: Site access & Squaw Valley Rd Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Delay (hr)	0.1	0.0	0.0	0.0	0.0	0.0	0.1
Denied Del/Veh (s)	0.4	0.4	0.0	0.0	0.1	0.1	0.2
Total Delay (hr)	0.2	0.0	0.1	0.2	0.0	0.1	0.6
Total Del/Veh (s)	0.7	0.4	7.8	0.9	27.7	7.0	1.3
Avg Speed (mph)	33	28	11	28	5	11	30
Vehicles Entered	846	5	47	617	5	56	1576
Vehicles Exited	845	5	47	616	5	55	1573
Hourly Exit Rate	845	5	47	616	5	55	1573
Input Volume	845	6	58	752	7	55	1723
% of Volume	100	83	81	82	71	100	91

9: External Performance by approach

Approach	SB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.0	0.0
Total Del/Veh (s)	0.6	0.6
Avg Speed (mph)	21	21
Vehicles Entered	52	52
Vehicles Exited	53	53
Hourly Exit Rate	53	53
Input Volume	64	64
% of Volume	83	83

10: Bend Performance by approach

Approach	NB	SB	All
Denied Delay (hr)	1.0	0.0	1.0
Denied Del/Veh (s)	3.9	0.0	2.0
Total Delay (hr)	0.9	2.8	3.7
Total Del/Veh (s)	3.3	11.3	7.1
Avg Speed (mph)	16	18	18
Vehicles Entered	972	900	1872
Vehicles Exited	972	900	1872
Hourly Exit Rate	972	900	1872
Input Volume	924	1338	2262
% of Volume	105	67	83

11: Bend Performance by approach

Approach	NB	SB	All
Denied Delay (hr)	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0
Total Delay (hr)	1.4	4.2	5.6
Total Del/Veh (s)	4.9	20.6	11.4
Avg Speed (mph)	20	4	11
Vehicles Entered	1038	728	1766
Vehicles Exited	1038	728	1766
Hourly Exit Rate	1038	728	1766
Input Volume	1024	1350	2374
% of Volume	101	54	74

12: SR 89 Performance by movement

Movement	EBL	EBR	NBL	NBT	SBT	SBR	All
Denied Delay (hr)	10.1	2.3	0.0	0.0	307.3	10.2	329.9
Denied Del/Veh (s)	912.6	1041.9	0.0	0.0	815.7	766.0	474.1
Total Delay (hr)	6.9	1.9	0.2	0.4	16.5	0.6	26.4
Total Del/Veh (s)	1375.8	1694.4	93.2	1.3	79.8	74.7	51.4
Avg Speed (mph)	0	0	1	29	4	4	3
Vehicles Entered	15	3	6	1047	731	29	1831
Vehicles Exited	12	1	6	1047	727	30	1823
Hourly Exit Rate	12	1	6	1047	727	30	1823
Input Volume	47	6	5	1036	1344	46	2484
% of Volume	26	17	120	101	54	65	73

13: External Performance by approach

Approach	WB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.0	0.0
Total Del/Veh (s)	1.5	1.5
Avg Speed (mph)	16	16
Vehicles Entered	36	36
Vehicles Exited	36	36
Hourly Exit Rate	36	36
Input Volume	51	51
% of Volume	71	71

Total Network Performance

Denied Delay (hr)	336.5
Denied Del/Veh (s)	353.1
Total Delay (hr)	64.3
Total Del/Veh (s)	82.2
Avg Speed (mph)	10
Vehicles Entered	2747
Vehicles Exited	2734
Hourly Exit Rate	2734
Input Volume	17127
% of Volume	16

Intersection: 1: SR 89 & Squaw Valley Rd

Movement	EB	EB	WB	NB	NB	NB	B10	SB	SB	SB	B11
Directions Served	L	LT	LTR	L	T	TR	T	L	T	R	T
Maximum Queue (ft)	200	169	30	466	531	156	109	22	361	260	172
Average Queue (ft)	135	102	2	308	207	45	24	1	333	244	151
95th Queue (ft)	188	163	14	505	534	122	106	9	345	345	162
Link Distance (ft)	156	156	94		488		111		260		76
Upstream Blk Time (%)	4	0		3	7		6		60	2	62
Queuing Penalty (veh)	12	1		0	0		0		813	0	834
Storage Bay Dist (ft)				500		300		160		280	
Storage Blk Time (%)				3	0				71	2	
Queuing Penalty (veh)				16	0				292	21	

Intersection: 6: Squaw Valley Rd & 7-11 driveway

Movement	EB	EB	WB	SB
Directions Served	LT	T	TR	LR
Maximum Queue (ft)	106	34	9	87
Average Queue (ft)	30	2	0	32
95th Queue (ft)	85	23	5	68
Link Distance (ft)	176	176	156	332
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 8: Site access & Squaw Valley Rd

Movement	WB	NB
Directions Served	LT	LR
Maximum Queue (ft)	74	67
Average Queue (ft)	25	27
95th Queue (ft)	59	53
Link Distance (ft)	176	284
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 10: Bend

Movement	SB
Directions Served	T
Maximum Queue (ft)	410
Average Queue (ft)	16
95th Queue (ft)	150
Link Distance (ft)	488
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 12: SR 89

Movement	EB	NB	NB	B11	B11	SB
Directions Served	LR	L	T	T		TR
Maximum Queue (ft)	217	38	36	201	53	531
Average Queue (ft)	193	7	2	16	2	501
95th Queue (ft)	243	28	16	125	37	520
Link Distance (ft)	198		76	260	260	479
Upstream Blk Time (%)	86			0	0	79
Queuing Penalty (veh)	0			1	0	0
Storage Bay Dist (ft)		75				
Storage Blk Time (%)						
Queuing Penalty (veh)						

Network Summary

Network wide Queuing Penalty: 1991

1: SR 89 & Squaw Valley Rd Performance by movement

Movement	EBL	EBR	NBL	NBT	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.0	0.0
Total Delay (hr)	9.3	0.2	2.3	8.8	1.9	0.1	22.5
Total Del/Veh (s)	33.3	2.1	44.4	47.2	27.1	2.4	31.2
Avg Speed (mph)	4	13	6	7	7	19	6
Vehicles Entered	992	298	182	659	251	194	2576
Vehicles Exited	993	298	180	659	250	194	2574
Hourly Exit Rate	993	298	180	659	250	194	2574
Input Volume	1154	352	179	662	253	195	2795
% of Volume	86	85	101	100	99	99	92

2: External Performance by approach

Approach	WB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.0	0.0
Total Del/Veh (s)	0.3	0.3
Avg Speed (mph)	34	34
Vehicles Entered	378	378
Vehicles Exited	381	381
Hourly Exit Rate	381	381
Input Volume	387	387
% of Volume	98	98

3: External Performance by approach

Approach	NB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	2.5	2.5
Total Del/Veh (s)	5.5	5.5
Avg Speed (mph)	30	30
Vehicles Entered	1645	1645
Vehicles Exited	1646	1646
Hourly Exit Rate	1646	1646
Input Volume	1858	1858
% of Volume	89	89

4: External Performance by approach

Approach	SB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.1	0.1
Total Del/Veh (s)	0.5	0.5
Avg Speed (mph)	43	43
Vehicles Entered	542	542
Vehicles Exited	542	542
Hourly Exit Rate	542	542
Input Volume	598	598
% of Volume	91	91

6: Squaw Valley Rd & 7-11 driveway Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	4.6	1.6	0.0
Total Delay (hr)	0.4	9.2	0.4	0.0	0.6	1.6	12.2
Total Del/Veh (s)	44.2	25.5	3.8	3.3	451.2	193.1	25.2
Avg Speed (mph)	3	5	12	11	0	1	5
Vehicles Entered	33	1289	358	17	4	29	1730
Vehicles Exited	33	1287	358	17	3	23	1721
Hourly Exit Rate	33	1287	358	17	3	23	1721
Input Volume	38	1501	360	15	5	27	1946
% of Volume	87	86	99	113	60	85	88

7: External Performance by approach

Approach	NB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.0	0.0
Total Del/Veh (s)	0.8	0.8
Avg Speed (mph)	22	22
Vehicles Entered	50	50
Vehicles Exited	50	50
Hourly Exit Rate	50	50
Input Volume	53	53
% of Volume	94	94

8: Site access & Squaw Valley Rd Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Delay (hr)	69.6	0.5	0.0	0.0	0.8	3.5	74.3
Denied Del/Veh (s)	168.5	208.4	0.0	0.0	338.4	370.5	139.6
Total Delay (hr)	24.7	0.0	0.0	0.1	0.9	6.0	31.8
Total Del/Veh (s)	66.4	20.2	20.1	0.6	673.2	869.6	65.2
Avg Speed (mph)	6	13	6	29	0	0	5
Vehicles Entered	1329	8	5	374	5	24	1745
Vehicles Exited	1307	8	5	374	4	15	1713
Hourly Exit Rate	1307	8	5	374	4	15	1713
Input Volume	1505	10	7	379	8	34	1943
% of Volume	87	80	71	99	50	44	88

9: External Performance by approach

Approach	SB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.0	0.0
Total Del/Veh (s)	0.4	0.4
Avg Speed (mph)	20	20
Vehicles Entered	13	13
Vehicles Exited	13	13
Hourly Exit Rate	13	13
Input Volume	17	17
% of Volume	76	76

10: Bend Performance by approach

Approach	NB	SB	All
Denied Delay (hr)	0.2	0.0	0.2
Denied Del/Veh (s)	0.8	0.0	0.5
Total Delay (hr)	0.5	1.5	2.0
Total Del/Veh (s)	2.1	9.8	5.1
Avg Speed (mph)	22	19	19
Vehicles Entered	841	541	1382
Vehicles Exited	841	542	1383
Hourly Exit Rate	841	542	1383
Input Volume	841	598	1439
% of Volume	100	91	96

11: Bend Performance by approach

Approach	NB	SB	All
Denied Delay (hr)	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0
Total Delay (hr)	6.4	0.1	6.6
Total Del/Veh (s)	13.9	1.2	11.2
Avg Speed (mph)	11	32	12
Vehicles Entered	1652	437	2089
Vehicles Exited	1649	438	2087
Hourly Exit Rate	1649	438	2087
Input Volume	1816	441	2257
% of Volume	91	99	92

12: SR 89 Performance by movement

Movement	EBL	EBR	NBL	NBT	SBT	SBR	All
Denied Delay (hr)	12.2	1.5	0.0	0.0	0.0	0.0	13.7
Denied Del/Veh (s)	1125.3	876.6	0.0	0.0	0.3	0.4	22.7
Total Delay (hr)	7.0	2.0	0.0	1.3	0.3	0.0	10.6
Total Del/Veh (s)	2806.4	2424.6	3.7	2.8	2.1	0.1	17.8
Avg Speed (mph)	0	0	11	20	40	33	7
Vehicles Entered	8	2	4	1663	437	25	2139
Vehicles Exited	2	0	4	1663	437	25	2131
Hourly Exit Rate	2	0	4	1663	437	25	2131
Input Volume	47	6	5	1831	435	27	2351
% of Volume	4	0	80	91	100	93	91

13: External Performance by approach

Approach	WB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.0	0.0
Total Del/Veh (s)	0.1	0.1
Avg Speed (mph)	20	20
Vehicles Entered	28	28
Vehicles Exited	29	29
Hourly Exit Rate	29	29
Input Volume	32	32
% of Volume	91	91

Total Network Performance

Denied Delay (hr)	88.2
Denied Del/Veh (s)	107.9
Total Delay (hr)	88.3
Total Del/Veh (s)	113.1
Avg Speed (mph)	8
Vehicles Entered	2736
Vehicles Exited	2690
Hourly Exit Rate	2690
Input Volume	15676
% of Volume	17

Intersection: 1: SR 89 & Squaw Valley Rd

Movement	EB	EB	NB	NB	NB	B10	SB
Directions Served	L	LT	L	T	TR	T	T
Maximum Queue (ft)	228	220	353	464	323	46	214
Average Queue (ft)	186	181	136	263	207	3	111
95th Queue (ft)	218	211	313	438	345	35	183
Link Distance (ft)	156	156		488		111	260
Upstream Blk Time (%)	61	46	0	1		0	0
Queuing Penalty (veh)	304	231	0	0		0	0
Storage Bay Dist (ft)			500		300		
Storage Blk Time (%)			0	8	1		3
Queuing Penalty (veh)			0	40	5		6

Intersection: 6: Squaw Valley Rd & 7-11 driveway

Movement	EB	EB	EB	WB	SB
Directions Served	LT	T	T	TR	LR
Maximum Queue (ft)	193	244	192	24	198
Average Queue (ft)	174	197	20	1	70
95th Queue (ft)	200	238	112	14	209
Link Distance (ft)	176	176	176	156	332
Upstream Blk Time (%)	16	26	1		2
Queuing Penalty (veh)	81	136	4		0
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 8: Site access & Squaw Valley Rd

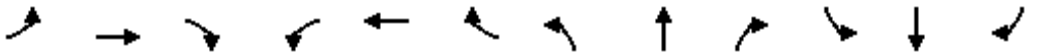
Movement	EB	EB	EB	WB	NB
Directions Served	T	T	TR	LT	LR
Maximum Queue (ft)	34	788	787	33	276
Average Queue (ft)	4	683	629	5	164
95th Queue (ft)	20	987	1085	25	355
Link Distance (ft)		736	736	176	284
Upstream Blk Time (%)		65	47		41
Queuing Penalty (veh)		0	0		0
Storage Bay Dist (ft)	10				
Storage Blk Time (%)	1	33			
Queuing Penalty (veh)	3	165			

Intersection: 12: SR 89

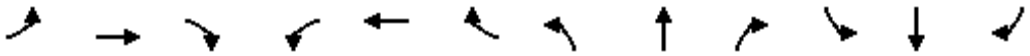
Movement	EB	NB	NB	B11	B11
Directions Served	LR	L	T	T	
Maximum Queue (ft)	213	24	58	360	369
Average Queue (ft)	193	2	7	325	248
95th Queue (ft)	258	13	36	408	458
Link Distance (ft)	198		76	260	260
Upstream Blk Time (%)	82		0	24	7
Queuing Penalty (veh)	0		0	217	61
Storage Bay Dist (ft)		75			
Storage Blk Time (%)			0		
Queuing Penalty (veh)			0		

Network Summary

Network wide Queuing Penalty: 1253



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1154	0	352	0	0	0	179	662	0	0	246	195
Future Volume (vph)	1154	0	352	0	0	0	179	662	0	0	246	195
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	500		300	160		280
Storage Lanes	1		1	0		0	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00
Frt			0.850									0.850
Flt Protected	0.950	0.950					0.950					
Satd. Flow (prot)	1681	1681	1583	0	1863	0	1770	3438	0	1863	1810	1583
Flt Permitted	0.950	0.950					0.950					
Satd. Flow (perm)	1681	1681	1583	0	1863	0	1770	3438	0	1863	1810	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			383									212
Link Speed (mph)		35			25			55			55	
Link Distance (ft)		233			143			555			325	
Travel Time (s)		4.5			3.9			6.9			4.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	5%	2%	2%	5%	2%
Adj. Flow (vph)	1254	0	383	0	0	0	195	720	0	0	267	212
Shared Lane Traffic (%)	50%											
Lane Group Flow (vph)	627	627	383	0	0	0	195	720	0	0	267	212
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2		1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100		20	100		20	100	20
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	0
Detector 1 Position(ft)	0	0	0	0	0		0	0		0	0	0
Detector 1 Size(ft)	20	6	20	20	6		20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Split	NA	Perm				Prot	NA		Prot	NA	Perm
Protected Phases	4	4			8		5	2		1	6	



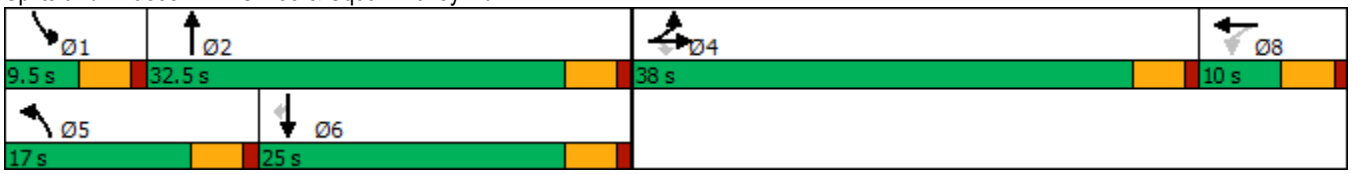
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases			4	8								6
Detector Phase	4	4	4	8	8		5	2		1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	10.0	10.0		9.5	22.5		9.5	22.5	22.5
Total Split (s)	38.0	38.0	38.0	10.0	10.0		17.0	32.5		9.5	25.0	25.0
Total Split (%)	42.2%	42.2%	42.2%	11.1%	11.1%		18.9%	36.1%		10.6%	27.8%	27.8%
Maximum Green (s)	33.5	33.5	33.5	5.5	5.5		12.5	28.0		5.0	20.5	20.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5		4.5		4.5	4.5		4.5	4.5	4.5
Lead/Lag							Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None	None	None	None		None	Min		None	Min	Min
Walk Time (s)	7.0	7.0	7.0					7.0			7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0					11.0			11.0	11.0
Pedestrian Calls (#/hr)	0	0	0					0			0	0
Act Effct Green (s)	33.6	33.6	33.6				11.9	32.1			15.7	15.7
Actuated g/C Ratio	0.45	0.45	0.45				0.16	0.43			0.21	0.21
v/c Ratio	0.83	0.83	0.42				0.69	0.49			0.70	0.42
Control Delay	31.2	31.2	3.3				45.4	16.4			38.0	6.7
Queue Delay	0.0	0.0	0.0				0.0	0.0			0.0	0.0
Total Delay	31.2	31.2	3.3				45.4	16.4			38.0	6.7
LOS	C	C	A				D	B			D	A
Approach Delay		24.6						22.6			24.1	
Approach LOS		C						C			C	
Queue Length 50th (ft)	265	265	0				87	121			116	0
Queue Length 95th (ft)	#512	#512	49				#186	166			192	50
Internal Link Dist (ft)		153			63			475			245	
Turn Bay Length (ft)							500					280
Base Capacity (vph)	755	755	922				297	1514			497	589
Starvation Cap Reductn	0	0	0				0	0			0	0
Spillback Cap Reductn	0	0	0				0	0			0	0
Storage Cap Reductn	0	0	0				0	0			0	0
Reduced v/c Ratio	0.83	0.83	0.42				0.66	0.48			0.54	0.36

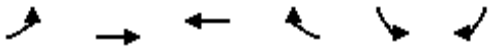
Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 74.8			
Natural Cycle: 90			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.83			
Intersection Signal Delay: 23.9		Intersection LOS: C	
Intersection Capacity Utilization 66.1%		ICU Level of Service C	
Analysis Period (min) 15			

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 1: SR 89 & Squaw Valley Rd



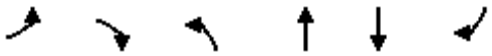


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	38	1501	359	15	5	27
Future Volume (vph)	38	1501	359	15	5	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.91	0.91	1.00	1.00	1.00	1.00
Frt			0.995		0.885	
Flt Protected		0.999			0.993	
Satd. Flow (prot)	0	5080	1853	0	1637	0
Flt Permitted		0.999			0.993	
Satd. Flow (perm)	0	5080	1853	0	1637	0
Link Speed (mph)		35	35		20	
Link Distance (ft)		210	233		372	
Travel Time (s)		4.1	4.5		12.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	41	1632	390	16	5	29
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1673	406	0	34	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 62.9%		ICU Level of Service B	
Analysis Period (min) 15			

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1505	10	7	379	8	34
Future Volume (vph)	1505	10	7	379	8	34
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	80		0	0
Storage Lanes		0	0		1	0
Taper Length (ft)			25		25	
Lane Util. Factor	0.91	0.91	0.95	0.95	1.00	1.00
Frt	0.999				0.891	
Flt Protected				0.999	0.990	
Satd. Flow (prot)	5080	0	0	3536	1643	0
Flt Permitted				0.999	0.990	
Satd. Flow (perm)	5080	0	0	3536	1643	0
Link Speed (mph)	35			35	20	
Link Distance (ft)	785			210	348	
Travel Time (s)	15.3			4.1	11.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1636	11	8	412	9	37
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1647	0	0	420	46	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 39.3%		ICU Level of Service A	
Analysis Period (min) 15			



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	47	6	5	1811	435	27
Future Volume (vph)	47	6	5	1811	435	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	75			0
Storage Lanes	1	0	1			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.984				0.992	
Flt Protected	0.958		0.950			
Satd. Flow (prot)	1756	0	1770	1863	1848	0
Flt Permitted	0.958		0.950			
Satd. Flow (perm)	1756	0	1770	1863	1848	0
Link Speed (mph)	30			55	55	
Link Distance (ft)	236			130	511	
Travel Time (s)	5.4			1.6	6.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	51	7	5	1968	473	29
Shared Lane Traffic (%)						
Lane Group Flow (vph)	58	0	5	1968	502	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 105.3%		ICU Level of Service G	
Analysis Period (min) 15			

1: SR 89 & Squaw Valley Rd Performance by movement

Movement	EBL	EBT	EBR	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.4	0.5	4.8
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	29.4	7.7	6.7
Total Delay (hr)	2.9	0.0	0.2	0.0	0.0	5.3	1.7	0.0	0.0	10.4	0.9	21.4
Total Del/Veh (s)	20.7	17.4	2.0	53.6	7.1	46.5	11.1	2.5	37.1	69.3	15.2	29.3
Avg Speed (mph)	5	7	13	2	6	6	21	25	4	3	8	6
Vehicles Entered	491	2	413	1	1	401	537	1	2	528	223	2600
Vehicles Exited	494	2	413	1	1	403	536	1	2	526	223	2602
Hourly Exit Rate	494	2	413	1	1	403	536	1	2	526	223	2602
Input Volume	501	2	411	2	1	393	533	1	3	966	412	3225
% of Volume	99	100	100	50	100	103	101	100	67	54	54	81

2: External Performance by approach

Approach	WB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.1	0.1
Total Del/Veh (s)	0.5	0.5
Avg Speed (mph)	34	34
Vehicles Entered	603	603
Vehicles Exited	602	602
Hourly Exit Rate	602	602
Input Volume	764	764
% of Volume	79	79

3: External Performance by approach

Approach	NB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.6	0.6
Total Del/Veh (s)	1.9	1.9
Avg Speed (mph)	41	41
Vehicles Entered	1042	1042
Vehicles Exited	1043	1043
Hourly Exit Rate	1043	1043
Input Volume	1077	1077
% of Volume	97	97

4: External Performance by approach

Approach	SB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.2	0.2
Total Del/Veh (s)	0.8	0.8
Avg Speed (mph)	39	39
Vehicles Entered	928	928
Vehicles Exited	928	928
Hourly Exit Rate	928	928
Input Volume	1349	1349
% of Volume	69	69

5: External Performance by approach

Approach	EB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.0	0.0
Total Del/Veh (s)	1.1	1.1
Avg Speed (mph)	18	18
Vehicles Entered	5	5
Vehicles Exited	5	5
Hourly Exit Rate	5	5
Input Volume	6	6
% of Volume	83	83

6: Squaw Valley Rd & 7-11 driveway Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.2	0.1	0.0
Total Delay (hr)	0.1	0.5	0.8	0.0	0.3	0.2	1.8
Total Del/Veh (s)	10.5	2.0	4.5	3.0	48.0	19.3	4.1
Avg Speed (mph)	9	23	12	11	4	7	15
Vehicles Entered	32	886	612	15	21	30	1596
Vehicles Exited	32	885	612	15	21	30	1595
Hourly Exit Rate	32	885	612	15	21	30	1595
Input Volume	32	892	786	21	22	29	1782
% of Volume	100	99	78	71	95	103	90

7: External Performance by approach

Approach	NB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.0	0.0
Total Del/Veh (s)	0.4	0.4
Avg Speed (mph)	22	22
Vehicles Entered	47	47
Vehicles Exited	47	47
Hourly Exit Rate	47	47
Input Volume	53	53
% of Volume	89	89

8: Site access & Squaw Valley Rd Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Delay (hr)	0.1	0.0	0.0	0.0	0.0	0.0	0.1
Denied Del/Veh (s)	0.4	0.3	0.0	0.0	0.1	0.2	0.2
Total Delay (hr)	0.2	0.0	0.1	0.2	0.1	0.2	0.7
Total Del/Veh (s)	0.8	0.2	7.2	0.9	25.7	8.6	1.6
Avg Speed (mph)	33	28	11	28	6	10	29
Vehicles Entered	841	8	49	592	11	77	1578
Vehicles Exited	840	8	50	592	11	78	1579
Hourly Exit Rate	840	8	50	592	11	78	1579
Input Volume	845	7	64	752	13	79	1760
% of Volume	99	114	78	79	85	99	90

9: External Performance by approach

Approach	SB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.0	0.0
Total Del/Veh (s)	0.6	0.6
Avg Speed (mph)	21	21
Vehicles Entered	57	57
Vehicles Exited	57	57
Hourly Exit Rate	57	57
Input Volume	71	71
% of Volume	80	80

10: Bend Performance by approach

Approach	NB	SB	All
Denied Delay (hr)	0.3	0.0	0.3
Denied Del/Veh (s)	1.0	0.0	0.5
Total Delay (hr)	0.5	3.0	3.5
Total Del/Veh (s)	1.9	11.4	6.6
Avg Speed (mph)	23	18	19
Vehicles Entered	939	925	1864
Vehicles Exited	939	928	1867
Hourly Exit Rate	939	928	1867
Input Volume	927	1349	2276
% of Volume	101	69	82

11: Bend Performance by approach

Approach	NB	SB	All
Denied Delay (hr)	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0
Total Delay (hr)	1.3	4.2	5.5
Total Del/Veh (s)	4.7	20.4	11.2
Avg Speed (mph)	20	4	11
Vehicles Entered	1031	733	1764
Vehicles Exited	1029	733	1762
Hourly Exit Rate	1029	733	1762
Input Volume	1035	1353	2388
% of Volume	99	54	74

12: SR 89 Performance by movement

Movement	EBL	EBR	NBL	NBT	SBT	SBR	All
Denied Delay (hr)	10.2	2.1	0.0	0.0	310.6	10.3	333.2
Denied Del/Veh (s)	748.8	828.3	0.0	0.0	831.4	879.3	481.7
Total Delay (hr)	7.4	1.2	0.0	0.4	16.6	0.5	26.1
Total Del/Veh (s)	1070.8	1414.4	49.5	1.3	79.6	74.2	50.8
Avg Speed (mph)	0	0	2	30	4	4	3
Vehicles Entered	23	3	3	1042	732	23	1826
Vehicles Exited	17	1	3	1042	732	23	1818
Hourly Exit Rate	17	1	3	1042	732	23	1818
Input Volume	47	6	5	1046	1347	46	2497
% of Volume	36	17	60	100	54	50	73

13: External Performance by approach

Approach	WB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.0	0.0
Total Del/Veh (s)	1.5	1.5
Avg Speed (mph)	16	16
Vehicles Entered	26	26
Vehicles Exited	25	25
Hourly Exit Rate	25	25
Input Volume	51	51
% of Volume	49	49

Total Network Performance

Denied Delay (hr)	338.4
Denied Del/Veh (s)	356.5
Total Delay (hr)	59.8
Total Del/Veh (s)	76.3
Avg Speed (mph)	11
Vehicles Entered	2746
Vehicles Exited	2738
Hourly Exit Rate	2738
Input Volume	17299
% of Volume	16

Intersection: 1: SR 89 & Squaw Valley Rd

Movement	EB	EB	WB	NB	NB	NB	SB	SB	SB	B11
Directions Served	L	LT	LTR	L	T	TR	L	T	R	T
Maximum Queue (ft)	212	159	30	408	322	164	120	366	260	186
Average Queue (ft)	133	99	2	229	125	35	5	334	233	152
95th Queue (ft)	187	157	15	379	289	116	47	347	361	167
Link Distance (ft)	156	156	94		488			260		76
Upstream Blk Time (%)	3	0		0	0			60	2	62
Queuing Penalty (veh)	10	1		0	0			812	0	833
Storage Bay Dist (ft)				500		300	160		280	
Storage Blk Time (%)				0	0			71	2	
Queuing Penalty (veh)				0	1			294	20	

Intersection: 6: Squaw Valley Rd & 7-11 driveway

Movement	EB	EB	WB	SB
Directions Served	LT	T	TR	LR
Maximum Queue (ft)	116	20	13	120
Average Queue (ft)	33	1	1	37
95th Queue (ft)	92	18	8	85
Link Distance (ft)	176	176	156	332
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 8: Site access & Squaw Valley Rd

Movement	WB	WB	NB
Directions Served	LT	T	LR
Maximum Queue (ft)	69	24	95
Average Queue (ft)	28	1	34
95th Queue (ft)	62	13	67
Link Distance (ft)	176	176	284
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 10: Bend

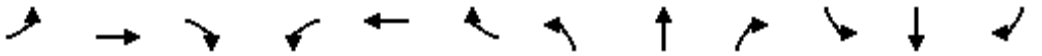
Movement	SB
Directions Served	T
Maximum Queue (ft)	247
Average Queue (ft)	11
95th Queue (ft)	120
Link Distance (ft)	488
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 12: SR 89

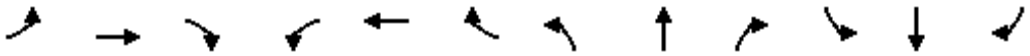
Movement	EB	NB	NB	B11	B11	SB
Directions Served	LR	L	T	T		TR
Maximum Queue (ft)	213	30	27	327	11	529
Average Queue (ft)	191	3	1	18	0	502
95th Queue (ft)	249	16	10	133	8	522
Link Distance (ft)	198		76	260	260	479
Upstream Blk Time (%)	82			0		78
Queuing Penalty (veh)	0			2		0
Storage Bay Dist (ft)		75				
Storage Blk Time (%)						
Queuing Penalty (veh)						

Network Summary

Network wide Queuing Penalty: 1973



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	501	2	411	0	2	1	393	533	1	3	938	412
Future Volume (vph)	501	2	411	0	2	1	393	533	1	3	938	412
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	500		300	160		280
Storage Lanes	1		1	0		0	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00
Frt			0.850		0.955							0.850
Flt Protected	0.950	0.953					0.950			0.950		
Satd. Flow (prot)	1681	1686	1583	0	1779	0	1770	3438	0	1770	1810	1583
Flt Permitted	0.950	0.953					0.950			0.950		
Satd. Flow (perm)	1681	1686	1583	0	1779	0	1770	3438	0	1770	1810	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			433		1							257
Link Speed (mph)		35			25			55			55	
Link Distance (ft)		233			143			555			325	
Travel Time (s)		4.5			3.9			6.9			4.0	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	5%	2%	2%	5%	2%
Adj. Flow (vph)	527	2	433	0	2	1	414	561	1	3	987	434
Shared Lane Traffic (%)	50%											
Lane Group Flow (vph)	263	266	433	0	3	0	414	562	0	3	987	434
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2		1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100		20	100		20	100	20
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	0
Detector 1 Position(ft)	0	0	0	0	0		0	0		0	0	0
Detector 1 Size(ft)	20	6	20	20	6		20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Split	NA	Perm		NA		Prot	NA		Prot	NA	Perm
Protected Phases	4	4			8		5	2		1	6	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases			4	8								6
Detector Phase	4	4	4	8	8		5	2		1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	10.0	10.0		22.5	22.5		9.5	22.5	22.5
Total Split (s)	38.0	38.0	38.0	10.0	10.0		22.5	32.5		9.5	25.0	25.0
Total Split (%)	39.8%	39.8%	39.8%	10.5%	10.5%		23.6%	34.0%		9.9%	26.2%	26.2%
Maximum Green (s)	33.5	33.5	33.5	5.5	5.5		18.0	28.0		5.0	20.5	20.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5		4.5		4.5	4.5		4.5	4.5	4.5
Lead/Lag							Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None	None	None	None		None	Min		None	Min	Min
Walk Time (s)	7.0	7.0	7.0					7.0				
Flash Dont Walk (s)	11.0	11.0	11.0					11.0				
Pedestrian Calls (#/hr)	0	0	0					224				
Act Effct Green (s)	19.7	19.7	19.7		5.6		18.4	42.4		5.1	20.9	20.9
Actuated g/C Ratio	0.27	0.27	0.27		0.08		0.25	0.57		0.07	0.28	0.28
v/c Ratio	0.59	0.60	0.59		0.02		0.95	0.29		0.02	1.94	0.69
Control Delay	29.3	29.5	5.9		34.7		64.0	11.9		39.0	451.9	18.1
Queue Delay	0.0	0.0	0.0		0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	29.3	29.5	5.9		34.7		64.0	11.9		39.0	451.9	18.1
LOS	C	C	A		C		E	B		D	F	B
Approach Delay		18.8			34.7			34.0			318.8	
Approach LOS		B			C			C			F	
Queue Length 50th (ft)	105	106	0		1		175	53		1	~672	61
Queue Length 95th (ft)	204	206	63		11		#494	185		11	#1241	#260
Internal Link Dist (ft)		153			63			475			245	
Turn Bay Length (ft)							500			160		280
Base Capacity (vph)	772	775	961		135		437	1960		121	509	629
Starvation Cap Reductn	0	0	0		0		0	0		0	0	0
Spillback Cap Reductn	0	0	0		0		0	0		0	0	0
Storage Cap Reductn	0	0	0		0		0	0		0	0	0
Reduced v/c Ratio	0.34	0.34	0.45		0.02		0.95	0.29		0.02	1.94	0.69

Intersection Summary			
Area Type:	Other		
Cycle Length: 95.5			
Actuated Cycle Length: 74.3			
Natural Cycle: 150			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 1.94			
Intersection Signal Delay: 150.2		Intersection LOS: F	
Intersection Capacity Utilization 103.0%		ICU Level of Service G	
Analysis Period (min) 15			

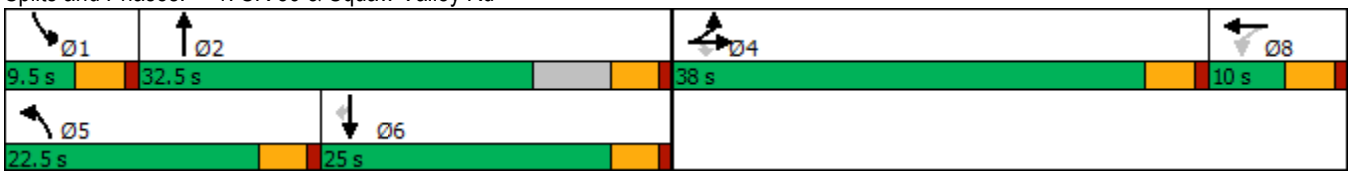
~ Volume exceeds capacity, queue is theoretically infinite.

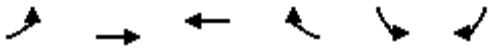
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 1: SR 89 & Squaw Valley Rd



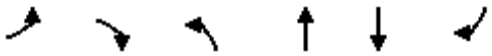


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	32	892	786	21	22	29
Future Volume (vph)	32	892	786	21	22	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.91	0.91	1.00	1.00	1.00	1.00
Frt			0.997		0.923	
Flt Protected		0.998			0.979	
Satd. Flow (prot)	0	5075	1857	0	1683	0
Flt Permitted		0.998			0.979	
Satd. Flow (perm)	0	5075	1857	0	1683	0
Link Speed (mph)		35	35		20	
Link Distance (ft)		210	233		372	
Travel Time (s)		4.1	4.5		12.7	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	36	991	873	23	24	32
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1027	896	0	56	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 52.6%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	845	7	64	751	13	79
Future Volume (vph)	845	7	64	751	13	79
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	80		0	0
Storage Lanes		0	0		1	0
Taper Length (ft)			25		25	
Lane Util. Factor	0.91	0.91	0.95	0.95	1.00	1.00
Frt	0.999				0.884	
Flt Protected				0.996	0.993	
Satd. Flow (prot)	5080	0	0	3525	1635	0
Flt Permitted				0.996	0.993	
Satd. Flow (perm)	5080	0	0	3525	1635	0
Link Speed (mph)	35			35	20	
Link Distance (ft)	785			210	348	
Travel Time (s)	15.3			4.1	11.9	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	939	8	71	834	14	88
Shared Lane Traffic (%)						
Lane Group Flow (vph)	947	0	0	905	102	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 54.7%		ICU Level of Service A	
Analysis Period (min) 15			



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	47	6	5	1030	1347	46
Future Volume (vph)	47	6	5	1030	1347	46
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	75			0
Storage Lanes	1	0	1			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.984				0.996	
Flt Protected	0.958		0.950			
Satd. Flow (prot)	1756	0	1770	1863	1855	0
Flt Permitted	0.958		0.950			
Satd. Flow (perm)	1756	0	1770	1863	1855	0
Link Speed (mph)	30			55	55	
Link Distance (ft)	236			130	511	
Travel Time (s)	5.4			1.6	6.3	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	52	7	6	1144	1497	51
Shared Lane Traffic (%)						
Lane Group Flow (vph)	59	0	6	1144	1548	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 83.7%		ICU Level of Service E	
Analysis Period (min) 15			

APPENDIX F

TRANSPORTATION PLANNING AND
TRAFFIC ENGINEERING CONSULTANTS

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TECHNICAL MEMORANDUM

Date: January 29, 2021

TO: Jill Short Milne, Executive Director, Project SNOW
Emilio Balingit, Urban Planning Partners, Inc.

FROM: Gordon Shaw, PE and Sierra Brown, EIT, LSC Transportation Consultants, Inc.

RE: Squaw S.N.O.W. Museum – Trip Generation, Level of Service and Roadway Capacity

This memorandum documents the findings and conclusions of an analysis of trip generation, intersection Level of Service (LOS), queuing and roadway capacity analysis regarding the proposed Squaw Valley Olympic Museum project located at the existing Squaw Valley Park property on the south side of Squaw Valley Road immediately west of State Route (SR) 89. This analysis is an update of the analysis presented in the *Squaw Valley Olympic Museum Transportation Impact Analysis* (LSC, March 2, 2020). The purpose of this analysis is to present determine the impacts of the traffic generated by the project on the surrounding roadway infrastructure. Next, it is identified whether mitigation is required to allow transportation facilities to operate in conformance with adopted standards and consistent with pertinent policies under the current adopted Placer County and Caltrans standards. Finally, the project's consistency with the traffic policies in the Squaw Valley General Plan is evaluated.

Based upon input provided by Placer County staff, the following intersections were identified for quantitative analysis:

- SR 89/Squaw Valley Road
- Squaw Valley Road/Squaw Park Driveway (site access intersection)

The following roadway segments were identified for analysis:

- SR 89 north of Squaw Valley Road
- SR 89 south of Squaw Valley Road

This analysis considers the following four scenarios:

1. Existing Year without Project
2. Existing Year with Project
3. Future Cumulative (20-Year Horizon) without Project
4. Future Cumulative with Project

Trip Generation

TRIP GENERATION OF PROPOSED MUSEUM

Project Description

The proposed museum building would provide about 12,000 square feet of use area for museum operations and a limited number of special events. The museum is anticipated to be open daily from 10 AM to 6 PM. A total of 6 employees (3 full-time and 3 part-time) are expected to report to the site over the course of a busy day. Visitation levels at the museum would vary by season, day of week, and time of day. Consistent with typical tourism trends, the highest visitation levels would generally occur during winter and summer peak/holiday periods. Friday through Sunday would typically be busier than Monday through Thursday.

Based on visitation data provided by Squaw Valley Ski Museum Foundation staff, approximately 300 visitors are anticipated over the course of a peak winter Sunday, and 225 on a peak summer day. Over the course of a peak day, the number of visitors at the museum would be highest during the afternoon period from about 3 PM to 6 PM. In addition, an average of 6 special events per year would be held at the museum, with up to 100 guests per event. Special events would occur in the evening, between 6 PM and 10 PM, in order to avoid peak traffic periods.

Access to the museum would be provided via the existing Squaw Valley Park driveway located on the south side of Squaw Valley Road immediately west of its intersection with SR 89. The existing parking lot would serve both the park and the museum.

Trip Generation of Museum

The first step in the analysis of future traffic impacts is to prepare an estimate of the number of one-way vehicle-trips generated by the proposed project. While standard trip generation rates for a museum are provided in the Institute of Transportation Engineers (ITE) *Trip Generation, 10th Edition* (2017) manual, the rates are based on data collected at only one museum. In order to provide a more accurate estimate of site-generated traffic, a detailed analysis is performed to estimate the vehicular trip generation of the museum based on the number of employees, visitors, and service vehicles, factored by expected travel modes and vehicle occupancy rates. The trip generation of the project is evaluated for typical museum operations on a winter Sunday, a summer Friday and a summer weekend day.

The trip generation analysis is summarized in Table 1. The following assumptions are applied:

- Some visitors are expected to make trips to/from the site via non-auto modes, such as transit trips. Considering the site's location along the TART transit route and the winter Mountaineer and Squaw Valley-Alpine Meadows skier shuttle service, approximately 4 percent of visitor trips to/from the museum during the winter are assumed to be made by non-auto modes. Given that the site is also served by a Class I trail (bike path) in the summer, approximately 15 percent of visitor trips on a summer day are assumed to be made via non-auto modes.

- About 5 percent of employee trips are assumed to be made via non-auto modes during the winter and summer.

- An average vehicle occupancy rate of 2.1 visitors per vehicle is assumed, consistent with other recent studies. Museum employees traveling via private automobile are assumed to have an average vehicle occupancy rate of 1 employee per vehicle, conservatively.

- About half of the employees are assumed to make one round-trip off the site during the workday for lunch, errands, etc.

- Approximately 2 service/delivery vehicles are anticipated to visit the site over the course of a busy day.

TABLE 1: Squaw Valley Olympic Museum - Trip Generation at Site Driveway

Description	Quantity	Units	Trip Generation Rates[1] Daily	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Vehicle Trips at Site Driveway[2] Daily	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	% Daily Trips Generated by Visitors	Pass-by Reduction	Daily Trips Pass-by	Daily Trips New
Proposed Project[3]														
Peak Summer Friday	12.00	KSF	person trip analysis				203	6	22	28	90%	20%	36	167
Peak Summer Saturday	12.00	KSF	person trip analysis				268	7	30	37	92%	20%	49	219
Peak Winter Sunday	12.00	KSF	person trip analysis				301	8	33	41	93%	25%	70	231

KSF = 1,000 square feet of floor area

Note: Excludes special events at museum.

Note 1: Trip generation rates are based on a person-trip analysis as Trip Generation, 10th Edition (ITE, 2017) does not have sufficient data.

Note 2: These are not all "new" trips to the roadway network. See discussion in text report.

Source: LSC Transportation Consultants, Inc.

Trip Generation at Site Driveway

Multiplying the number of person-trips by the auto mode split and dividing by the average vehicle occupancy rate yields the number of one-way vehicle trips generated at the site driveway. Adding the visitor, employee, and service/delivery vehicle trips yields a total of approximately 301 daily one-way vehicle trips on a winter Sunday, 203 daily trips on a summer Friday and 268 daily trips on a summer Saturday. Note that these are not all 'new' trips on the surrounding roadway network, as discussed below.

To estimate the portion of total daily trips that occur during the PM peak hours, an average 'PM-to-daily' trip factor of approximately 13.7 percent is applied. This factor is derived from a review of PM-to-daily factors for similar land use types in the ITE Trip Generation Manual. The resulting number of PM peak-hour one-way trips generated by the proposed museum is approximately 41 (8 entering and 33 exiting) on a winter Sunday, 28 (6 entering and 22 exiting) on a summer Friday and 37 (7 entering and 30 exiting) during the weekend mid-day peak hour.

Trip Generation of Special Events

Museum staff indicates that special events are planned to occur in the evening starting at or after 6 PM. The following assumptions are applied:

- A special event is assumed to have 100 guests and about 10 staff.
- Considering that special events would occur in the evening and that guests could be coming from outside Squaw Valley, all guests are assumed to arrive via automobile. About 5 percent of event staff trips are assumed to be made via non-auto modes during the winter and summer.
- An additional 2 service/delivery vehicles are assumed to be associated with a special event.

Multiplying the number of person-trips by the auto mode split and dividing by the average vehicle occupancy rate yields the number of one-way vehicle trips generated at the site driveway. Adding the guest, staff, and service/delivery vehicle trips yields a total of approximately 119 daily one-way vehicle trips generated at the site driveway by a special event.

Pass-by Versus New Trips

A portion of trips associated with the museum are expected to be "pass-by" trips, or trips attracted from traffic passing the site on SR 89 or Squaw Valley Road. Pass-by trips generate traffic on the access driveway, but do not add new traffic on regional roadways (as they are made by vehicles already passing by the site that will divert to the new land use as part of a longer trip). As an example, tourists passing by the site along SR 89 might decide to stop at the site, thereby generating new trips on Squaw Valley Road and the site access driveway but not generating new trips along SR 89. (This is technically called a "diverted-link" trip, given that the site driveway does not front on the highway. For simplicity, it is referred to as a pass-by trip.)

Data on the proportion of trips that are pass-by have been collected for a variety of land uses. As examples, the following are the average observed pass-by percentages as reported in the ITE *Trip Generation Handbook*:

- Variety Store – 34 percent
- Supermarket – 36 percent
- Shopping Center (Saturday, Mid-day) – 26 percent

Unfortunately, there is no available published data on the pass-by proportion for a museum. Efforts to research pass-by trips for similar existing sports museums did not result in any

useable data, though a study of the State Rail Museum in Sacramento indicated that 30 percent of visitors were already in the vicinity. In estimating an appropriate value, the following was considered:

- The proposed museum is relatively modest in size compared with a large museum in an urban area. Rather than being a day-long activity, a relatively short stay can be expected[1]. This would indicate that many visitors will stop by the museum as part of longer trips with multiple destinations.

- The location along the access route to Squaw Valley, Alpine Meadows (and other ski areas) means that much of the traffic on the adjacent roadways consists of persons interested in outdoor recreation and specifically skiers that would have a relatively high level of interest in visiting a museum dedicated to the Winter Olympics. In particular, a pattern of stopping by the museum at the end of a ski day would be expected.

- Many summer visitors to the region make multiple stops as part of a day trip exploring the area. The Museum would be a logical additional stop along a longer such trip.

The portion of pass-by trips generated during typical operations at the museum is estimated as follows:

- Over the course of a busy **winter day**, the total portion of museum trips that are on the adjacent roadways (pass-by) is estimated to be 25 percent. Of this, 34 percent is generated by vehicles passing by on SR 89 (proceeding straight through the Squaw Valley Road intersection) while 66 percent is generated by vehicles passing by on Squaw Valley Road.

- Over the course of a busy **summer day**, the total proportion of pass-by trips would be slightly lower at 20 percent, reflecting that a smaller proportion of summer travelers have an interest in winter sports. Reflecting the relatively low traffic activity on Squaw Valley Road in the summer compared to the winter, 62 percent of this pass-by activity is generated by travelers passing by on SR 89 and 38 percent by those on Squaw Valley Road.

As shown in the right portion of Table 1, applying these proportions to the proportion of daily trips generated by visitors yields the daily pass-by trips for the three analysis days. Subtracting these pass-by trips from the total trip generation yields the daily new vehicle-trips (those that would not be on the adjacent roadways in the absence of the proposed project). These new trips equal 167 on a summer Friday, 219 on a summer Saturday and 231 on a winter Sunday. It is important to note that no pass-by reductions are applied to the peak-hour trip generation in order to yield a conservative analysis of peak-hour LOS, and to reflect that pass-by trips diverting off of SR 89 still represent new traffic activity on Squaw Valley Road.

LOS Description

Traffic operations at the study intersections are assessed in terms of Level of Service (LOS) and

[1] As an example, surveys of visitors to the existing Tahoe Maritime Museum indicate an average length of stay of 2 hours.

delay. LOS is a concept that was developed by transportation engineers to quantify the level of operation of intersections and roadways (*Highway Capacity Manual*, Transportation Research Board). LOS measures are classified in grades "A" through "F," indicating the range of operation. LOS "A" signifies the best level of operation, while "F" represents the worst. A detailed description of LOS criteria is provided in Appendix A.

For signalized intersections, LOS is primarily measured in terms of average delay per vehicle entering the intersection. LOS at unsignalized intersections is reported in terms of delay on the worst movement. Unsignalized intersection LOS is based upon the theory of gap acceptance for side-street stop sign-controlled approaches, while signalized intersection LOS is based upon the assessment of volume-to-capacity ratios and control delay.

LOS Standards

The LOS thresholds applicable to the study area are discussed below.

Caltrans

According to the *SR 89 Transportation Corridor Concept Report* (Caltrans District 3, April 2012), the minimum acceptable LOS along SR 89 over the next 20 years is "E."

Placer County

Placer County defines its LOS standard as "D" for locations within one-half mile of a state highway, and "C" for other locations in the study area. Roadway LOS is measured according to ADT (Average Daily Traffic) per travel lane, using a lookup table provided in the *Placer County Congestion Management Plan*. For the study area, Placer County requires evaluation of summer or winter ADT, whichever is higher. According to County policy, the County's LOS standards for the state highway system shall be no worse than those adopted in the Placer County Congestion Management Program (CMP). The LOS standard in the CMP for roadways and signalized intersections located along state highways is "E." If worst movement LOS at an unsignalized intersection in Placer County exceeds LOS standards, a "Peak-Hour" signal warrant analysis, consistent with the Manual of Uniform Traffic Control Devices (MUTCD), is required. If the intersection attains minimum signal warrant volumes, mitigation is required.

The segments of SR 89 (located in Placer County) are measured against the Caltrans standard of LOS E, as Placer County typically defers to Caltrans LOS standards on State facilities.

Placer County may allow exceptions to its LOS standards where it finds that the improvements or other measures required to achieve the LOS standards is unacceptable based on established criteria. In allowing any exceptions to established LOS standards, the County shall consider the following factors:

- The number of hours per day that the intersection or roadway segment would operate the conditions worse than the standard.

- The ability of the required improvement to significantly reduce peak-hour delay and improve traffic operations.
- The right-of-way needs and the physical impacts on surrounding properties.
- The visual aesthetics of the required improvement and its impact on community identity and character.
- Environmental impacts including air quality and noise impacts.
- Construction and right-of-way acquisition costs.
- The impacts on general safety.
- The impacts of the required construction phasing and traffic maintenance.
- The impacts on quality of life as perceived by residents.
- Consideration of other environmental, social or economic factors on which the County may base findings to allow exceedance of the standards.

Exceptions to the standards will only be allowed after all feasible measures and options are explored, including alternative forms of transportation.

Finally, as of the time when this traffic analysis was initiated, Placer County adopted an "Impact Analysis Methodology of Assessment" for County roadways and intersections (including State facilities) to ensure that mitigation measures are proportionate to the level of impact a specific project has on an intersection or roadway. The methodology document is included in Appendix B. This methodology establishes guidelines for when a project may be considered to exceed the minimum LOS policies.

For roadway segments, *"a project may be considered to exceed the minimum LOS policies if:*

1. *A roadway segment operating at or above the established Placer County policy without the project traffic trips will decrease to an unacceptable LOS with the project;* ***or***
2. *A roadway segment currently operating below the established acceptable LOS policy will experience an increase in V/C (volume to capacity) ratio of 0.05 or greater with the project;* ***or***
3. *A roadway segment currently operating below the established acceptable LOS policy experiences an increase in ADT of 100 or more project generated trips, per lane."*

For signalized intersections, *"a project may be considered to exceed the minimum LOS*

policies if:

1. *An intersection operating at or above the established Placer County policies without the project traffic trips will decrease to an unacceptable LOS with the project;* ***or***

2. *An intersection currently operating below the established acceptable LOS policy will experience an increase in V/C (volume to capacity) ratio of 0.05 (5%) or greater;* ***or***

3. *An intersection currently operating below the established acceptable LOS policy will experience an increase in overall average intersection delay of 4 seconds or greater."*

For unsignalized intersections, *"a project may be considered to exceed the minimum LOS policies if:*

1. *An all way stop or side street controlled intersection, which currently operates at or above the established Placer County policies without the project, will deteriorate to an unacceptable LOS with the project and cause the intersection to meet MUTCD traffic signal warrant(s)* ***or***

2. *An all way stop or side street controlled intersection which currently operates below the established acceptable LOS policy and meets MUTCD traffic signal warrant(s) will experience an increase of 2.5 seconds or more with the project.*

Further consideration will be given in situations where the existing level of service is just above or at the approved minimum level of service and any increase in vehicle trips, or even daily fluctuations in traffic, will deteriorate the level of service to an unacceptable level. In such cases, it may be determined by the County that part (2) or (3) of the above exceptions is more applicable and should be used to analyze a proposed project's impacts."

Squaw Valley General Plan Policies

The *Squaw Valley Land Use Plan and Land Use Ordinance* was adopted in 1983. With regards to traffic impacts on the roadway network, the following policy discussion is included (p 44):

> *"The major existing development is the ski hill, which causes most of the present peak-traffic problems. The following policies and requirements regarding additional sports/recreation development are necessary to keep existing traffic problems from becoming worse and to protect public safety, convenience, and general welfare:*
>
> *A) Present peak-period congestion and delay shall not be worsened; levels of service on area's road network shall not deteriorate within Squaw Valley, or at the Squaw Valley Road/State Hwy 89 intersection, or at the State Hwy 89/28 intersection.*

B) The duration and number of occurrences of such traffic problems shall not increase within Squaw Valley, or at the Squaw Valley Road/State Hwy 89 intersection, or at the State Hwy 89/28 intersection.

While these policies are not specifically pertinent to the proposed museum project (as it is not a sports/recreation land use), these policies provide a useful measure for considering impacts on Squaw Valley Road.

Intersection LOS

The peak-hour trip generation volumes shown in Table 1 were distributed to the study intersections based on the distribution pattern presented in the *Squaw Valley Olympic Museum Transportation Impact Analysis* (LSC, March 2, 2020). In addition, that document presents the existing and no-project traffic volumes. The resulting volumes were used to evaluate intersection LOS at the signalized SR 89/Squaw Valley Road intersection and at the unsignalized "T" intersection formed by the site driveway and Squaw Valley Road. These intersections are evaluated to determine existing and future cumulative operational conditions during the winter PM, summer PM and summer weekend mid-day peak hours, with and without the proposed project. The results are summarized in Table 2.

TABLE 2: Squaw Valley Olympic Museum - Intersection LOS Summary

			No Project		With Project	
Scenario	Intersection	Control	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
Existing Year						
Winter PM	SR 89 / Squaw Valley Road [1]	Signal	14.3	B	14.5	B
Winter PM	Squaw / Site Access [2]	Stop	15.6	C	9.1	A
Summer Friday PM	SR 89 / Squaw Valley Road [1]	Signal	9.5	A	9.6	A
Summer Friday PM	Squaw / Site Access [2]	Stop	3.8	A	4.1	A
Summer Weekend Mid-Day	SR 89 / Squaw Valley Road [1]	Signal	10.4	B	12.0	B
Summer Weekend Mid-Day	Squaw / Site Access [2]	Stop	3.8	A	4.3	A
Future Year						
Winter PM	SR 89 / Squaw Valley Road [1]	Signal	31.6	C	31.2	C
Winter PM	Squaw / Site Access [2]	Stop	**OVF**	**F**	**OVF**	**F**
Summer PM	SR 89 / Squaw Valley Road [1]	Signal	34.7	C	29.3	C
Summer PM	Squaw / Site Access [2]	Stop	8.7	A	11.1	B

BOLD text indicates that LOS standard has been exceeded.

OVF = Overflow. Overflow indicates a delay greater than 200 seconds per vehicle, which cannot be accurately calculated.

NOTE: Future summer weekend LOS would be no worse than summer Friday, as the volumes would be lower.

NOTE 1: Level of service for signalized intersections is reported for the total intersection.

NOTE 2: Level of service for unsignalized intersections is reported for the worst movement.

Source: LSC Transportation Consultants, Inc. *Squaw Olympic.xlsx*

LOS Analysis Methodology and Assumptions

In order to reflect the effects of the downstream lane drop on SR 89 to the north of Squaw Valley Road, the yield-controlled right-turn movements, and the queuing between the closely-spaced intersections along Squaw Valley Road, a microscopic traffic simulation was created for the study area using the SimTraffic software package (Version 10, TrafficWare). The intersection LOS analysis is based on the results of the simulation. Computer output of the simulation runs is provided in Appendix C.

Existing Year Intersection LOS

As indicated in the table, the two intersections currently operate at an acceptable LOS C or better during the winter and summer peak hours. Implementation of the proposed project under existing year conditions would not affect the LOS at the SR 89/Squaw Valley Road intersection, although the average vehicular delays would increase slightly. The site access intersection would operate at an acceptable LOS C or better. As such, no intersection LOS deficiencies are identified under existing year conditions, with or without the proposed project.

Future Cumulative Intersection LOS

Although the forecasted growth in background traffic (including traffic generated by the approved Village at Squaw Valley Specific Plan Project and the proposed Base-to-Base Gondola Project) would cause the LOS to degrade under some scenarios, the SR 89/Squaw Valley Road intersection would continue to operate within the applicable LOS thresholds without the proposed project. However, the forecasted growth in background traffic would degrade the site access approach on Squaw Valley Road to LOS F during winter PM peak periods when skier traffic is exiting the valley. Although average driver delays would increase slightly with implementation of the proposed project, the SR 89/Squaw Valley Road intersection would continue to operate at an acceptable LOS, while the site driveway would continue to operate at LOS F in the winter PM. No LOS deficiencies are identified during the summer, with or without the project.

According to the County's methodology of assessment for unsignalized intersections, "a project may be considered to exceed the minimum LOS policies if a side-street-controlled intersection (such as the site access intersection) which currently operates below the established acceptable LOS policy and meets MUTCD traffic signal warrant(s) will experience an increase in delay of 2.5 seconds or more with the project. As the 'future with project' peak-hour traffic volumes at this intersection do not meet the MUTCD's peak-hour volume signal warrant criteria, the proposed project would not exceed the County's minimum LOS policies at the Squaw Valley Road/Site Access intersection.

Intersection Queuing Analysis

Traffic queues at specific intersections that exceed the storage capacity of turn lanes or ramps, or that block turn movements at important nearby intersections or driveways can cause operational problems beyond those identified in the LOS analysis. The 95th-percentile traffic queue lengths (the length that is only exceeded 5 percent of the time during the analysis period) were reviewed at intersection locations where queuing could potentially interfere with adjacent roads or driveways. The results of the simulation indicate no existing traffic queuing concerns at the two study intersections, except left turns from the 7-11 driveway onto Squaw Valley Road are currently hindered by the eastbound traffic queues forming at the signal during winter PM periods. Implementation of the proposed project in the existing year is not expected to materially affect the traffic queue lengths during winter or summer PM peak periods.

Under future cumulative conditions without the proposed project, eastbound traffic queues on Squaw Valley Road are expected to be notably longer than under existing year conditions. Left turns from the 7-11 driveway would continue to be hindered by this queue during winter periods. These turns would also be hindered during summer peak periods. Additionally, the 95th-percentile queues on eastbound Squaw Valley Road would block turns from the site driveway during winter PM peak periods, as well as left turns into the site. The average (50th-percentile) queues would not be expected to block the site driveway. Finally, although the 95th-percentile queue lengths in the northbound and southbound left-turn lanes on SR 89 would exceed the available storage length during some future peak periods, the proposed project would not be expected to exacerbate this issue.

Roadway Capacity

Roadway capacity is evaluated in order to determine whether a specific roadway segment should be widened to accommodate existing or future traffic volumes. Different methodologies can be employed to determine capacity, but generally, the calculation will incorporate a series of factors including roadway facility type, evaluation period, and level of service thresholds. The roadway LOS was determined by applying the Placer County standard to the Average Daily Traffic volume (ADT). Placer County policy on roadway LOS defers to the Caltrans concept LOS standard for state highways. Therefore, the roadway LOS for SR 89 is evaluated against the Caltrans LOS standard of LOS E. The LOS threshold and estimated ADT for SR 89 north and south of Squaw Valley Road are shown in Table 2, along with the maximum allowable traffic volumes to obtain the LOS threshold. As shown in the table, SR 89 would operate within the LOS thresholds under all existing year scenarios, with or without the proposed project.

Roadway LOS under future cumulative conditions is summarized in Table 3. SR 89 would continue to operate within the LOS thresholds under all winter future cumulative analysis periods, with or without the proposed project. However, summer future cumulative conditions

TABLE 3: 2019 Squaw Valley Olympic Museum - Existing Roadway LOS

Roadway Segments	Classification	LOS Threshold	Peak-Hour Two Way Volume	Peak-Hour Peak-Direction Volume	ADT	Maximum Allowable Two-way ADT to Obtain LOS Threshold	LOS Threshold Exceeded?
Existing No Project							
Winter							
SR 89 immediately north of Squaw Valley Rd	Rural Highway-Level	E	1,702	1,363	15,370	25,000	No
SR 89 immediately south of Squaw Valley Rd	Rural Highway-Level	E	1,267	852	14,490	25,000	No
Summer Friday PM							
SR 89 immediately north of Squaw Valley Rd	Rural Highway-Level	E	1,314	724	15,270	25,000	No
SR 89 immediately south of Squaw Valley Rd	Rural Highway-Level	E	1,295	687	13,140	25,000	No
Summer Weekend Mid-Day							
SR 89 immediately north of Squaw Valley Rd	Rural Highway-Level	E	1,437	837	16,700	25,000	No
SR 89 immediately south of Squaw Valley Rd	Rural Highway-Level	E	1,427	833	14,480	25,000	No
Existing With Project							
Winter							
SR 89 immediately north of Squaw Valley Rd	Rural Highway-Level	E	n/a	n/a	15,430	25,000	No
SR 89 immediately south of Squaw Valley Rd	Rural Highway-Level	E	n/a	n/a	14,500	25,000	No
Summer Friday PM							
SR 89 immediately north of Squaw Valley Rd	Rural Highway-Level	E	n/a	n/a	15,320	25,000	No
SR 89 immediately south of Squaw Valley Rd	Rural Highway-Level	E	n/a	n/a	13,190	25,000	No
Summer Weekend Mid-Day							
SR 89 immediately north of Squaw Valley Rd	Rural Highway-Level	E	n/a	n/a	16,760	25,000	No
SR 89 immediately south of Squaw Valley Rd	Rural Highway-Level	E	n/a	n/a	14,540	25,000	No

Source: LSC Transportation Consultants, Inc.

TABLE 4: Squaw Valley Olympic Museum - Future Cumulative Roadway LOS

Roadway Segments	Classification	LOS Threshold	Peak-Hour Two Way Volume	Peak-Hour Peak-Direction Volume	ADT	Maximum Allowable Two-way ADT to Obtain LOS Threshold	LOS Threshold Exceeded?
Future Without Project							
Winter							
SR 89 immediately north of Squaw Valley Rd	Rural Highway-Level	E	2,237	1,797	20,210	25,000	No
SR 89 immediately south of Squaw Valley Rd	Rural Highway-Level	E	1,430	840	16,350	25,000	No
Summer							
SR 89 immediately north of Squaw Valley Rd	Rural Highway-Level	E	2,374	1,350	27,600	25,000	**Yes**
SR 89 immediately south of Squaw Valley Rd	Rural Highway-Level	E	2,262	1,338	22,950	25,000	No
Future With Project							
Winter							
SR 89 immediately north of Squaw Valley Rd	Rural Highway-Level	E	n/a	n/a	20,270	25,000	No
SR 89 immediately south of Squaw Valley Rd	Rural Highway-Level	E	n/a	n/a	16,360	25,000	No
Summer							
SR 89 immediately north of Squaw Valley Rd	Rural Highway-Level	E	n/a	n/a	27,660	25,000	**Yes**
SR 89 immediately south of Squaw Valley Rd	Rural Highway-Level	E	n/a	n/a	23,010	25,000	No

Note: 'With Project' ADT calculated from daily project-generated volumes less pass by, then added to 'No Project' ADT.

Source: LSC Transportation Consultants, Inc.

exceed the threshold at SR 89 immediately north of Squaw Valley Road, due to growth in future background traffic. According to the County's methodology of assessment for roadway segments, *"a project may be considered to exceed the minimum LOS policies if:*

1. *A roadway segment operating at or above the established Placer County policy without the project traffic trips will decrease to an unacceptable LOS with the project;* ***or***

2. *A roadway segment currently operating below the established acceptable LOS policy will experience an increase in V/C (volume to capacity) ratio of 0.05 or greater with the project;* ***or***

3. *A roadway segment currently operating below the established acceptable LOS policy experiences an increase in ADT of 100 or more project generated trips, per lane."*

Condition 1 does not apply to this segment, as it operates below the standard under 'future no project' conditions. Condition 2 is not met, as the increase in V/C due to the project is calculated to be less than 0.01. Regarding Condition 3, the increase in ADT on this segment in the summer is estimated to be about 60, which is less than the 100 ADT threshold. Therefore, the proposed project would not exceed the County's minimum LOS policies on SR 89 immediately north of Squaw Valley Road.

IMPACTS AND MITIGATION

The following potential areas of transportation impacts are considered in this section:

- Intersection LOS
- Intersection Queuing
- Roadway LOS
- Project's Consistency with Squaw Valley General Plan

Intersection LOS

No intersection LOS concerns are identified under existing year conditions, with or without the proposed project. Under future cumulative conditions, the Squaw Valley Road/Site Access intersection is shown to operate at LOS F during winter PM peak periods when skier traffic is exiting the valley. However, as the peak-hour traffic volumes at this intersection do not meet the MUTCD's peak-hour volume signal warrant criteria, the proposed project would not exceed the County's minimum LOS policies at this intersection. As such, no intersection LOS mitigation measures are necessary under typical museum operations.

On a busy winter day, a 100-person event with the majority of guests arriving after 6 PM is not expected to result in delays exceeding those already occurring in the peak hours.

During the non-winter seasons, a 100-person event would not be expected to result in any intersection LOS concerns, even if the event lets out during the summer PM peak hour.

Intersection Queuing

The results of the simulation indicate left turns from the 7-11 driveway onto Squaw Valley Road are currently hindered by the eastbound traffic queues forming at the signal during winter PM periods. No additional traffic queuing issues are identified in the site vicinity under existing winter and summer "design hour" conditions. Note that the simulation model does not reflect conditions during winter storm events. Implementation of the proposed project in the existing year is not expected to materially affect the traffic queue lengths during winter or summer peak periods.

Under future cumulative conditions without the proposed project, left turns from the 7-11 driveway would continue to be hindered by the eastbound traffic queues on Squaw Valley Road during winter PM peak periods. These turns would also be hindered during summer PM peak periods. With the proposed project, the 95th-percentile queues in the eastbound left-turn lanes would interfere with turns from the site driveway during winter PM peak periods, as well as left turns into the site. Average (50th-percentile) queues would not be expected to block the site driveway. Furthermore, the number of vehicles turning left from the site driveway during peak periods is expected to be relatively low (less than one vehicle every 8 minutes, on average). Finally, the proposed project is not expected to exacerbate any queuing issues on the SR 89 approaches to Squaw Valley Road. As such, the proposed project is considered to have a minimal impact on intersection traffic queues.

Roadway LOS

The study roadway (SR 89) is shown to operate within the established LOS standards under all existing year scenarios. SR 89 would continue to operate within the LOS thresholds under all winter future cumulative analysis periods, with or without the proposed project. However, summer future cumulative conditions exceed the threshold at SR 89 immediately north of Squaw Valley Road, due to growth in future background traffic. The proposed project would not exceed the County's minimum LOS policies for this roadway segment. As such, no roadway LOS mitigation measures are expected to be necessary.

Consistency with Squaw Valley General Plan

The project's consistency with the key policies and requirements set forth in the 1983 *Squaw Valley General Plan* Traffic/Circulation section (as presented above) was evaluated. As the *General Plan* policies regarding traffic operations on Squaw Valley Road are limited to the impacts of "sports/recreation land use", they do not directly pertain to a proposed museum use. The following summary is therefore provided for informational purposes only.

Implementation of the proposed project is expected to result in a negligible increase (a calculated increase of approximately 0.2 seconds per vehicle) in average vehicular delays at the SR 89/Squaw Valley Road intersection during the winter PM period. During the summer peak hours, average driver delays at intersections are calculated to increase by up to 1.6 seconds per vehicle. Summer LOS remains relatively good (LOS C or better) and well attains LOS standards. In addition, as implementation of the proposed project in the existing year is not expected to materially affect the intersection traffic queue lengths during winter or summer peak periods, the project would not be expected to worsen present peak-period congestion.

According to the Draft EIR for the Base-to-Base Gondola Project, Squaw Valley Road currently operates at an acceptable LOS B during the winter, with an existing ADT of 13,100. (The ADT in summer is typically lower than winter.) The maximum ADT threshold for LOS B is 15,750. With implementation of the proposed museum project, the ADT on Squaw Valley Road would be well within this threshold. As such, the project would not deteriorate the LOS on the area's road network within Squaw Valley. Additionally, the existing LOS at the intersections along SR 89 would not degrade as a result of the proposed project.

In addition, the proposed project would not be expected to significantly increase the duration or number of occurrences of any existing traffic queuing issues or LOS issues within Squaw Valley, or at intersections along SR 89.

Given that the *Squaw Valley General Plan* includes no policies directly pertinent to a proposed museum land use, the project's impact on driver delays would be negligible in winter and minimal in summer, the project would not materially affect existing traffic queue lengths during peak periods, the project would not deteriorate the existing LOS on the Squaw Valley roadway network during peak periods, and that the existing LOS at intersections along SR 89 would not deteriorate, no inconsistencies with the General Plan are identified.

Mitigation Summary

No mitigation measures are identified as a part of this analysis.

Conclusions

In sum, the proposed project would result in a relatively small increase in traffic volumes on the adjacent roadways. As a key example, the eastbound winter peak-hour traffic volume on Squaw Valley Road approaching SR 89 would be increased by 27 vehicles (roughly 1 vehicle every 2 minutes), or 3 percent over existing volumes. However, there would be no degradations in intersection or roadway level of service under any study periods or analysis

scenarios. The proposed project is not inconsistent with the traffic policies of the Squaw Valley General Plan.

Attached: Appendix A – LOS Descriptions
Appendix B – Placer County's "Impact Analysis Methodology of Assessment"
Appendix C – LOS Simulation Output

DESCRIPTIONS OF LEVELS OF SERVICE

The concept of level of service is defined as a qualitative measure describing operational conditions within a traffic stream, and their perception by motorists and/or passengers. A level of service definition generally describes these conditions in terms of such factors as speed and travel time, freedom to maneuver, traffic interruptions, comfort and convenience, and safety. Six levels of service are defined for each type of facility for which analysis procedures are available. They are given letter designations, from A to F, with level of service A representing the best operating conditions and level of service F the worst.

Level of Service Definitions

In general, the various levels of service are defined as follows for uninterrupted flow facilities:

- **Level of service A** represents free flow. Individual users are virtually unaffected by the presence of others in the traffic stream. Freedom to select desired speeds and to maneuver within the traffic stream is extremely high. The general level of comfort and convenience provided to the motorist, passenger, or pedestrian is excellent.

- **Level of service B** is in the range of stable flow, but the presence of other users in the traffic stream begins to be noticeable. Freedom to select desired speeds is relatively unaffected, but there is a slight decline in the freedom to maneuver within the traffic stream from LOS A. The level of comfort and convenience provided is somewhat less than at LOS A, because the presence of others in the traffic stream begins to affect individual behavior.

- **Level of service C** is in the range of stable flow, but marks the beginning of the range of flow in which the operation of individual users becomes significantly affected by interactions with others in the traffic stream. The selection of speed is now affected by the presence of others, and maneuvering within the traffic stream requires substantial vigilance on the part of the user. The general level of comfort and convenience declines noticeably at this level.

- **Level of Service D** represents high-density, but stable, flow. Speed and freedom to maneuver are severely restricted, and the driver or pedestrian experiences a generally poor level of comfort and convenience. Small increases in traffic flow will generally cause operational problems at this level.

- **Level of service E** represents operating conditions at or near the capacity level. All speeds are reduced to a low, but relatively uniform value. Freedom to maneuver within the traffic stream is extremely difficult, and it is generally accomplished by forcing a vehicle or pedestrian to “give way” to accommodate such maneuvers. Comfort and convenience levels are extremely poor, and driver or pedestrian frustration is generally high. Operations at this level are usually unstable, because small increases in flow or minor perturbations within the traffic stream will cause breakdowns.

- **Level of service F** is used to define forced or breakdown flow. This condition exists wherever the amount of traffic approaching a point exceeds the amount which can traverse the point. Queues form behind such locations. Operations within the queue are characterized by stop-and-go waves, and they are extremely unstable. Vehicles may progress at reasonable speeds for several hundred feet or more, then be required to stop in a cyclic fashion. Level of service F is used to describe the operating conditions within the queue, as well as the point of the breakdown. It should be noted, however, that in many cases operating conditions of vehicles or pedestrians discharged from the queue may be quite good. Nevertheless, it is the point at which arrival flow exceeds discharge flow which causes the queue to form, and level of service F is an appropriate designation for such points.

MEMORANDUM

DEPARTMENT OF PUBLIC WORKS AND FACILITIES
County of Placer

TO: Placer County Public Works DATE: October 5, 2015

FROM: Ken Grehm, Director

SUBJECT: **IMPACT ANALYSIS METHODOLOGY OF ASSESSMENT**

Placer County, along with surrounding jurisdictions, has experienced significant growth in recent years. The resulting traffic volume increases on County roadways and intersections have outpaced available roadway and intersection infrastructure construction activities. Achieving Level of Service (LOS) policy(s), as shown in the current Placer County General Plan, various Community Plans, and Specific Plans, remains the goal on all Placer County roadway facilities.

Due to overall decreases in operational efficiency and infrastructure construction timing throughout the County, some of the existing transportation networks are occasionally overburdened and traffic operations have declined. Development project proposals which would generate small amounts of new traffic are more and more often expected to fund large improvements because nearby roadways or intersections already operate just within or below the County LOS policies. Available roadway and/or intersection capacities for small increases in traffic volumes can be limited without relatively large infrastructure upgrade requirements. This can cause smaller development projects to become economically infeasible.

Placer County has developed the following methodology of assessment of project impact(s) for County roadway segments and/or intersections associated with LOS standards as defined in the General Plan, Community Plans, and Specific Plans within Placer County. The goal of this methodology of assessment is to ensure that project associated construction mitigation(s) are proportionate to the level of impact a specific project has on an intersection or roadway.

Traffic Impact Analysis:

If necessary, a traffic impact analysis shall be performed which includes the following analysis scenarios; Existing, Existing plus Project, Cumulative, and Cumulative plus Project. The project applicant/consultant shall consult with the Department of Public Works and Facilities prior to beginning the Traffic Impact Analysis (TIA) to finalize a scope of work.

Roadway Segment Assessment Methodology:

A project may be considered to exceed the minimum LOS policies if;

1) A roadway segment operating at or above the established Placer County policy without the project traffic trips will decrease to an unacceptable LOS with the project; **or**

2) A roadway segment currently operating below the established acceptable LOS policy will experience an increase in V/C (volume to capacity) ratio of 0.05 or greater with the project; **or**

3) A roadway segment currently operating below the established acceptable LOS policy experience an increase in ADT of 100 or more project generated trips, per lane.

Signalized Intersection Assessment Methodology:

A project may be considered to exceed the minimum LOS policies if;

1) An intersection operating at or above the established Placer County policies without the project traffic trips will decrease to an unacceptable LOS with the project; **or**

2) An intersection currently operating below the established acceptable LOS policy will experience an increase in the V/C (volume to capacity) ratio of 0.05 (5%) or greater; **or**

3) An intersection currently operating below the established acceptable LOS policy will experience an increase in overall average intersection delay of 4 seconds or greater.

Unsignalized Intersection Assessment Methodology:

A project may be considered to exceed the minimum LOS policies if;

1) An all way stop or side street controlled intersection, which currently operates at or above the established Placer County policies without the project, will deteriorate to an unacceptable LOS with the project and cause the intersection to meet MUTCD traffic signal warrant(s)[1] **or**

2) An all way stop or side street controlled intersection which currently operates below the established acceptable LOS policy and meets MUTCD signal warrant(s)[1] will experience an increase of 2.5 seconds[2] or more with the project.

Further consideration will be given in situations where the existing level of service is just above or at the approved minimum level of service and any increase in vehicle trips, or even daily fluctuations in traffic, will deteriorate the level of service to an unacceptable level. In such cases, it may be determined by the County that part (2) or (3) of the above exceptions is more applicable and should be used to analyze a proposed project's impacts.

1 Applicable MUTCD signal warrants to be determined in consultation with DPW Transportation staff. (2010 HCM)

2 Intersection delay for all-way stop intersections to be defined as the "overall intersection delay". Intersection delay for side street stop intersections to be defined as the "overall weighted average delay for movements yielding the ROW." (2010 HCM)

1: SR 89 & Squaw Valley Rd Performance by movement

Movement	EBL	EBT	EBR	NBL	NBT	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (hr)	2.6	0.0	0.1	1.1	3.4	1.0	0.1	8.3
Total Del/Veh (s)	13.7	1.0	1.9	27.3	17.7	17.9	2.2	14.3
Avg Speed (mph)	7	20	14	9	15	10	20	11
Vehicles Entered	688	1	219	144	680	200	147	2079
Vehicles Exited	688	1	219	145	678	200	148	2079
Hourly Exit Rate	688	1	219	145	678	200	148	2079
Input Volume	664	1	219	153	699	202	143	2081
% of Volume	104	100	100	95	97	99	103	100

2: External Performance by approach

Approach	WB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.0	0.0
Total Del/Veh (s)	0.2	0.2
Avg Speed (mph)	34	34
Vehicles Entered	306	306
Vehicles Exited	306	306
Hourly Exit Rate	306	306
Input Volume	308	308
% of Volume	99	99

3: External Performance by approach

Approach	NB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	1.2	1.2
Total Del/Veh (s)	3.2	3.2
Avg Speed (mph)	36	36
Vehicles Entered	1395	1395
Vehicles Exited	1396	1396
Hourly Exit Rate	1396	1396
Input Volume	1403	1403
% of Volume	100	100

4: External Performance by approach

Approach	SB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.0	0.0
Total Del/Veh (s)	0.4	0.4
Avg Speed (mph)	45	45
Vehicles Entered	412	412
Vehicles Exited	412	412
Hourly Exit Rate	412	412
Input Volume	415	415
% of Volume	99	99

6: Squaw Valley Rd & 7-11 driveway Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.1	0.0
Total Delay (hr)	0.0	0.4	0.3	0.0	0.0	0.0	0.7
Total Del/Veh (s)	4.8	1.5	3.5	2.7	19.8	3.5	2.1
Avg Speed (mph)	14	26	13	11	7	14	20
Vehicles Entered	31	903	279	14	5	26	1258
Vehicles Exited	31	903	280	14	5	26	1259
Hourly Exit Rate	31	903	280	14	5	26	1259
Input Volume	36	879	281	15	5	27	1243
% of Volume	86	103	100	93	100	96	101

7: External Performance by approach

Approach	NB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.0	0.0
Total Del/Veh (s)	0.3	0.3
Avg Speed (mph)	22	22
Vehicles Entered	45	45
Vehicles Exited	45	45
Hourly Exit Rate	45	45
Input Volume	51	51
% of Volume	88	88

8: Site access & Squaw Valley Rd Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Delay (hr)	0.1	0.0	0.0	0.0	0.0	0.0	0.1
Denied Del/Veh (s)	0.5	0.2	0.0	0.0	0.1	0.1	0.3
Total Delay (hr)	0.2	0.0	0.0	0.0	0.0	0.0	0.3
Total Del/Veh (s)	0.8	0.6	6.6	0.5	23.6	7.5	0.9
Avg Speed (mph)	33	27	12	29	6	11	32
Vehicles Entered	928	3	5	302	6	6	1250
Vehicles Exited	927	3	5	302	6	6	1249
Hourly Exit Rate	927	3	5	302	6	6	1249
Input Volume	909	5	5	304	5	5	1233
% of Volume	102	60	100	99	120	120	101

9: External Performance by approach

Approach	SB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.0	0.0
Total Del/Veh (s)	0.4	0.4
Avg Speed (mph)	21	21
Vehicles Entered	8	8
Vehicles Exited	8	8
Hourly Exit Rate	8	8
Input Volume	10	10
% of Volume	80	80

10: Bend Performance by approach

Approach	NB	SB	All
Denied Delay (hr)	0.2	0.0	0.2
Denied Del/Veh (s)	0.9	0.0	0.6
Total Delay (hr)	0.4	1.0	1.4
Total Del/Veh (s)	1.9	8.6	4.1
Avg Speed (mph)	23	20	21
Vehicles Entered	824	411	1235
Vehicles Exited	825	412	1237
Hourly Exit Rate	825	412	1237
Input Volume	852	415	1267
% of Volume	97	99	98

11: Bend Performance by approach

Approach	NB	SB	All
Denied Delay (hr)	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0
Total Delay (hr)	2.6	0.1	2.7
Total Del/Veh (s)	7.0	1.0	5.8
Avg Speed (mph)	17	33	18
Vehicles Entered	1366	342	1708
Vehicles Exited	1365	341	1706
Hourly Exit Rate	1365	341	1706
Input Volume	1363	339	1702
% of Volume	100	101	100

12: SR 89 Performance by movement

Movement	EBL	EBR	NBL	NBT	SBT	SBR	All
Denied Delay (hr)	2.9	0.5	0.0	0.0	0.0	0.0	3.4
Denied Del/Veh (s)	230.1	232.3	0.0	0.0	0.3	0.3	6.7
Total Delay (hr)	5.3	0.8	0.0	0.7	0.2	0.0	6.9
Total Del/Veh (s)	461.1	453.4	2.2	1.9	1.9	0.1	13.9
Avg Speed (mph)	0	0	13	24	41	34	8
Vehicles Entered	39	6	6	1383	335	26	1795
Vehicles Exited	34	6	6	1383	336	26	1791
Hourly Exit Rate	34	6	6	1383	336	26	1791
Input Volume	45	6	5	1379	333	27	1795
% of Volume	76	100	120	100	101	96	100

13: External Performance by approach

Approach	WB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.0	0.0
Total Del/Veh (s)	0.1	0.1
Avg Speed (mph)	21	21
Vehicles Entered	31	31
Vehicles Exited	31	31
Hourly Exit Rate	31	31
Input Volume	32	32
% of Volume	97	97

Total Network Performance

Denied Delay (hr)	3.7
Denied Del/Veh (s)	5.9
Total Delay (hr)	21.8
Total Del/Veh (s)	34.5
Avg Speed (mph)	18
Vehicles Entered	2235
Vehicles Exited	2234
Hourly Exit Rate	2234
Input Volume	11540
% of Volume	19

Intersection: 1: SR 89 & Squaw Valley Rd

Movement	EB	EB	NB	NB	NB	SB
Directions Served	L	LT	L	T	TR	T
Maximum Queue (ft)	209	164	171	293	248	169
Average Queue (ft)	135	97	77	155	98	71
95th Queue (ft)	194	159	135	257	218	134
Link Distance (ft)	156	156		488		260
Upstream Blk Time (%)	4	0				
Queuing Penalty (veh)	10	1				
Storage Bay Dist (ft)			500		300	
Storage Blk Time (%)				0		0
Queuing Penalty (veh)				1		1

Intersection: 6: Squaw Valley Rd & 7-11 driveway

Movement	EB	EB	SB
Directions Served	LT	T	LR
Maximum Queue (ft)	105	30	62
Average Queue (ft)	20	1	21
95th Queue (ft)	69	18	50
Link Distance (ft)	176	176	332
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 8: Site access & Squaw Valley Rd

Movement	WB	NB
Directions Served	LT	LR
Maximum Queue (ft)	39	32
Average Queue (ft)	3	8
95th Queue (ft)	20	26
Link Distance (ft)	176	284
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 12: SR 89

Movement	EB	NB	NB	B11	B11
Directions Served	LR	L	T	T	
Maximum Queue (ft)	200	24	48	343	261
Average Queue (ft)	149	2	4	56	18
95th Queue (ft)	249	13	25	242	124
Link Distance (ft)	198		76	260	260
Upstream Blk Time (%)	40			1	0
Queuing Penalty (veh)	0			9	1
Storage Bay Dist (ft)		75			
Storage Blk Time (%)					
Queuing Penalty (veh)					

Network Summary

Network wide Queuing Penalty: 23

1: SR 89 & Squaw Valley Rd Performance by movement

Movement	EBL	EBT	EBR	WBL	NBL	NBT	SBL	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0		0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0
Total Delay (hr)	0.8	0.0	0.1	0.0	0.8	0.9	0.0	1.5	0.1	4.4
Total Del/Veh (s)	15.5		1.8	23.2	18.1	6.5	28.8	12.8	2.4	9.5
Avg Speed (mph)	7	34	14	2	12	28	6	13	19	16
Vehicles Entered	194	0	181	1	164	521	3	427	159	1650
Vehicles Exited	193	0	181	1	164	521	3	426	158	1647
Hourly Exit Rate	193	0	181	1	164	521	3	426	158	1647
Input Volume	196	1	178	1	159	528	3	441	158	1665
% of Volume	98	0	102	100	103	99	100	97	100	99

2: External Performance by approach

Approach	WB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.0	0.0
Total Del/Veh (s)	0.2	0.2
Avg Speed (mph)	34	34
Vehicles Entered	310	310
Vehicles Exited	311	311
Hourly Exit Rate	311	311
Input Volume	305	305
% of Volume	102	102

3: External Performance by approach

Approach	NB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.2	0.2
Total Del/Veh (s)	0.9	0.9
Avg Speed (mph)	45	45
Vehicles Entered	758	758
Vehicles Exited	757	757
Hourly Exit Rate	757	757
Input Volume	764	764
% of Volume	99	99

4: External Performance by approach

Approach	SB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.1	0.1
Total Del/Veh (s)	0.5	0.5
Avg Speed (mph)	45	45
Vehicles Entered	598	598
Vehicles Exited	598	598
Hourly Exit Rate	598	598
Input Volume	608	608
% of Volume	98	98

5: External Performance by approach

Approach	EB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.0	0.0
Total Del/Veh (s)	1.1	1.1
Avg Speed (mph)	16	16
Vehicles Entered	3	3
Vehicles Exited	3	3
Hourly Exit Rate	3	3
Input Volume	3	3
% of Volume	100	100

6: Squaw Valley Rd & 7-11 driveway Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.1	0.0
Total Delay (hr)	0.0	0.1	0.3	0.0	0.0	0.0	0.5
Total Del/Veh (s)	4.6	1.0	3.8	2.0	14.8	3.1	2.4
Avg Speed (mph)	14	27	13	12	9	14	17
Vehicles Entered	17	371	299	23	4	27	741
Vehicles Exited	17	370	299	23	4	27	740
Hourly Exit Rate	17	370	299	23	4	27	740
Input Volume	19	369	297	20	5	25	735
% of Volume	89	100	101	115	80	108	101

7: External Performance by approach

Approach	NB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.0	0.0
Total Del/Veh (s)	0.2	0.2
Avg Speed (mph)	22	22
Vehicles Entered	40	40
Vehicles Exited	41	41
Hourly Exit Rate	41	41
Input Volume	39	39
% of Volume	105	105

8: Site access & Squaw Valley Rd Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.3	0.1	0.0	0.0	0.1	0.1	0.2
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Total Del/Veh (s)	0.3	0.0	3.1	0.5	7.2	3.2	0.6
Avg Speed (mph)	34	28	16	29	11	13	31
Vehicles Entered	366	3	19	307	4	21	720
Vehicles Exited	367	3	19	308	4	21	722
Hourly Exit Rate	367	3	19	308	4	21	722
Input Volume	369	3	20	303	3	19	717
% of Volume	99	100	95	102	133	111	101

9: External Performance by approach

Approach	SB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.0	0.0
Total Del/Veh (s)	0.3	0.3
Avg Speed (mph)	22	22
Vehicles Entered	22	22
Vehicles Exited	22	22
Hourly Exit Rate	22	22
Input Volume	23	23
% of Volume	96	96

10: Bend Performance by approach

Approach	NB	SB	All
Denied Delay (hr)	0.1	0.0	0.1
Denied Del/Veh (s)	0.6	0.0	0.3
Total Delay (hr)	0.3	1.3	1.6
Total Del/Veh (s)	1.8	7.5	4.5
Avg Speed (mph)	24	23	23
Vehicles Entered	687	597	1284
Vehicles Exited	686	598	1284
Hourly Exit Rate	686	598	1284
Input Volume	687	608	1295
% of Volume	100	98	99

11: Bend Performance by approach

Approach	NB	SB	All
Denied Delay (hr)	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0
Total Delay (hr)	0.5	0.2	0.7
Total Del/Veh (s)	2.3	1.3	1.9
Avg Speed (mph)	29	30	29
Vehicles Entered	714	580	1294
Vehicles Exited	714	580	1294
Hourly Exit Rate	714	580	1294
Input Volume	724	590	1314
% of Volume	99	98	98

12: SR 89 Performance by movement

Movement	EBL	EBR	NBL	NBT	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.1	0.0	0.1
Denied Del/Veh (s)	0.1	0.1	0.0	0.0	0.5	0.4	0.2
Total Delay (hr)	0.3	0.0	0.0	0.1	0.4	0.0	0.9
Total Del/Veh (s)	23.9	9.2	4.1	0.6	2.6	0.4	2.3
Avg Speed (mph)	4	9	10	39	38	30	32
Vehicles Entered	48	6	5	724	573	28	1384
Vehicles Exited	48	6	5	724	573	28	1384
Hourly Exit Rate	48	6	5	724	573	28	1384
Input Volume	45	6	5	735	584	25	1400
% of Volume	107	100	100	99	98	112	99

13: External Performance by approach

Approach	WB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.0	0.0
Total Del/Veh (s)	0.1	0.1
Avg Speed (mph)	19	19
Vehicles Entered	33	33
Vehicles Exited	32	32
Hourly Exit Rate	32	32
Input Volume	30	30
% of Volume	107	107

Total Network Performance

Denied Delay (hr)	0.2
Denied Del/Veh (s)	0.5
Total Delay (hr)	8.4
Total Del/Veh (s)	16.8
Avg Speed (mph)	25
Vehicles Entered	1794
Vehicles Exited	1790
Hourly Exit Rate	1790
Input Volume	8898
% of Volume	20

Intersection: 1: SR 89 & Squaw Valley Rd

Movement	EB	EB	WB	NB	NB	NB	SB	SB	SB	B11
Directions Served	L	LT	LTR	L	T	TR	L	T	R	T
Maximum Queue (ft)	110	91	24	133	149	104	58	210	52	30
Average Queue (ft)	61	20	1	69	56	11	4	96	2	2
95th Queue (ft)	95	60	11	114	113	55	32	184	37	31
Link Distance (ft)	156	156	94		488			260		76
Upstream Blk Time (%)								1	0	0
Queuing Penalty (veh)								4	0	3
Storage Bay Dist (ft)				500		300	160		280	
Storage Blk Time (%)								2	0	
Queuing Penalty (veh)								3	0	

Intersection: 6: Squaw Valley Rd & 7-11 driveway

Movement	EB	SB
Directions Served	LT	LR
Maximum Queue (ft)	52	61
Average Queue (ft)	9	21
95th Queue (ft)	35	49
Link Distance (ft)	176	332
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 8: Site access & Squaw Valley Rd

Movement	WB	NB
Directions Served	LT	LR
Maximum Queue (ft)	40	32
Average Queue (ft)	6	13
95th Queue (ft)	26	33
Link Distance (ft)	176	284
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 10: Bend

Movement	SB
Directions Served	T
Maximum Queue (ft)	77
Average Queue (ft)	3
95th Queue (ft)	54
Link Distance (ft)	488
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 12: SR 89

Movement	EB	NB	NB	SB
Directions Served	LR	L	T	TR
Maximum Queue (ft)	74	31	11	19
Average Queue (ft)	33	3	0	1
95th Queue (ft)	67	16	6	16
Link Distance (ft)	198		76	479
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)		75		
Storage Blk Time (%)				
Queuing Penalty (veh)				

Network Summary

Network wide Queuing Penalty: 10

1: SR 89 & Squaw Valley Rd Performance by movement

Movement	EBL	EBT	EBR	WBR	NBL	NBT	NBR	SBL	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.0	0.0	0.0		0.3	0.0	0.1
Total Delay (hr)	0.6	0.0	0.1	0.0	0.6	0.7	0.0	0.0	2.9	0.2	5.0
Total Del/Veh (s)	16.6	5.9	1.8	3.9	16.5	5.3	1.3		15.6	3.1	10.4
Avg Speed (mph)	6	12	14	8	13	31	28	10	11	18	15
Vehicles Entered	136	3	178	1	138	449	4	0	659	179	1747
Vehicles Exited	136	3	178	1	138	449	4	0	660	180	1749
Hourly Exit Rate	136	3	178	1	138	449	4	0	660	180	1749
Input Volume	138	2	175	1	130	461	3	1	678	178	1767
% of Volume	99	150	102	100	106	97	133	0	97	101	99

2: External Performance by approach

Approach	WB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.0	0.0
Total Del/Veh (s)	0.2	0.2
Avg Speed (mph)	34	34
Vehicles Entered	278	278
Vehicles Exited	279	279
Hourly Exit Rate	279	279
Input Volume	265	265
% of Volume	105	105

3: External Performance by approach

Approach	NB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.1	0.1
Total Del/Veh (s)	0.8	0.8
Avg Speed (mph)	46	46
Vehicles Entered	628	628
Vehicles Exited	628	628
Hourly Exit Rate	628	628
Input Volume	640	640
% of Volume	98	98

4: External Performance by approach

Approach	SB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.1	0.1
Total Del/Veh (s)	0.5	0.5
Avg Speed (mph)	43	43
Vehicles Entered	818	818
Vehicles Exited	818	818
Hourly Exit Rate	818	818
Input Volume	833	833
% of Volume	98	98

5: External Performance by approach

Approach	EB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.0	0.0
Total Del/Veh (s)	0.7	0.7
Avg Speed (mph)	16	16
Vehicles Entered	6	6
Vehicles Exited	6	6
Hourly Exit Rate	6	6
Input Volume	5	5
% of Volume	120	120

6: Squaw Valley Rd & 7-11 driveway Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.1	0.0
Total Delay (hr)	0.0	0.1	0.3	0.0	0.1	0.0	0.6
Total Del/Veh (s)	4.5	1.2	4.0	2.8	12.9	3.9	3.0
Avg Speed (mph)	14	24	12	11	9	14	15
Vehicles Entered	33	295	299	20	21	30	698
Vehicles Exited	33	295	300	20	21	31	700
Hourly Exit Rate	33	295	300	20	21	31	700
Input Volume	30	293	288	21	22	29	683
% of Volume	110	101	104	95	95	107	102

7: External Performance by approach

Approach	NB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.0	0.0
Total Del/Veh (s)	0.3	0.3
Avg Speed (mph)	22	22
Vehicles Entered	53	53
Vehicles Exited	53	53
Hourly Exit Rate	53	53
Input Volume	51	51
% of Volume	104	104

8: Site access & Squaw Valley Rd Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.5	0.3	0.0	0.0	0.1	0.1	0.2
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.2
Total Del/Veh (s)	0.4	0.2	3.0	0.7	8.8	3.1	1.0
Avg Speed (mph)	34	27	16	28	10	14	28
Vehicles Entered	274	8	57	273	7	53	672
Vehicles Exited	274	8	58	273	7	53	673
Hourly Exit Rate	274	8	58	273	7	53	673
Input Volume	267	6	58	259	7	55	652
% of Volume	103	133	100	105	100	96	103

9: External Performance by approach

Approach	SB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.0	0.0
Total Del/Veh (s)	0.3	0.3
Avg Speed (mph)	22	22
Vehicles Entered	65	65
Vehicles Exited	65	65
Hourly Exit Rate	65	65
Input Volume	64	64
% of Volume	102	102

10: Bend Performance by approach

Approach	NB	SB	All
Denied Delay (hr)	0.1	0.0	0.1
Denied Del/Veh (s)	0.5	0.0	0.2
Total Delay (hr)	0.3	1.8	2.1
Total Del/Veh (s)	1.8	7.9	5.4
Avg Speed (mph)	24	23	23
Vehicles Entered	591	820	1411
Vehicles Exited	591	818	1409
Hourly Exit Rate	591	818	1409
Input Volume	594	833	1427
% of Volume	99	98	99

11: Bend Performance by approach

Approach	NB	SB	All
Denied Delay (hr)	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0
Total Delay (hr)	0.3	0.4	0.7
Total Del/Veh (s)	1.9	1.9	1.9
Avg Speed (mph)	31	25	29
Vehicles Entered	585	823	1408
Vehicles Exited	586	822	1408
Hourly Exit Rate	586	822	1408
Input Volume	600	837	1437
% of Volume	98	98	98

12: SR 89 Performance by movement

Movement	EBL	EBR	NBL	NBT	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.2	0.0	0.2
Denied Del/Veh (s)	0.1	0.1	0.0	0.0	0.8	0.9	0.5
Total Delay (hr)	0.7	0.0	0.0	0.1	0.9	0.0	1.7
Total Del/Veh (s)	54.7	23.3	9.8	0.4	3.9	0.6	4.1
Avg Speed (mph)	2	4	6	41	33	27	26
Vehicles Entered	44	7	5	596	816	36	1504
Vehicles Exited	44	7	5	595	816	37	1504
Hourly Exit Rate	44	7	5	595	816	37	1504
Input Volume	45	6	5	609	831	46	1542
% of Volume	98	117	100	98	98	80	98

13: External Performance by approach

Approach	WB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.0	0.0
Total Del/Veh (s)	0.2	0.2
Avg Speed (mph)	19	19
Vehicles Entered	42	42
Vehicles Exited	42	42
Hourly Exit Rate	42	42
Input Volume	51	51
% of Volume	82	82

Total Network Performance

Denied Delay (hr)	0.4
Denied Del/Veh (s)	0.7
Total Delay (hr)	10.7
Total Del/Veh (s)	19.7
Avg Speed (mph)	24
Vehicles Entered	1923
Vehicles Exited	1923
Hourly Exit Rate	1923
Input Volume	9417
% of Volume	20

Intersection: 1: SR 89 & Squaw Valley Rd

Movement	EB	EB	WB	NB	NB	NB	SB	SB	SB	B11
Directions Served	L	LT	LTR	L	T	TR	L	T	R	T
Maximum Queue (ft)	99	74	24	128	106	44	10	312	206	64
Average Queue (ft)	49	16	1	59	40	5	0	157	22	4
95th Queue (ft)	84	51	10	103	85	26	5	281	142	36
Link Distance (ft)	156	156	94		488			260		76
Upstream Blk Time (%)								2	0	0
Queuing Penalty (veh)								14	0	3
Storage Bay Dist (ft)				500		300	160		280	
Storage Blk Time (%)								8	0	
Queuing Penalty (veh)								15	1	

Intersection: 6: Squaw Valley Rd & 7-11 driveway

Movement	EB	SB
Directions Served	LT	LR
Maximum Queue (ft)	67	68
Average Queue (ft)	14	28
95th Queue (ft)	46	51
Link Distance (ft)	176	332
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 8: Site access & Squaw Valley Rd

Movement	WB	NB
Directions Served	LT	LR
Maximum Queue (ft)	40	52
Average Queue (ft)	13	23
95th Queue (ft)	40	42
Link Distance (ft)	176	284
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 12: SR 89

Movement	EB	NB	NB	SB
Directions Served	LR	L	T	TR
Maximum Queue (ft)	103	30	12	24
Average Queue (ft)	42	4	0	1
95th Queue (ft)	89	20	6	17
Link Distance (ft)	198		76	479
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)		75		
Storage Blk Time (%)				
Queuing Penalty (veh)				

Network Summary

Network wide Queuing Penalty: 33

1: SR 89 & Squaw Valley Rd Performance by movement

Movement	EBL	EBT	EBR	NBL	NBT	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (hr)	2.7	0.0	0.1	1.1	3.5	1.0	0.1	8.5
Total Del/Veh (s)	14.0	2.2	1.9	27.2	18.0	18.4	2.1	14.5
Avg Speed (mph)	7	19	14	9	15	9	20	11
Vehicles Entered	696	2	231	145	701	193	142	2110
Vehicles Exited	695	2	231	145	700	194	142	2109
Hourly Exit Rate	695	2	231	145	700	194	142	2109
Input Volume	683	1	227	154	699	202	144	2110
% of Volume	102	200	102	94	100	96	99	100

2: External Performance by approach

Approach	WB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.0	0.0
Total Del/Veh (s)	0.2	0.2
Avg Speed (mph)	34	34
Vehicles Entered	296	296
Vehicles Exited	297	297
Hourly Exit Rate	297	297
Input Volume	311	311
% of Volume	95	95

3: External Performance by approach

Approach	NB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	1.3	1.3
Total Del/Veh (s)	3.3	3.3
Avg Speed (mph)	36	36
Vehicles Entered	1414	1414
Vehicles Exited	1415	1415
Hourly Exit Rate	1415	1415
Input Volume	1423	1423
% of Volume	99	99

4: External Performance by approach

Approach	SB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.1	0.1
Total Del/Veh (s)	0.4	0.4
Avg Speed (mph)	45	45
Vehicles Entered	420	420
Vehicles Exited	419	419
Hourly Exit Rate	419	419
Input Volume	423	423
% of Volume	99	99

6: Squaw Valley Rd & 7-11 driveway Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.1	0.0
Total Delay (hr)	0.0	0.4	0.3	0.0	0.0	0.0	0.7
Total Del/Veh (s)	4.7	1.5	3.5	2.3	22.0	2.7	2.1
Avg Speed (mph)	14	25	13	12	7	15	20
Vehicles Entered	30	926	272	15	3	22	1268
Vehicles Exited	31	925	274	15	3	22	1270
Hourly Exit Rate	31	925	274	15	3	22	1270
Input Volume	38	905	283	15	5	27	1273
% of Volume	82	102	97	100	60	81	100

7: External Performance by approach

Approach	NB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.0	0.0
Total Del/Veh (s)	0.4	0.4
Avg Speed (mph)	22	22
Vehicles Entered	45	45
Vehicles Exited	45	45
Hourly Exit Rate	45	45
Input Volume	53	53
% of Volume	85	85

8: Site access & Squaw Valley Rd Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Delay (hr)	0.1	0.0	0.0	0.0	0.0	0.0	0.1
Denied Del/Veh (s)	0.5	0.2	0.0	0.0	0.1	0.1	0.3
Total Delay (hr)	0.2	0.0	0.0	0.0	0.0	0.1	0.4
Total Del/Veh (s)	0.9	0.2	7.9	0.5	16.0	7.6	1.1
Avg Speed (mph)	33	29	11	29	7	10	31
Vehicles Entered	926	7	6	290	7	32	1268
Vehicles Exited	924	7	6	291	6	32	1266
Hourly Exit Rate	924	7	6	291	6	32	1266
Input Volume	909	10	7	304	8	34	1272
% of Volume	102	70	86	96	75	94	100

9: External Performance by approach

Approach	SB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.0	0.0
Total Del/Veh (s)	0.3	0.3
Avg Speed (mph)	21	21
Vehicles Entered	13	13
Vehicles Exited	13	13
Hourly Exit Rate	13	13
Input Volume	17	17
% of Volume	76	76

10: Bend Performance by approach

Approach	NB	SB	All
Denied Delay (hr)	0.2	0.0	0.2
Denied Del/Veh (s)	0.9	0.0	0.6
Total Delay (hr)	0.4	1.0	1.5
Total Del/Veh (s)	1.9	8.8	4.2
Avg Speed (mph)	23	20	21
Vehicles Entered	846	419	1265
Vehicles Exited	846	420	1266
Hourly Exit Rate	846	420	1266
Input Volume	853	423	1276
% of Volume	99	99	99

11: Bend Performance by approach

Approach	NB	SB	All
Denied Delay (hr)	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0
Total Delay (hr)	2.7	0.1	2.8
Total Del/Veh (s)	7.0	1.0	5.9
Avg Speed (mph)	17	34	18
Vehicles Entered	1395	330	1725
Vehicles Exited	1392	330	1722
Hourly Exit Rate	1392	330	1722
Input Volume	1382	340	1722
% of Volume	101	97	100

12: SR 89 Performance by movement

Movement	EBL	EBR	NBL	NBT	SBT	SBR	All
Denied Delay (hr)	3.7	0.4	0.0	0.0	0.0	0.0	4.2
Denied Del/Veh (s)	326.8	217.5	0.0	0.0	0.3	0.3	8.3
Total Delay (hr)	6.4	1.1	0.0	0.8	0.2	0.0	8.5
Total Del/Veh (s)	661.7	647.5	2.8	2.0	1.9	0.1	16.8
Avg Speed (mph)	0	0	13	24	41	34	7
Vehicles Entered	32	6	6	1408	325	28	1805
Vehicles Exited	27	5	6	1409	325	28	1800
Hourly Exit Rate	27	5	6	1409	325	28	1800
Input Volume	46	7	5	1398	333	27	1816
% of Volume	59	71	120	101	98	104	99

13: External Performance by approach

Approach	WB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.0	0.0
Total Del/Veh (s)	0.1	0.1
Avg Speed (mph)	21	21
Vehicles Entered	34	34
Vehicles Exited	34	34
Hourly Exit Rate	34	34
Input Volume	32	32
% of Volume	106	106

Total Network Performance

Denied Delay (hr)	4.5
Denied Del/Veh (s)	7.1
Total Delay (hr)	23.8
Total Del/Veh (s)	37.4
Avg Speed (mph)	18
Vehicles Entered	2263
Vehicles Exited	2253
Hourly Exit Rate	2253
Input Volume	11728
% of Volume	19

Intersection: 1: SR 89 & Squaw Valley Rd

Movement	EB	EB	NB	NB	NB	SB
Directions Served	L	LT	L	T	TR	T
Maximum Queue (ft)	216	160	160	305	256	159
Average Queue (ft)	140	100	77	159	97	69
95th Queue (ft)	201	154	134	256	208	130
Link Distance (ft)	156	156		488		260
Upstream Blk Time (%)	4	0				
Queuing Penalty (veh)	13	1				
Storage Bay Dist (ft)			500		300	
Storage Blk Time (%)				0	0	0
Queuing Penalty (veh)				1	0	0

Intersection: 6: Squaw Valley Rd & 7-11 driveway

Movement	EB	EB	WB	SB
Directions Served	LT	T	TR	LR
Maximum Queue (ft)	93	25	13	67
Average Queue (ft)	21	1	0	20
95th Queue (ft)	68	14	5	49
Link Distance (ft)	176	176	156	332
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 8: Site access & Squaw Valley Rd

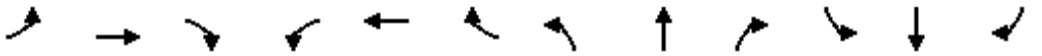
Movement	WB	NB
Directions Served	LT	LR
Maximum Queue (ft)	51	63
Average Queue (ft)	5	20
95th Queue (ft)	27	45
Link Distance (ft)	176	284
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 12: SR 89

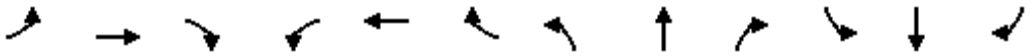
Movement	EB	NB	NB	B11	B11
Directions Served	LR	L	T	T	
Maximum Queue (ft)	217	33	49	323	245
Average Queue (ft)	176	2	6	55	13
95th Queue (ft)	262	15	31	242	108
Link Distance (ft)	198		76	260	260
Upstream Blk Time (%)	66			1	0
Queuing Penalty (veh)	0			9	1
Storage Bay Dist (ft)		75			
Storage Blk Time (%)					
Queuing Penalty (veh)					

Network Summary

Network wide Queuing Penalty: 26



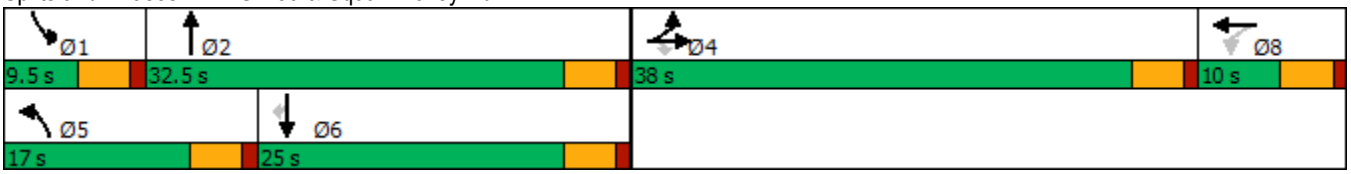
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	683	0	227	0	0	0	154	699	0	0	196	144
Future Volume (vph)	683	0	227	0	0	0	154	699	0	0	196	144
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	500		300	160		280
Storage Lanes	1		1	0		0	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00
Frt			0.850									0.850
Flt Protected	0.950	0.950					0.950					
Satd. Flow (prot)	1681	1681	1583	0	1863	0	1770	3438	0	1863	1810	1583
Flt Permitted	0.950	0.950					0.950					
Satd. Flow (perm)	1681	1681	1583	0	1863	0	1770	3438	0	1863	1810	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			247									182
Link Speed (mph)		35			25			55			55	
Link Distance (ft)		233			143			555			325	
Travel Time (s)		4.5			3.9			6.9			4.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	5%	2%	2%	5%	2%
Adj. Flow (vph)	742	0	247	0	0	0	167	760	0	0	213	157
Shared Lane Traffic (%)	50%											
Lane Group Flow (vph)	371	371	247	0	0	0	167	760	0	0	213	157
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2		1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100		20	100		20	100	20
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	0
Detector 1 Position(ft)	0	0	0	0	0		0	0		0	0	0
Detector 1 Size(ft)	20	6	20	20	6		20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Split	NA	Perm				Prot	NA		Prot	NA	Perm
Protected Phases	4	4			8		5	2		1	6	

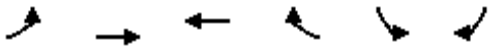


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases			4	8								6
Detector Phase	4	4	4	8	8		5	2		1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	10.0	10.0		9.5	22.5		9.5	22.5	22.5
Total Split (s)	38.0	38.0	38.0	10.0	10.0		17.0	32.5		9.5	25.0	25.0
Total Split (%)	42.2%	42.2%	42.2%	11.1%	11.1%		18.9%	36.1%		10.6%	27.8%	27.8%
Maximum Green (s)	33.5	33.5	33.5	5.5	5.5		12.5	28.0		5.0	20.5	20.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5		4.5		4.5	4.5		4.5	4.5	4.5
Lead/Lag							Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None	None	None	None		None	Min		None	Min	Min
Walk Time (s)	7.0	7.0	7.0					7.0			7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0					11.0			11.0	11.0
Pedestrian Calls (#/hr)	0	0	0					0			0	0
Act Effct Green (s)	21.3	21.3	21.3				10.8	28.5			12.9	12.9
Actuated g/C Ratio	0.36	0.36	0.36				0.18	0.48			0.22	0.22
v/c Ratio	0.61	0.61	0.34				0.52	0.46			0.54	0.32
Control Delay	21.0	21.0	3.6				31.9	12.4			28.4	5.1
Queue Delay	0.0	0.0	0.0				0.0	0.0			0.0	0.0
Total Delay	21.0	21.0	3.6				31.9	12.4			28.4	5.1
LOS	C	C	A				C	B			C	A
Approach Delay		16.6						15.9			18.6	
Approach LOS		B						B			B	
Queue Length 50th (ft)	111	111	0				54	88			69	0
Queue Length 95th (ft)	221	221	40				139	177			154	33
Internal Link Dist (ft)		153			63			475			245	
Turn Bay Length (ft)							500					280
Base Capacity (vph)	1004	1004	1045				394	1846			661	694
Starvation Cap Reductn	0	0	0				0	0			0	0
Spillback Cap Reductn	0	0	0				0	0			0	0
Storage Cap Reductn	0	0	0				0	0			0	0
Reduced v/c Ratio	0.37	0.37	0.24				0.42	0.41			0.32	0.23

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 59.3			
Natural Cycle: 70			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.61			
Intersection Signal Delay: 16.6		Intersection LOS: B	
Intersection Capacity Utilization 53.7%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 1: SR 89 & Squaw Valley Rd



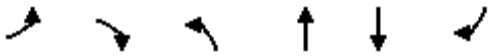


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	38	905	283	15	5	27
Future Volume (vph)	38	905	283	15	5	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.91	0.91	1.00	1.00	1.00	1.00
Frt			0.993		0.885	
Flt Protected		0.998			0.993	
Satd. Flow (prot)	0	5075	1850	0	1637	0
Flt Permitted		0.998			0.993	
Satd. Flow (perm)	0	5075	1850	0	1637	0
Link Speed (mph)		35	35		20	
Link Distance (ft)		210	233		372	
Travel Time (s)		4.1	4.5		12.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	41	984	308	16	5	29
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1025	324	0	34	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 47.4%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	909	10	7	303	8	34
Future Volume (vph)	909	10	7	303	8	34
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	80		0	0
Storage Lanes		0	0		1	0
Taper Length (ft)			25		25	
Lane Util. Factor	0.91	0.91	0.95	0.95	1.00	1.00
Frt	0.998				0.891	
Flt Protected				0.999	0.990	
Satd. Flow (prot)	5075	0	0	3536	1643	0
Flt Permitted				0.999	0.990	
Satd. Flow (perm)	5075	0	0	3536	1643	0
Link Speed (mph)	35			35	20	
Link Distance (ft)	785			210	348	
Travel Time (s)	15.3			4.1	11.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	988	11	8	329	9	37
Shared Lane Traffic (%)						
Lane Group Flow (vph)	999	0	0	337	46	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 27.8%		ICU Level of Service A	
Analysis Period (min) 15			



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	46	7	5	1377	333	27
Future Volume (vph)	46	7	5	1377	333	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	75			0
Storage Lanes	1	0	1			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.981				0.990	
Flt Protected	0.959		0.950			
Satd. Flow (prot)	1752	0	1770	1863	1844	0
Flt Permitted	0.959		0.950			
Satd. Flow (perm)	1752	0	1770	1863	1844	0
Link Speed (mph)	30			55	55	
Link Distance (ft)	236			130	511	
Travel Time (s)	5.4			1.6	6.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	50	8	5	1497	362	29
Shared Lane Traffic (%)						
Lane Group Flow (vph)	58	0	5	1497	391	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 82.5%		ICU Level of Service E	
Analysis Period (min) 15			

1: SR 89 & Squaw Valley Rd Performance by movement

Movement	EBL	EBR	WBL	NBL	NBT	SBL	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (hr)	0.9	0.1	0.0	0.8	1.0	0.0	1.6	0.1	4.5
Total Del/Veh (s)	15.7	1.9		18.2	6.8	25.3	12.8	2.4	9.6
Avg Speed (mph)	7	14	2	12	27	7	13	19	16
Vehicles Entered	201	192	0	163	513	2	438	160	1669
Vehicles Exited	201	192	0	164	511	2	437	160	1667
Hourly Exit Rate	201	192	0	164	511	2	437	160	1667
Input Volume	204	188	1	161	528	3	441	161	1687
% of Volume	99	102	0	102	97	67	99	99	99

2: External Performance by approach

Approach	WB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.0	0.0
Total Del/Veh (s)	0.2	0.2
Avg Speed (mph)	34	34
Vehicles Entered	313	313
Vehicles Exited	315	315
Hourly Exit Rate	315	315
Input Volume	308	308
% of Volume	102	102

3: External Performance by approach

Approach	NB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.2	0.2
Total Del/Veh (s)	1.0	1.0
Avg Speed (mph)	45	45
Vehicles Entered	747	747
Vehicles Exited	747	747
Hourly Exit Rate	747	747
Input Volume	767	767
% of Volume	97	97

4: External Performance by approach

Approach	SB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.1	0.1
Total Del/Veh (s)	0.5	0.5
Avg Speed (mph)	44	44
Vehicles Entered	617	617
Vehicles Exited	617	617
Hourly Exit Rate	617	617
Input Volume	618	618
% of Volume	100	100

5: External Performance by approach

Approach	EB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.0	0.0
Total Del/Veh (s)	1.1	1.1
Avg Speed (mph)	16	16
Vehicles Entered	2	2
Vehicles Exited	2	2
Hourly Exit Rate	2	2
Input Volume	3	3
% of Volume	67	67

6: Squaw Valley Rd & 7-11 driveway Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.1	0.0
Total Delay (hr)	0.0	0.1	0.3	0.0	0.0	0.0	0.5
Total Del/Veh (s)	5.0	1.1	3.6	3.0	10.9	2.8	2.4
Avg Speed (mph)	13	26	13	11	10	15	17
Vehicles Entered	20	387	306	17	6	27	763
Vehicles Exited	20	386	305	17	6	27	761
Hourly Exit Rate	20	386	305	17	6	27	761
Input Volume	20	387	302	20	5	25	759
% of Volume	100	100	101	85	120	108	100

7: External Performance by approach

Approach	NB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.0	0.0
Total Del/Veh (s)	0.3	0.3
Avg Speed (mph)	22	22
Vehicles Entered	38	38
Vehicles Exited	37	37
Hourly Exit Rate	37	37
Input Volume	40	40
% of Volume	92	92

8: Site access & Squaw Valley Rd Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.4	0.1	0.0	0.0	0.1	0.1	0.2
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.2
Total Del/Veh (s)	0.3	0.3	3.3	0.6	8.2	3.5	0.8
Avg Speed (mph)	34	28	15	29	11	13	30
Vehicles Entered	363	3	25	307	6	43	747
Vehicles Exited	364	3	25	307	6	43	748
Hourly Exit Rate	364	3	25	307	6	43	748
Input Volume	369	4	25	302	6	38	744
% of Volume	99	75	100	102	100	113	101

9: External Performance by approach

Approach	SB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.0	0.0
Total Del/Veh (s)	0.3	0.3
Avg Speed (mph)	22	22
Vehicles Entered	28	28
Vehicles Exited	28	28
Hourly Exit Rate	28	28
Input Volume	29	29
% of Volume	97	97

10: Bend Performance by approach

Approach	NB	SB	All
Denied Delay (hr)	0.1	0.0	0.1
Denied Del/Veh (s)	0.6	0.0	0.3
Total Delay (hr)	0.3	1.3	1.7
Total Del/Veh (s)	1.8	7.7	4.6
Avg Speed (mph)	24	23	23
Vehicles Entered	675	617	1292
Vehicles Exited	676	617	1293
Hourly Exit Rate	676	617	1293
Input Volume	689	618	1307
% of Volume	98	100	99

11: Bend Performance by approach

Approach	NB	SB	All
Denied Delay (hr)	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0
Total Delay (hr)	0.5	0.2	0.7
Total Del/Veh (s)	2.4	1.2	1.9
Avg Speed (mph)	28	31	29
Vehicles Entered	712	588	1300
Vehicles Exited	712	588	1300
Hourly Exit Rate	712	588	1300
Input Volume	732	593	1325
% of Volume	97	99	98

12: SR 89 Performance by movement

Movement	EBL	EBR	NBL	NBT	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.1	0.0	0.1
Denied Del/Veh (s)	0.1	0.1	0.0	0.0	0.5	0.5	0.2
Total Delay (hr)	0.3	0.0	0.0	0.1	0.4	0.0	0.8
Total Del/Veh (s)	26.6	10.7	3.8	0.6	2.5	0.2	2.1
Avg Speed (mph)	4	8	11	38	38	31	33
Vehicles Entered	37	5	3	726	584	24	1379
Vehicles Exited	37	5	3	726	583	24	1378
Hourly Exit Rate	37	5	3	726	583	24	1378
Input Volume	40	6	5	742	587	25	1405
% of Volume	92	83	60	98	99	96	98

13: External Performance by approach

Approach	WB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.0	0.0
Total Del/Veh (s)	0.1	0.1
Avg Speed (mph)	19	19
Vehicles Entered	27	27
Vehicles Exited	27	27
Hourly Exit Rate	27	27
Input Volume	30	30
% of Volume	90	90

Total Network Performance

Denied Delay (hr)	0.2
Denied Del/Veh (s)	0.5
Total Delay (hr)	8.6
Total Del/Veh (s)	17.0
Avg Speed (mph)	25
Vehicles Entered	1802
Vehicles Exited	1801
Hourly Exit Rate	1801
Input Volume	9022
% of Volume	20

Intersection: 1: SR 89 & Squaw Valley Rd

Movement	EB	EB	WB	NB	NB	NB	SB	SB	B11
Directions Served	L	LT	LTR	L	T	TR	L	T	T
Maximum Queue (ft)	115	96	9	160	119	91	22	216	9
Average Queue (ft)	61	23	0	71	59	10	2	100	0
95th Queue (ft)	100	67	5	126	108	45	13	178	6
Link Distance (ft)	156	156	94		488			260	76
Upstream Blk Time (%)	0							0	
Queuing Penalty (veh)	0							1	
Storage Bay Dist (ft)				500		300	160		
Storage Blk Time (%)								1	
Queuing Penalty (veh)								2	

Intersection: 6: Squaw Valley Rd & 7-11 driveway

Movement	EB	SB
Directions Served	LT	LR
Maximum Queue (ft)	57	49
Average Queue (ft)	9	22
95th Queue (ft)	37	46
Link Distance (ft)	176	332
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 8: Site access & Squaw Valley Rd

Movement	WB	NB
Directions Served	LT	LR
Maximum Queue (ft)	45	59
Average Queue (ft)	9	21
95th Queue (ft)	35	43
Link Distance (ft)	176	284
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

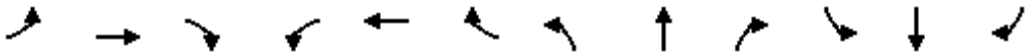
Intersection: 12: SR 89

Movement	EB	NB	NB
Directions Served	LR	L	T
Maximum Queue (ft)	78	24	6
Average Queue (ft)	30	2	0
95th Queue (ft)	64	13	4
Link Distance (ft)	198		76
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)		75	
Storage Blk Time (%)			
Queuing Penalty (veh)			

Network Summary

Network wide Queuing Penalty: 3

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	204	0	188	1	0	0	161	528	0	3	429	161
Future Volume (vph)	204	0	188	1	0	0	161	528	0	3	429	161
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	500		300	160		280
Storage Lanes	1		1	0		0	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00
Frt			0.850									0.850
Flt Protected	0.950	0.950			0.950		0.950			0.950		
Satd. Flow (prot)	1681	1681	1583	0	1770	0	1770	3438	0	1770	1810	1583
Flt Permitted	0.950	0.950					0.950			0.950		
Satd. Flow (perm)	1681	1681	1583	0	1863	0	1770	3438	0	1770	1810	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			221									189
Link Speed (mph)		35			25			55			55	
Link Distance (ft)		233			143			555			325	
Travel Time (s)		4.5			3.9			6.9			4.0	
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	5%	2%	2%	5%	2%
Adj. Flow (vph)	240	0	221	1	0	0	189	621	0	4	505	189
Shared Lane Traffic (%)	50%											
Lane Group Flow (vph)	120	120	221	0	1	0	189	621	0	4	505	189
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2		1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100		20	100		20	100	20
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	0
Detector 1 Position(ft)	0	0	0	0	0		0	0		0	0	0
Detector 1 Size(ft)	20	6	20	20	6		20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Split	NA	Perm	Perm	NA		Prot	NA		Prot	NA	Perm
Protected Phases	4	4			8		5	2		1	6	



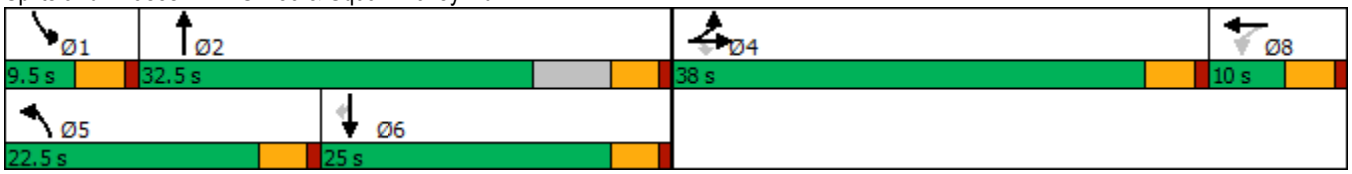
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases			4	8								6
Detector Phase	4	4	4	8	8		5	2		1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	10.0	10.0		22.5	22.5		9.5	22.5	22.5
Total Split (s)	38.0	38.0	38.0	10.0	10.0		22.5	32.5		9.5	25.0	25.0
Total Split (%)	39.8%	39.8%	39.8%	10.5%	10.5%		23.6%	34.0%		9.9%	26.2%	26.2%
Maximum Green (s)	33.5	33.5	33.5	5.5	5.5		18.0	28.0		5.0	20.5	20.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5		4.5		4.5	4.5		4.5	4.5	4.5
Lead/Lag							Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None	None	None	None		None	Min		None	Min	Min
Walk Time (s)	7.0	7.0	7.0					7.0				
Flash Dont Walk (s)	11.0	11.0	11.0					11.0				
Pedestrian Calls (#/hr)	0	0	0					69				
Act Effct Green (s)	10.2	10.2	10.2		5.7		11.6	35.9		5.1	21.1	21.1
Actuated g/C Ratio	0.17	0.17	0.17		0.10		0.20	0.62		0.09	0.36	0.36
v/c Ratio	0.41	0.41	0.48		0.01		0.54	0.29		0.03	0.77	0.27
Control Delay	27.3	27.3	8.0		30.0		28.3	7.8		30.7	30.1	4.8
Queue Delay	0.0	0.0	0.0		0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	27.3	27.3	8.0		30.0		28.3	7.8		30.7	30.1	4.8
LOS	C	C	A		C		C	A		C	C	A
Approach Delay		18.1			30.0			12.6			23.3	
Approach LOS		B			C			B			C	
Queue Length 50th (ft)	36	36	0		0		55	34		1	136	0
Queue Length 95th (ft)	95	95	45		5		132	140		10	#420	39
Internal Link Dist (ft)		153			63			475			245	
Turn Bay Length (ft)							500			160		280
Base Capacity (vph)	994	994	1027		180		562	2133		156	655	693
Starvation Cap Reductn	0	0	0		0		0	0		0	0	0
Spillback Cap Reductn	0	0	0		0		0	0		0	0	0
Storage Cap Reductn	0	0	0		0		0	0		0	0	0
Reduced v/c Ratio	0.12	0.12	0.22		0.01		0.34	0.29		0.03	0.77	0.27

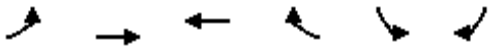
Intersection Summary			
Area Type:	Other		
Cycle Length: 95.5			
Actuated Cycle Length: 58.3			
Natural Cycle: 80			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.77			
Intersection Signal Delay: 17.7		Intersection LOS: B	
Intersection Capacity Utilization 49.6%		ICU Level of Service A	
Analysis Period (min) 15			

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 1: SR 89 & Squaw Valley Rd



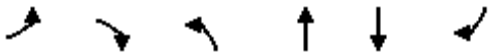


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	20	387	302	20	5	25
Future Volume (vph)	20	387	302	20	5	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.91	0.91	1.00	1.00	1.00	1.00
Frt			0.991		0.888	
Flt Protected		0.998			0.992	
Satd. Flow (prot)	0	5075	1846	0	1641	0
Flt Permitted		0.998			0.992	
Satd. Flow (perm)	0	5075	1846	0	1641	0
Link Speed (mph)		35	35		20	
Link Distance (ft)		210	233		372	
Travel Time (s)		4.1	4.5		12.7	
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Adj. Flow (vph)	24	455	355	24	6	29
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	479	379	0	35	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 32.6%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	369	4	25	302	6	38
Future Volume (vph)	369	4	25	302	6	38
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	80		0	0
Storage Lanes		0	0		1	0
Taper Length (ft)			25		25	
Lane Util. Factor	0.91	0.91	0.95	0.95	1.00	1.00
Frt	0.998				0.883	
Flt Protected				0.996	0.993	
Satd. Flow (prot)	5075	0	0	3525	1633	0
Flt Permitted				0.996	0.993	
Satd. Flow (perm)	5075	0	0	3525	1633	0
Link Speed (mph)	35			35	20	
Link Distance (ft)	785			210	348	
Travel Time (s)	15.3			4.1	11.9	
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Adj. Flow (vph)	434	5	29	355	7	45
Shared Lane Traffic (%)						
Lane Group Flow (vph)	439	0	0	384	52	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 29.6%		ICU Level of Service A	
Analysis Period (min) 15			



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	40	6	5	727	587	25
Future Volume (vph)	40	6	5	727	587	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	75			0
Storage Lanes	1	0	1			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.981				0.995	
Flt Protected	0.959		0.950			
Satd. Flow (prot)	1752	0	1770	1863	1853	0
Flt Permitted	0.959		0.950			
Satd. Flow (perm)	1752	0	1770	1863	1853	0
Link Speed (mph)	30			55	55	
Link Distance (ft)	236			130	511	
Travel Time (s)	5.4			1.6	6.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	43	7	5	790	638	27
Shared Lane Traffic (%)						
Lane Group Flow (vph)	50	0	5	790	665	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	48.3%	ICU Level of Service	A
Analysis Period (min)	15		

1: SR 89 & Squaw Valley Rd Performance by movement

Movement	EBL	EBT	EBR	WBR	NBL	NBT	NBR	SBL	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.6	0.3	0.3
Total Delay (hr)	0.7	0.0	0.1	0.0	0.7	0.7	0.0	0.0	3.7	0.2	6.1
Total Del/Veh (s)	16.8	3.0	1.8	4.6	18.2	5.4	2.1	30.1	19.2	3.9	12.0
Avg Speed (mph)	6	16	14	7	12	30	26	5	9	16	14
Vehicles Entered	145	3	190	1	137	465	4	1	697	184	1827
Vehicles Exited	145	3	190	1	137	465	4	1	697	183	1826
Hourly Exit Rate	145	3	190	1	137	465	4	1	697	183	1826
Input Volume	149	2	186	1	133	461	3	1	678	181	1795
% of Volume	97	150	102	100	103	101	133	100	103	101	102

2: External Performance by approach

Approach	WB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.0	0.0
Total Del/Veh (s)	0.2	0.2
Avg Speed (mph)	34	34
Vehicles Entered	275	275
Vehicles Exited	275	275
Hourly Exit Rate	275	275
Input Volume	271	271
% of Volume	101	101

3: External Performance by approach

Approach	NB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.2	0.2
Total Del/Veh (s)	0.8	0.8
Avg Speed (mph)	46	46
Vehicles Entered	651	651
Vehicles Exited	652	652
Hourly Exit Rate	652	652
Input Volume	651	651
% of Volume	100	100

4: External Performance by approach

Approach	SB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.1	0.1
Total Del/Veh (s)	0.6	0.6
Avg Speed (mph)	43	43
Vehicles Entered	866	866
Vehicles Exited	866	866
Hourly Exit Rate	866	866
Input Volume	844	844
% of Volume	103	103

5: External Performance by approach

Approach	EB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.0	0.0
Total Del/Veh (s)	0.5	0.5
Avg Speed (mph)	15	15
Vehicles Entered	5	5
Vehicles Exited	5	5
Hourly Exit Rate	5	5
Input Volume	5	5
% of Volume	100	100

6: Squaw Valley Rd & 7-11 driveway Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.1	0.0
Total Delay (hr)	0.0	0.1	0.3	0.0	0.1	0.0	0.6
Total Del/Veh (s)	5.0	1.1	4.0	3.0	12.6	4.0	3.0
Avg Speed (mph)	12	24	12	11	9	14	15
Vehicles Entered	31	316	300	22	21	29	719
Vehicles Exited	31	315	299	22	21	29	717
Hourly Exit Rate	31	315	299	22	21	29	717
Input Volume	32	314	294	21	22	29	712
% of Volume	97	100	102	105	95	100	101

7: External Performance by approach

Approach	NB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.0	0.0
Total Del/Veh (s)	0.3	0.3
Avg Speed (mph)	22	22
Vehicles Entered	52	52
Vehicles Exited	53	53
Hourly Exit Rate	53	53
Input Volume	53	53
% of Volume	100	100

8: Site access & Squaw Valley Rd Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.5	0.1	0.0	0.0	0.1	0.1	0.2
Total Delay (hr)	0.0	0.0	0.1	0.0	0.0	0.1	0.2
Total Del/Veh (s)	0.3	0.0	3.3	0.7	7.5	3.8	1.3
Avg Speed (mph)	34	28	15	28	11	13	27
Vehicles Entered	263	6	61	264	14	83	691
Vehicles Exited	264	6	62	264	14	83	693
Hourly Exit Rate	264	6	62	264	14	83	693
Input Volume	267	7	64	259	13	79	689
% of Volume	99	86	97	102	108	105	101

9: External Performance by approach

Approach	SB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.0	0.0
Total Del/Veh (s)	0.3	0.3
Avg Speed (mph)	22	22
Vehicles Entered	67	67
Vehicles Exited	67	67
Hourly Exit Rate	67	67
Input Volume	71	71
% of Volume	94	94

10: Bend Performance by approach

Approach	NB	SB	All
Denied Delay (hr)	0.1	0.0	0.1
Denied Del/Veh (s)	0.5	0.0	0.2
Total Delay (hr)	0.3	2.0	2.3
Total Del/Veh (s)	1.8	8.3	5.6
Avg Speed (mph)	24	23	23
Vehicles Entered	606	866	1472
Vehicles Exited	606	866	1472
Hourly Exit Rate	606	866	1472
Input Volume	597	844	1441
% of Volume	102	103	102

11: Bend Performance by approach

Approach	NB	SB	All
Denied Delay (hr)	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0
Total Delay (hr)	0.3	0.6	0.9
Total Del/Veh (s)	2.0	2.5	2.3
Avg Speed (mph)	31	22	27
Vehicles Entered	611	858	1469
Vehicles Exited	612	857	1469
Hourly Exit Rate	612	857	1469
Input Volume	611	840	1451
% of Volume	100	102	101

12: SR 89 Performance by movement

Movement	EBL	EBR	NBL	NBT	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.2	0.0	0.2
Denied Del/Veh (s)	0.1	0.1	0.0	0.0	0.8	0.8	0.5
Total Delay (hr)	0.6	0.1	0.0	0.1	1.1	0.0	1.9
Total Del/Veh (s)	54.5	37.2	8.8	0.5	4.7	1.1	4.3
Avg Speed (mph)	2	3	6	40	31	26	26
Vehicles Entered	40	6	3	623	852	38	1562
Vehicles Exited	40	6	4	624	852	38	1564
Hourly Exit Rate	40	6	4	624	852	38	1564
Input Volume	45	6	5	620	834	46	1556
% of Volume	89	100	80	101	102	83	101

13: External Performance by approach

Approach	WB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.0	0.0
Total Del/Veh (s)	0.2	0.2
Avg Speed (mph)	18	18
Vehicles Entered	41	41
Vehicles Exited	41	41
Hourly Exit Rate	41	41
Input Volume	51	51
% of Volume	80	80

Total Network Performance

Denied Delay (hr)	0.5
Denied Del/Veh (s)	0.8
Total Delay (hr)	12.4
Total Del/Veh (s)	22.1
Avg Speed (mph)	22
Vehicles Entered	2000
Vehicles Exited	1999
Hourly Exit Rate	1999
Input Volume	9590
% of Volume	21

Intersection: 1: SR 89 & Squaw Valley Rd

Movement	EB	EB	WB	NB	NB	NB	SB	SB	SB	B11
Directions Served	L	LT	LTR	L	T	TR	L	T	R	T
Maximum Queue (ft)	94	75	18	140	117	48	16	331	208	115
Average Queue (ft)	50	16	1	63	44	5	1	190	48	13
95th Queue (ft)	84	52	10	112	91	26	8	335	213	76
Link Distance (ft)	156	156	94		488			260		76
Upstream Blk Time (%)								5	0	2
Queuing Penalty (veh)								43	0	17
Storage Bay Dist (ft)				500		300	160		280	
Storage Blk Time (%)								15	0	
Queuing Penalty (veh)								28	2	

Intersection: 6: Squaw Valley Rd & 7-11 driveway

Movement	EB	WB	SB
Directions Served	LT	TR	LR
Maximum Queue (ft)	60	13	69
Average Queue (ft)	15	0	28
95th Queue (ft)	46	6	55
Link Distance (ft)	176	156	332
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 8: Site access & Squaw Valley Rd

Movement	WB	NB
Directions Served	LT	LR
Maximum Queue (ft)	60	74
Average Queue (ft)	16	30
95th Queue (ft)	46	53
Link Distance (ft)	176	284
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

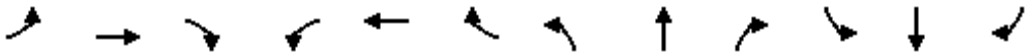
Intersection: 12: SR 89

Movement	EB	NB	NB	SB
Directions Served	LR	L	T	TR
Maximum Queue (ft)	103	24	6	106
Average Queue (ft)	38	3	0	5
95th Queue (ft)	81	17	4	51
Link Distance (ft)	198		76	479
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)		75		
Storage Blk Time (%)				
Queuing Penalty (veh)				

Network Summary

Network wide Queuing Penalty: 89

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	149	1	186	0	0	1	133	461	3	1	658	181
Future Volume (vph)	149	1	186	0	0	1	133	461	3	1	658	181
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	500		300	160		280
Storage Lanes	1		1	0		0	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00
Frt			0.850		0.865			0.999				0.850
Flt Protected	0.950	0.953					0.950			0.950		
Satd. Flow (prot)	1681	1686	1583	0	1611	0	1770	3435	0	1770	1810	1583
Flt Permitted	0.950	0.953					0.950			0.950		
Satd. Flow (perm)	1681	1686	1583	0	1611	0	1770	3435	0	1770	1810	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			207		445			1				171
Link Speed (mph)		35			25			55			55	
Link Distance (ft)		233			143			555			325	
Travel Time (s)		4.5			3.9			6.9			4.0	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	5%	2%	2%	5%	2%
Adj. Flow (vph)	166	1	207	0	0	1	148	512	3	1	731	201
Shared Lane Traffic (%)	50%											
Lane Group Flow (vph)	83	84	207	0	1	0	148	515	0	1	731	201
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2		1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100		20	100		20	100	20
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	0
Detector 1 Position(ft)	0	0	0	0	0		0	0		0	0	0
Detector 1 Size(ft)	20	6	20	20	6		20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Split	NA	Perm		NA		Prot	NA		Prot	NA	Perm
Protected Phases	4	4			8		5	2		1	6	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases			4	8								6
Detector Phase	4	4	4	8	8		5	2		1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	10.0	10.0		22.5	22.5		9.5	22.5	22.5
Total Split (s)	38.0	38.0	38.0	10.0	10.0		22.5	32.5		9.5	25.0	25.0
Total Split (%)	39.8%	39.8%	39.8%	10.5%	10.5%		23.6%	34.0%		9.9%	26.2%	26.2%
Maximum Green (s)	33.5	33.5	33.5	5.5	5.5		18.0	28.0		5.0	20.5	20.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5		4.5		4.5	4.5		4.5	4.5	4.5
Lead/Lag							Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None	None	None	None		None	Min		None	Min	Min
Walk Time (s)	7.0	7.0	7.0					7.0				
Flash Dont Walk (s)	11.0	11.0	11.0					11.0				
Pedestrian Calls (#/hr)	0	0	0					204				
Act Effct Green (s)	8.5	8.5	8.5		5.7		10.0	33.0		5.2	22.8	22.8
Actuated g/C Ratio	0.16	0.16	0.16		0.11		0.19	0.61		0.10	0.42	0.42
v/c Ratio	0.31	0.32	0.49		0.00		0.45	0.24		0.01	0.95	0.26
Control Delay	25.6	25.6	8.7		0.0		26.0	7.0		28.0	46.3	5.6
Queue Delay	0.0	0.0	0.0		0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	25.6	25.6	8.7		0.0		26.0	7.0		28.0	46.3	5.6
LOS	C	C	A		A		C	A		C	D	A
Approach Delay		16.3						11.2			37.5	
Approach LOS		B						B			D	
Queue Length 50th (ft)	24	24	0		0		40	24		0	~220	5
Queue Length 95th (ft)	73	74	52		0		108	114		5	#646	56
Internal Link Dist (ft)		153			63			475			245	
Turn Bay Length (ft)							500			160		280
Base Capacity (vph)	1083	1086	1093		568		612	2259		170	766	769
Starvation Cap Reductn	0	0	0		0		0	0		0	0	0
Spillback Cap Reductn	0	0	0		0		0	0		0	0	0
Storage Cap Reductn	0	0	0		0		0	0		0	0	0
Reduced v/c Ratio	0.08	0.08	0.19		0.00		0.24	0.23		0.01	0.95	0.26

Intersection Summary			
Area Type:	Other		
Cycle Length: 95.5			
Actuated Cycle Length: 53.7			
Natural Cycle: 100			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.95			
Intersection Signal Delay: 24.6		Intersection LOS: C	
Intersection Capacity Utilization 64.1%		ICU Level of Service C	
Analysis Period (min) 15			

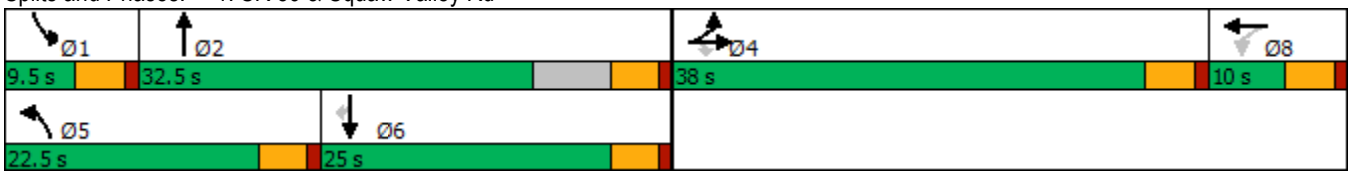
~ Volume exceeds capacity, queue is theoretically infinite.

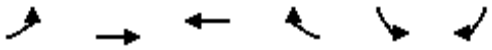
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 1: SR 89 & Squaw Valley Rd



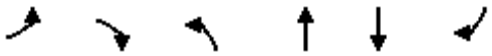


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	32	314	293	21	22	29
Future Volume (vph)	32	314	293	21	22	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.91	0.91	1.00	1.00	1.00	1.00
Frt			0.991		0.923	
Flt Protected		0.995			0.979	
Satd. Flow (prot)	0	5060	1846	0	1683	0
Flt Permitted		0.995			0.979	
Satd. Flow (perm)	0	5060	1846	0	1683	0
Link Speed (mph)		35	35		20	
Link Distance (ft)		210	233		372	
Travel Time (s)		4.1	4.5		12.7	
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Adj. Flow (vph)	38	369	345	25	26	34
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	407	370	0	60	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 36.7%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	267	7	64	258	13	79
Future Volume (vph)	267	7	64	258	13	79
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	80		0	0
Storage Lanes		0	0		1	0
Taper Length (ft)			25		25	
Lane Util. Factor	0.91	0.91	0.95	0.95	1.00	1.00
Frt	0.996				0.884	
Flt Protected				0.990	0.993	
Satd. Flow (prot)	5065	0	0	3504	1635	0
Flt Permitted				0.990	0.993	
Satd. Flow (perm)	5065	0	0	3504	1635	0
Link Speed (mph)	35			35	20	
Link Distance (ft)	785			210	348	
Travel Time (s)	15.3			4.1	11.9	
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Adj. Flow (vph)	314	8	75	304	15	93
Shared Lane Traffic (%)						
Lane Group Flow (vph)	322	0	0	379	108	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 29.9%		ICU Level of Service A	
Analysis Period (min) 15			



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	45	6	5	606	834	46
Future Volume (vph)	45	6	5	606	834	46
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	75			0
Storage Lanes	1	0	1			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.983				0.993	
Flt Protected	0.958		0.950			
Satd. Flow (prot)	1754	0	1770	1863	1850	0
Flt Permitted	0.958		0.950			
Satd. Flow (perm)	1754	0	1770	1863	1850	0
Link Speed (mph)	30			55	55	
Link Distance (ft)	236			130	511	
Travel Time (s)	5.4			1.6	6.3	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	50	7	6	673	927	51
Shared Lane Traffic (%)						
Lane Group Flow (vph)	57	0	6	673	978	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 56.7%		ICU Level of Service B	
Analysis Period (min) 15			

1: SR 89 & Squaw Valley Rd Performance by movement

Movement	EBL	EBT	EBR	NBL	NBT	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
Total Delay (hr)	9.2	0.0	0.2	2.3	9.3	2.0	0.1	23.1
Total Del/Veh (s)	33.3	4.6	2.1	43.6	49.1	27.0	2.4	31.6
Avg Speed (mph)	4	11	13	7	7	7	19	6
Vehicles Entered	988	2	307	185	672	259	188	2601
Vehicles Exited	990	2	307	183	673	260	187	2602
Hourly Exit Rate	990	2	307	183	673	260	187	2602
Input Volume	1135	1	344	178	662	253	194	2767
% of Volume	87	200	89	103	102	103	96	94

2: External Performance by approach

Approach	WB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.0	0.0
Total Del/Veh (s)	0.3	0.3
Avg Speed (mph)	34	34
Vehicles Entered	368	368
Vehicles Exited	368	368
Hourly Exit Rate	368	368
Input Volume	384	384
% of Volume	96	96

3: External Performance by approach

Approach	NB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	2.7	2.7
Total Del/Veh (s)	5.9	5.9
Avg Speed (mph)	29	29
Vehicles Entered	1656	1656
Vehicles Exited	1656	1656
Hourly Exit Rate	1656	1656
Input Volume	1837	1837
% of Volume	90	90

4: External Performance by approach

Approach	SB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.1	0.1
Total Del/Veh (s)	0.5	0.5
Avg Speed (mph)	43	43
Vehicles Entered	559	559
Vehicles Exited	558	558
Hourly Exit Rate	558	558
Input Volume	590	590
% of Volume	95	95

6: Squaw Valley Rd & 7-11 driveway Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.3	0.3
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	4.8	34.4	0.5
Total Delay (hr)	0.4	8.8	0.4	0.0	1.3	4.1	14.9
Total Del/Veh (s)	42.7	24.3	3.8	3.1	1144.5	591.8	31.0
Avg Speed (mph)	3	6	13	11	0	0	4
Vehicles Entered	30	1300	355	16	4	25	1730
Vehicles Exited	30	1294	356	16	2	14	1712
Hourly Exit Rate	30	1294	356	16	2	14	1712
Input Volume	36	1474	358	15	5	27	1915
% of Volume	83	88	99	107	40	52	89

7: External Performance by approach

Approach	NB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.0	0.0
Total Del/Veh (s)	0.8	0.8
Avg Speed (mph)	21	21
Vehicles Entered	46	46
Vehicles Exited	46	46
Hourly Exit Rate	46	46
Input Volume	51	51
% of Volume	90	90

8: Site access & Squaw Valley Rd Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Delay (hr)	61.4	0.2	0.0	0.0	0.0	0.0	61.6
Denied Del/Veh (s)	145.9	110.7	0.0	0.0	0.1	0.1	116.8
Total Delay (hr)	23.4	0.0	0.0	0.1	0.5	0.9	24.9
Total Del/Veh (s)	62.0	10.4	17.8	0.6	413.2	558.3	51.4
Avg Speed (mph)	6	17	6	30	0	0	7
Vehicles Entered	1353	6	4	364	4	6	1737
Vehicles Exited	1323	6	4	364	4	6	1707
Hourly Exit Rate	1323	6	4	364	4	6	1707
Input Volume	1505	5	5	379	5	5	1904
% of Volume	88	120	80	96	80	120	90

9: External Performance by approach

Approach	SB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.0	0.0
Total Del/Veh (s)	0.4	0.4
Avg Speed (mph)	21	21
Vehicles Entered	9	9
Vehicles Exited	9	9
Hourly Exit Rate	9	9
Input Volume	10	10
% of Volume	90	90

10: Bend Performance by approach

Approach	NB	SB	All
Denied Delay (hr)	0.2	0.0	0.2
Denied Del/Veh (s)	0.8	0.0	0.5
Total Delay (hr)	0.5	1.6	2.0
Total Del/Veh (s)	2.0	9.9	5.1
Avg Speed (mph)	23	19	19
Vehicles Entered	857	558	1415
Vehicles Exited	857	559	1416
Hourly Exit Rate	857	559	1416
Input Volume	840	590	1430
% of Volume	102	95	99

11: Bend Performance by approach

Approach	NB	SB	All
Denied Delay (hr)	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0
Total Delay (hr)	6.5	0.1	6.7
Total Del/Veh (s)	14.1	1.2	11.4
Avg Speed (mph)	11	32	12
Vehicles Entered	1663	440	2103
Vehicles Exited	1659	440	2099
Hourly Exit Rate	1659	440	2099
Input Volume	1797	440	2237
% of Volume	92	100	94

12: SR 89 Performance by movement

Movement	EBL	EBR	NBL	NBT	SBT	SBR	All
Denied Delay (hr)	14.4	1.9	0.0	0.0	0.0	0.0	16.3
Denied Del/Veh (s)	1264.9	1117.9	0.0	0.0	0.4	0.3	26.8
Total Delay (hr)	7.2	1.4	0.0	1.4	0.3	0.0	10.2
Total Del/Veh (s)	2341.2	2481.0	3.0	2.9	2.2	0.2	16.9
Avg Speed (mph)	0	0	12	19	40	32	7
Vehicles Entered	9	1	4	1678	439	25	2156
Vehicles Exited	2	1	4	1678	439	25	2149
Hourly Exit Rate	2	1	4	1678	439	25	2149
Input Volume	45	6	5	1812	434	27	2329
% of Volume	4	17	80	93	101	93	92

13: External Performance by approach

Approach	WB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.0	0.0
Total Del/Veh (s)	0.1	0.1
Avg Speed (mph)	20	20
Vehicles Entered	29	29
Vehicles Exited	29	29
Hourly Exit Rate	29	29
Input Volume	32	32
% of Volume	91	91

Total Network Performance

Denied Delay (hr)	78.4
Denied Del/Veh (s)	95.2
Total Delay (hr)	84.6
Total Del/Veh (s)	107.8
Avg Speed (mph)	9
Vehicles Entered	2762
Vehicles Exited	2702
Hourly Exit Rate	2702
Input Volume	15486
% of Volume	17

Intersection: 1: SR 89 & Squaw Valley Rd

Movement	EB	EB	NB	NB	NB	B10	SB	SB
Directions Served	L	LT	L	T	TR	T	T	R
Maximum Queue (ft)	224	218	344	475	324	23	227	104
Average Queue (ft)	188	182	136	266	213	1	112	5
95th Queue (ft)	220	213	269	420	336	15	191	65
Link Distance (ft)	156	156		488		111	260	
Upstream Blk Time (%)	60	46	0	0			0	0
Queuing Penalty (veh)	296	229	0	0			1	0
Storage Bay Dist (ft)			500		300			280
Storage Blk Time (%)			0	8	1		3	0
Queuing Penalty (veh)			0	39	5		5	0

Intersection: 6: Squaw Valley Rd & 7-11 driveway

Movement	EB	EB	EB	WB	SB
Directions Served	LT	T	T	TR	LR
Maximum Queue (ft)	203	238	135	9	303
Average Queue (ft)	170	188	14	0	136
95th Queue (ft)	216	255	92	5	332
Link Distance (ft)	176	176	176	156	332
Upstream Blk Time (%)	16	24	0		11
Queuing Penalty (veh)	83	122	1		0
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 8: Site access & Squaw Valley Rd

Movement	EB	EB	EB	WB	NB
Directions Served	T	T	TR	LT	LR
Maximum Queue (ft)	38	791	784	39	100
Average Queue (ft)	3	634	600	4	33
95th Queue (ft)	22	1059	1103	22	97
Link Distance (ft)		736	736	176	284
Upstream Blk Time (%)		62	45		
Queuing Penalty (veh)		0	0		
Storage Bay Dist (ft)	10				
Storage Blk Time (%)	0	30			
Queuing Penalty (veh)	1	152			

Intersection: 10: Bend

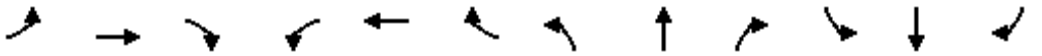
Movement	SB
Directions Served	T
Maximum Queue (ft)	76
Average Queue (ft)	3
95th Queue (ft)	54
Link Distance (ft)	488
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 12: SR 89

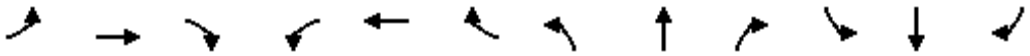
Movement	EB	NB	NB	B11	B11
Directions Served	LR	L	T	T	
Maximum Queue (ft)	221	24	58	360	362
Average Queue (ft)	187	1	13	325	256
95th Queue (ft)	252	12	47	429	444
Link Distance (ft)	198		76	260	260
Upstream Blk Time (%)	83		0	24	7
Queuing Penalty (veh)	0		0	220	62
Storage Bay Dist (ft)		75			
Storage Blk Time (%)			0		
Queuing Penalty (veh)			0		

Network Summary

Network wide Queuing Penalty: 1214



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1135	0	344	0	0	0	178	662	0	0	246	194
Future Volume (vph)	1135	0	344	0	0	0	178	662	0	0	246	194
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	500		300	160		280
Storage Lanes	1		1	0		0	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00
Frt			0.850									0.850
Flt Protected	0.950	0.950					0.950					
Satd. Flow (prot)	1681	1681	1583	0	1863	0	1770	3438	0	1863	1810	1583
Flt Permitted	0.950	0.950					0.950					
Satd. Flow (perm)	1681	1681	1583	0	1863	0	1770	3438	0	1863	1810	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			374									211
Link Speed (mph)		35			25			55			55	
Link Distance (ft)		233			143			555			325	
Travel Time (s)		4.5			3.9			6.9			4.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	5%	2%	2%	5%	2%
Adj. Flow (vph)	1234	0	374	0	0	0	193	720	0	0	267	211
Shared Lane Traffic (%)	50%											
Lane Group Flow (vph)	617	617	374	0	0	0	193	720	0	0	267	211
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2		1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100		20	100		20	100	20
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	0
Detector 1 Position(ft)	0	0	0	0	0		0	0		0	0	0
Detector 1 Size(ft)	20	6	20	20	6		20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Split	NA	Perm				Prot	NA		Prot	NA	Perm
Protected Phases	4	4			8		5	2		1	6	



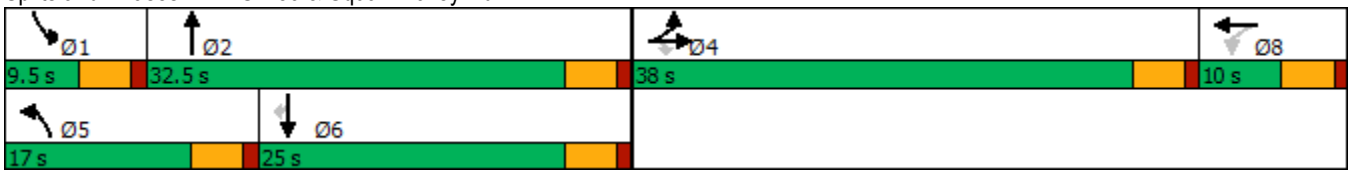
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases			4	8								6
Detector Phase	4	4	4	8	8		5	2		1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	10.0	10.0		9.5	22.5		9.5	22.5	22.5
Total Split (s)	38.0	38.0	38.0	10.0	10.0		17.0	32.5		9.5	25.0	25.0
Total Split (%)	42.2%	42.2%	42.2%	11.1%	11.1%		18.9%	36.1%		10.6%	27.8%	27.8%
Maximum Green (s)	33.5	33.5	33.5	5.5	5.5		12.5	28.0		5.0	20.5	20.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5		4.5		4.5	4.5		4.5	4.5	4.5
Lead/Lag							Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None	None	None	None		None	Min		None	Min	Min
Walk Time (s)	7.0	7.0	7.0					7.0			7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0					11.0			11.0	11.0
Pedestrian Calls (#/hr)	0	0	0					0			0	0
Act Effct Green (s)	33.6	33.6	33.6				11.8	32.0			15.7	15.7
Actuated g/C Ratio	0.45	0.45	0.45				0.16	0.43			0.21	0.21
v/c Ratio	0.82	0.82	0.41				0.69	0.49			0.70	0.42
Control Delay	30.1	30.1	3.3				45.2	16.5			37.9	6.7
Queue Delay	0.0	0.0	0.0				0.0	0.0			0.0	0.0
Total Delay	30.1	30.1	3.3				45.2	16.5			37.9	6.7
LOS	C	C	A				D	B			D	A
Approach Delay		23.9						22.5			24.1	
Approach LOS		C						C			C	
Queue Length 50th (ft)	257	257	0				86	121			116	0
Queue Length 95th (ft)	#500	#500	48				#182	166			192	50
Internal Link Dist (ft)		153			63			475			245	
Turn Bay Length (ft)							500					280
Base Capacity (vph)	756	756	918				297	1514			498	589
Starvation Cap Reductn	0	0	0				0	0			0	0
Spillback Cap Reductn	0	0	0				0	0			0	0
Storage Cap Reductn	0	0	0				0	0			0	0
Reduced v/c Ratio	0.82	0.82	0.41				0.65	0.48			0.54	0.36

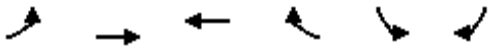
Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 74.7			
Natural Cycle: 90			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.82			
Intersection Signal Delay: 23.5		Intersection LOS: C	
Intersection Capacity Utilization 65.5%		ICU Level of Service C	
Analysis Period (min) 15			

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 1: SR 89 & Squaw Valley Rd



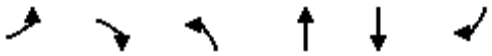


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	36	1474	357	15	5	27
Future Volume (vph)	36	1474	357	15	5	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.91	0.91	1.00	1.00	1.00	1.00
Frt			0.995		0.885	
Flt Protected		0.999			0.993	
Satd. Flow (prot)	0	5080	1853	0	1637	0
Flt Permitted		0.999			0.993	
Satd. Flow (perm)	0	5080	1853	0	1637	0
Link Speed (mph)		35	35		20	
Link Distance (ft)		210	233		372	
Travel Time (s)		4.1	4.5		12.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	39	1602	388	16	5	29
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1641	404	0	34	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 62.2%		ICU Level of Service B	
Analysis Period (min) 15			

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1505	5	5	379	5	5
Future Volume (vph)	1505	5	5	379	5	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	80		0	0
Storage Lanes		0	0		1	0
Taper Length (ft)			25		25	
Lane Util. Factor	0.91	0.91	0.95	0.95	1.00	1.00
Frt					0.932	
Flt Protected				0.999	0.976	
Satd. Flow (prot)	5085	0	0	3536	1694	0
Flt Permitted				0.999	0.976	
Satd. Flow (perm)	5085	0	0	3536	1694	0
Link Speed (mph)	35			35	20	
Link Distance (ft)	785			210	348	
Travel Time (s)	15.3			4.1	11.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1636	5	5	412	5	5
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1641	0	0	417	10	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 39.2%		ICU Level of Service A	
Analysis Period (min) 15			



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	45	6	5	1792	434	27
Future Volume (vph)	45	6	5	1792	434	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	75			0
Storage Lanes	1	0	1			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.983				0.992	
Flt Protected	0.958		0.950			
Satd. Flow (prot)	1754	0	1770	1863	1848	0
Flt Permitted	0.958		0.950			
Satd. Flow (perm)	1754	0	1770	1863	1848	0
Link Speed (mph)	30			55	55	
Link Distance (ft)	236			130	511	
Travel Time (s)	5.4			1.6	6.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	49	7	5	1948	472	29
Shared Lane Traffic (%)						
Lane Group Flow (vph)	56	0	5	1948	501	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 104.3%		ICU Level of Service G	
Analysis Period (min) 15			

1: SR 89 & Squaw Valley Rd Performance by movement

Movement	EBL	EBT	EBR	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.9	0.6	5.5
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	33.1	9.1	7.5
Total Delay (hr)	3.0	0.0	0.2	0.0	0.0	8.8	2.0	0.0	0.0	10.4	1.0	25.5
Total Del/Veh (s)	21.4	17.8	2.0	35.3	5.5	71.8	13.5	2.6	50.0	69.8	16.5	34.7
Avg Speed (mph)	5	7	13	2	7	4	18	23	4	3	7	6
Vehicles Entered	500	2	391	1	1	432	538	2	1	524	220	2612
Vehicles Exited	501	2	391	1	1	431	536	2	1	525	220	2611
Hourly Exit Rate	501	2	391	1	1	431	536	2	1	525	220	2611
Input Volume	490	3	400	2	1	390	533	1	3	966	409	3198
% of Volume	102	67	98	50	100	111	101	200	33	54	54	82

2: External Performance by approach

Approach	WB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.1	0.1
Total Del/Veh (s)	0.4	0.4
Avg Speed (mph)	34	34
Vehicles Entered	619	619
Vehicles Exited	618	618
Hourly Exit Rate	618	618
Input Volume	758	758
% of Volume	82	82

3: External Performance by approach

Approach	NB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.6	0.6
Total Del/Veh (s)	1.9	1.9
Avg Speed (mph)	42	42
Vehicles Entered	1042	1042
Vehicles Exited	1041	1041
Hourly Exit Rate	1041	1041
Input Volume	1066	1066
% of Volume	98	98

4: External Performance by approach

Approach	SB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.2	0.2
Total Del/Veh (s)	0.8	0.8
Avg Speed (mph)	40	40
Vehicles Entered	900	900
Vehicles Exited	900	900
Hourly Exit Rate	900	900
Input Volume	1338	1338
% of Volume	67	67

5: External Performance by approach

Approach	EB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.0	0.0
Total Del/Veh (s)	1.2	1.2
Avg Speed (mph)	16	16
Vehicles Entered	4	4
Vehicles Exited	4	4
Hourly Exit Rate	4	4
Input Volume	6	6
% of Volume	67	67

6: Squaw Valley Rd & 7-11 driveway Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.1	0.0
Total Delay (hr)	0.1	0.5	0.8	0.0	0.2	0.1	1.7
Total Del/Veh (s)	10.9	1.9	4.3	3.9	40.6	10.6	3.7
Avg Speed (mph)	9	24	12	11	4	10	16
Vehicles Entered	29	871	636	17	20	28	1601
Vehicles Exited	29	872	636	17	20	28	1602
Hourly Exit Rate	29	872	636	17	20	28	1602
Input Volume	30	870	780	21	22	29	1752
% of Volume	97	100	82	81	91	97	91

7: External Performance by approach

Approach	NB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.0	0.0
Total Del/Veh (s)	0.4	0.4
Avg Speed (mph)	22	22
Vehicles Entered	46	46
Vehicles Exited	46	46
Hourly Exit Rate	46	46
Input Volume	51	51
% of Volume	90	90

8: Site access & Squaw Valley Rd Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Delay (hr)	0.1	0.0	0.0	0.0	0.0	0.0	0.1
Denied Del/Veh (s)	0.4	0.4	0.0	0.0	0.1	0.1	0.2
Total Delay (hr)	0.2	0.0	0.1	0.2	0.0	0.1	0.6
Total Del/Veh (s)	0.7	0.4	7.8	0.9	27.7	7.0	1.3
Avg Speed (mph)	33	28	11	28	5	11	30
Vehicles Entered	846	5	47	617	5	56	1576
Vehicles Exited	845	5	47	616	5	55	1573
Hourly Exit Rate	845	5	47	616	5	55	1573
Input Volume	845	6	58	752	7	55	1723
% of Volume	100	83	81	82	71	100	91

9: External Performance by approach

Approach	SB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.0	0.0
Total Del/Veh (s)	0.6	0.6
Avg Speed (mph)	21	21
Vehicles Entered	52	52
Vehicles Exited	53	53
Hourly Exit Rate	53	53
Input Volume	64	64
% of Volume	83	83

10: Bend Performance by approach

Approach	NB	SB	All
Denied Delay (hr)	1.0	0.0	1.0
Denied Del/Veh (s)	3.9	0.0	2.0
Total Delay (hr)	0.9	2.8	3.7
Total Del/Veh (s)	3.3	11.3	7.1
Avg Speed (mph)	16	18	18
Vehicles Entered	972	900	1872
Vehicles Exited	972	900	1872
Hourly Exit Rate	972	900	1872
Input Volume	924	1338	2262
% of Volume	105	67	83

11: Bend Performance by approach

Approach	NB	SB	All
Denied Delay (hr)	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0
Total Delay (hr)	1.4	4.2	5.6
Total Del/Veh (s)	4.9	20.6	11.4
Avg Speed (mph)	20	4	11
Vehicles Entered	1038	728	1766
Vehicles Exited	1038	728	1766
Hourly Exit Rate	1038	728	1766
Input Volume	1024	1350	2374
% of Volume	101	54	74

12: SR 89 Performance by movement

Movement	EBL	EBR	NBL	NBT	SBT	SBR	All
Denied Delay (hr)	10.1	2.3	0.0	0.0	307.3	10.2	329.9
Denied Del/Veh (s)	912.6	1041.9	0.0	0.0	815.7	766.0	474.1
Total Delay (hr)	6.9	1.9	0.2	0.4	16.5	0.6	26.4
Total Del/Veh (s)	1375.8	1694.4	93.2	1.3	79.8	74.7	51.4
Avg Speed (mph)	0	0	1	29	4	4	3
Vehicles Entered	15	3	6	1047	731	29	1831
Vehicles Exited	12	1	6	1047	727	30	1823
Hourly Exit Rate	12	1	6	1047	727	30	1823
Input Volume	47	6	5	1036	1344	46	2484
% of Volume	26	17	120	101	54	65	73

13: External Performance by approach

Approach	WB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.0	0.0
Total Del/Veh (s)	1.5	1.5
Avg Speed (mph)	16	16
Vehicles Entered	36	36
Vehicles Exited	36	36
Hourly Exit Rate	36	36
Input Volume	51	51
% of Volume	71	71

Total Network Performance

Denied Delay (hr)	336.5
Denied Del/Veh (s)	353.1
Total Delay (hr)	64.3
Total Del/Veh (s)	82.2
Avg Speed (mph)	10
Vehicles Entered	2747
Vehicles Exited	2734
Hourly Exit Rate	2734
Input Volume	17127
% of Volume	16

Intersection: 1: SR 89 & Squaw Valley Rd

Movement	EB	EB	WB	NB	NB	NB	B10	SB	SB	SB	B11
Directions Served	L	LT	LTR	L	T	TR	T	L	T	R	T
Maximum Queue (ft)	200	169	30	466	531	156	109	22	361	260	172
Average Queue (ft)	135	102	2	308	207	45	24	1	333	244	151
95th Queue (ft)	188	163	14	505	534	122	106	9	345	345	162
Link Distance (ft)	156	156	94		488		111		260		76
Upstream Blk Time (%)	4	0		3	7		6		60	2	62
Queuing Penalty (veh)	12	1		0	0		0		813	0	834
Storage Bay Dist (ft)				500		300		160		280	
Storage Blk Time (%)				3	0				71	2	
Queuing Penalty (veh)				16	0				292	21	

Intersection: 6: Squaw Valley Rd & 7-11 driveway

Movement	EB	EB	WB	SB
Directions Served	LT	T	TR	LR
Maximum Queue (ft)	106	34	9	87
Average Queue (ft)	30	2	0	32
95th Queue (ft)	85	23	5	68
Link Distance (ft)	176	176	156	332
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 8: Site access & Squaw Valley Rd

Movement	WB	NB
Directions Served	LT	LR
Maximum Queue (ft)	74	67
Average Queue (ft)	25	27
95th Queue (ft)	59	53
Link Distance (ft)	176	284
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 10: Bend

Movement	SB
Directions Served	T
Maximum Queue (ft)	410
Average Queue (ft)	16
95th Queue (ft)	150
Link Distance (ft)	488
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 12: SR 89

Movement	EB	NB	NB	B11	B11	SB
Directions Served	LR	L	T	T		TR
Maximum Queue (ft)	217	38	36	201	53	531
Average Queue (ft)	193	7	2	16	2	501
95th Queue (ft)	243	28	16	125	37	520
Link Distance (ft)	198		76	260	260	479
Upstream Blk Time (%)	86			0	0	79
Queuing Penalty (veh)	0			1	0	0
Storage Bay Dist (ft)		75				
Storage Blk Time (%)						
Queuing Penalty (veh)						

Network Summary

Network wide Queuing Penalty: 1991

1: SR 89 & Squaw Valley Rd Performance by movement

Movement	EBL	EBR	NBL	NBT	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.0	0.0
Total Delay (hr)	9.3	0.2	2.3	8.8	1.9	0.1	22.5
Total Del/Veh (s)	33.3	2.1	44.4	47.2	27.1	2.4	31.2
Avg Speed (mph)	4	13	6	7	7	19	6
Vehicles Entered	992	298	182	659	251	194	2576
Vehicles Exited	993	298	180	659	250	194	2574
Hourly Exit Rate	993	298	180	659	250	194	2574
Input Volume	1154	352	179	662	253	195	2795
% of Volume	86	85	101	100	99	99	92

2: External Performance by approach

Approach	WB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.0	0.0
Total Del/Veh (s)	0.3	0.3
Avg Speed (mph)	34	34
Vehicles Entered	378	378
Vehicles Exited	381	381
Hourly Exit Rate	381	381
Input Volume	387	387
% of Volume	98	98

3: External Performance by approach

Approach	NB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	2.5	2.5
Total Del/Veh (s)	5.5	5.5
Avg Speed (mph)	30	30
Vehicles Entered	1645	1645
Vehicles Exited	1646	1646
Hourly Exit Rate	1646	1646
Input Volume	1858	1858
% of Volume	89	89

4: External Performance by approach

Approach	SB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.1	0.1
Total Del/Veh (s)	0.5	0.5
Avg Speed (mph)	43	43
Vehicles Entered	542	542
Vehicles Exited	542	542
Hourly Exit Rate	542	542
Input Volume	598	598
% of Volume	91	91

6: Squaw Valley Rd & 7-11 driveway Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	4.6	1.6	0.0
Total Delay (hr)	0.4	9.2	0.4	0.0	0.6	1.6	12.2
Total Del/Veh (s)	44.2	25.5	3.8	3.3	451.2	193.1	25.2
Avg Speed (mph)	3	5	12	11	0	1	5
Vehicles Entered	33	1289	358	17	4	29	1730
Vehicles Exited	33	1287	358	17	3	23	1721
Hourly Exit Rate	33	1287	358	17	3	23	1721
Input Volume	38	1501	360	15	5	27	1946
% of Volume	87	86	99	113	60	85	88

7: External Performance by approach

Approach	NB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.0	0.0
Total Del/Veh (s)	0.8	0.8
Avg Speed (mph)	22	22
Vehicles Entered	50	50
Vehicles Exited	50	50
Hourly Exit Rate	50	50
Input Volume	53	53
% of Volume	94	94

8: Site access & Squaw Valley Rd Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Delay (hr)	69.6	0.5	0.0	0.0	0.8	3.5	74.3
Denied Del/Veh (s)	168.5	208.4	0.0	0.0	338.4	370.5	139.6
Total Delay (hr)	24.7	0.0	0.0	0.1	0.9	6.0	31.8
Total Del/Veh (s)	66.4	20.2	20.1	0.6	673.2	869.6	65.2
Avg Speed (mph)	6	13	6	29	0	0	5
Vehicles Entered	1329	8	5	374	5	24	1745
Vehicles Exited	1307	8	5	374	4	15	1713
Hourly Exit Rate	1307	8	5	374	4	15	1713
Input Volume	1505	10	7	379	8	34	1943
% of Volume	87	80	71	99	50	44	88

9: External Performance by approach

Approach	SB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.0	0.0
Total Del/Veh (s)	0.4	0.4
Avg Speed (mph)	20	20
Vehicles Entered	13	13
Vehicles Exited	13	13
Hourly Exit Rate	13	13
Input Volume	17	17
% of Volume	76	76

10: Bend Performance by approach

Approach	NB	SB	All
Denied Delay (hr)	0.2	0.0	0.2
Denied Del/Veh (s)	0.8	0.0	0.5
Total Delay (hr)	0.5	1.5	2.0
Total Del/Veh (s)	2.1	9.8	5.1
Avg Speed (mph)	22	19	19
Vehicles Entered	841	541	1382
Vehicles Exited	841	542	1383
Hourly Exit Rate	841	542	1383
Input Volume	841	598	1439
% of Volume	100	91	96

11: Bend Performance by approach

Approach	NB	SB	All
Denied Delay (hr)	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0
Total Delay (hr)	6.4	0.1	6.6
Total Del/Veh (s)	13.9	1.2	11.2
Avg Speed (mph)	11	32	12
Vehicles Entered	1652	437	2089
Vehicles Exited	1649	438	2087
Hourly Exit Rate	1649	438	2087
Input Volume	1816	441	2257
% of Volume	91	99	92

12: SR 89 Performance by movement

Movement	EBL	EBR	NBL	NBT	SBT	SBR	All
Denied Delay (hr)	12.2	1.5	0.0	0.0	0.0	0.0	13.7
Denied Del/Veh (s)	1125.3	876.6	0.0	0.0	0.3	0.4	22.7
Total Delay (hr)	7.0	2.0	0.0	1.3	0.3	0.0	10.6
Total Del/Veh (s)	2806.4	2424.6	3.7	2.8	2.1	0.1	17.8
Avg Speed (mph)	0	0	11	20	40	33	7
Vehicles Entered	8	2	4	1663	437	25	2139
Vehicles Exited	2	0	4	1663	437	25	2131
Hourly Exit Rate	2	0	4	1663	437	25	2131
Input Volume	47	6	5	1831	435	27	2351
% of Volume	4	0	80	91	100	93	91

13: External Performance by approach

Approach	WB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.0	0.0
Total Del/Veh (s)	0.1	0.1
Avg Speed (mph)	20	20
Vehicles Entered	28	28
Vehicles Exited	29	29
Hourly Exit Rate	29	29
Input Volume	32	32
% of Volume	91	91

Total Network Performance

Denied Delay (hr)	88.2
Denied Del/Veh (s)	107.9
Total Delay (hr)	88.3
Total Del/Veh (s)	113.1
Avg Speed (mph)	8
Vehicles Entered	2736
Vehicles Exited	2690
Hourly Exit Rate	2690
Input Volume	15676
% of Volume	17

Intersection: 1: SR 89 & Squaw Valley Rd

Movement	EB	EB	NB	NB	NB	B10	SB
Directions Served	L	LT	L	T	TR	T	T
Maximum Queue (ft)	228	220	353	464	323	46	214
Average Queue (ft)	186	181	136	263	207	3	111
95th Queue (ft)	218	211	313	438	345	35	183
Link Distance (ft)	156	156		488		111	260
Upstream Blk Time (%)	61	46	0	1		0	0
Queuing Penalty (veh)	304	231	0	0		0	0
Storage Bay Dist (ft)			500		300		
Storage Blk Time (%)			0	8	1		3
Queuing Penalty (veh)			0	40	5		6

Intersection: 6: Squaw Valley Rd & 7-11 driveway

Movement	EB	EB	EB	WB	SB
Directions Served	LT	T	T	TR	LR
Maximum Queue (ft)	193	244	192	24	198
Average Queue (ft)	174	197	20	1	70
95th Queue (ft)	200	238	112	14	209
Link Distance (ft)	176	176	176	156	332
Upstream Blk Time (%)	16	26	1		2
Queuing Penalty (veh)	81	136	4		0
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 8: Site access & Squaw Valley Rd

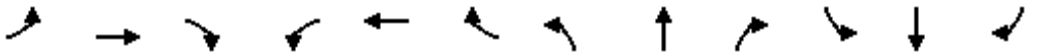
Movement	EB	EB	EB	WB	NB
Directions Served	T	T	TR	LT	LR
Maximum Queue (ft)	34	788	787	33	276
Average Queue (ft)	4	683	629	5	164
95th Queue (ft)	20	987	1085	25	355
Link Distance (ft)		736	736	176	284
Upstream Blk Time (%)		65	47		41
Queuing Penalty (veh)		0	0		0
Storage Bay Dist (ft)	10				
Storage Blk Time (%)	1	33			
Queuing Penalty (veh)	3	165			

Intersection: 12: SR 89

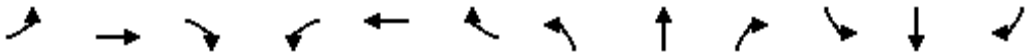
Movement	EB	NB	NB	B11	B11
Directions Served	LR	L	T	T	
Maximum Queue (ft)	213	24	58	360	369
Average Queue (ft)	193	2	7	325	248
95th Queue (ft)	258	13	36	408	458
Link Distance (ft)	198		76	260	260
Upstream Blk Time (%)	82		0	24	7
Queuing Penalty (veh)	0		0	217	61
Storage Bay Dist (ft)		75			
Storage Blk Time (%)			0		
Queuing Penalty (veh)			0		

Network Summary

Network wide Queuing Penalty: 1253



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1154	0	352	0	0	0	179	662	0	0	246	195
Future Volume (vph)	1154	0	352	0	0	0	179	662	0	0	246	195
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	500		300	160		280
Storage Lanes	1		1	0		0	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00
Frt			0.850									0.850
Flt Protected	0.950	0.950					0.950					
Satd. Flow (prot)	1681	1681	1583	0	1863	0	1770	3438	0	1863	1810	1583
Flt Permitted	0.950	0.950					0.950					
Satd. Flow (perm)	1681	1681	1583	0	1863	0	1770	3438	0	1863	1810	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			383									212
Link Speed (mph)		35			25			55			55	
Link Distance (ft)		233			143			555			325	
Travel Time (s)		4.5			3.9			6.9			4.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	5%	2%	2%	5%	2%
Adj. Flow (vph)	1254	0	383	0	0	0	195	720	0	0	267	212
Shared Lane Traffic (%)	50%											
Lane Group Flow (vph)	627	627	383	0	0	0	195	720	0	0	267	212
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2		1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100		20	100		20	100	20
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	0
Detector 1 Position(ft)	0	0	0	0	0		0	0		0	0	0
Detector 1 Size(ft)	20	6	20	20	6		20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Split	NA	Perm				Prot	NA		Prot	NA	Perm
Protected Phases	4	4			8		5	2		1	6	



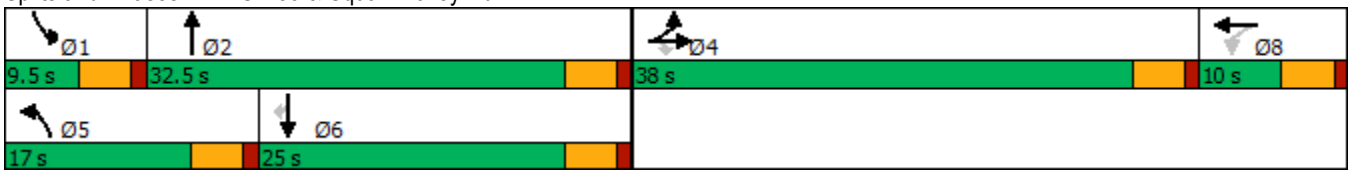
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases			4	8								6
Detector Phase	4	4	4	8	8		5	2		1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	10.0	10.0		9.5	22.5		9.5	22.5	22.5
Total Split (s)	38.0	38.0	38.0	10.0	10.0		17.0	32.5		9.5	25.0	25.0
Total Split (%)	42.2%	42.2%	42.2%	11.1%	11.1%		18.9%	36.1%		10.6%	27.8%	27.8%
Maximum Green (s)	33.5	33.5	33.5	5.5	5.5		12.5	28.0		5.0	20.5	20.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5		4.5		4.5	4.5		4.5	4.5	4.5
Lead/Lag							Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None	None	None	None		None	Min		None	Min	Min
Walk Time (s)	7.0	7.0	7.0					7.0			7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0					11.0			11.0	11.0
Pedestrian Calls (#/hr)	0	0	0					0			0	0
Act Effct Green (s)	33.6	33.6	33.6				11.9	32.1			15.7	15.7
Actuated g/C Ratio	0.45	0.45	0.45				0.16	0.43			0.21	0.21
v/c Ratio	0.83	0.83	0.42				0.69	0.49			0.70	0.42
Control Delay	31.2	31.2	3.3				45.4	16.4			38.0	6.7
Queue Delay	0.0	0.0	0.0				0.0	0.0			0.0	0.0
Total Delay	31.2	31.2	3.3				45.4	16.4			38.0	6.7
LOS	C	C	A				D	B			D	A
Approach Delay		24.6						22.6			24.1	
Approach LOS		C						C			C	
Queue Length 50th (ft)	265	265	0				87	121			116	0
Queue Length 95th (ft)	#512	#512	49				#186	166			192	50
Internal Link Dist (ft)		153			63			475			245	
Turn Bay Length (ft)							500					280
Base Capacity (vph)	755	755	922				297	1514			497	589
Starvation Cap Reductn	0	0	0				0	0			0	0
Spillback Cap Reductn	0	0	0				0	0			0	0
Storage Cap Reductn	0	0	0				0	0			0	0
Reduced v/c Ratio	0.83	0.83	0.42				0.66	0.48			0.54	0.36

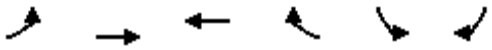
Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 74.8			
Natural Cycle: 90			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.83			
Intersection Signal Delay: 23.9		Intersection LOS: C	
Intersection Capacity Utilization 66.1%		ICU Level of Service C	
Analysis Period (min) 15			

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 1: SR 89 & Squaw Valley Rd



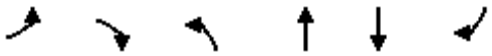


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	38	1501	359	15	5	27
Future Volume (vph)	38	1501	359	15	5	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.91	0.91	1.00	1.00	1.00	1.00
Frt			0.995		0.885	
Flt Protected		0.999			0.993	
Satd. Flow (prot)	0	5080	1853	0	1637	0
Flt Permitted		0.999			0.993	
Satd. Flow (perm)	0	5080	1853	0	1637	0
Link Speed (mph)		35	35		20	
Link Distance (ft)		210	233		372	
Travel Time (s)		4.1	4.5		12.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	41	1632	390	16	5	29
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1673	406	0	34	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 62.9%		ICU Level of Service B	
Analysis Period (min) 15			

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1505	10	7	379	8	34
Future Volume (vph)	1505	10	7	379	8	34
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	80		0	0
Storage Lanes		0	0		1	0
Taper Length (ft)			25		25	
Lane Util. Factor	0.91	0.91	0.95	0.95	1.00	1.00
Frt	0.999				0.891	
Flt Protected				0.999	0.990	
Satd. Flow (prot)	5080	0	0	3536	1643	0
Flt Permitted				0.999	0.990	
Satd. Flow (perm)	5080	0	0	3536	1643	0
Link Speed (mph)	35			35	20	
Link Distance (ft)	785			210	348	
Travel Time (s)	15.3			4.1	11.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1636	11	8	412	9	37
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1647	0	0	420	46	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 39.3%		ICU Level of Service A	
Analysis Period (min) 15			



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	47	6	5	1811	435	27
Future Volume (vph)	47	6	5	1811	435	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	75			0
Storage Lanes	1	0	1			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.984				0.992	
Flt Protected	0.958		0.950			
Satd. Flow (prot)	1756	0	1770	1863	1848	0
Flt Permitted	0.958		0.950			
Satd. Flow (perm)	1756	0	1770	1863	1848	0
Link Speed (mph)	30			55	55	
Link Distance (ft)	236			130	511	
Travel Time (s)	5.4			1.6	6.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	51	7	5	1968	473	29
Shared Lane Traffic (%)						
Lane Group Flow (vph)	58	0	5	1968	502	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 105.3%		ICU Level of Service G	
Analysis Period (min) 15			

1: SR 89 & Squaw Valley Rd Performance by movement

Movement	EBL	EBT	EBR	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.4	0.5	4.8
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	29.4	7.7	6.7
Total Delay (hr)	2.9	0.0	0.2	0.0	0.0	5.3	1.7	0.0	0.0	10.4	0.9	21.4
Total Del/Veh (s)	20.7	17.4	2.0	53.6	7.1	46.5	11.1	2.5	37.1	69.3	15.2	29.3
Avg Speed (mph)	5	7	13	2	6	6	21	25	4	3	8	6
Vehicles Entered	491	2	413	1	1	401	537	1	2	528	223	2600
Vehicles Exited	494	2	413	1	1	403	536	1	2	526	223	2602
Hourly Exit Rate	494	2	413	1	1	403	536	1	2	526	223	2602
Input Volume	501	2	411	2	1	393	533	1	3	966	412	3225
% of Volume	99	100	100	50	100	103	101	100	67	54	54	81

2: External Performance by approach

Approach	WB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.1	0.1
Total Del/Veh (s)	0.5	0.5
Avg Speed (mph)	34	34
Vehicles Entered	603	603
Vehicles Exited	602	602
Hourly Exit Rate	602	602
Input Volume	764	764
% of Volume	79	79

3: External Performance by approach

Approach	NB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.6	0.6
Total Del/Veh (s)	1.9	1.9
Avg Speed (mph)	41	41
Vehicles Entered	1042	1042
Vehicles Exited	1043	1043
Hourly Exit Rate	1043	1043
Input Volume	1077	1077
% of Volume	97	97

4: External Performance by approach

Approach	SB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.2	0.2
Total Del/Veh (s)	0.8	0.8
Avg Speed (mph)	39	39
Vehicles Entered	928	928
Vehicles Exited	928	928
Hourly Exit Rate	928	928
Input Volume	1349	1349
% of Volume	69	69

5: External Performance by approach

Approach	EB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.0	0.0
Total Del/Veh (s)	1.1	1.1
Avg Speed (mph)	18	18
Vehicles Entered	5	5
Vehicles Exited	5	5
Hourly Exit Rate	5	5
Input Volume	6	6
% of Volume	83	83

6: Squaw Valley Rd & 7-11 driveway Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.2	0.1	0.0
Total Delay (hr)	0.1	0.5	0.8	0.0	0.3	0.2	1.8
Total Del/Veh (s)	10.5	2.0	4.5	3.0	48.0	19.3	4.1
Avg Speed (mph)	9	23	12	11	4	7	15
Vehicles Entered	32	886	612	15	21	30	1596
Vehicles Exited	32	885	612	15	21	30	1595
Hourly Exit Rate	32	885	612	15	21	30	1595
Input Volume	32	892	786	21	22	29	1782
% of Volume	100	99	78	71	95	103	90

7: External Performance by approach

Approach	NB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.0	0.0
Total Del/Veh (s)	0.4	0.4
Avg Speed (mph)	22	22
Vehicles Entered	47	47
Vehicles Exited	47	47
Hourly Exit Rate	47	47
Input Volume	53	53
% of Volume	89	89

8: Site access & Squaw Valley Rd Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Delay (hr)	0.1	0.0	0.0	0.0	0.0	0.0	0.1
Denied Del/Veh (s)	0.4	0.3	0.0	0.0	0.1	0.2	0.2
Total Delay (hr)	0.2	0.0	0.1	0.2	0.1	0.2	0.7
Total Del/Veh (s)	0.8	0.2	7.2	0.9	25.7	8.6	1.6
Avg Speed (mph)	33	28	11	28	6	10	29
Vehicles Entered	841	8	49	592	11	77	1578
Vehicles Exited	840	8	50	592	11	78	1579
Hourly Exit Rate	840	8	50	592	11	78	1579
Input Volume	845	7	64	752	13	79	1760
% of Volume	99	114	78	79	85	99	90

9: External Performance by approach

Approach	SB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.0	0.0
Total Del/Veh (s)	0.6	0.6
Avg Speed (mph)	21	21
Vehicles Entered	57	57
Vehicles Exited	57	57
Hourly Exit Rate	57	57
Input Volume	71	71
% of Volume	80	80

10: Bend Performance by approach

Approach	NB	SB	All
Denied Delay (hr)	0.3	0.0	0.3
Denied Del/Veh (s)	1.0	0.0	0.5
Total Delay (hr)	0.5	3.0	3.5
Total Del/Veh (s)	1.9	11.4	6.6
Avg Speed (mph)	23	18	19
Vehicles Entered	939	925	1864
Vehicles Exited	939	928	1867
Hourly Exit Rate	939	928	1867
Input Volume	927	1349	2276
% of Volume	101	69	82

11: Bend Performance by approach

Approach	NB	SB	All
Denied Delay (hr)	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0
Total Delay (hr)	1.3	4.2	5.5
Total Del/Veh (s)	4.7	20.4	11.2
Avg Speed (mph)	20	4	11
Vehicles Entered	1031	733	1764
Vehicles Exited	1029	733	1762
Hourly Exit Rate	1029	733	1762
Input Volume	1035	1353	2388
% of Volume	99	54	74

12: SR 89 Performance by movement

Movement	EBL	EBR	NBL	NBT	SBT	SBR	All
Denied Delay (hr)	10.2	2.1	0.0	0.0	310.6	10.3	333.2
Denied Del/Veh (s)	748.8	828.3	0.0	0.0	831.4	879.3	481.7
Total Delay (hr)	7.4	1.2	0.0	0.4	16.6	0.5	26.1
Total Del/Veh (s)	1070.8	1414.4	49.5	1.3	79.6	74.2	50.8
Avg Speed (mph)	0	0	2	30	4	4	3
Vehicles Entered	23	3	3	1042	732	23	1826
Vehicles Exited	17	1	3	1042	732	23	1818
Hourly Exit Rate	17	1	3	1042	732	23	1818
Input Volume	47	6	5	1046	1347	46	2497
% of Volume	36	17	60	100	54	50	73

13: External Performance by approach

Approach	WB	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	0.0	0.0
Total Del/Veh (s)	1.5	1.5
Avg Speed (mph)	16	16
Vehicles Entered	26	26
Vehicles Exited	25	25
Hourly Exit Rate	25	25
Input Volume	51	51
% of Volume	49	49

Total Network Performance

Denied Delay (hr)	338.4
Denied Del/Veh (s)	356.5
Total Delay (hr)	59.8
Total Del/Veh (s)	76.3
Avg Speed (mph)	11
Vehicles Entered	2746
Vehicles Exited	2738
Hourly Exit Rate	2738
Input Volume	17299
% of Volume	16

Intersection: 1: SR 89 & Squaw Valley Rd

Movement	EB	EB	WB	NB	NB	NB	SB	SB	SB	B11
Directions Served	L	LT	LTR	L	T	TR	L	T	R	T
Maximum Queue (ft)	212	159	30	408	322	164	120	366	260	186
Average Queue (ft)	133	99	2	229	125	35	5	334	233	152
95th Queue (ft)	187	157	15	379	289	116	47	347	361	167
Link Distance (ft)	156	156	94		488			260		76
Upstream Blk Time (%)	3	0		0	0			60	2	62
Queuing Penalty (veh)	10	1		0	0			812	0	833
Storage Bay Dist (ft)				500		300	160		280	
Storage Blk Time (%)				0	0			71	2	
Queuing Penalty (veh)				0	1			294	20	

Intersection: 6: Squaw Valley Rd & 7-11 driveway

Movement	EB	EB	WB	SB
Directions Served	LT	T	TR	LR
Maximum Queue (ft)	116	20	13	120
Average Queue (ft)	33	1	1	37
95th Queue (ft)	92	18	8	85
Link Distance (ft)	176	176	156	332
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 8: Site access & Squaw Valley Rd

Movement	WB	WB	NB
Directions Served	LT	T	LR
Maximum Queue (ft)	69	24	95
Average Queue (ft)	28	1	34
95th Queue (ft)	62	13	67
Link Distance (ft)	176	176	284
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 10: Bend

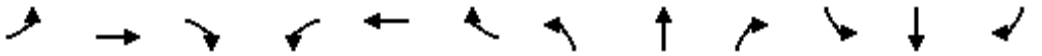
Movement	SB
Directions Served	T
Maximum Queue (ft)	247
Average Queue (ft)	11
95th Queue (ft)	120
Link Distance (ft)	488
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 12: SR 89

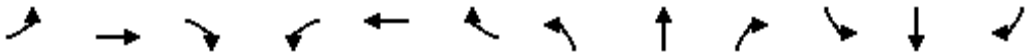
Movement	EB	NB	NB	B11	B11	SB
Directions Served	LR	L	T	T		TR
Maximum Queue (ft)	213	30	27	327	11	529
Average Queue (ft)	191	3	1	18	0	502
95th Queue (ft)	249	16	10	133	8	522
Link Distance (ft)	198		76	260	260	479
Upstream Blk Time (%)	82			0		78
Queuing Penalty (veh)	0			2		0
Storage Bay Dist (ft)		75				
Storage Blk Time (%)						
Queuing Penalty (veh)						

Network Summary

Network wide Queuing Penalty: 1973



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	501	2	411	0	2	1	393	533	1	3	938	412
Future Volume (vph)	501	2	411	0	2	1	393	533	1	3	938	412
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	500		300	160		280
Storage Lanes	1		1	0		0	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00
Frt			0.850		0.955							0.850
Flt Protected	0.950	0.953					0.950			0.950		
Satd. Flow (prot)	1681	1686	1583	0	1779	0	1770	3438	0	1770	1810	1583
Flt Permitted	0.950	0.953					0.950			0.950		
Satd. Flow (perm)	1681	1686	1583	0	1779	0	1770	3438	0	1770	1810	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			433		1							257
Link Speed (mph)		35			25			55			55	
Link Distance (ft)		233			143			555			325	
Travel Time (s)		4.5			3.9			6.9			4.0	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	5%	2%	2%	5%	2%
Adj. Flow (vph)	527	2	433	0	2	1	414	561	1	3	987	434
Shared Lane Traffic (%)	50%											
Lane Group Flow (vph)	263	266	433	0	3	0	414	562	0	3	987	434
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2		1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100		20	100		20	100	20
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	0
Detector 1 Position(ft)	0	0	0	0	0		0	0		0	0	0
Detector 1 Size(ft)	20	6	20	20	6		20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Split	NA	Perm		NA		Prot	NA		Prot	NA	Perm
Protected Phases	4	4			8		5	2		1	6	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases			4	8								6
Detector Phase	4	4	4	8	8		5	2		1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	10.0	10.0		22.5	22.5		9.5	22.5	22.5
Total Split (s)	38.0	38.0	38.0	10.0	10.0		22.5	32.5		9.5	25.0	25.0
Total Split (%)	39.8%	39.8%	39.8%	10.5%	10.5%		23.6%	34.0%		9.9%	26.2%	26.2%
Maximum Green (s)	33.5	33.5	33.5	5.5	5.5		18.0	28.0		5.0	20.5	20.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5		4.5		4.5	4.5		4.5	4.5	4.5
Lead/Lag							Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None	None	None	None		None	Min		None	Min	Min
Walk Time (s)	7.0	7.0	7.0					7.0				
Flash Dont Walk (s)	11.0	11.0	11.0					11.0				
Pedestrian Calls (#/hr)	0	0	0					224				
Act Effct Green (s)	19.7	19.7	19.7		5.6		18.4	42.4		5.1	20.9	20.9
Actuated g/C Ratio	0.27	0.27	0.27		0.08		0.25	0.57		0.07	0.28	0.28
v/c Ratio	0.59	0.60	0.59		0.02		0.95	0.29		0.02	1.94	0.69
Control Delay	29.3	29.5	5.9		34.7		64.0	11.9		39.0	451.9	18.1
Queue Delay	0.0	0.0	0.0		0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	29.3	29.5	5.9		34.7		64.0	11.9		39.0	451.9	18.1
LOS	C	C	A		C		E	B		D	F	B
Approach Delay		18.8			34.7			34.0			318.8	
Approach LOS		B			C			C			F	
Queue Length 50th (ft)	105	106	0		1		175	53		1	~672	61
Queue Length 95th (ft)	204	206	63		11		#494	185		11	#1241	#260
Internal Link Dist (ft)		153			63			475			245	
Turn Bay Length (ft)							500			160		280
Base Capacity (vph)	772	775	961		135		437	1960		121	509	629
Starvation Cap Reductn	0	0	0		0		0	0		0	0	0
Spillback Cap Reductn	0	0	0		0		0	0		0	0	0
Storage Cap Reductn	0	0	0		0		0	0		0	0	0
Reduced v/c Ratio	0.34	0.34	0.45		0.02		0.95	0.29		0.02	1.94	0.69

Intersection Summary			
Area Type:	Other		
Cycle Length: 95.5			
Actuated Cycle Length: 74.3			
Natural Cycle: 150			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 1.94			
Intersection Signal Delay: 150.2		Intersection LOS: F	
Intersection Capacity Utilization 103.0%		ICU Level of Service G	
Analysis Period (min) 15			

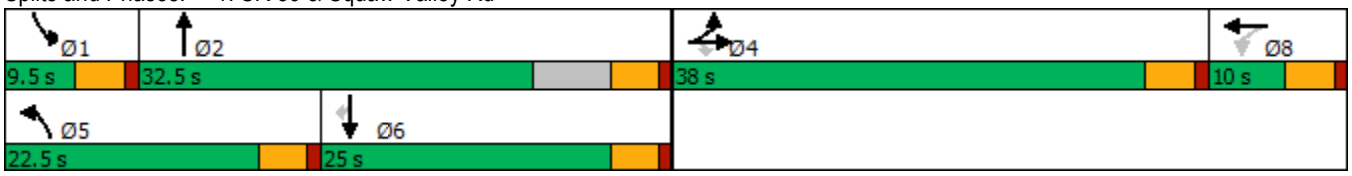
~ Volume exceeds capacity, queue is theoretically infinite.

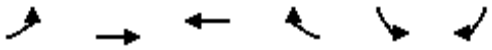
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 1: SR 89 & Squaw Valley Rd



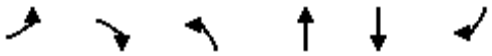


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	32	892	786	21	22	29
Future Volume (vph)	32	892	786	21	22	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.91	0.91	1.00	1.00	1.00	1.00
Frt			0.997		0.923	
Flt Protected		0.998			0.979	
Satd. Flow (prot)	0	5075	1857	0	1683	0
Flt Permitted		0.998			0.979	
Satd. Flow (perm)	0	5075	1857	0	1683	0
Link Speed (mph)		35	35		20	
Link Distance (ft)		210	233		372	
Travel Time (s)		4.1	4.5		12.7	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	36	991	873	23	24	32
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1027	896	0	56	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 52.6%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	845	7	64	751	13	79
Future Volume (vph)	845	7	64	751	13	79
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	80		0	0
Storage Lanes		0	0		1	0
Taper Length (ft)			25		25	
Lane Util. Factor	0.91	0.91	0.95	0.95	1.00	1.00
Frt	0.999				0.884	
Flt Protected				0.996	0.993	
Satd. Flow (prot)	5080	0	0	3525	1635	0
Flt Permitted				0.996	0.993	
Satd. Flow (perm)	5080	0	0	3525	1635	0
Link Speed (mph)	35			35	20	
Link Distance (ft)	785			210	348	
Travel Time (s)	15.3			4.1	11.9	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	939	8	71	834	14	88
Shared Lane Traffic (%)						
Lane Group Flow (vph)	947	0	0	905	102	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 54.7%		ICU Level of Service A	
Analysis Period (min) 15			



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	47	6	5	1030	1347	46
Future Volume (vph)	47	6	5	1030	1347	46
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	75			0
Storage Lanes	1	0	1			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.984				0.996	
Flt Protected	0.958		0.950			
Satd. Flow (prot)	1756	0	1770	1863	1855	0
Flt Permitted	0.958		0.950			
Satd. Flow (perm)	1756	0	1770	1863	1855	0
Link Speed (mph)	30			55	55	
Link Distance (ft)	236			130	511	
Travel Time (s)	5.4			1.6	6.3	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	52	7	6	1144	1497	51
Shared Lane Traffic (%)						
Lane Group Flow (vph)	59	0	6	1144	1548	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 83.7%		ICU Level of Service E	
Analysis Period (min) 15			

APPENDIX G

TRANSPORTATION PLANNING AND TRAFFIC ENGINEERING CONSULTANTS

2690 Lake Forest Road, Suite C
Post Office Box 5875
Tahoe City, California 96145
(530) 583-4053 FAX: (530) 583-5966
info@lsctahoe.com • www.lsctrans.com

MEMORANDUM

DATE: March 16, 2021

TO: Emilio Balingit, Urban Planning Partners, Inc.

FROM: Gordon Shaw, PE, LSC Transportation Consultants, Inc.

RE: Squaw S.N.O.W. Museum – Vehicle Miles Traveled

This memorandum presents a discussion pertaining to the Vehicle Miles Traveled (VMT) analysis associated with the proposed museum to be located at the existing Squaw Valley Park in the southwest corner of the State Route (SR) 89/Squaw Valley Road intersection. VMT is a computed value which correlates to the degree of an area's reliance on the private automobile for trip-making.

Placer County VMT Screening Criteria

Placer County recently (November 2020[1]) adopted the *County of Placer Transportation Study Guidelines* (TSG). This document includes VMT screening criteria that is applicable to the proposed project site.

According to the TSG, a project that meets at least one of four screening criteria can be presumed to have a less than significant VMT impact:

- Small Projects
- Affordable Housing
- Local-Serving Non-Residential Development
- Projects in Low VMT-Generating Area

The criteria that is pertinent to the proposed museum is the "Local-Serving Non-Residential Development." The TSG defines local-serving non-residential projects as projects under

[1] Placer County Board of Supervisors Resolution 2020-250. Adopted December 1, 2020.

50,000 square feet of floor area that include a range of non-residential, non-employment center uses, including the following uses:

- Library
- Civic center or community center

Although museum is not specifically listed as a land use within the TSG, the Placer County Zoning Code[2] contains a single combined land use definition for libraries and museums, defining them as follows:

> *"permanent public or quasi-public facilities generally of a noncommercial nature which are intended to provide historical, cultural, literary, artistic and/or educational displays and information."*

The proposed facility, in addition to containing exhibit galleries, will contain a library for storage of archives related to winter sports and the 1960 Olympics and a multipurpose room that will be made available to the residents of the Squaw Valley area for community meetings, lectures, and other similar events. These characteristics show that the project substantially meets the definition of library and civic center for the purposes of VMT screening criteria.

Also pertinent to this review is the definition of "local-serving" uses. It can be expected that a majority of visitors to the museum will not be residents of the Tahoe/Truckee area (and are thus not "locals"). However, very few (3 percent) of the vehicle-trips generated by visitors are expected to be from beyond this local area. Instead, the large majority of visitors are those non-residents that are already in the area, such as second-home owners and their guests, as well as overnight visitors. A relatively small museum can be expected to be a secondary destination for visitors that are drawn to the region for skiing or accessing the region in general. As such, the large majority of visitor trips generated by the museum are local trips with both origin and destination within the Truckee/Tahoe region.

As the project is local serving, is an appropriate non-residential land use and is also under 50,000 square feet in floor area, all criteria are met and the project can be presumed to have a less than significant VMT impact. Thus, no further analysis is needed.

[2] Placer County Code Article 17

APPENDIX H

EMERGENCY PREPAREDNESS AND EVACUATION PLAN

SNOW SPORTS MUSEUM

This Emergency Preparedness and Evacuation Plan (EPEP) has been prepared for The Sierra Nevada Olympic Winter Sports Museum project. The focus of the EPEP is primarily on emergency preparedness and evacuation protocols related to emergency events, such as fire. However, other relevant hazards are addressed, including seismic and flooding.

Prepared For: Placer County
Prepared By: Raney Planning & Management, Inc., and Atlas Planning Solutions

11/21/2022

INTRODUCTION

This Emergency Preparedness and Evacuation Plan (EPEP) is intended for the Sierra Nevada Olympic Winter Sports Museum (Museum) project site. The focus of the EPEP is primarily on emergency preparedness and evacuation protocols for emergency events, such as fire. However, other hazards are also addressed, including seismic and flooding. This EPEP is consistent with the Squaw Valley General Plan and Land Use Ordinance (SVGPLUO) concepts and goals and is intended to be implemented in conjunction with the Olympic Valley Fire Department (OVFD) Wildland Fire Evacuation Plan and the Placer County Operational Area East Side Emergency Evacuation Plan.

The Museum proposes a multi-use building on a small portion of the 25.8-acre Squaw Valley Park site. The proposed 2-story structure will include between 17,000 and 20,000 square feet of interior space, outdoor gathering spaces, and other amenities within an approximate 0.5-acre footprint. The museum will consist of the following key features: The Olympic Museum, a museum devoted to the Sierra Nevada ski history, an interactive Cultural Center/Community Hub, a place to hold events including a Community Room and Classroom, a Visitor Center with a small cafe and the museum gift shop. It will also provide restrooms accessible to the public at Squaw Valley Park, a large community multi-purpose room, sewer, electrical power, water line improvements for the park infrastructure, and drinkable water for the pickleball courts already in existence at the park.

The topography of the project site slopes from west to east, with elevations ranging from 6,136 to 6,110 feet. The site contains several large boulders, rock outcroppings, and native vegetation, including fir and pine trees. The surrounding area to the north and south of the project site is developed with rural residential uses and is primarily composed of forest and meadow vegetation; however, a few commercial businesses, including a convenience store (7-11) and a seasonal equipment rental shop (Tahoe Dave's) are located on the west side of SR 89, directly north of the project site. To the east, across SR 89, is a neighborhood of single-family residences located alongside the Truckee River. To the west lies the interior of Olympic Valley, which is home to the Palisades Tahoe Resort (approximately 1.75 miles from the project site) and single-family residences. The resort area includes a hotel, golf course, ski lodge and lifts, restaurants, shops, and a grocery store.[1]

PURPOSE

This EPEP applies explicitly to the property and structures within the Museum project site. The EPEP provides a coherent set of protocols to prepare and guide staff and visitors in an emergency event that requires evacuation. These events include localized fire events within the plan area or events outside the project area, including avalanche, earthquake, or flood events.

PROJECT SUMMARY

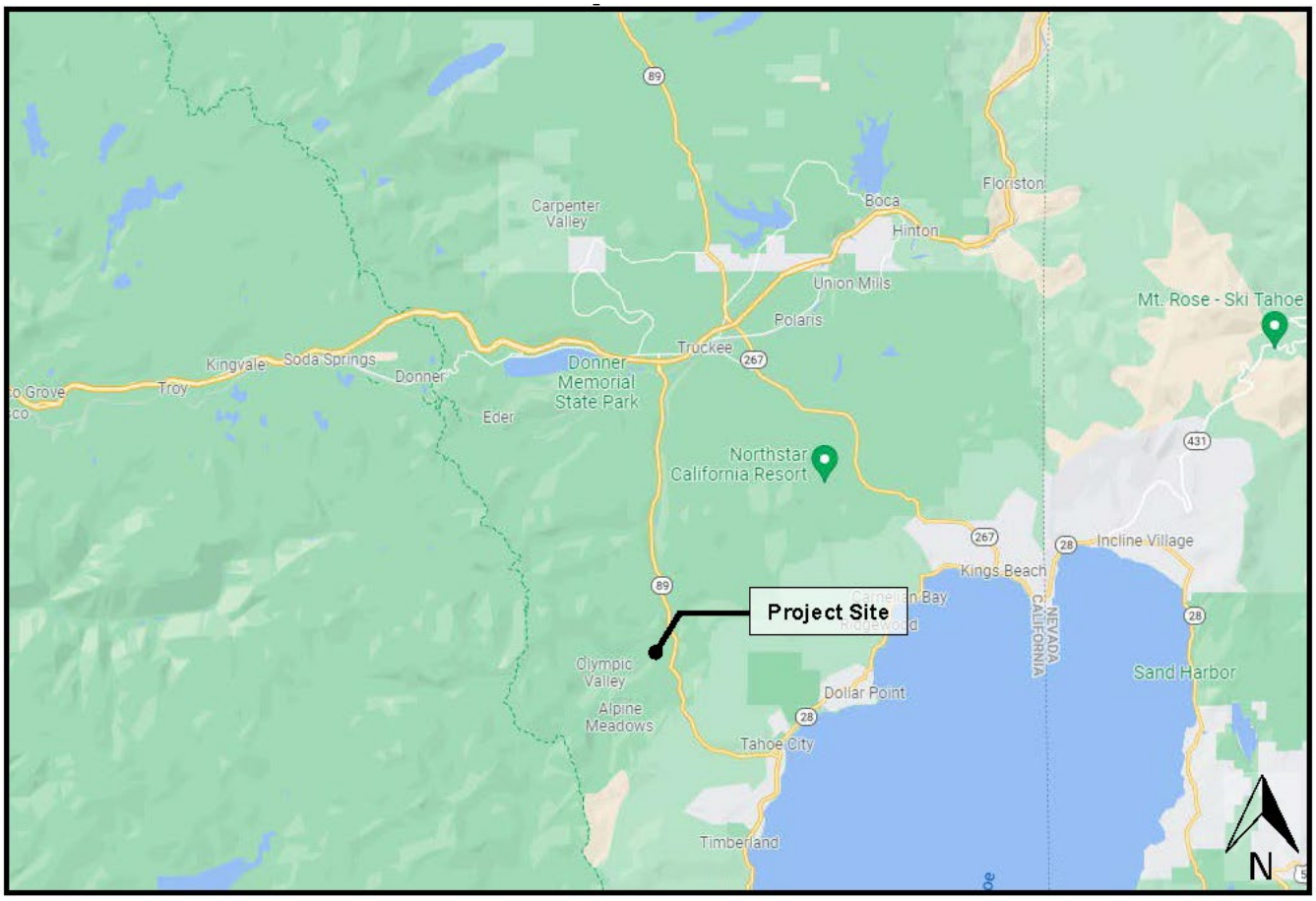
Location

The Museum project site is proposed within Squaw Valley Park at the entrance to Olympic Valley in northeastern Placer County (**Figure 1**). The site is southwest of the intersection at State Route (SR) 89 and Olympic Valley Rd. The valley is west of SR 89, approximately 9 miles south of Truckee,

[1] SNOW Sports Museum and Community Cultural Center EQ4 Project Description, pg. 4

and 7 miles northwest of Tahoe City. The Museum site sits within the service area of the OVFD, which is approximately 0.3 miles east of the Museum project site.

Figure 1: Regional Location



EXISTING CONDITIONS

Olympic Valley is an alpine valley located northwest of Lake Tahoe in California's Sierra Nevada Mountain range. The valley floor ranges in elevation from approximately 6,100 feet at the east end to around 6,200 feet at the west end and is surrounded by steep mountain slopes that rise to peaks over 9,000 feet in elevation. Squaw Creek and a tributary stream flowing into the Truckee River just east of the project site across SR 89 bisects the valley.

Topography and Vegetation

Elevations within the project site range from 6,110 feet in the northwest corner and increase to 6,136 feet in the southwest portion of the site. The project site contains large boulders and rock outcroppings, surrounded by native vegetation, including pine and fir trees. Due to its topography, even once it has been cleared of trees and boulders, the site would still be unsuitable for active recreational use. The mountains rise to approximately 6,800 feet south of the site, covered in coniferous forest and other native plants. SR 89 and the Truckee River are located to the east, which may act as a combination fire break and transportation route and helps protect Olympic Valley from the dangers of wildfires coming from the east. To the north is

Squaw Creek and additional forested mountain areas that rise to an elevation of 6,755 feet. West of the site lies the Palisades at Tahoe Ski Resort, which is home to ski slopes, amenities, and residents that live or frequent the resort throughout the year. Within the property of the Squaw Valley Community Park, a 370' x 200'artificial turf soccer field lies to the west of the project. South of the Project lies a 10' wide paved trail. Upslope of the trail to the south is a wooded area that has been treated and maintained as a shaded fuel break by Placer County.

Climate

Olympic Valley is located just east of the crest of the Sierra Nevada range and experiences a montane climate regime that includes cool, wet winters (average daytime highs of 42F°) and mild, dry summers (average daytime highs of 82F°). Average annual wind speeds of 4 mph out of the south can be expected. Most of the annual precipitation falls as snow, typically between December and March, while a small percentage can be expected to come as rain during the spring and summer months.[2]

Existing Land Uses

The project site sits within the Olympic Valley Community Park, a large year-round communal park containing a large, relatively flat recreational area with a soccer field, a playground, pickleball courts, and bike trails. The current land use designation for the site is Conservation Preserve (CP), and the current zoning is Forest Recreation (FR). This designation is anticipated to change as the proposed project includes a rezone to accommodate the proposed project. This rezone only applies to the proposed project site. As stated in the Notice of Preparation (NOP), any future development projects applying for a rezone to the new designation, would do so independently of the proposed project, and subject to a separate environmental review and discretionary approval. Approval of the requested rezone for this project would not commit the County towards any particular course of action regarding future rezones.

Surrounding the site are properties designated for residential, commercial, open space, and forestry uses. Olympic Valley is currently home to over 1,000 residences (single and multi-family), various lodging uses, schools, a fire station, and various recreation facilities, including the Olympic Valley Community Park. The full-time, permanent population is approximately 879 persons (based on the 2010 census), but the daytime visitor population can swell to more than 20,000, especially in winter during peak ski/snowboarding periods.

Project Description

The proposed project includes a new building, various site improvements, and amenities within an undeveloped portion of Olympic Valley Park **(Figure 2)**. The Museum and community cultural center are designed as a modern architecturally iconic structure. **Table 1** identifies the proposed site amenities, including up to 20,000 square feet (sf) of interior space on 2 levels (and possibly a mezzanine level) and an outdoor gathering space with amenities.[3] **Figure 3** depicts the proposed site plan, which is anticipated to accommodate up to 80,000 visitors annually (**Table 2**).

[2] Ascent Environmental, Draft Environmental Impact Report, Village at Squaw Valley Specific Plan, May 2015, page 10-1.

[3] The current plans show a net building area of 18,000 square feet and a footprint of 8,925 square feet. To allow for design development and some future expansion, we are defining the project as up to 20,000 square feet for the CEQA analysis.

Figure 2: Museum Site Location

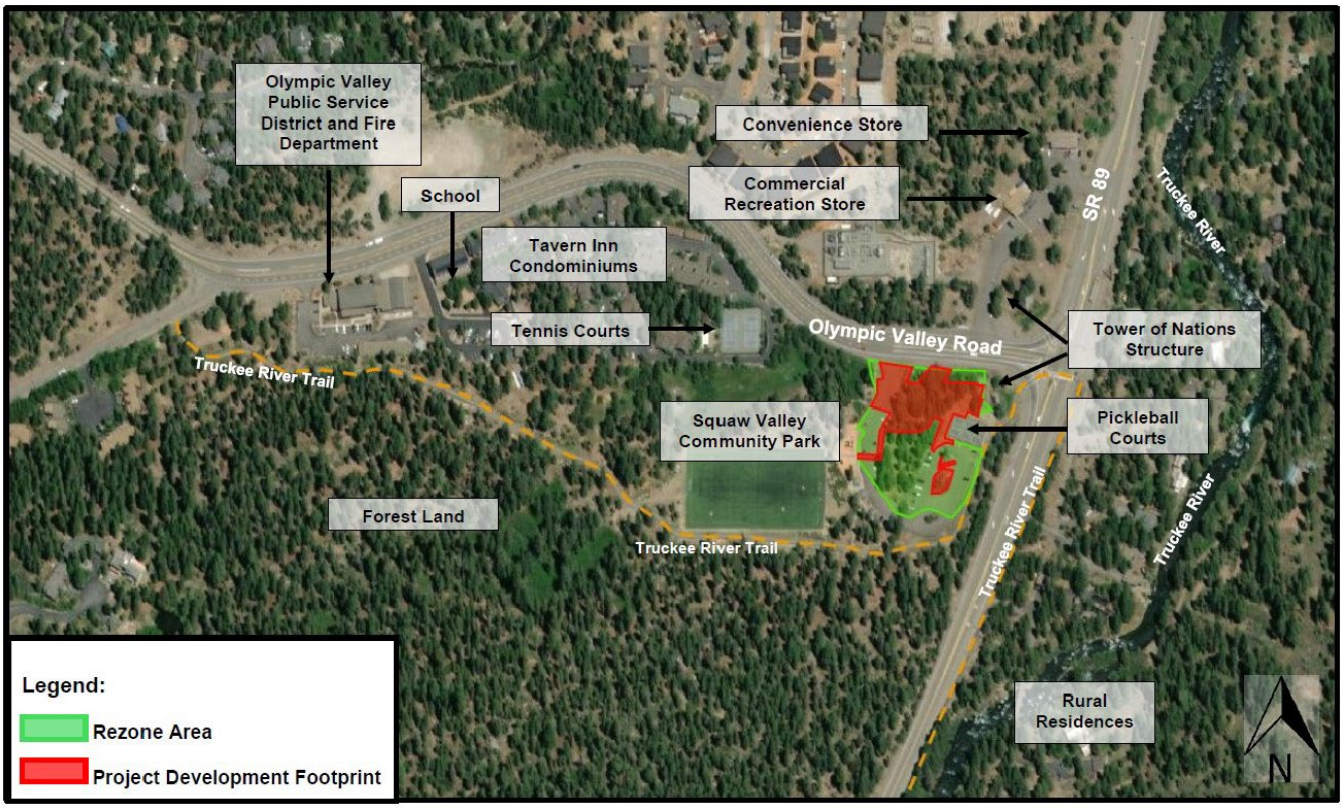


Table 1: Proposed Museum Site Characteristics	
Lower Level/Building Footprint	7,718 net square feet
Entry/Upper Level (2nd Story)	10,842 net square feet
TOTAL	18,560 net square feet
Maximum Height	30 Feet
Room areas are based on current plans, which show a gross building area of 17,285 gross sf and a footprint of 8,925 sf. As building design proceeds to construction design, the final floor area of these rooms may be adjusted. *For the purposes of the CEQA analysis, it is anticipated that the building will have a gross area of up to 20,000 sf.*	

Per the project description, the building will be constructed with mass timber elements on the exterior of the building in strategic locations around entries, at the open end of each building wing, and around large windows with neutral wood finishes. The base of the building is horizontal board-formed concrete. Window glazing will be of low reflectance and high thermal efficiency. Window and storefront systems will be a dark color. The roof and upper wall surfaces will be encased with fire-resistant material. A regular pattern of vertical square strips of solid material will add texture to wall surfaces. The plan calls for the grading of portions of the existing site, plus the removal of approximately 55 trees (greater than 6-inch diameter), further reducing the fire vulnerability of the project site.

Table 2: Estimated Annual Museum Visitors	
Type	Visitors Per Year
Museum Visitors	60,000 – 70,000 (Includes approx. 10,000 students)
Special Events/Community Facilities	+/- 10,000
Total	70,000 – 80,000
Source: Squaw Valley Ski Museum Foundation, 2021	

Figure 3: Museum Site Plan

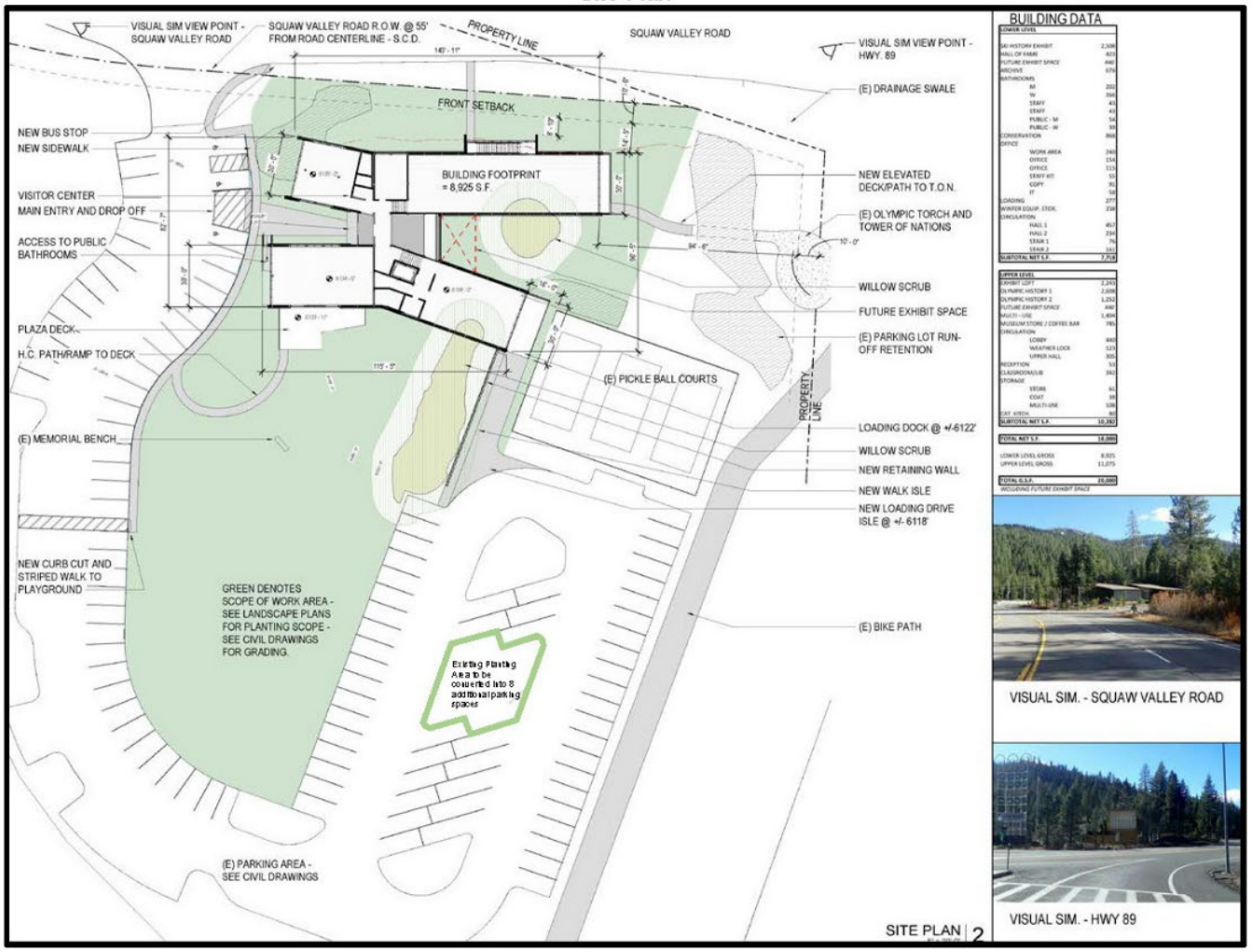
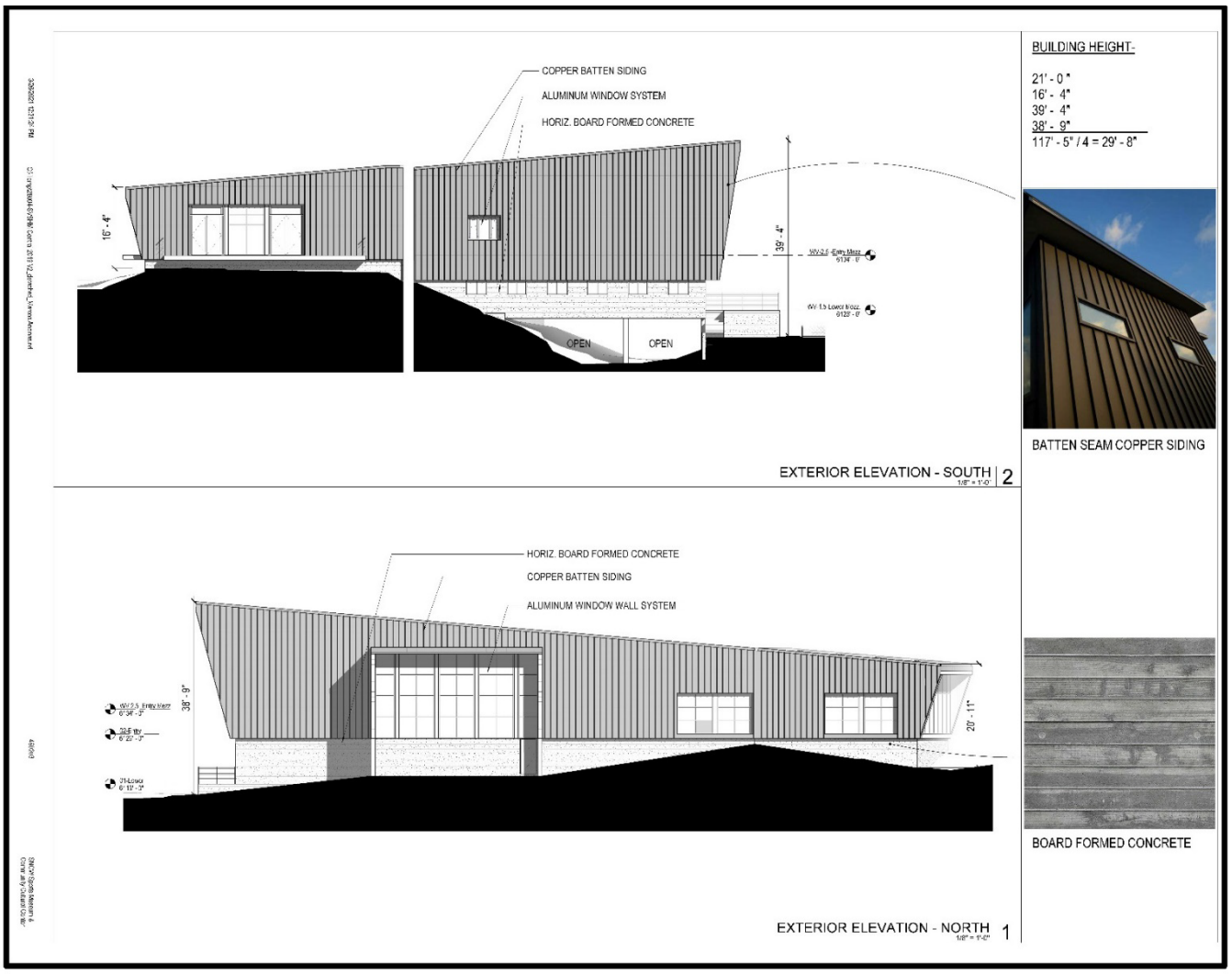


Figure 4: Museum Building Elevations



CIRCULATION

The Museum site directly accesses Olympic Valley Road, connecting to River Road (State Route 89) and ultimately to N. Lake Blvd (State Route 28) to the southeast and Interstate 80 to the north. According to the Placer County Land Use and Circulation Element, the following characteristics for these roadways include:

- Olympic Valley Road is a Rural Arterial that typically includes 2-4 lanes within a 70-84 foot right of way.
- State Routes 28 and 89 are State Highway – Arterials that typically include 2-4 lanes within a varying right of way width.
- Interstate 80 is a State Highway – Freeway that typically includes 4-10 lanes within a varying right of way width.

FIRE HISTORY

In Placer County, the wildland fire hazard season lasts from early spring through late fall. Fire conditions arise from a combination of hot, dry weather, an accumulation of vegetation, and low moisture content in both the air and the fuel sources. Past incidences of wildland fire can be described in two ways: fires that have occurred within the service area of OVFD and fires occurring outside of the service area boundary, with the potential to burn into the service area.

Within the OVFD Service Area

According to OVFD, there have been fewer than two dozen wildland fires within the OVFD service area in the past 30 years, all small events (involving an acre or less). None have burned for more than one 24-hour operational period, and all have been extinguished before damaging any structures or facilities. Lightning strikes ignited most, but there have been a handful of human-caused fires. The relatively small size of Olympic Valley makes early detection and reporting of wildland fires much easier as the area is visible from either the community itself or from SR 89. Many fires, even small ones, are reported by more than one party. The Martis Peak fire lookout, located east of Olympic Valley, can see a considerable portion of the higher terrain surrounding the valley and provides a reliable report and location during the months that the lookout is staffed.[4] Recent communication with Chief Allen Riley of the OVFD indicates that the valley has not been impacted by wildfire in quite some time, which can increase fire risk if vegetation management and brush clearance have not occurred regularly.

Access to fires within the service area is generally very good by road; however, pockets of a few hundred acres do not provide easy access to engines or crew transport vehicles. Fire hydrants provide the primary water source to most of the accessible areas within the valley. Fires in more remote locations may need to rely on other water sources like the Truckee River for tactics like helicopter bucket-drops or water tenders. The rare combination of early detection and good access has made the rapid response and fire suppression duties in Olympic Valley reliable. Due to early detection and reporting, a handful of lightning-caused fires in the more remote areas have been handled promptly without too much collateral burning or damage. Generally, these fires have been dealt with by an immediate single engine response from OVFD, augmented, when necessary, by a Forest Service or CAL Fire team or helitack crew as they became available.[5]

Outside the OVFD Service Area

Large fires have occurred outside of the OVFD service area and have caused concern because of the potential to spread into Olympic Valley. The 2014 King Fire reached within 6 miles of the southwestern-most portion of the service area (top of Squaw Peak) as it burned in one direction for more than ten miles during the night. The erratic and extreme behavior of the King Fire, exacerbated by drought conditions, has provided valuable information to fire managers as the fire behavior deviated from that predicted by the fuel model. Other, smaller fires within the Granite Chief Wilderness and lands to the west of the valley have been discovered promptly and either contained and extinguished rapidly or allowed to burn at a low level for resource management purposes. In 2021, the River Fire scorched approximately 2,600 acres within Placer and Nevada Counties, and the Caldor Fire burned over 221,000 acres in the southern portion of the Tahoe Basin (El Dorado National Forest) affecting El Dorado, Amador, and Alpine Counties.

[4] Squaw Valley EPEP, June 2016, page 11.
[5] Squaw Valley EPEP.

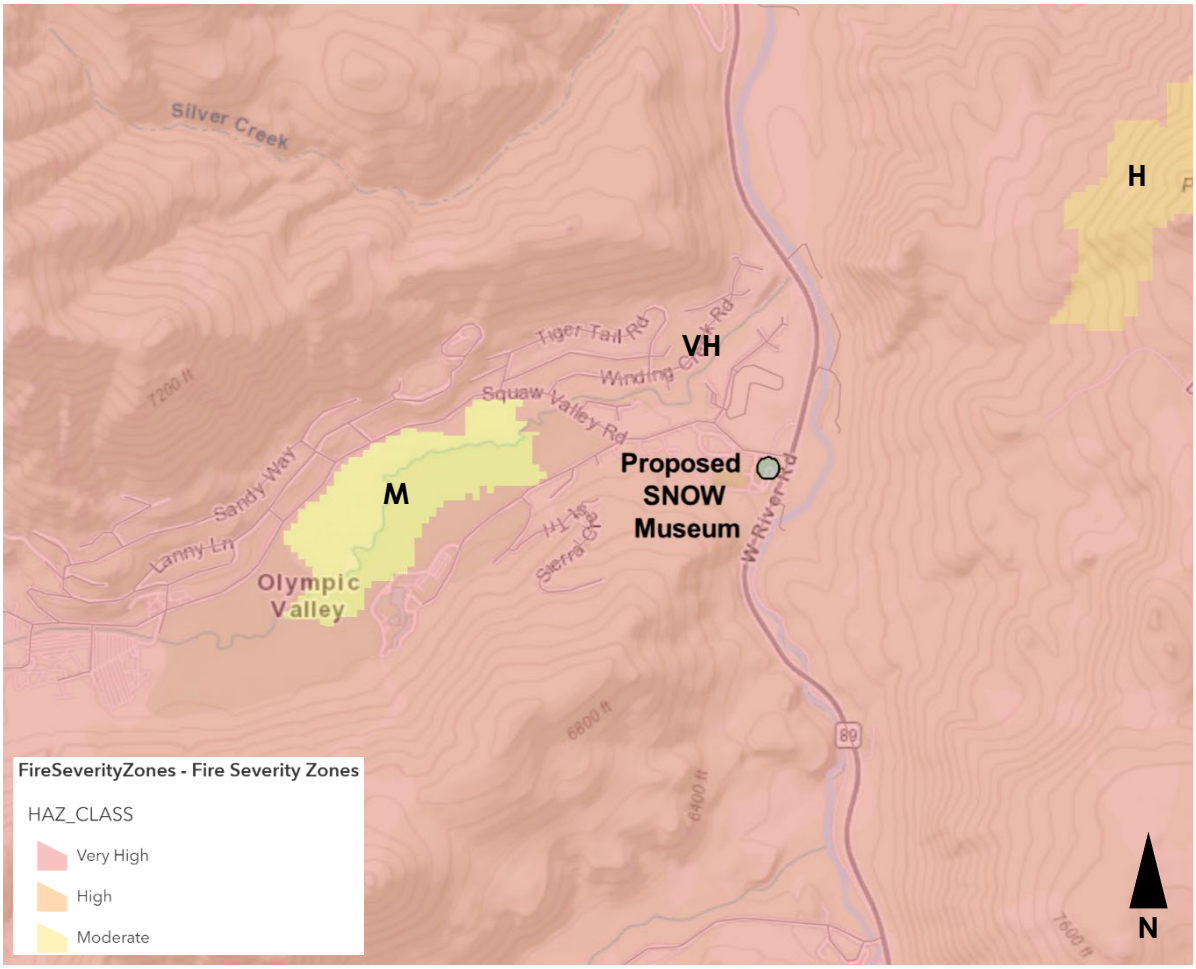
Since 2016 no other significant wildfires have occurred immediately outside the OVFD Service Area.[6]

Fire Hazard Severity Zones and State Responsibility Areas

The State Board of Forestry identifies those lands where the California Department of Forestry and Fire Protection (CAL FIRE) has the primary duty for wildland fire prevention and suppression; these lands are commonly known as state responsibility areas (SRAs). Lands are mapped by two categories: (1) wildland areas that could contain substantial forest fire risks and hazards (wildland areas or SRAs); and (2) very high fire hazard severity zones.

Olympic Valley and the project site are location within the SRA for the management of wildland fire hazards. Areas outside of the valley are located within the Federal Responsibility Area, which is managed by the US Forest Service. A majority of these areas are located in the Very High Fire Hazard Severity Zone, with smaller areas to the west located in the Moderate Fire Hazard Severity Zone, and portions to the east located in the High Fire Hazard Severity Zone, as shown in **Figure 4**.

Figure 4: Fire Hazard Severity Zones



[6] Annex O, Placer County LHMP, June 2021
https://www.placer.ca.gov/DocumentCenter/View/55467/Placer-County-LHMP-Update-Complete

WILDLAND URBAN INTERFACE

The Wildland Urban Interface is generally defined by CAL FIRE as areas where dense housing adjacent to vegetation that can burn in a wildfire, meeting the following criteria:

- Housing densities greater than one unit per 20 acres
- Located in moderate, high, or very high fire hazard severity zone
- Not dominated by wildland vegetation, and
- Spatially contiguous groups larger than 10 acres

While this mapping and criteria has been used at a county-level scale, it is not considered adequate to define WUI designations for individual houses or neighborhoods. Areas within the County designated in the WUI are located on the north side of Olympic Valley.

According to the Olympic Valley Community Wildfire Protection Plan, the WUI is defined as: "The wildland urban interface (WUI) is the area of land extending out from the edge of developed private land into undeveloped federal, private, and state jurisdictions." Based on the mapping in the CWPP (Figure 3) the ladder fuels range from low to high fuel hazards. The higher the hazard the greater the density of vegetation over six feet in height that could transition fire burning on the surface to the crowns of trees.

FIRE AND EMERGENCY RESPONSE

OLYMPIC VALLEY PUBLIC SERVICE DISTRICT/OLYMPIC VALLEY FIRE DEPARTMENT

The OVFD currently provides fire protection services to a 14- square-mile area that includes Olympic Valley and the Truckee River Corridor between the Deer Creek Day Use Area, just north of Alpine Meadows Road and Brush Creek, just south of Cabin Creek Road (approximately 2.5 miles south of Truckee). The following describes the resources available within the OVFD.

Fire Station and Equipment

The closest OVFD station to the project site is Station 21, located at 305 Olympic Valley Road, approximately 0.3-miles west of the project site. The OVFD has all the necessary vehicles/equipment to adequately protect their area of responsibility in the Olympic Valley.[7]

Staffing

According to the OVFD, a total of 13 full-time firefighters are on staff at Station 21, with 4 personnel scheduled on duty per shift, per day. Each shift includes a Captain, an Engineer/Paramedic (apparatus driver), and two Firefighter/Paramedics. The full-time staff is augmented by part-time, paid firefighters and Firefighter/Paramedics during peak periods. All full-time firefighters are paramedics, and the OVFD provides Advanced Life Support at all times. OVFD personnel are also trained to a Haz-Mat First Responder-Operations level, and officers typically have the Haz-Mat Incident Commander certification.[8]

Services

In addition to fire suppression, the OVFD provides up-to-date information to the community regarding fire prevention techniques, defensible space requirements, and other fire safety issues. The OVFD also reviews development proposals for projects within Olympic Valley, issues burn permits, and coordinates with the ski resort regarding avalanche control. With most OVFD

[7] Allen Riley, Chief, Olympic Valley Fire Department, virtual meeting communication, October 12, 2021.
[8] OVFD Home page, https://www.ovpsd.org/ovfd/home.

emergency calls related to accidents, injuries, or illness, the Department also provides emergency medical services. Currently, the closest emergency transport services are provided by the North Tahoe Fire Protection District and Truckee Fire Protection District and Care Flight and Calstar provide the closest air ambulance services.

Response Times

The OVFD currently maintains an Insurance Services Office (ISO) rating of 2/2Y, which can be used to assess the effectiveness of fire protection services. A Public Protection Class 2 rating is the second-highest rating, which considers fire department effectiveness, emergency communication systems, water supply, and community risk reduction.[9] The OVFD's goal for response time to service calls within its service area is to arrive on-site within 5 minutes of dispatch, 80 percent of the time.[10] Response time to the project site would be minimal as OVFD Station 21 is approximately 0.3 miles west of the Museum site.

Wildland Fire Response

The OVFD owns and operates fire apparatus capable of direct attack, fire suppression, and structure protection. The Department conducts ongoing professional training, including events such as the California Office of Emergency Services strike team responses state-wide and local wildland fire exercises (a large annual wildland-urban interface training exercise that has been held in Olympic Valley for the past several years). In addition, OVFD is subject to automatic and mutual aid agreements to provide and coordinate emergency response with local government, state, and federal resources when needed. Those agreements include:[11]

- Automatic aid, "boundary drop" agreements with North Tahoe and Truckee Fire Protection Districts and Northstar Fire Department,
- Lake Tahoe Regional Fire Chiefs' Association mutual aid agreement, and
- Mutual Aid Agreement/Annual Operating Plan with USDA Forest Service, Tahoe National Forest.

Emergency Dispatch and Initial Incident Response

The OVFD is dispatched by the CAL FIRE Grass Valley Emergency Command Center. The Grass Valley ECC also dispatches other local fire and ems services as well as CAL FIRE resources from across the region and shares the space with USDA Forest Service- Tahoe National Forest dispatch. All agencies involved in an active incident are dispatched from the Grass Valley ECC, ensuring that incident response is coordinated to place emergency response resources where needed. Emergency response resources include local, state, and federal engine companies, hand crews, dozers, air tankers, air tactics coordinators, helitack crews, and helicopters/helitankers of various sizes and capacities.

OVFD, in accordance with industry standards, uses the Incident Command System for all incidents involving more than a single unit response. Typically, the first-arriving company's most senior level officer will be assigned as the Incident Commander (IC) and will transfer command to either a higher-ranking officer or a representative of the authority having jurisdiction for the

[9] Olympic Valley Public Service District ISO Article, May 7, 2021.
[10] Riley, virtual meeting communication.
[11] CalFire, Cooperative Efforts, https://www.fire.ca.gov/programs/fire-protection/cooperative-efforts/.

incident upon their arrival at the scene. Typically, the agency having authority for investigation has jurisdiction. Within the OVFD service area, different agencies have jurisdiction for different geographic locations, including the Local Responsibility Area (LRA), State Responsibility Area (SRA), and Federal Responsibility Area or Direct Protection Area (FRA or Federal DPA). Questions regarding jurisdictional responsibility can be determined by working with the County, Cal Fire, and OVFD

Emergency Medical Response

The OVFD provides Advanced Life Support (ALS) medical response but does not have an ambulance service. North Tahoe FPD and Truckee FPD provides ambulance service to Olympic Valley. The North Tahoe FPD provides fire and emergency services to approximately 31 square miles within the Tahoe Basin, from the California/Nevada border near Kings Beach to Tahoma and serves Alpine Meadows. North Tahoe FPD maintains 6 fire stations staffed by 50 uniformed and support personnel. The North Tahoe FPD operates seven paramedic ambulances, one of which can carry up to three injured patients at one time.[12]
The OVFD ALS engine company responds within 4 to 5 minutes to calls within the Olympic Valley. The medic unit typically comes from North Tahoe FPD Station 56 in Alpine Meadows, usually 1 to 1.5 minutes after the OVFD engine.

Emergency Communication with the Public

Technological advances in emergency and public communications have changed significantly. With the decline in the use of landline home telephones, primary communication is changing from direct to indirect methods. The OVFD relies on its website and Nixle (a text-based messaging system) to disseminate information to the community and beyond. The OVFD has found the Nixle system to be an effective communication tool, and during the King Fire, over 700 people subscribed to Nixle updates. Placer County uses a similar system called Placer Alert or Everbridge.[13]

The use of Nixle is limited to verified emergency service agencies to ensure a high degree of credibility and accuracy in the messaging provided. This service is reliable for circulating the most current emergency information or instruction. Placer County will coordinate posts about emergency information on its website with County emergency response services and departments (e.g., PCSD, OES).[14]

Social media sites, such as Facebook or Twitter, can also effectively be used but require close management to prevent the spread of inaccurate information.

According to Fire Chief Riley, OVFD is considering installing permanent, changeable message boards (CMB) along Olympic Valley Road and a low power FM radio transmitter that will broadcast emergency information on a repeating loop. The two work best in tandem, with the CMB showing a message with FM radio frequency and the broadcasted information providing more detailed information or instructions.[15]

[12] North Tahoe Fire Protection District, https://www.ntfire.net.
[13] Riley, virtual meeting communication.
[14] Placer Alert, https://www.placer.ca.gov/2426/Placer-Alert.
[15] Riley, virtual meeting communication.

PROJECT EVACUATION

Evacuation Parameters

Evacuation of the SNOW Museum facility would involve the relocation of visitors and staff from the site to safer locations within the County or elsewhere. Based on the project description the following parameters are used to understand the evacuation characteristics of the site:

Annual Visitors	70,000 – 80,000
Hours of Operation	10:00 am to 6:00 pm
Peak Visitation Period	3:00 pm to 6:00 pm
Total Employees	6 (3 full time, 3 part time)
Total Parking Spaces	121 (116 existing)
Peak Winter Day Visitors (Saturday)	300
Peak Winter Day Vehicles	205 (199 Visitors | 6 Employees)
Peak Winter Parking Demand	46 vehicles (2:30pm)
Peak Winter Parking Balance*	65 spaces available
Peak Summer Day Visitors (Saturday)	225
Peak Summer Day Vehicles	129 (123 Visitors | 6 Employees)
Peak Summer Parking Demand	34 vehicles (2:30 pm)
Peak Summer Parking Demand (Maximum)	38 vehicles (based on County Code Requirements)
Peak Summer Parking Balance*	6 spaces available
Special Events	Average of 6 per year
Special Event Visitors	100 guests | 10 employees
Special Event Times	6:00 pm to 10:00 pm
Special Event Parking Demand	58 parking spaces (48 Visitors | 10 Employees)
Special Event Parking Balance*	53 spaces (Winter) | 28 Spaces (Summer)
* Parking balance indicates the number of available spots	

Based on the operating parameters developed for the project, the parking demand for the project site including museum vehicles, sports field vehicles, and existing parking counts include:

- Peak Winter Day – 56 vehicles (2:30-3:00 pm)
- Peak Summer Day – 108 vehicles (1:00-1:30 pm)

With a majority of activities within the project site and vicinity occurring during the summer, this time of year would have the greatest potential for a wildfire evacuation affecting the greatest number of evacuees. During the peak condition, over 1/3rd of the vehicles onsite (38) are anticipated to be museum visitors. Based on these assumptions, evacuation of the site including the additional 38 vehicles is not anticipated to cause a significant impact because the level of service operations at Olympic Valley Road and the Project Site driveway is anticipated to maintain acceptable levels of service. According to the January 29, 2021, memo prepared for the proposed project by LSC, both existing and future level of service projections for the project site access along Olympic Valley Road operate at acceptable levels of service. This memo also indicates that the proposed project does not exceed any County Level of Service Threshold under cumulative conditions. In addition, personal communications with Chief Riley of the

Olympic Valley Fire Department indicate that the proposed project would not impair an emergency response plan or affect evacuation activities if deemed necessary[16]. While Special Events are anticipated to include up to 58 vehicles, the timing of these events between 6:00 pm and 10:00 pm ensures adequate roadway capacity is available to accommodate these vehicles.

Based on the project description, the total number of trips is estimated to be 75%-80% new trips with approximately 25% pass-by trips in the winter and 20% pass-by trips in the summer. More specifically, as discussed in the project-specific traffic study, on a busy **summer day**:

- the total proportion of pass-by trips would be slightly lower at 20 percent, reflecting that a smaller proportion of summer travelers have an interest in winter sports.
- Reflecting the relatively low traffic activity on Olympic Valley Road in the summer compared to the winter, 62 percent of this pass-by activity is generated by travelers using SR 89 and 38 percent by those using Squaw Valley Road.

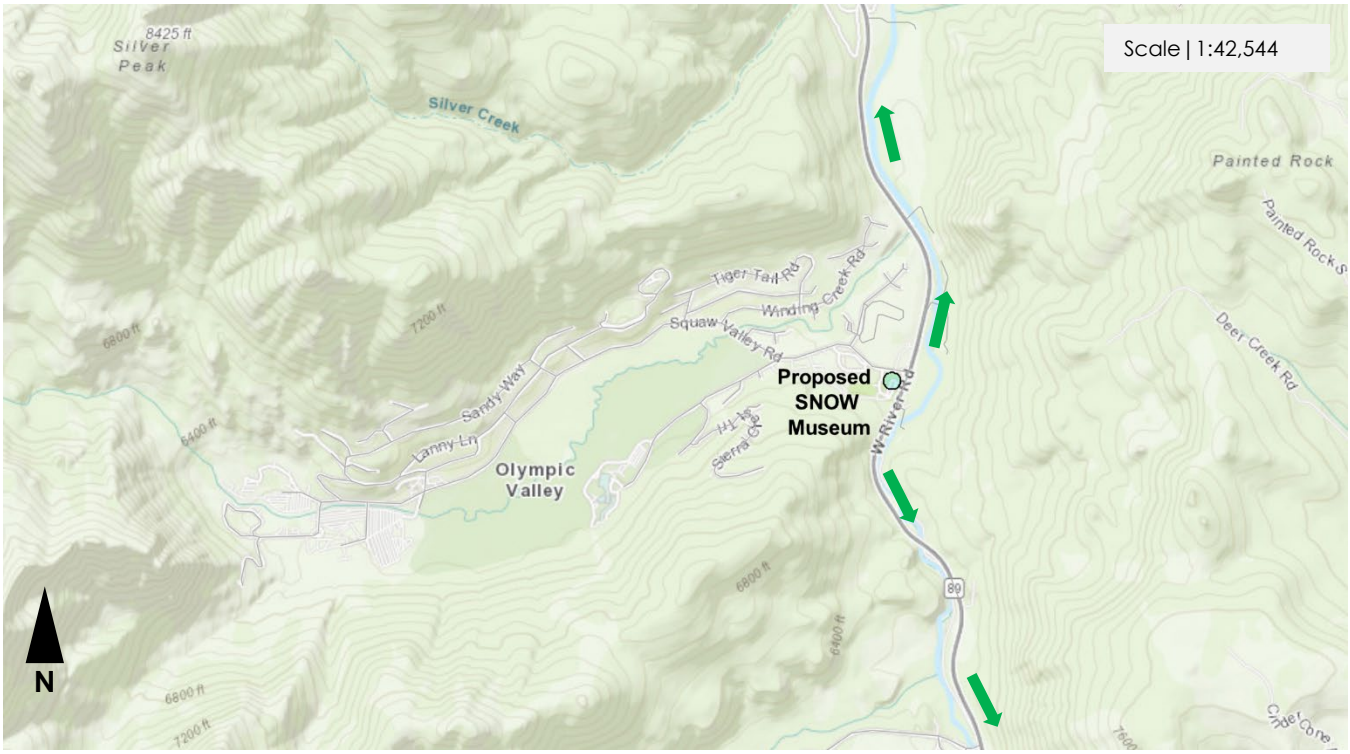
Overall, about 20 percent of project-generated external trips on a summer day are estimated to consist of pass-by traffic. According to the March 16, 2021, VMT Memo prepared for the proposed project by LSC, very few (approximately 3 percent) of the vehicle-trips generated by visitors are expected to be from beyond the "Tahoe/Truckee area" (considered the local area). Instead, the large majority of visitors are those non-residents that are already in the area, such as second-home owners and their guests, as well as overnight visitors. A relatively small museum can be expected to be a secondary destination for visitors that are drawn to the region for skiing or other purposes. As such, the large majority of visitor trips generated by the museum are local trips with both origin and destination within the Truckee/Tahoe region. Based on this understanding, the majority of the project's traffic could reasonably be expected to already be in the Olympic Valley area, and in the event of a wildfire evacuation, would still require use of the same roads for evacuation purposes, whether or not the project is implemented.

Evacuation Routes

Evacuation from the project site would be accomplished in the reverse of the route of entry. Potential evacuation routes include Olympic Valley Road and SR 89 (**Figure 5**). Evacuees using these routes would travel in the direction indicated by law enforcement. During evacuations, Placer County Sheriff's Department (PCSD) is the primary agency that supports evacuation proceedings and directing traffic during an emergency incident requiring evacuation. Olympic Valley Road is the only route in and out of the valley and will also be used to evacuate residents and tourists while providing access to the area for emergency crews and equipment, if necessary.

[16] Riley, virtual meeting communication.

Figure 5: Potential Evacuation Routes



From Olympic Valley, SR 89 is the only means of ingress and egress. This roadway connects Olympic Valley to the neighboring communities of Truckee to the north and Tahoe City to the south. Evacuation of the community using this roadway network could pose some challenges, especially if equipment for fire response uses these roadways to access the valley. While there are limitations to the existing roadways available, the OVFD is continually looking for opportunities to identify alternative access points and pathways.[17] To date, no loss of life has been attributed to limited evacuation access; however, the potential still exists that residents may become isolated during a major hazard event, much like the times the valley has been isolated for days at a time by simultaneous avalanche and mudslide events along SR 89.[18]

Per page 15-5 of the Highway Capacity Manual 2010 (Transportation Research Board, 2010), "The capacity of a two-lane highway under base conditions is 1,700 passenger cars per hour in one direction, with a limit of 3,200 passenger cars per hour for the total of two directions." As the southbound SR 89 volume is below 1,500, the 1,700 direction volume pertains. The maximum northbound capacity is therefore 1,700 vehicles per hour. Based on this capacity, and the peak summer parking demand from the project of 38 vehicles, the project would require 2.2% of the SR 89 northbound roadway capacity for wildfire evacuation purposes.

[17] Riley, virtual meeting communication.
[18] Annex O, Placer County LHMP.

Other Resources

Mutual Aid

The OVFD is a member of the Eastern Placer County Joint Powers Authority (JPA), along with Truckee Fire Protection District, NorthStar Fire Department, North Lake Tahoe Fire Protection District, and North Tahoe FPD, Meeks Bay Fire Protection District, and The JPA provides mutual aid, a shared radio repeater, and equipment purchases between other member districts. In addition, the Valley and surrounding forested areas are classified as a State Responsibility Area and receive fire protection assistance from the California Department of Forestry and Fire Protection (CAL FIRE).

Eastside Emergency Evacuation Plan

Placer County adopted an update to the Eastside Emergency Evacuation Plan in March 2015 to address the physical evacuation of one or more communities in unincorporated eastern Placer County. The Plan covers the portion of the county from just west of Cisco Grove to the Nevada State line but does not include areas within the Tahoe National Forest or the Lake Tahoe Basin Management Unit. The Plan prescribes specific responsibilities for first responders and other agencies that would be involved in an emergency evacuation, defines typical evacuation scenarios, establishes incident command responsibilities, and addresses traffic control, transportation, resources and support, communications, care and shelter, and animal services. Multiple public agencies were involved in the development of the Plan, including the Placer County Office of Emergency Services (OES), PCSD, the Nevada County Sheriff's Office, Town of Truckee, five eastern Fire Protection Districts/Departments (including OVFD), California Highway Patrol, US Forest Service, American Red Cross, and Nevada County Office of Emergency Services. [19]

This plan identifies evacuation centers within Tahoe City and Truckee that could provide shelter and resources to potential evacuees, the closest being the Fairway Community Center (330 Fairway Center, Tahoe City, CA 96145). The complete Eastside Emergency Evacuation Plan is provided in **Appendix B**.

Current Fire Protection Status within the Olympic Valley Area

OVFD provides fire protection services to the proposed project site from Fire Station 21, located at 305 Olympic Valley Road. Regional access for emergency personnel from other agencies is provided via SR 89. Water for fire suppression is currently provided via a 1.0-million-gallon water supply (spread amongst multiple tanks and refilled by the aquifer and a series of groundwater wells) [20], owned and operated by the Olympic Valley Public Service District (OVPSD) as well as the water system of the Squaw Valley Mutual Water Company. Water lines and fire hydrants are located throughout the Valley's developed portions, including the project area. [21]

Olympic Valley complies with defensible space and fuel management provisions and is monitored by annual inspections performed by the OVFD. More recently constructed buildings have sprinkler systems installed, while older structures in the Valley do not. The proposed structure on-site will be required to comply with the latest building code requirements ensuring the highest level of fire protection. Landscaping proposed on-site will meet current Fire Safe Regulation

[19] Placer Operational Area, Eastside Emergency Evacuation Plan Update, 2015.
[20] Riley, virtual meeting communication.
[21] Riley, virtual meeting communication.

requirements ensuring adequate setbacks and clearances from natural vegetation. The project site would fall under the Olympic Valley CWPP, which is currently being updated.[22]

Law Enforcement

General law enforcement for Olympic Valley is provided by the PCSD. The California Highway Patrol provides traffic-related enforcement services. The Tahoe Substation in Tahoe City (2501 North Lake Boulevard) is the closest Sheriff's station, approximately 1.5 miles east of Tahoe City on Highway 28. This station is approximately 4.5 miles east of the project site. Current staffing at this station includes 1 administrative lieutenant, 1 community services officer, 1 court deputy, 1 detective sergeant, 1 evidence technician, 1 field operations lieutenant, 1 jail deputy, 1 problem-oriented policing deputy, 18 patrol deputies, 4 detectives, 4 professional staff, and 6 patrol sergeants.[23]

Transit Resources and Agencies

Multiple public transit service providers serve the Olympic Valley, Tahoe City, Truckee, and the surrounding communities. Tahoe Area Regional Transit (TART) connects Olympic Valley with the cities of Truckee and Tahoe City. The route servicing SR 89 runs daily, year-round, from approximately 6 a.m. to 6 p.m. TART also provides other transit routes/services in Placer County.

The Eastside Emergency Evacuation Plan (EEEP) states that transit vehicles, such as public buses from TART and the Tahoe Truckee Unified School District, may be used to aid in evacuating those who do not have a vehicle. According to the EEEP, if transit vehicles are available for use during evacuations, evacuation bus stops would be prominent and identified.

HAZARDS WITHIN THE PROJECT AREA

Seismic and Geologic Hazards

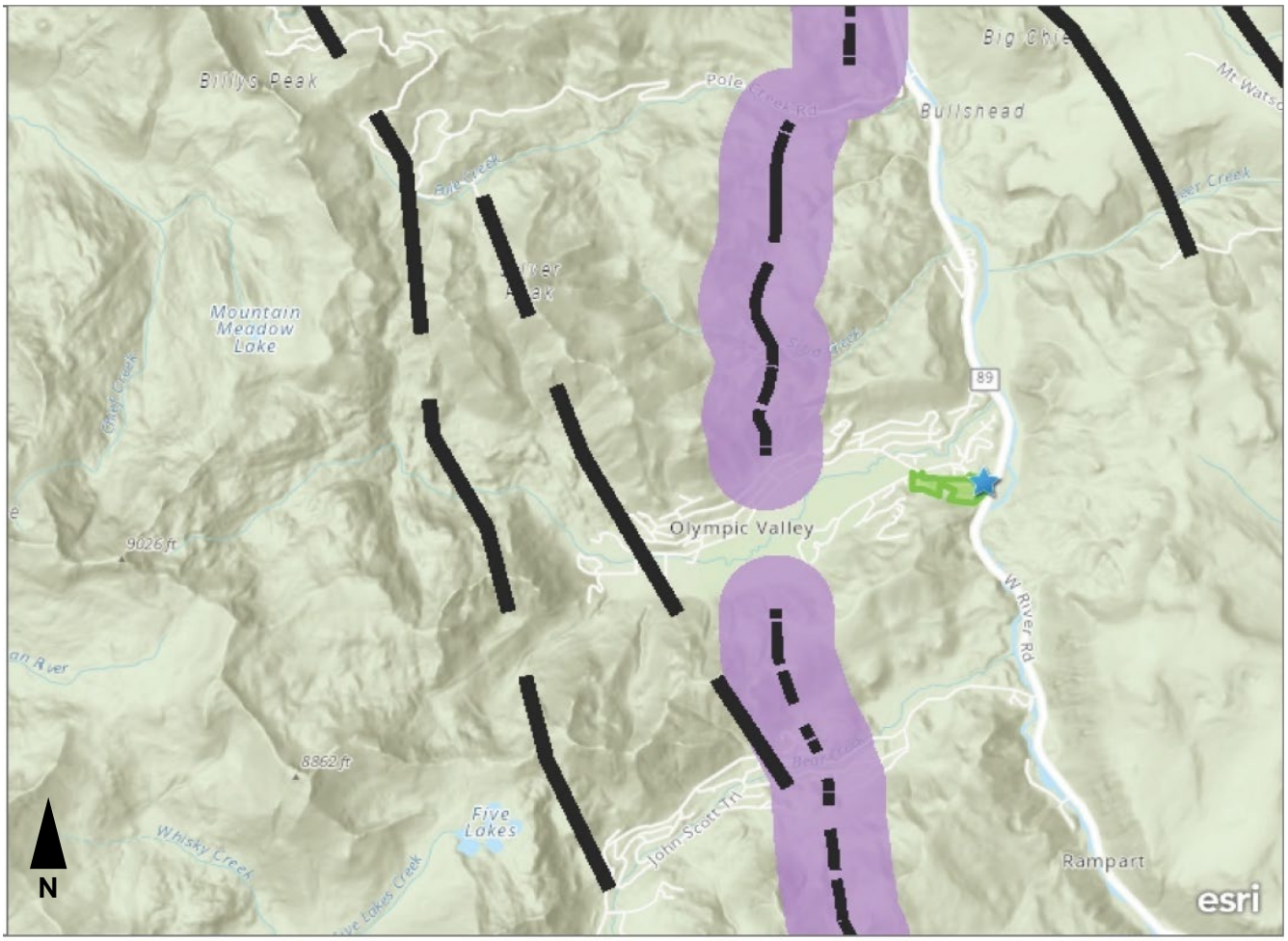
The plan area is in a potentially active area for seismic activity and has experienced moderate ground shaking in the past from large historic earthquakes. The project site is not located in proximity to active faults delineated within an Alquist-Priolo Special Study Zone. However, it should be noted that the region is home to several potentially active and active faults, as depicted in **Figure 6**. No faults are mapped within the project site, reducing the potential for fault rupture; however, the threat of seismic shaking still exists due to the proximity to faults within the region that can generate seismic events.

Avalanche Hazards

FEMA defines an avalanche as a large amount of snow moving quickly down a mountain, typically on slopes of 30 to 45 degrees. When an avalanche stops, the snow becomes solid like concrete, and people cannot dig out. People caught in avalanches can die from suffocation, trauma, or hypothermia.[24]

[22] Riley, virtual meeting communication.
[23] Placer County Sheriff, Tahoe Substation, https://www.placer.ca.gov/2290/Tahoe-Substation.
[24] FEMA "Avalanche | Ready.Gov," https://www.ready.gov/avalanche.

Figure 6: Seismic Hazards



Source: California Department of Conservation , Fault Activity Map of California

Olympic Valley is in the coastal zone of the Pacific Mountain ranges. It is one of the three snow avalanche climate zones (Coastal, Intermountain, and Continental) of the western United States mountain ranges. This zone is characterized by abundant snowfall, high snow densities cover, and higher temperatures. Avalanches in coastal climates tend to be the result of significant snowfalls, and they often involve only the new snowfall, therefore relying predominantly on daily precipitation variables (LaChapelle 1966). Higher avalanche indices are likely within Olympic Valley due to higher amounts of new snowfall.[25] December through March are the primary months of concern for avalanches. Generally, avalanches in Placer County occur during this time and are associated with large winter snowstorms, occurring primarily on slopes ranging between 30 and 45 degrees.[26]

Several historic avalanche incidents have been recorded in Olympic Valley, though occurring primarily in the area surrounding the Palisades Tahoe Ski Resort. The proposed project site is not in an avalanche zone, however the main access to and from the site along SR 89 travels through

[25] Mock and Birkeland, "Bulletin of the American Meteorological Society," October 2000, Page 11, https://bestsnow.net/AvalancheClimatologyWesternUS.pdf.
[26] Ascent Environmental, Draft Environmental Impact Report, Village at Squaw Valley Specific Plan, May 2015, page 12-10.

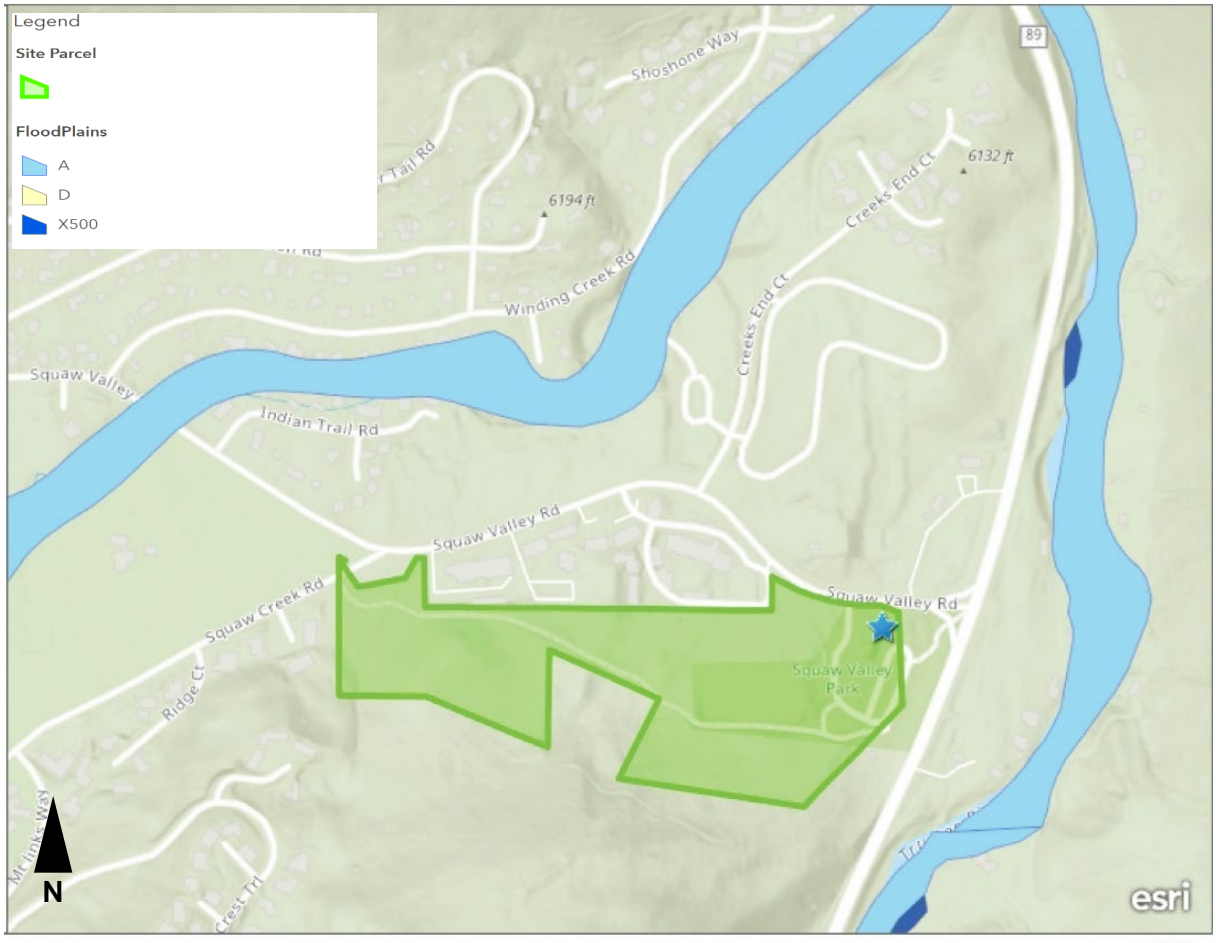
several avalanche-prone areas. An avalanche or landslide along SR 89 could potentially restrict access and isolate the Valley and the project site making travel and evacuation difficult.

Flooding

The plan area is located at the entrance to Olympic Valley and is bordered to the north by Squaw Creek, a seasonal stream fed from two tributaries in the mountains above, which drains into the Truckee River, east of the project site. The Truckee River is the only outlet from Lake Tahoe and terminates at Pyramid Lake in Nevada, approximately 120 miles away.

The Squaw Creek floodplain varies in width along its course and is generally contained within the stream corridor, which is also the case for the Truckee River. **Figure 7** identifies the FEMA floodplains designated for Squaw Creek and the Truckee River within the project vicinity. Based on this mapping, under extreme conditions like a 500-year flood (dark blue areas), only small portions of the Truckee River would experience additional impacts beyond the 100-year floodplain, which suggests that flooding during extreme events would be maintained within these drainages. While these conditions are rare, they do not preclude flowing in other areas during extreme events.

Figure 7: FEMA Floodplains



Source: Placer County FEMA Floodplains

REGULATORY REQUIREMENTS

Development for the project will be subject to federal and state laws, county ordinances and regulations, and mitigation measures identified in the Draft EIR. The major provisions that address natural hazards and emergencies within the plan area are summarized below:

FIRE PREVENTION AND RESPONSE

California Public Resources Code Section 4291

California Public Resources Code (PRC) Section 4291 sets the minimum fire safety standards for all development in or surrounding mountainous areas and lands covered by forest. Provisions that would apply to development in the plan area include:

- Defensible space must be maintained 100 feet from the side, front, and rear of a structure or up to the property line where the property line is less than 100 feet from the structure.
- Any portion of a tree that extends within 10 feet of a chimney or stovepipe outlet must be removed.
- Any tree, shrub, or other plant adjacent to or overhanging a building must be free of dead or dying wood.
- The roof of any structure must be free of leaves, needles, or other vegetative materials.
- Before constructing a new building, the owner shall obtain a certification from the local building official that the dwelling or structure, as proposed to be built, complies with all applicable state and local building standards.
- Before final inspection approval of any building, the Fire Department must inspect the building and the fire suppression facilities to certify that the fire suppression improvements comply with Building Code and fire department service requirements.
- Violation of any or all the above provisions may result in a fine. PRC Section 4291 also requires the Department of Forestry and Fire Protection (CalFire) to develop, periodically update, and post a guidance document regarding fuels management on the internet.

The OVFD's defensible space program has been in place for the past 20 years. This program requires a physical inspection of every property in the OVFD service area to ensure compliance with PRC Section 4291. This inspection process occurs annually to ensure continued compliance with these defensible space regulations.[27]

Placer County General Plan

The Health and Safety Element of the Placer County General Plan (2021) includes numerous goals and policies associated with wildfire hazards and public safety and emergency management. The following are relevant policies associated with the proposed project:

> **8.C.1.1.** The County shall require that new development meet State, County, and local fire district standards for fire protection, including the California Building Standards Code, the International Wildland-Urban Interface Code, and the Placer County Municipal Code as applicable.

[27] Defensible Space, Olympic Valley Fire Department, https://www.ovpsd.org/ovfd/defensible-space.

8.C.1.3. The County shall ensure that existing and new buildings of public assembly incorporate adequate fire protection measures to reduce the potential loss of life and property in accordance with state and local codes and ordinances.

8.C.1.7. The County shall require all new development projects with land classified as state responsibility areas (Public Resources Code Section 4102), land classified as very high fire hazard severity zones (VHFHSZs; Section 51177), or within areas defined as a "wildland urban interface" (WUI), to prepare a long-term comprehensive fuel reduction and management program, including provisions for multiple points of ingress and egress to improve evacuation and emergency response access and adequate water infrastructure for water supply and fire flow, and fire equipment access. (See Gov. Code, Section 66474.02.) (PCSP, WF-5)

8.C.1.14. The County shall encourage fire protection agencies to continue education programs in schools, service clubs, organized groups, industry, utility companies, government agencies, press, radio, and television to increase public awareness of fire hazards within the county.

8.C.1.15. The County shall work with local fire protection agencies, CAL FIRE, and the U.S. Forest Service to maintain existing fuel breaks and emergency access routes for effective fire suppression.

8.C.2.4. The County shall establish increased fire-safe development standards for all new and existing development in the WUI to minimize property damage and loss of life. (PCSP, WF-8)

8.E.1.2. The County shall continue to provide promotional programs that inform the general public of emergency preparedness and disaster response procedures.

8.E.1.4. The County shall provide alerts about potential, developing, and ongoing emergency situations through extensive alert and warning systems that convey information to all residents, in multiple languages and formats to ensure it is widely accessible. (PCSP, AH-1)

8.E.1.5. Encourage the creation of resiliency hubs in response to Public Safety Power Shutoff (PSPS) events that can serve as gathering places during emergencies and interruptions in services, and provide critical services such as access to water, electricity, and other needed services to those impacted by PSPS events. A resiliency hub should be powered by a microgrid or alternative sustainable form of energy.

8.E.2.2. The County shall, within its authority, ensure that emergency dispatch centers, emergency operations centers, communications systems, vital utilities, and other essential public facilities necessary for the continuity of government be designed and retrofitted in a manner that will allow them to remain operational during and following an earthquake or other disaster.

Placer County Fire Code

Placer County has adopted the 2019 California Building Code, Title 24 of the California Code of Regulations, and the 2019 Fire Code (Sections 15.04.510 and 15.04.520 Fire Code Amendment). The Fire Code addresses emergency access, sprinkler systems, fire alarms within buildings, the construction of access roads to accommodate fire apparatus, and materials and construction methods for exterior wildfire exposure (Chapter 7A). These regulations will apply to the proposed project.

OVPSD Fire Prevention Code

The OVPSD Fire Prevention Code, Chapter 9, Section 903.2 Automatic Sprinkler Systems: Where required, incorporates the most recent California Fire Code, the most recent National Fire Protection Association National Fire Codes and Standards, and PRC Section 4291 (discussed above). The Fire Prevention Code requires that an automatic fire sprinkler and/or fire extinguishing system be installed throughout new structures.[28]

Olympic Valley Wildland Fire Evacuation Plan

Access to Olympic Valley is limited by the Valley's orientation, topographic features surrounding the Valley, and the waterways (Squaw Valley Creek and Truckee River) that constrain ingress and egress. SR 89 is the primary connection from Olympic Valley to surrounding communities. Evacuation from the proposed project would require north or south transport along SR 89 away from danger. As a last resort, OVFD recommends sheltering in place if evacuation is not possible; however, the proposed project may be a potential location for temporary shelter-in-place activities if deemed safe by the Incident Commander and no imminent threat to the structure and inhabitants is identified. Once conditions are safe for visitors to safely evacuate, Museum staff would coordinate with Placer County Sherriff personnel on the procedures to safely evacuate. Shelter-in-place activities are considered a last resort and would only be recommended if conditions would not jeopardize the safety or residents, visitors, and employees.

Seismic Hazards

California Building Code

In California, seismic hazards are primarily addressed through building code requirements to ensure that new construction is built to withstand potential seismic activity. The California Building Code (CBC) (California Code of Regulations, Title 24) is based on the International Building Code (IBC). The IBC Seismic Zone Map of the United States places Placer County, including the proposed plan area, within Seismic Hazard Zone III. This designation applies to an area that may experience damage due to earthquakes having moderate intensities of V or more on the Modified Mercalli Scale, which corresponds to maximum momentum magnitudes of 4.9 or greater. The CBC has been modified for California conditions with more detailed and stringent regulations. Due to the absence of active earthquake faults within the project site, PRC Sections 2621-2630 (Earthquake Fault Zoning), would not apply to the proposed project.

[28] Administrative Code, Olympic Valley Public Service District, October 2020, page 4, https://www.ovpsd.org/sites/default/files/2021-10-01_OVPSD_AdminCode%20-%20Ch%205%20-%20Fire.pdf.

Placer County General Plan

The Health and Safety Element of the Placer County General Plan (2021) includes numerous goals and policies associated with seismic and geologic hazards. The following are relevant policies associated with the proposed project:

8.A.1.1. The County shall require the preparation of a soils engineering and geologic-seismic analysis prior to permitting development in areas prone to geological or seismic hazards (e.g., ground shaking, landslides, liquefaction, critically expansive soils, avalanche), prepared by a California registered civil engineer and based upon adequate test borings as needed.

8.A.1.2. The County shall require submission of a preliminary soils report, prepared by a California registered civil engineer and based on adequate test borings, for every major subdivision and for each individual lot where critically expansive soils have been identified or are expected to exist.

8.A.1.5. The County shall require that the location, design, and construction of any new buildings, facilities, or other development in areas subject to seismic activity minimize exposure to danger from earthquake-induced liquefaction or fault rupture or creep.

8.A.1.6. In areas subject to severe ground shaking, the County shall require that new structures intended for human occupancy be designed and constructed to minimize risk to the safety of occupants.

Placer County Local Hazard Mitigation Plan

The recently updated Placer County 2021 Local Hazard Mitigation Plan (LHMP)addresses a wide range of potential natural hazards within the western and eastern county, including flooding, wildfire, drought, snow, and other severe weather conditions, as well as other hazards such as climate change, pandemic, and earthquakes. The LHMP was updated and completed by the County, in partnership with other local agencies within the county, including cities and fire districts, in June of 2021 and submitted to FEMA and Cal OES. Each participating jurisdiction then adopted it.

AVALANCHE REGULATIONS

There are no federal or state laws governing development in avalanche zones. The relevant county policies and regulations are provided below.

Placer County General Plan

The Health and Safety Element of the Placer County General Plan (2021) includes numerous goals and policies associated with avalanche hazards. While the project area is not located in a Potential Avalanche Hazard Area (PAHA), the following are relevant policies associated with the proposed project:

8.G.1. The County shall require new development in potential avalanche hazard areas (PAHAs) as designated in the Placer County Avalanche Management Ordinance, to be sited, designed, and constructed to minimize avalanche hazards. Permits for development in such areas shall only be issued if the project proponents can

demonstrate that such development will be safe under anticipated snow loads and conditions of an avalanche.

8.G.2. The County shall maintain maps of potential avalanche hazard areas. (Addresses California Government Code Section 65302 (g)(4)(B)).

Avalanche Management Ordinance

Article 12.40 of the Placer County Code addresses Avalanche Management Areas and establishes the Placer County Avalanche Management Ordinance. The Article describes PAHAs as those areas where, after investigation and study, the County finds that an avalanche potential exists because of the steepness of the slope, exposure, snowpack composition, wind, temperature, rate of snowfall, and other interacting factors. PAHA zones are established to identify those areas with avalanche potential based on approved studies that designate a minimum probability of occurrence greater than 1 in 100 per year, or where avalanche damage is documented. Placer County limits construction in PAHAs and will not issue a building permit for construction in a PAHA without certifying that the structure will be safe under the anticipated snow loads and conditions of an avalanche.

The project site is not located within an identified PAHA; therefore, these requirements will not apply to the proposed project.

FLOOD REGULATIONS

National Flood Insurance Program

Established in 1968 with the passage of the National Flood Insurance Act, the National Flood Insurance Program is a federal program that allows property owners to obtain flood insurance as protection against losses during a flood. NFIP participation is based on an agreement between a participating community and the federal government. When a community adopts and enforces a floodplain management ordinance designed to reduce future flood risk to new development in designated floodplains, FEMA will make flood insurance available to that community as a way to protect against financial loss caused during a flood. Placer County participates in the NFIP by adopting and enforcing floodplain management ordinances to reduce future flood damage.

FEMA Community Rating System

Through the NFIP, FEMA has a voluntary program for recognizing and encouraging community floodplain management activities that exceed NFIP standards. Under the Community Rating System, NFIP policyholders within participating communities receive discounts on their flood insurance premiums. Ratings range from 1 to 9, with 1 being the highest and receiving the greatest discount. Placer County is rated 5, so policyholders within the County receive a 25 percent discount on flood insurance premiums.

Placer County General Plan

The Health and Safety Element of the Placer County General Plan (2021) includes numerous goals and policies associated with flood hazards. While the project area is not located in a FEMA flood hazard zone, the following are relevant policies associated with the proposed project:

8.B.1.1. The County shall require floodproofing of new and substantially improved structures in areas subject to flooding to be built in accordance with the Flood Damage Prevention Ordinance (Placer County Code Chapter 15, Article 15.52).

8.B.1.2. The County shall prohibit the construction of projects, including public facilities and other facilities essential for emergencies and large public assembly, within the County's Regulatory Floodway, unless the structure and access to the structure are adequately protected from flood hazards, incorporates all required flood protection specific to that area in accordance with County ordinances and guidelines, and will not result in any significant adverse impacts.

8.B.1.4. New construction shall not be permitted within 100 feet of the centerline of permanent streams and within 50 feet of intermittent streams or within the 100-year floodplain, whichever distance is greater.

8.B.1.6. The County shall ensure new development projects incorporate design strategies and features to reduce the area of impervious surfaces.

8.B.2.1. The County shall promote flood-control measures that maintain natural conditions within the County's Regulatory Floodplain of rivers and streams.

8.B.2.2. The County shall implement the adaptation strategies as contained in the Placer County Sustainability Plan necessary to ensure that natural systems and flood-control infrastructure can handle floodwater year-round.

8.B.2.3. The County shall require that flood management programs avoid alteration of waterways and adjacent areas whenever possible.

8.B.2.4. The County shall require that dams, levees, floodwalls, and their related potential flood inundation areas be designed, located, and constructed in accordance with all applicable design standards and specifications and accepted state-of-the-art design and construction practices. Such structures shall conserve resources, incorporate and preserve scenic values if possible, and incorporate opportunities for recreation where appropriate.

8.B.2.5. The County shall consult with the Placer County Flood Control District and other agencies to maintain and improve local and regional flood control systems' capacity and ensure a regional approach to addressing flood hazards.

Placer County Flood Control and Water Conservation District

The Placer County Flood Control and Water Conservation District (PCFCWCD) was formed by a legislative resolution on Senate Bill 1312 and made effective on August 23, 1984. The objective of PCFCWCD is to reduce the effects of flooding by the maintenance of drainage basins and the use of detention/retention basins; offer technical support; perform studies, advise, and collect data; and coordinate with adjacent jurisdictions. The PCFCWCD's Stormwater Management Manual (1990) includes standards and methods for the planning and design of

drainage and flood control infrastructure.

FIRE PREVENTION AND EMERGENCY PLANNING

FIRE PREVENTION MEASURES

The proposed project will incorporate a variety of fire prevention measures to ensure consistency with the California Fire Code. The proposed structure will incorporate fire-resistant building materials, mass timber elements, appropriate landscaping that meets fire-safe regulations, and maintenance of defensible space around buildings. The base of the building is horizontal board-formed concrete, accompanied by low reflectance and high thermal efficiency windows, and roof and upper wall surfaces encased with fire-resistant materials.[29]

WATER SUPPLY AND FIRE FLOW

The OVPSD will provide water for fire suppression for the proposed project. This water system contains a 1.0-million-gallon water supply (spread amongst multiple tanks and supplied by groundwater wells). Water lines and 199 fire hydrants (spaced approximately 300 feet from each other) are located throughout the Valley's developed areas, including the project area. The water system meets or exceeds NFPA standards for storage, flow, and pressure.[30]

FIRE APPARATUS AND EMERGENCY ACCESS[31]

Olympic Valley Road is the primary route for Fire and Emergency personnel based on OVFD Fire Station 21. SR 89 is the primary route for other agencies supporting OVFD with fire and emergency response activities. The OVFD currently uses the following equipment:

- Two Type I Structural Engines with a full complement of firefighting equipment, rescue equipment, vehicle extrication equipment, and advanced life support equipment
- Two Type III Brush Engines,
- One 2,150-gallon Water Tender,
- One Light Duty Rescue vehicle, and
- One small off-road UTV.

BUILDING FIRE AND IGNITION RESISTANCE AND FIRE PROTECTION SYSTEMS

The International Building and Fire Codes focus on built-in fire protection features such as automatic sprinkler systems, fire-resistance-rated building materials, applications and assemblages to prevent fire spread, and properly designed egress systems. Currently, Placer County has adopted the 2019 California Building Code, Title 24 of the California Code of Regulations, and the 2019 Fire Code (Sections 15.04.510 and 15.04.520 Fire Code Amendment). Consistent with the California Building and Fire Code, the following measures will be used to minimize the potential for structure ignition:

- ignition and ember-resistant building materials;
- fire protection systems; interior sprinklers;
- designated sheltering structure(s); and
- compliance with all other applicable California Building Code requirements.

[29] The SNOW Sports Museum and Community Cultural Center Project Description, pg. 6
[30] Your OVFD, Olympic Valley Fire Department, https://www.ovpsd.org/sites/default/files/documents/Your_OVFD.pdf.
[31] Olympic Valley Fire Department, Your OVFD.

DEFENSIBLE SPACE/VEGETATION MANAGEMENT

California law (PRC 4291) requires any person who owns, leases, controls, operates, or maintains a building or structure in an adjoining mountainous area; lands covered in forest, brush, or grass; or any land that is covered with flammable material and is within the State Responsibility Area to create 100 feet of defensible space around the perimeter of all buildings (or to the property line if less than 100 feet). The proposed project is located within areas that require compliance with PRC 4291.

The following Defensible Space BMPs are recommended:

- Rake and remove pine needles to 100 feet from the structure or to the property line.
- Remove accumulated pine needles, leaves, and other vegetation from roofs.
- Cut grasses, thin brush, and other flammable vegetation to 100 feet from the structure or property line.
- Clear flammable debris such as vegetation piles and construction debris from around the structure.
- Remove brush, limbs, grass, needles, and debris 10 feet in all directions around propane tanks.
- Trim mature trees a minimum of 10 feet from the ground.
- Remove dead tree limbs touching or overhanging roofs and decks.
- Remove all dead and dying trees from the property.

Shelter in Place

Limited roadway capacity is a concern for evacuation of Olympic Valley, which can lead to different strategies in an emergency.[32] Depending on the type and location of an emergency event, it may be safer to "shelter-in-place" rather than to attempt leaving the Valley. The OVFD identified the Palisades at Tahoe Resort (approximately 2 miles from proposed project site) parking lots as a temporary shelter-in-place location that could be used by valley residents/visitors, if necessary, during a hazard event. In addition, discussions with staff from the Placer County Sherriff and OVFD indicated that the proposed project could be used for temporary shelter-in-place activities if deemed safe by the Incident Commander and/or County. If shelter-in-place activities occur within the project site, the following recommendations should be incorporated:

- Allow for temporary shelter-in-place activities within the proposed project site if it is in the best interest of the County and residents/visitors to the Valley.
- As part of the overall building design and programming, create locations for assembly and shelter that are safe and effective.
- If the proposed project is identified as a potential temporary shelter-in-place location, emergency supplies such as food, water, blankets, first aid kits, flashlights/lanterns, batteries, and radios should be stored on-site.
- Conduct exercises with site staff to test the protocols and processes for setting up and managing a shelter-in-place location.
- Clearly mark and identify suitable shelter-in-place locations within the project site.
- Coordinate with OVFD to identify the maximum occupancy for shelter-in-place operations.

[32] Lt Paul Long, Placer County Sheriff's Office, virtual communication, November 5th, 2021.

Emergency Notification

Emergency notifications for the project site will rely on the existing protocols and infrastructure currently in place within the County. Assuming that a majority of visitors to the project site may reside outside of the Valley and the County, the following recommendations should be incorporated into the proposed project:

- Install a hardwired phone line (aka landline) to accept emergency notifications through Nixle and the Placer Alerts systems. This installation should include the ability to provide backup battery power to ensure the system operates during a power outage.[33]
- Install an internal PA system that can make announcements and relay information and instructions during an emergency event/notification.
- Install external speakers/sirens to assist with communications for visitors located within the vicinity of the project site but not within a building on-site.

Staff Preparedness

Staff preparedness will require training and exercising emergency protocols for the proposed project. The EPEP developed by the Museum shall be maintained and regularly updated in close coordination with PCSD, OVFD, and OES.

Key elements associated with staff preparedness include:

- Identification of an Emergency Coordinator(s) who oversees implementation and future updates to the EPEP.
- Annual trainings for Museum staff.
- Annual testing and exercise of the EPEP by Museum staff to determine if protocols and training require modification.
- Guest education and outreach efforts during high hazard conditions.
- Coordination with emergency service providers to prepare for hazard incidents during key times of the year.

To ensure effective use of the EPEP during hazard events, hard copies should be available and accessible in case of a power outage.[34]

Future updates to the EPEP will occur on an as-needed basis in response to state or county law changes, new technologies or best practices, and other changing conditions. Additional materials to support visitor education and outreach will be prepared or provided (if readily available). Staff training programs and materials should receive a copy of the EPEP and other relevant emergency management and response plans/ information upon starting work and at least annually thereafter. Upon initial hire and again yearly, staff will be encouraged to subscribe to Nixle and Placer Alert feeds for the project site zip code.

[33] Lt Long, virtual communication.
[34] Lt Long, virtual communication.

Evacuation Planning

The measures identified in this chapter are intended to reduce the potential for fire or other emergencies to occur. Unfortunately, in some rare instances, evacuation from Olympic Valley may become necessary. Ultimately the actual decision to evacuate because of a wildfire threat will be determined by Placer County Incident Command as outlined in the Eastside Emergency Evacuation Plan. This EPEP is intended for the Museum staff and visitors and is intended to be used in tandem with the Placer County East Side Emergency Evacuation Plan, local law enforcement, and fire authority's emergency procedures in the face of an emergency evacuation situation.

The designated Emergency Coordinator for the Museum will be available to cooperate with local and regional emergency agencies during training and/or exercises/simulations held by the Museum or other agencies within the County.

Seismic Protection Measures

All Museum buildings and structures will be constructed in compliance with applicable seismic requirements of the California Building Code. Generally, these standards will help to ensure that potential risks associated with seismic hazards are minimized. Where possible, the County should identify measures that ensure the structure has greater resiliency and can maintain its functionality as a critical asset/shelter location after large seismic events. There are two fault traces (mapped traces of Fault 2 or Fault 5) that have been identified in the western portion of the Valley, the closest of which is approximately 1.5 miles from the planning area. While fault rupture is not a primary concern for the proposed project, the threat from seismic shaking and secondary effects created by shaking exists and must be accounted for during the proposed project's design.

Flood Protection Measures

The proposed project is not located within mapped FEMA flood zones, which reduces the risk of flood impacts on the proposed project site. The proposed on-site drainage improvements will require periodic maintenance to ensure that drainages remain free and clear of debris and function as designed. Additional precautions should be taken during rain on snow events, which tend to cause flooding if drainage infrastructure cannot convey storm flows effectively. According to the site plan, the main drainage for the Museum will be a drainage swale that runs along the northern edge of the property adjacent to Squaw Valley Rd. Multiple storm drains feed into this drainage as well as a large stormwater detention basin (which lies along the northeastern border of the project site).

EVACUATION PLAN

INTRODUCTION

Developing a successful plan to implement effective emergency preparedness and communication/education strategies for Museum visitors and staff is the primary objective of this EPEP. Emergencies do occasionally happen, and when these incidents occur, the evacuation and relocation of visitors and staff from unsafe locations to locations of safety may be required.

Two different types of relocation/evacuation have been identified for the proposed project:

> **Type I Evacuation** – refers to a local evacuation, which would include a small, centralized emergency (localized fire) that requires relocation of staff and visitors to a safe location as determined by emergency services personnel. This type of evacuation would be managed by the local emergency services personnel (PCSD or OVFD) and involve direct coordination by the Museum Emergency Coordinator.
>
> **Type II Evacuation** – refers to an out-of-valley evacuation, which would include evacuating all staff and visitors to locations outside of Olympic Valley completely. This type of evacuation is assumed to result from a large-scale emergency event such as a wildfire that could potentially impact the project site. The Incident Commander and appropriate County Departments (PCSD, OES, Fire) would issue orders to evacuate.

All evacuations would require coordination with the Incident Commander or designee to determine the appropriate level of evacuation response and communicate any directives to staff and visitors.

ROLES AND RESPONSIBILITIES

To ensure effective emergency preparedness and evacuation planning, the following roles and responsibilities have been identified for Museum staff.

Emergency Coordinator (Insert Museum Staff Position Title)

It is the responsibility of the Emergency Coordinator to work in synchronization with the local fire authority (OVFD) and/or law enforcement (PCSD) to make decisions regarding necessary evacuation (local or out-of-valley) and communicate real-time updates of potential hazardous events and any necessary evacuation orders to all staff members. This position is also responsible for ensuring all staff is adequately trained and the necessary emergency supplies and planning actions are taken to ensure staff is prepared and ready to assist visitors during an incident.

Assistant Emergency Coordinator (Insert Museum Staff Position Title)

It is the responsibility of the Assistant Emergency Coordinator (trained staff member) to implement all instructions and direction from the Emergency Coordinator, communicate strategies between other staff and the Emergency Coordinator, as well as coordinate and direct the safe relocation of staff and visitors of the Museum in accordance with EPEP protocol in the event of an emergency situation. The Assistant Emergency Coordinator will assume the role duties of Acting Emergency Coordinator if the Emergency Coordinator is unable or unavailable to do so.

Museum Staff

Museum staff will play a key role in ensuring museum visitors receive proper instruction and information pertaining to any emergency incidents that may affect the facility. These activities could occur daily and be associated with inclement weather or with unique incidents occurring locally or within the region. Each staff member shall be trained in emergency procedures that ensure the safety of visitors. Key staff may receive specialized training for specific procedures, such as assisting visitors with access and functional needs, coordinating pedestrian and vehicular traffic control within the museum grounds, and/or disseminating supplies and information regarding incident details.

Sheriff's Department and/or Incident Command

The decision to initiate an evacuation order will be made by the Incident Commander and will be implemented by the PCSD or other emergency response agency, as determined by the Incident Commander. Upon this determination, the PCSD or local emergency authority shall manage public notification within the Olympic Valley, including the Museum staff and visitors. The Emergency Coordinator or their designee shall coordinate with the PCSD as needed during an evacuation event and/or if sheltering in place is occurring within the museum facility.

COMMUNICATION PROTOCOLS

Staff/Visitor Communication Protocols – the following are ways information regarding emergency preparedness practices and regional and local hazardous events may be communicated to visitors:

- **Emergency Notification Protocol (Evacuate)** - a protocol developed in response to a localized emergency that requires notification to museum visitors to evacuate the museum grounds and seek transportation to a safe location as identified by PCSD, OES, and/or OVFD.
- **Emergency Notification Protocol (Shelter in Place)** - a protocol developed in response to a localized emergency that requires notification to museum visitors to shelter in place in the designated area in the museum grounds/parking lot. Museum staff will await further instruction provided by PCSD, OES, and/or OVFD.
- **Museum Messaging Signs/Boards** – messaging boards/signs should be located throughout the facility to provide emergency preparedness and evacuation information and real-time messages about hazard events that pose a threat to the museum site. If these messaging boards are computer-based, staff may update information in real-time to ensure the most accurate information is available. Messaging regarding evacuation orders should be coordinated through PCSD, OES, and/or OVFD.
- **Emergency Notification Calls** – if an emergency has occurred and directly affects the safety of museum visitors, the Emergency Coordinator will work with staff to notify visitors of the incident conditions. If the PCSD has issued an official evacuation order, Museum staff will follow the instructions provided and notify visitors appropriately.
- **Social Media Notifications** – all social media instruction and information from PCSD, OES, and OVFD will be monitored by the Emergency Coordinator, and relevant information will be shared in a timely manner with staff and visitors.
- **Placer Alert** – Museum visitors will be encouraged to sign up for Placer Alert when purchasing tickets. In addition, information and real-time updates from Placer Alert on message boards and signs. To ensure these alerts are effectively communicated, the

museum facility should register with Placer Alert using a dedicated landline to receive messages and information shared by the County.

- **Recommendation**: Outdoor Messaging signage should be incorporated into the proposed project allowing travelers along both Olympic Valley Road and SR 89 to view messaging associated with the Museum. Depending on the location of this sign, Caltrans approval may be required. This message board could provide crucial information to travelers visiting the museum or passing the facility. Information regarding weather conditions, roadway conditions, and other pertinent information could be shared using this amenity. If this signage would be infeasible to construct at this time, an area for future signage should be identified that could support advertising and messaging to be constructed at a later date.
- **Recommendation:** Ticket alerts in the form of information provided to museum visitors provided at the time of purchase and visitation can help provide important information regarding relevant hazard conditions that can affect the region. These alerts should be tailored to the different seasons, notifying visitors of the wildfire conditions during the summer and fall seasons, or weather conditions during the winter and spring seasons. Kiosks and /or signage should encourage museum guests to sign up for Placer Alert. This could be easily accomplished by setting up a scannable QR code that can be scanned with smart phones upon entry, and/or printed on museum tickets.

Incident Communication Protocols

Incident communication protocols will vary depending on who initially identifies the hazard event and type (i.e., fire ignition, fire in process, flood, avalanche, etc.) or if the PCSD or OES has initiated an emergency evacuation notification or order.

The following are the three protocols for reporting an emergency event:

Detection by Visitor – if a guest reports a hazardous event to any staff member, these protocols shall be implemented:

1. Identify the type and location of the event and confirm the reliability of the report
2. Determine if there is immediate injury or danger
3. ***If immediate injury or danger, call 911***, then contact the **Emergency Coordinator.** If there is no immediate injury or danger, contact the Emergency Coordinator.
4. Upon notification to the **Emergency Coordinator,** the following will occur:
   - **Emergency Coordinator:** contact PCSD, OVFD, and/or OES. Relay incident information to the appropriate authority and establish the next course of action.
   - Coordinate with PCSD, OVFD, and OES to determine if evacuation is required.
   - **Emergency Coordinator:** contact Museum Staff and provide a situation update and further instructions.
   - **Assistant EC/Staff:** follow instructions from Emergency Coordinator, initiate communication protocols with Museum visitors regarding incident and instructions provided by PCSD, OVFD, and OES.
   - **All Staff**: Instruct and direct visitors to the appropriate area to begin either evacuation or shelter in place orders, if necessary.
   - **Emergency Coordinator:** maintain communications with PCSD and OES personnel to maintain situational awareness and provide timely updates to museum visitors and staff.

Detection by Staff – if a museum employee detects a hazardous event, these protocols shall be implemented:

1. Identify the type and location of the event and begin the reporting process.
2. Determine if there is immediate injury or danger
3. **If immediate injury or danger, call 911**; then contact the **Emergency Coordinator**. If no immediate injury or danger, contact the Emergency Coordinator
4. Upon notification to the **Emergency Coordinator,** the following will occur:
   - **Emergency Coordinator:** contact PCSD, OVFD, and/or OES. Relay incident information to the appropriate authority and establish the next course of action.
   - Coordinate with PCSD, OVFD, and OES to determine if evacuation is required.
   - **Emergency Coordinator:** contact Museum Staff and provide a situation update and further instructions.
   - **Assistant EC/Staff:** Follow instructions from Emergency Coordinator, initiate communication protocols with Museum visitors regarding incident and instructions provided by PCSD, OVFD, and/or OES.
   - **Emergency Coordinator**: Maintain communications with emergency response personnel to maintain situational awareness and provide timely updates to staff and museum visitors.
   - **All Staff**: Instruct and direct visitors to the appropriate area to begin either evacuation or shelter in place orders, if necessary.
   - **Emergency Coordinator:** Coordinate with emergency response personnel regarding when it is considered safe to stand down the evacuation or shelter-in-place orders.

Notification or Order by Placer County – if the Museum is notified of an event by OVFD, PCSD, OES, or by the Nixle or Placer Alert systems, the following protocols shall be implemented:

1. **Emergency Coordinator**: If PCSD, OVFD, or OES have issued an alert or warning, all Staff will be notified and prepare for further action.
2. **All Staff**: once the **Emergency Coordinator** receives relevant information regarding the incident and has relayed it to all staff, staff will notify visitors of the information available. **Note:** staff should assume that all museum visitors are not registered with the emergency alert systems within the County and would be reliant on the Museum Facility to act as their intermediary.
3. **Emergency Coordinator:** coordination with the PCSD will continue until an order for evacuation or shelter in place has been issued, requiring the Emergency Coordinator to direct staff to communicate that information with visitors.
4. **All Staff:** commence staff and visitor evacuations or shelter in place instructions. During this time, the Emergency Coordinator will maintain contact with issuing authorities to identify when and if it is safe (depending on the level of evacuation/shelter in place orders) to return or leave the area.

Mass Notification Procedures

Mass notifications are assumed to be issued by PCSD, OVFD, or OES using Placer Alerts, Nixle, or other acceptable methods. Assuming that visitors will not be registered for these notification platforms, the Museum will register with all available platforms and provide these alters to all visitors.

Upon an alert being issued by PCSD, OVFD, or OES, communications to museum staff and visitors will occur. Visitors will be notified via staff announcements, whether in person or over the internal speakers/intercom, and any message boards within the facility. Visitors will be given details of the event and provided instructions by PCSD, OVFD, or OES regarding evacuation or shelter in place. The Emergency Coordinator should confirm whether or not local authorities would be

on-site to support evacuation proceedings beyond the Museum location, if necessary.

Recommendation: For special events, the Museum should include a provision that allows for cancelation on the premises in the case of a declared emergency that may require evacuation. Should the Museum decide to cancel an event for these reasons, all Museum facilities will be cleared of staff and visitors.
Note: this recommendation intends to ensure event participants have adequate time to exit the facility and relocate safely and efficiently in advance of an evacuation order.

SHELTER-IN-PLACE PLAN

If exiting the Valley is not necessary or physically possible (for example, a hazard condition is preventing the safe movement of staff and visitors away from the site) then staff and visitors may be required to temporarily shelter in place. This condition would only occur under the direction of the Incident Commander in close consultation with Placer County (OES and Sheriff's Departments). If this occurs, the Emergency Coordinator will direct staff to move visitors to the designated locations within the facility to accommodate shelter in place. The Emergency Coordinator will disseminate available information regarding the hazard incident, provide instruction on where visitors may go and where to find necessary services (restrooms, food/drink), and, if necessary, distribute emergency supplies. Trained staff members will help facilitate the gathering of visitors within these locations and assess any issues that may affect visitor comfort. If circumstance dictates that the museum facility is no longer viable or safe to shelter in place and evacuation is still not possible, the Emergency Coordinator will coordinate with PCSD, OVFD, or OES to determine an alternative location for these activities.

EMERGENCY SUPPLIES

Based on daily average attendance assumptions, the Museum should maintain adequate emergency supplies as deemed adequate by PCSD, OVFD, and OES to include:

- Water
- First Aid Kits
- Shelf Stable Non-Perishable Food
- Battery Powered Lanterns/Flashlights
- Extra Batteries
- Dust Masks
- Plastic Sheeting and Duct tape
- Moist towelettes, feminine hygiene products, garbage bags, and plastic ties for personal sanitation.
- Blankets
- Fire Extinguishers
- Matches
- Radio/Walkie Talkies

APPENDICES

Appendix A – Olympic Valley Fire Department Emergency Preparedness and Evacuation Guide

Appendix B – 2015 Update to the Placer Operational Area Eastside Emergency Evacuation Plan

APPENDICES

Appendix A – Olympic Valley Fire Department Emergency Preparedness and Evacuation Guide

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APPENDICES

Appendix A – Olympic Valley Fire Department Emergency Preparedness and Evacuation Guide

Olympic Valley Fire Department

Emergency Preparedness and Evacuation Guide

Introduction

Olympic Valley has the potential for a number of natural disasters. Since most natural disasters seldom give warning, you should always be prepared. Wildland fire is clearly the number one potential problem facing our community. Other natural events to be aware of are: wind storms, snow storms, extreme cold, earthquakes, and flooding. During major emergencies, Olympic Valley Fire Department resources may be overtaxed, and we may not be able to get to you in a timely manner. You may have to rely on your own resourcefulness until emergency personnel can assist you.

This emergency preparedness and evacuation guide is being provided to you so that you are informed and can prepare to care for yourself and your family in the event of an emergency. This guide is divided into 3 sections: Ready, Set and Go. These 3 sections provide helpful information instructing individuals on the necessary actions to take prior to and during an emergency.

Please take the time to review the material provided within this document. In the event of an emergency, careful planning and preparation can reduce the impact of an emergency upon you and your family. If you would like further information regarding emergency planning or have questions specific to this document, please contact the Olympic Valley Fire Department. 530-583-6111.

Ready

What steps can you take ***now*** for a possible emergency in the future? This section provides various steps to follow allowing you and your family to be as ***READY*** as possible for an emergency that might strike Squaw Valley. Review and consider following these steps:

- Create a Family Disaster Plan that includes meeting locations and communication plans and practice it regularly. Include in your plan the evacuation of your animals.
- Have fire extinguishers on hand and train your family how to use them.
- Ensure that your family knows where your gas, electric and water main shut-off controls are and how to use them.
- Plan several different evacuation routes.
- Designate an emergency meeting location outside the community / hazard area.
- Assemble an emergency supply kit or Go Bags.
- Appoint an out-of-area friend or relative as a point of contact so you can communicate with family members who have relocated.
- Maintain a list of emergency contact numbers posted near your phone and in your emergency supply kit.
- Keep an extra emergency supply kit in your car in case you can't get to your home because of an emergency.
- Have a portable radio or scanner so you can stay updated on the emergency.

Emergency Supply Kit or Go Bags

At a minimum, you should have the basic supplies listed below:

- Three-day supply of non-perishable food and three gallons of water per person.
- Flashlight
- Battery-powered or hand-crank radio (NOAA Weather Radio, if possible)
- Extra batteries
- First aid kit
- Prescriptions / Medications (7-day supply) and medical items
- Multi-purpose tool
- Sanitation and personal hygiene items
- Copies of personal documents (medication list and pertinent medical information, proof of address, deed / lease to home, passports, birth certificates, insurance policies)
- Cell phone with charger - Consider solar charger
- Family and emergency contact information
- Extra cash
- Emergency blanket
- Maps of the area with evacuation routes

Consider the needs of all family members and add supplies to your kit. Suggested items to help meet additional needs are:

- Medical supplies (hearing aids with extra batteries, glasses, contact lenses, syringes, etc.)
- Baby supplies (bottles, formula, baby food, diapers)
- Games and activities for children
- Pet supplies (collar, leash, ID, food, carrier, bowl)
- Two-way radios
- Extra set of car keys and house keys
- Manual can opener

Additional supplies to keep at home or in your survival kit based on the types of disasters common to your area:

- N95 or surgical masks
- Matches
- Rain gear
- Towels
- Work gloves
- Tools / supplies for securing your home
- Blankets or sleeping bags
- Extra clothing, hat and sturdy shoes
- Plastic sheeting
- Duct tape
- Scissors
- Household liquid bleach
- Entertainment items

Set

This section provides various steps to follow - allowing you and your family to be ***SET*** for a possible evacuation or a "shelter in place." Review and consider following these steps:

Inside Checklist

- Shut all windows and doors, leaving them unlocked.
- Remove flammable window shades and curtains.
- Remove lightweight curtains.
- Move flammable furniture to the center of the room, away from windows and doors.
- Shut off gas at the meter. Turn off pilot lights.
- Leave your lights on so firefighters can see your house under possible smoky conditions.
- Shut off the air conditioning.

Outside Checklist

- Gather up flammable items from the exterior of the house and bring them inside (e.g., patio furniture, children's toys, door mats, etc.) or place them in your pool.
- Turn off propane tanks.
- Don't leave sprinklers on or water running – they can waste critical water pressure.
- Leave exterior lights on.
- Back your car into the driveway. Shut doors and roll up windows.
- Have a ladder available.
- Patrol your property and extinguish all small fires until you leave.
- Seal attic and ground vents with pre-cut plywood or commercial seals if time permits.

How you may be Notified of an Emergency or Evacuation

Reverse 911 – Community members may receive a telephone call to your home phones with a brief message alerting you of an emergency or other unusual incident where there has been a substantial threat to life or property.

Placer Alert - This service allows you to opt-in to receive notifications via phone calls, text messaging, e-mail and more based on locations you care about. You can choose to receive notifications about events that may affect your home, workplace, family's schools and more. This system will be used to notify you about imminent threats to health and safety as well as informational notifications that affect your locations or work environments. Administrators will send notifications regarding severe weather, flooding, gas leaks, police activity and more. For more information or to sign-up for this notification service, go to: http://www.placer-alert.org/

NIXLE – Olympic Valley Fire Department is registered with Nixle Connect, a service that allows the fire department to communicate directly with the public via text and e-mail at no cost. Communications can range from emergency alerts such as mandatory evacuations, public safety information (like "boil notices") and other critical community information. The Olympic Valley Public Service District is recommending that all property owners and visitors to the community sign up for this free public safety messaging system. In order to sign up to receive instant text messages simply text "96146" to 888777. You will be sent back two confirmation messages advising that you are registered. In order to sign up for email messages go to http://www.nixle.com and follow the instructions to sign up as a user.

How to stay informed

- **Check for Nixle Alerts.**
- **Check for Placer Alerts.**
- **Check the internet at: www.placer.ca.gov/departments/ceo/emergency/currentemergencyinfo**
- **Listen for fire and law enforcement announcements in your neighborhood.**
- **Keep your home phone available for emergency evacuation information.**

Go

When should you leave? Where should you go? What routes should you take? What should you take with you? This section provides information for you to follow – allowing you and your family to ***GO*** in a timely manner and with the utmost confidence during the emergency. Review and consider following these guidelines:

Evacuation Checklist

- **When to leave – Leave early enough to avoid being caught in fire, smoke or road congestion. Don't wait to be told by authorities to leave. During a major emergency, emergency personnel may not have time to knock on every door. If you are advised to leave, don't hesitate!**
- **Where to go – Evacuate to a predetermined location. This location should be a low-risk area, such as well-prepared friend or relative's house, a local evacuation center, or motel.**
- **How to get there – Have several travel routes in case one route is compromised in the emergency or blocked by emergency vehicles and equipment. Choose an escape route away from the fire or emergency.**
- **What to take – Take your emergency supply kit and any other necessary family and pet items. Do not delay evacuation to gather unnecessary items.**

Safety Hazards during an Evacuation

Each emergency is unique and will present with various problems / hazards. It is imperative that you follow the directions of emergency personnel and public service workers to minimize the risk of these hazards. The following are examples of hazards to be aware of:

- Downed power lines.
- Reduced visibility from smoke.
- Falling trees and limbs.
- Rolling rocks on steep slopes.
- Emergency barricades.
- Roads, highways, and bridges with broken pavement.
- Fire equipment and personnel.

Destination

- There are multiple community evacuation destinations to which you may be directed and the location may not be the closest to your home. In the event that a community evacuation destination is not yet established, have a number of potential predetermined evacuation destinations.
- Notify an out-of-area contact person to inform them of your location and status.
- Leave a note with your emergency contact information and out-of-area contact on your refrigerator or kitchen table in the event emergency crews need to contact you.

If you are Trapped: Survival Tips

- Shelter away from outside walls.
- Patrol inside your home for spot fires and extinguish them.
- Wear long sleeves and long pants made of natural fibers such as cotton.
- Stay hydrated.
- Ensure you can exit your home.
- Fill sinks and tubs for an emergency water supply.
- Place wet towels under doors to keep smoke and embers out
- After the natural catastrophe has passed, survey your property and structure and roof to make sure there are no fires, sparks or embers.

What happens when you call 911?

The advent of the 911 system has proven to be one of the most effective tools ever designed to expedite emergency response to people in need. Simply pick up any phone and dial three numbers and you're immediately connected to a person who can get you the assistance you need.

But how does this work? Well, if you live in the Olympic Valley community and call 911, you will be connected to the Placer County Sheriff's Office. The dispatcher will immediately know where you are calling from if you are using a "land line*," because the enhanced 911 system shows the street address associated with your telephone number. The dispatcher will ask you what the emergency is and to verify its location. If this is an incident in Olympic Valley, the dispatcher will tell you they are transferring your call to the Grass Valley Emergency Command Center, located at the Grass Valley Airport and operated by California Department of Forestry and Fire Protection (CALFIRE). This process takes only seconds. The Grass Valley dispatcher will type all the information you provide to them into their Computer Aided Dispatch system, which will indicate that the Olympic Valley Fire Department is the appropriate response agency.

*If calling from a cell phone, your call will go to the California Highway Patrol, who will not automatically know the location you are calling from. They will need this information before they can transfer you to the Grass Valley dispatcher.

You might wonder why we are dispatched out of Grass Valley when it is so far away. CALFIRE has a statewide radio system and we contract with them to be our dispatching agency. Their system provides mountaintop radio sites and multiple radio frequencies for our use. CALFIRE dispatches for almost all of the local fire departments, so they know where every crew is at any given moment, ensuring a seamless communication link. With computer aided dispatch and radio technology, it is conceivable that a dispatch center could be located as far away as New York and still be effective and complete the process as well as one located across the street.

911 is a wonderful system that works very well. You and your family need to know how and when to use it. Do not abuse the system on questions that are not emergency related (like requesting road conditions) as this may delay response to a real emergency. Before you call 911, make sure you know your address, and more importantly, that it is visible from the street. The best system will not help us find your home if your address is hidden from us on a snowy night.

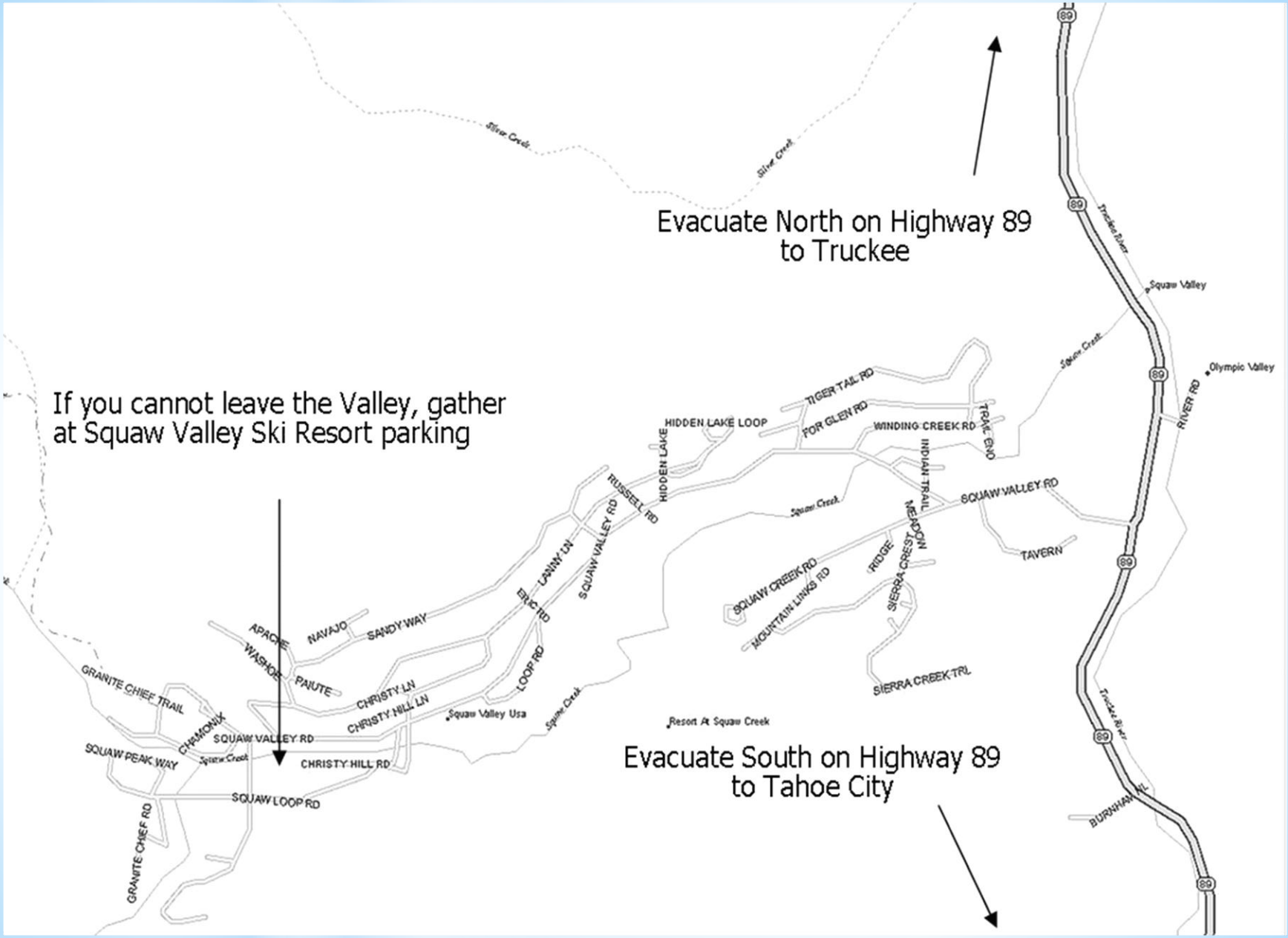
Resource Directory

Olympic Valley Fire Department: 530-583-6111 www.ovpsd.org/ovfd

Placer County Public Health: 530-546-1970 www.placer.ca.gov/public-health

CALFIRE - Fire Information: 530-823-4083 www.calfire.ca.gov

CALTRANS - Road Conditions: 1-800-427-7623
www.dot.ca.gov/cgi-bin/roads.cgi


Evacuate North on Highway 89
to Truckee
If you cannot leave the Valley, gather
at Squaw Valley Ski Resort parking
Evacuate South on Highway 89
to Tahoe City
Silver Creek
Squaw Valley
Olympic Valley
RIVER RD
TIGER TAIL RD
FOR GLEN RD
HIDDEN LAKE LOOP
WINDING CREEK RD
TRAIL END
INDIAN TRAIL
SQUAW VALLEY RD
HIDDEN LAKE
RUSSELL RD
SQUAW VALLEY RD
LANNY LN
ENO RD
LOOP RD
MEADOW RIDGE
SIERRA CREST
TAVERN
SQUAW CREEK RD
MOUNTAIN LINKS RD
SIERRA CREEK TRL
Squaw Creek
Resort At Squaw Creek
Squaw Valley Usa
APACHE
NAVAJO
SANDY WAY
WASHOE
PAIUTE
CHRISTY LN
CHRISTY HILL LN
CHRISTY HILL RD
GRANITE CHIEF TRAIL
CHAMONIX
SQUAW VALLEY RD
SQUAW PEAK WAY
SQUAW LOOP RD
GRANITE CHIEF RD
BURNHAM RD
Truckee River
89

Appendix B – 2015 Update to the Placer Operational Area Eastside Emergency Evacuation Plan

PLACER COUNTY
OFFICE OF EMERGENCY SERVICES

M E M O R A N D U M

To: **Honorable Board of Supervisors**

From: David Boesch, County Executive Officer
by: John McEldowney, Program Manager of Emergency Services

Date: November 17, 2015

Subject: **2015 Update to the Placer Operational Area Eastside Emergency Evacuation Plan**

ACTION REQUESTED

Adopt a Resolution Enacting the 2015 Update to the Placer Operational Area Eastside Emergency Evacuation Plan.

BACKGROUND

This is a plan for the conduct of a physical evacuation of one or more communities in the unincorporated area on the eastern side of Placer County. This plan is necessitated by a larger incident, most probably a forest fire or flood. For the purposes of this plan, the "eastern side" comprises all of Placer County from just west of Cisco Grove to the Nevada State line not including the areas within the Tahoe National Forest and the Lake Tahoe Basin Management Unit. The dense forests, rugged terrain, and the scarcity of roads in the area are problems that present difficulties for first responders and residents alike. These problems would complicate any emergency evacuation operation.

Whereas the potential exists for severe winter storms, mass casualty incidents or floods on the eastern side, forest fire remains the greatest single threat to communities. For all but the wettest of months, homes and businesses in wildland-urban interface areas are particularly susceptible to fire damage and destruction. During fire season, the combination of dense forests, heavy fuel loads, low humidity, potential for high winds and the steep terrain in the Sierra Nevada's can rapidly turn even small fires into lethal, major disasters. Despite a record of very successful evacuations in the past, the limited number of roads in the area always makes evacuations problematic. The need to quickly execute a rapid evacuation of residents, businesses, and even pets, requires detailed planning, de-confliction of response actions, and cooperation between first responders and supporting agencies alike.

This plan prescribes specific responsibilities for first responders, County staff and other state, federal and non-profit cooperating agencies for conducting an emergency evacuation of one or more communities as part of a larger natural disaster or human caused incident on the east side of Placer County.

FISCAL IMPACT
There is no net County cost to the General Fund as a result of this action.

Attachments:

Resolution
Letter of Promulgation
2015 Update to the Placer Operational Eastside Emergency Evacuation Plan

Before the Board of Supervisors
County of Placer, State of California

Resol. No: _____

In the matter of: **Adoption of the 2015 Update to the Placer Operational Area Eastside Emergency Evacuation Plan**

The following Resolution was duly passed by the Board of Supervisors of the County of Placer

at a regular meeting held _____ by the following vote on roll call:

Ayes:

Noes:

Absent:

Signed and approved by me after its passage.

_____
Chair, Board of Supervisors

Attest:

_____
Clerk of said Board

WHEREAS, Placer County and its incorporated communities are exposed to numerous natural and manmade hazards, including flood, drought, wildfire, and severe weather. These hazards pose threats to lives, property and the economy; and

WHEREAS, the Eastside Emergency Evacuation Plan ("EEEP") creates an operational framework for potentially reducing losses from natural and manmade hazards; and

WHEREAS, the EEEP is for conduct of a physical evacuation of one or more communities in the unincorporated area on the eastern side of Placer County that is necessitated by a larger incident, most probably a forest fire or flood; and

WHEREAS, the EEEP prescribes specific responsibilities for first responders, County staff and other state, federal and non-profit cooperating agencies for conducting an emergency evacuation of one or more communities as part of a larger natural disaster or human caused incident on the east side of Placer County; and

WHEREAS, the EEEP applies to an evacuation of one or more communities, due to a disaster or incident response affecting all public jurisdictions on the eastern side. This plan also applies to evacuations necessitated by incidents that start in the Tahoe National Forest or the Lake Tahoe Basin Management Unit that threaten County areas; and

WHEREAS, portions of this plan and agency responsibilities delineated herein are applicable for requests for mutual aid from adjacent Counties impacted by similar incidents or events; and

WHEREAS, the EEEP complies with the Placer County Emergency Operations Plan (EOP), the California Emergency Plan and legal authorities in the California Emergency Services Act, and is developed by authority of Placer County Code, Chapter 2, Article 2.88 and Chapter 9, Article 9.32; and

WHEREAS, the need to quickly execute a rapid evacuation of residents, businesses, and pets, requires detailed planning, de-confliction of response actions, and cooperation between first responders and supporting agencies alike; and

NOW, THEREFORE, BE IT RESOLVED that the Board of Supervisors of the County of Placer hereby approves and adopts the 2015 Update to the Placer Operational Area Eastside Emergency Evacuation Plan and authorizes the execution of the letter of promulgation, both of which are attached hereto as Exhibit "A".

NOW BE IT FURTHER RESOLVED that this resolution shall become effective immediately upon adoption.

EXHIBIT A

2015 Update to the Placer Operational Area
Eastside Emergency Evacuation Plan

Letter of Promulgation

PLACER OPERATIONAL AREA

EAST SIDE
EMERGENCY EVACUATION PLAN

1. GENERAL

This is a plan for conduct of a physical evacuation of one or more communities in the unincorporated Placer County area on the eastern side of the County that is necessitated by a larger incident, most probably a forest fire or flood. For the purposes of this plan, the "eastern side" comprises all of Placer County from just west of Cisco Grove to the Nevada State line not including the areas within the Tahoe National Forest and the Lake Tahoe Basin Management Unit. The dense forests, rugged terrain, and the scarcity of roads in the area – problems that present difficulties for first responders and residents/transients alike - complicate any evacuation.

Whereas the potential exists for severe winter storms, mass casualty incidents or floods on the eastern side, forest fire remains the greatest single threat to communities. For all but the wettest of months, homes and businesses in wildland-urban interface areas are particularly susceptible to fire damage and destruction. During fire season, the combination of dense forests, heavy fuel loads, low humidity, potential for high winds and the steep terrain in the Sierra Nevadas can rapidly turn even small fires into lethal, major disasters. Despite a record of very successful evacuations in the past, the limited number of roads in the area always makes evacuations problematic. The need to quickly execute a rapid evacuation of residents, businesses, transients, and even pets, requires detailed planning, de-confliction of response actions, and cooperation between first responders and supporting agencies alike.

Therefore, in order to meet this planning challenge, the Placer County Sheriff's Office (PCSO), Nevada County Sheriff's Office (NCSO), Town of Truckee, the five eastern Fire Protection Districts/Departments, California Highway Patrol (CHP), USDA Forest Service (USFS), American Red cross (ARC), Placer County Office of Emergency Services (PCOES), Nevada County Office of Emergency Services (NCOES) and other state and federal contributing agencies developed this plan to help increase preparedness, and facilitate the efficient and rapid evacuation of threatened communities in the far eastern end of the County. While focusing on fire-induced evacuations, the plan remains applicable to all evacuations in general.

2. PURPOSE

This plan prescribes specific responsibilities for first responders, County staff and other state, federal and non-profit contributing agencies for conducting an emergency evacuation of one or more communities as part of a larger natural disaster or human-caused incident on the east side of Placer County.

3. ASSUMPTIONS

a. An evacuation order is given coincident with first response/initial attack.
b. Evacuation of the entire eastern side of the County is not required.
c. Most, but not all, of the roads and pre-designated shelter and evacuation centers on the eastern side are available for use.
d. Mutual aid resources for all disciplines are available.
e. There will be limited County emergency management organization support in the initial stages of an incident.

4. SCOPE

This plan applies to an evacuation of one or more communities due to a disaster or incident, response to which affects all public jurisdictions on the eastern side. It also applies to evacuations necessitated by incidents that start in the Tahoe National Forest or the Lake Tahoe Basin Management Unit that threaten County areas. Portions of this plan and agency responsibilities delineated herein are applicable for requests for mutual aid from adjacent Counties impacted by similar incidents or events.

For planning purposes, "evacuation" begins upon the order of the Incident Commander and concludes upon IC release of the area to general reentry. Evacuee support and damage/safety assessment activities occurring after completion of the initial evacuation but prior to general reentry are more correctly the subject of incident specific plans. However, some activities are referred to in this plan for clarity in illustrating the relationship between "incident command" as exercised by first responders and "emergency management" as exercised by the County through the Emergency Management Organization (EMO).

5. AUTHORITIES AND REFERENCES

This Plan complies with the Placer County Emergency Operations Plan (EOP), the California Emergency Plan and legal authorities in the California Emergency Services Act, and is developed by authority of Placer County Code, Chapters 2 and 9.

6. CONCEPT OF OPERATIONS

a. ***Initial Response***: Initial response to a disaster or incident occurring on the eastern side is by local, state and federal resources using Unified Command methodology. Upon assessment of the incident and in consultation with other responding agencies, Incident Command (IC) makes the decision that the incident has the real potential of becoming too great to handle or is actually beyond the capability of available resources, and therefore orders an evacuation. The IC directs that notifications be made, and directs promulgation of evacuation notices throughout affected areas via emergency notification systems and television and

radio stations. As the incident is both multi-jurisdictional and multi-disciplinary, the

IC requests OES response to provide incident emergency management. Subsequently, OES activates those members of the Emergency Management Organization (EMO) needed to support the evacuation and the greater incident, and ensures either an incident EOC on the eastern side or the EOC in Auburn is made operational.

The following functions are normally present in typical evacuation scenarios:

- ***Evacuation Alerts, Warnings and Orders:***

  Dissemination of evacuation alerts, warnings and orders are the responsibility of law enforcement. The Placer County Sheriff's Office (PCSO), assisting law enforcement, and other personnel as available commence evacuation notifications using all means such as door to door visits, and use of handheld, vehicular and helicopter mounted public address systems. The IC notifies dispatch as well to disseminate instructions and warnings via the emergency notification system (Everbridge) and assigns Incident PIO to provide the same evacuation instructions to the media (listed at Attachment B) for emergency broadcast.

- ***Evacuation Emergency Medical Services (EMS)***

  Emergency medical services for an evacuation are provided by all fire protection districts through engine-company Advanced Life Support (ALS) and the Truckee (TFPD) and North Tahoe Fire Protection Districts (NTFPD) ambulance service. Ambulance Mutual Aid is requested through the single ordering point established by the IC. The Placer County Medical/Health Operational Area Coordinator (MHOAC) receives requests for medical mutual aid and, if unable to fill the request locally, will forward it to the Regional Disaster Medical Health Coordinator (RDMHC) for action. Requests for aerial evacuation are made from the ICP to dispatch. NTFPD and TFPD also provide Advanced Life Support (ALS) medical transport, i.e., ambulance evacuation/transportation of the medically fragile from health care facilities or homes.

- ***Evacuation Emergency Public Information***

  Public information about the evacuation will be disseminated at the direction of the IC, most often through the Incident PIO. In the event of a fast-moving fire or other life-threatening situation, the Incident PIO, a member of the Tahoe PIO Team or a member of the Auburn PIO Team should be assigned to begin notifications. Using IC guidance, this person will draft, obtain approval and then disseminate the message to critical media. (Attachment B).

Once the County EOC is operational, public information officers from all agencies establish a Joint Information Center (JIC) in which advisories, warnings, traffic updates, press releases, etc. are written, edited, assembled, and, after approval of the IC, released to the public and the media. The JIC also collects and disseminates information gathered from government agencies, businesses or schools regarding evacuation centers (locations where evacuees can get information on the evacuation) and emergency shelters (with overnight provisions), pet disposition, provision of security in evacuated areas, etc. Radio and television stations interrupt regular programming to broadcast emergency instructions as appropriate. Residents and visitors will be encouraged to also monitor instructions provided over the air, on car radios, on-line, or social media. Lastly, the EOC will maintain an emergency evacuation information message on the Public Information hotline at (530) 886-5310 in Auburn, and (530) 584-1590 on the eastern side, as well as on the County website.

- ***Evacuation and Reentry***

  In Unified Command, the decision to evacuate or to prioritize evacuations of multiple areas is made after consultation between Incident Commanders. Execution of the actual evacuation order is by PCSO, with assistance from all other responding law enforcement, if and as available. Individuals will be strongly encouraged to evacuate, however those who refuse evacuation will be allowed to shelter-in-place. During enforcement of the evacuation, law enforcement will encourage family, friends and neighbors to assist any who require assistance (medically fragile, aged, etc). Volunteers, if available, may also be employed to assist those needing help to include assisting those without vehicles get to evacuation bus stops when and if Tahoe Area regional Transit (TART) or Tahoe Truckee Unified School District (TTUSD) or other buses or means of public transport are used.

  To facilitate a rapid and effective evacuation, the IC will identify all directly threatened and potentially threatened areas for evacuation. Evacuation centers and emergency shelters for the evacuees have been pre-coordinated and contact information determined (Attachment A). Upon consultation with OES and American Red Cross, Unified Command will select the emergency shelters and evacuation centers to be used. The decision is based on the threat and the probability that the facilities and routes of ingress and egress will remain out of danger. Pending OES arrival at the incident, the senior County representative coordinates with ARC and HHS to ensure designated facilities are put into operational order.

  Reentry <u>during</u> active response: The Incident Commander is the sole authority for allowing individual reentry into any secured incident area, either on an unlimited or escorted basis, during active response operations. Most often requests for reentry are by homeowners wishing to recover pets or family items, but, as law enforcement maintains incident site security for any

and all incidents, any IC decision on reentry is made after full consultation with law enforcement.

Reentry <u>after</u> active response: Although not the main focus of this plan, upon transition from initial or extended response to remediation of the incident area, general reentry will only be allowed after completion of safety and damage assessments by numerous agencies such as DPW-Roads, Environmental Health, Building Department, and law enforcement/fire forensic investigators, etc. The Damage/Safety Assessment Teams determine the state of damage and threats to public safety from unstable structures such as fire/flood damaged and now unsupported chimneys and walls as well as from other threats such as damaged or weakened roadways, downed lines or fire weakened trees or telephone/power poles. Environmental Health as an example has the responsibility for determining the presence of hazardous materials resulting from burned structures or of contaminants left by receding floodwaters, etc. These assessments will determine, prior to any IC decision, that the area is safe or hazards are clearly marked allowing for unrestricted access by the general public.

- ***Incident Command and Emergency Management***

Tactical employment of fire, law and emergency medical resources, as well as the decision to warn, or evacuate or shelter-in-place is the purview of the IC, and is executed from the Incident Command Post (ICP). Evacuation orders issued during an active emergency response are coordinated under the direction of Incident Commanders acting in Unified Command. It is imperative that all agencies affected by the response, or having critical infrastructure affected or potentially affected by the incident, or which act solely in a support role, initially respond and send representation to the ICP. All agencies should self-refer to the ICP whenever possible rather than waiting on a request to do so.

> *Note: Attachment E is a guide for both fire and law incident commanders who are considering or ordering an emergency evacuation. The Attachment contains general information on the technical aspects of ordering an evacuation as well as a check list for incident commanders.*

Upon the opening of an incident Emergency Operations Center (EOC) by the County, the IC may release some of agency representatives to the EOC. The senior County representative on-scene or OES meets with the Unified Command to better understand the direction the incident is taking and ascertain the best location for an incident EOC, and potentially, an incident base. With that information, the senior County representative also consults with ARC to ensure any requested County support or facility owner/manager concerns are addressed to facilitate the opening and operation of shelters and evacuation centers.

Once alerted, the local Emergency Management Organization (EMO) reports to and works from the incident EOC to provide emergency management and County coordinated support. Upon arrival on-scene, OES assumes direction of active emergency management of the incident from the incident EOC. The EMO maintains communications with the Auburn EOC (if activated) as well as with regional and state agencies, assisting agencies, and the ICP. It coordinates non-tactical matters such as emergency care and shelter, animal services, provision of DPW traffic control assets, damage and safety assessments, evacuation centers and Local Assistance Centers used during recovery, etc. It is through the EMO that the decision to issue a proclamation of local emergency is made and information needed for preparation is provided. Locations that can potentially be used for an incident EOC have been pre-designated and are listed at Attachment D.

- ***Traffic Control***

CHP is primarily responsible for traffic control, however, other agencies such as the Sheriff's Office and the Department of Public Works can and often do assist on an as-needed basis. Potential issues include access and egress for emergency vehicles and evacuees alike, and minimizing or preventing unauthorized traffic entering the affected area. The Unified Command establishes evacuation priorities, and CHP further designates the supporting routes. Placer County Department of Public Works (DPW) and CAL TRANS support traffic control with traffic control implements and personnel, as requested.

The primary roads in the area, Interstate 80 (I-80) and State Highways 28, 89 and 267 comprise the major evacuation routes. Depending on the location and movement of the incident, the Unified Command designates which is or are to be used for evacuation and which for emergency vehicle ingress and egress. When necessary, surface streets will also be designated for evacuees and for emergency vehicle traffic. A map of the major road networks is at Attachment A.

- ***Transportation***

Once students and school sites are secured, school or Tahoe Area Regional Transit (TART) buses may be utilized for evacuations, if required. This may be a viable option during severe winter storms when roads are not passable to normal vehicular traffic. Other buses besides those mentioned above, if available in the area, will also be considered for use. Contact information for buses is at Attachment B.

There may also be instances where boats could be used for ferrying evacuees

across or down the lake due to lakeside road destruction or landslides that close the roads. The U.S. Coast Guard Station Lake Tahoe may be contacted for assistance in coordinating this resource.

- ***Resources and Support***

  Discipline-specific mutual aid for fire, law enforcement and emergency medical services is requested through the single resource ordering point at the ICP. Requests for additional or other resources such as animal services, public works, Red Cross, etc. are requested through (1) agency or OES representatives at the ICP, (2) Dispatch, or (3) once established, through the incident EOC. Requests unable to be filled locally are processed and forwarded by the activated EOC to the State Regional EOC (REOC) for fulfillment by regional, state, or federal resources.

- ***Communications***

  Responders, mutual aid resources and contributing agencies use existing radio communications systems on frequencies coordinated through PSAPs. Additional mobile communications support is available and is requested either through Dispatch or directly from the Communications Coordinator in the EOC. Cellular and satellite phones, as available with local agencies and personnel as well as with responding and supporting agencies, are used as local service and prevailing weather allows. Amateur radio operators, living or working on the eastern slope and in the Auburn area are also available and will be requested by OES to support any major incident involving an evacuation. Requests for Government Emergency Telecommunications Service (GETS), used to prioritize emergency communications traffic when local communications are overwhelmed, are requested by Incident Command or by the EMO Communications Coordinator.

- ***Care and Shelter***

  The Division of Human Services in the Department of Health and Human Services (HHS) coordinates mass care shelters as delineated in the Emergency Operations Plan (EOP). The American Red Cross (ARC) normally opens and operates one or more pre-designated shelters and evacuation centers (Attachment C), but County staff responsibility remains with Human Services. Shelters will be selected based on near- and long-term site security (based the direction of movement of fire or flooding, etc.) and ease of access.

  The Medical/Health Operational Area Coordinator is a position jointly held by the Public Health Officer and the Executive Director of Sierra-Sacramento Valley EMSA (S-SV), responsible during an evacuation for assessing immediate medical needs, coordinating medical evaluations and all other

tasks assigned by the Health and Safety Code. Mental health counseling of evacuees is coordinated by the Adult System of Care Division of HHS.

- ***Animal Services***

  Shelters to accommodate pets/domestic animals (hereinafter "pets") will be set up by Animal Services. However, care and evacuation of pets remains the responsibility of the pet owner. Animal Services coordinates emergency evacuation and care of pets when owners are precluded from entering an area or if pets have had to be abandoned due to the incident or the owner's absence. Pet volunteer organizations may also be available to assist in sheltering. Pets evacuated will be transported to designated areas and held in more permanent custodial care until the incident is resolved or the animal(s) is/are claimed by owners. Local facilities will be designated and promulgated to the public by Animal Services at the time of the incident. Owners able to transport their own pets or animals during an emergency, but who still require temporary shelter, will be directed by Animal Services via traffic control, road signage or public service announcements to emergency holding areas.

b. ***Extended Response***: Unified Command continues in the field in response to the incident. The EMO operates from an incident EOC on the eastern side or from the EOC in Auburn depending on the needs of the incident. The principal focus of extended response concentrates on those activities necessary to ensure rapid reentry and comprise, among other things, damage and safety assessments and preparation and coordination with local, state and federal officials for set up and operation of Local Assistance Centers/Disaster Recovery Centers.

7. Evacuation Responsibilities by Agency

As an evacuation is only one aspect of a larger incident, all Departments and agencies listed below retain responsibility for completing EOP-listed tasks in addition to these evacuation-specific responsibilities.

A. Eastern Side Special Districts

1) Fire Protection Districts/Fire Departments

- Provide Advanced Life Support (ALS) emergency medical services, i.e., engine company ALS
- Provide ALS transport (NTFPD and TFPD only)
- Assist law enforcement with alerts, warning and evacuations as available
- Provide technical fire and geographic area expertise to Unified Command

2) Tahoe Truckee Unified School District

- Open and support use of requested school(s) for use as emergency shelters or evacuation centers.
- Provide school buses to assist in incidents/evacuations, as requested.

B. Placer County Agencies

1) Placer County Deputy CEO – Tahoe

- Senior County representative at incident pending arrival of Program Manager, OES, or designee.
- In consultation with OES and the IC and considering the physical characteristics of the incident, select location for Incident EOC. Coordinate sites for emergency shelters/evacuation centers and ensure their operational status.
- Serve as Incident EOC Director pending arrival of OES, and direct EMO members of County staff on eastern side to report to EOC.

2) Office of Emergency Services (OES)

- Provide County emergency management support of the evacuation as part of a larger, more significant incident such as forest fire, flood, etc.
- Activate the Emergency Management Organization in Auburn or at the Incident EOC on the Eastern Slope, as appropriate. This includes County Public Information Lead/Team if activation hasn't already occurred
- Coordinate with Local, State (CalOES, CALFIRE, CHP, CAL TRANS, etc.) and federal agencies as well as other public and private entities, if deployed, for support and to provide current incident operational information.
- Consider long-term ramifications of the evacuation and begin planning for return of evacuees.
- Begin planning and coordination for incident recovery.

3) Placer County Sheriff's Office (PCSO)

- Alert and warn all persons and businesses to be evacuated, including the use of the emergency notification system, as required.
- Implement evacuation – notify residents and businesses, and certify areas as clear of inhabitants, transients, those using recreational facilities, etc.
- Provide mobile communications support for the evacuation, as requested.
- Provide Search and Rescue team support as requested to support the evacuation or evacuees.

4) Public Information Officer (PIO)

- Coordinate and prepare advisories, warnings, updates and evacuation orders for broadcast to responding agencies, school authorities, media, and the public.
- Include evacuation information in Joint Information Center (JIC) operations and provide it to media, the public, and other jurisdictions.

5) Department of Health & Human Services (HHS)

- **Human Services Division**

Provide or coordinate with ARC and other agencies for the opening and operation of shelters for evacuees.

- **Adult System of Care**
  Provide or coordinate mental health services for evacuees

- **Environmental Health**
  - As a member of Damage and Safety Assessment Teams, provide technical, environmental health expertise to IC for determining advisability of allowing reentry into evacuated areas during active response operations.
  - Coordinate or provide testing of evacuated areas for hazardous materials, environmental health hazards and infectious diseases.

- **Animal Services**
  - Provide or arrange transport and care of abandoned pets and those unable to be transported by their owners.
  - Coordinate and manage holding areas for pets of evacuees for those unable to care for their pets or those in emergency shelters

6) Department of Public Works - Tahoe

- Assist evacuation with traffic closure level analysis and traffic control equipment, as requested
- Provide evacuation support (vehicles, personnel, etc.) as requested.
- Assist with maintaining County road access as requested in matters such as clearing downed trees, snow and mudslide removal and flood affect abatement.
- Participate in Safety and Damage Assessment Teams, as needed.

7) Planning Department – Tahoe

Land Use Manager for Tahoe Area is second in order of seniority among Placer County agency heads on the eastern side.

8) Building Department – Tahoe

Participate in Safety and Damage Assessment Teams, as needed

9) Facility Services Department

Participate in Safety and Damage Assessment Teams, as needed

C. State Agencies

1) California Highway Patrol

- Provide evacuation traffic control.
- Determine primary and alternate evacuation routes.
- Assist PCSO, as requested, in alerting, warning and evacuations.

2) **California Department of Transportation (CALTRANS)**
Assist CHP as requested with traffic control

3) **California State Parks**
Provide disposition and status of visitors and staff in park facilities before, during and after an evacuation.

D. USDA Forest Service
Provide disposition of visitors and staff in forests before, during and after an evacuation.

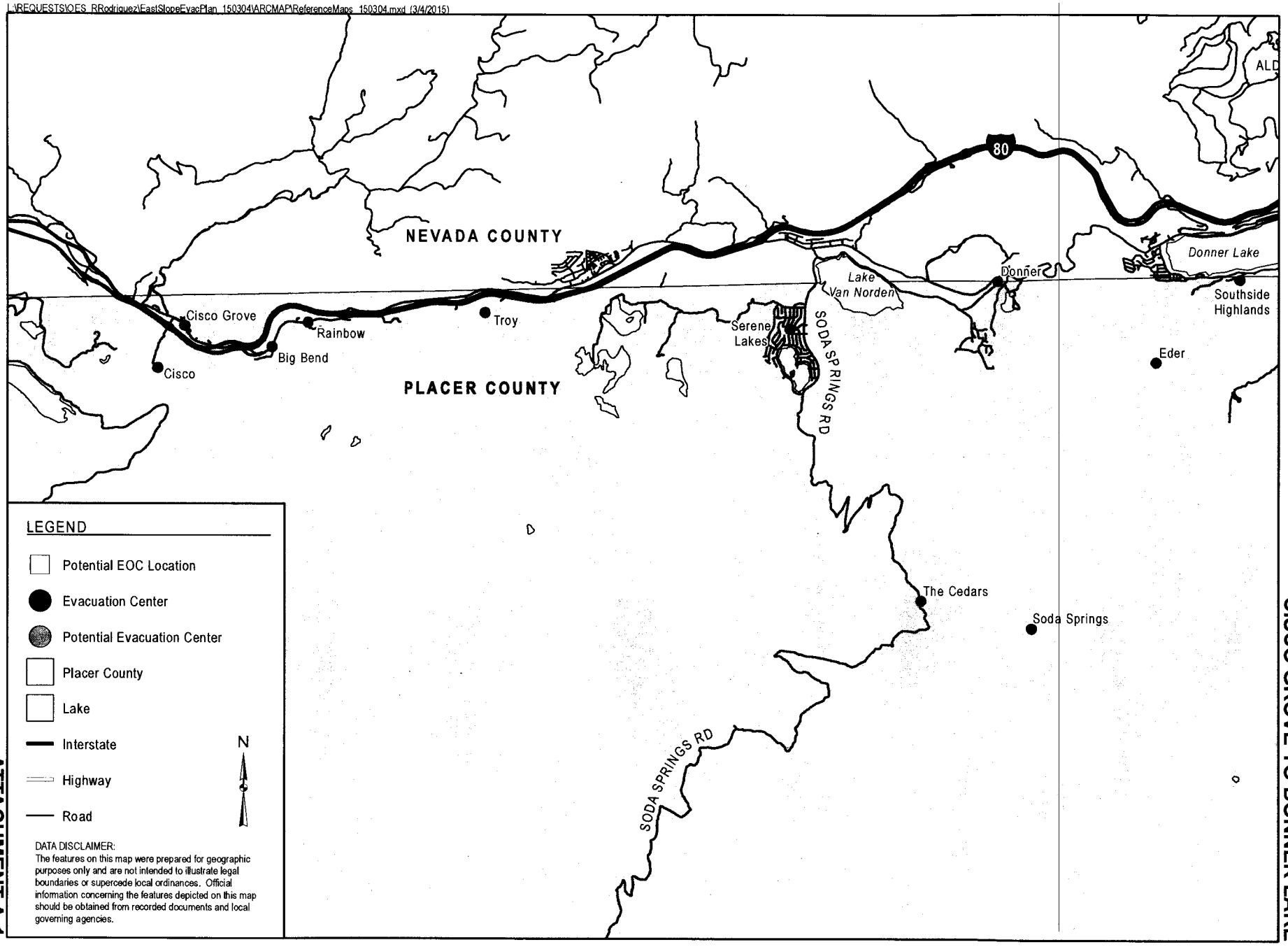
E. Other Agencies

1) **American Red Cross**
Open and operate emergency shelters or evacuation centers, as necessary, and coordinate local volunteer support of the shelters.

2) **Sierra-Sacramento Valley Emergency Medical Services Agency (S-SV)**
In conjunction with the Placer County Public Health Officer, execute all Medical Health Operational Area Coordinator tasks regarding provision of medical care for evacuees, coordination of medical and health resources, etc. per provisions of the Public Health and Safety Code, Sections 1797.150-153.

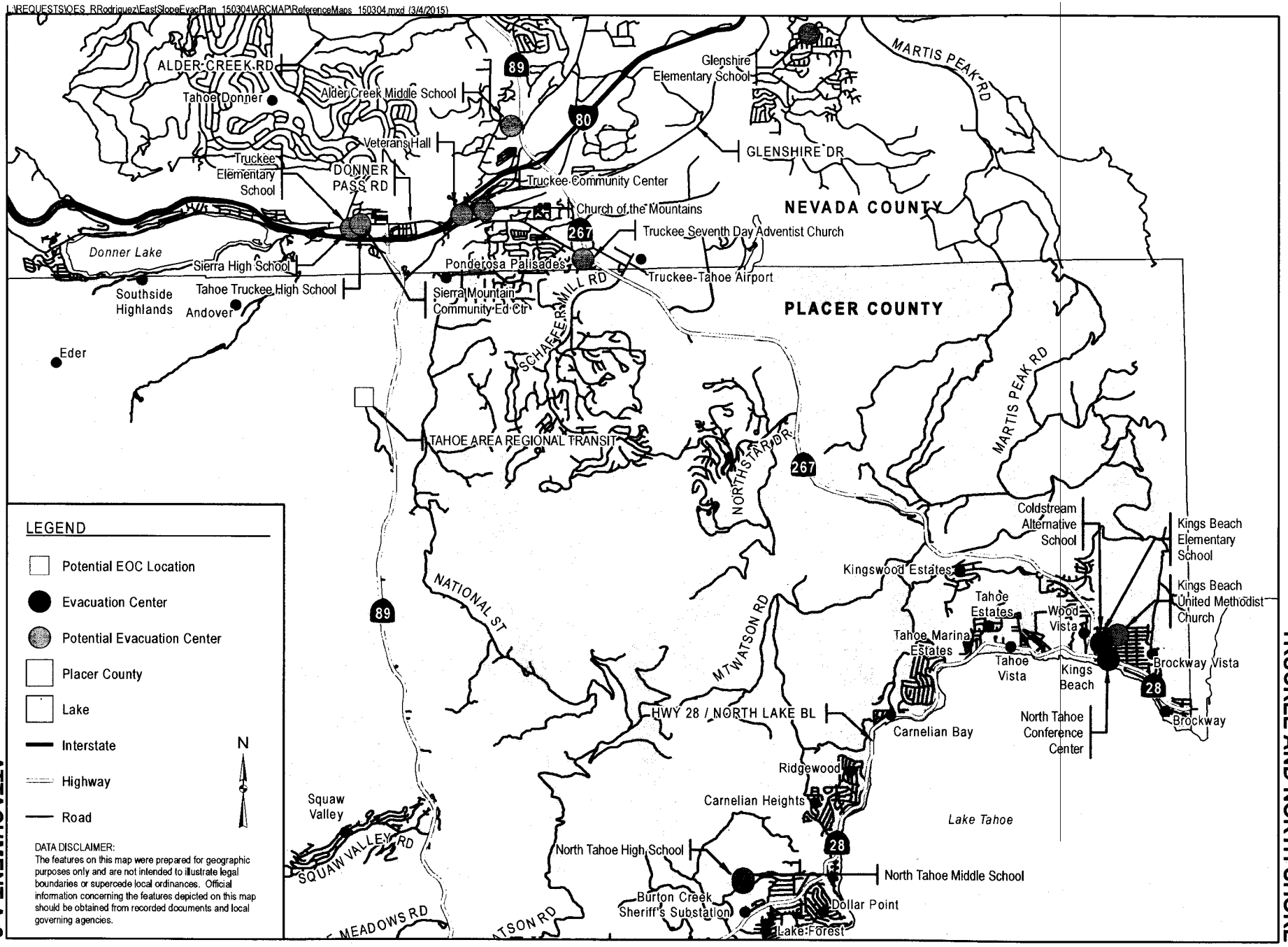
3) **Out of County Mutual Aid Providers**
Law enforcement, fire and emergency medical services mutual aid providers in Nevada and El Dorado Counties and the State of Nevada are requested to maintain familiarity with this plan to provide mutual aid as requested.

Attachments:
- **A.** Maps: Road Networks and Key Emergency Facility Locations
- **B.** Important Phone Numbers/Contact Information including Media
- **C.** Contact Information for Shelters and Evacuation Centers
- **D.** Alternate EOC Locations
- **E.** Immediate Emergency Evacuation Guidelines for Incident Commanders



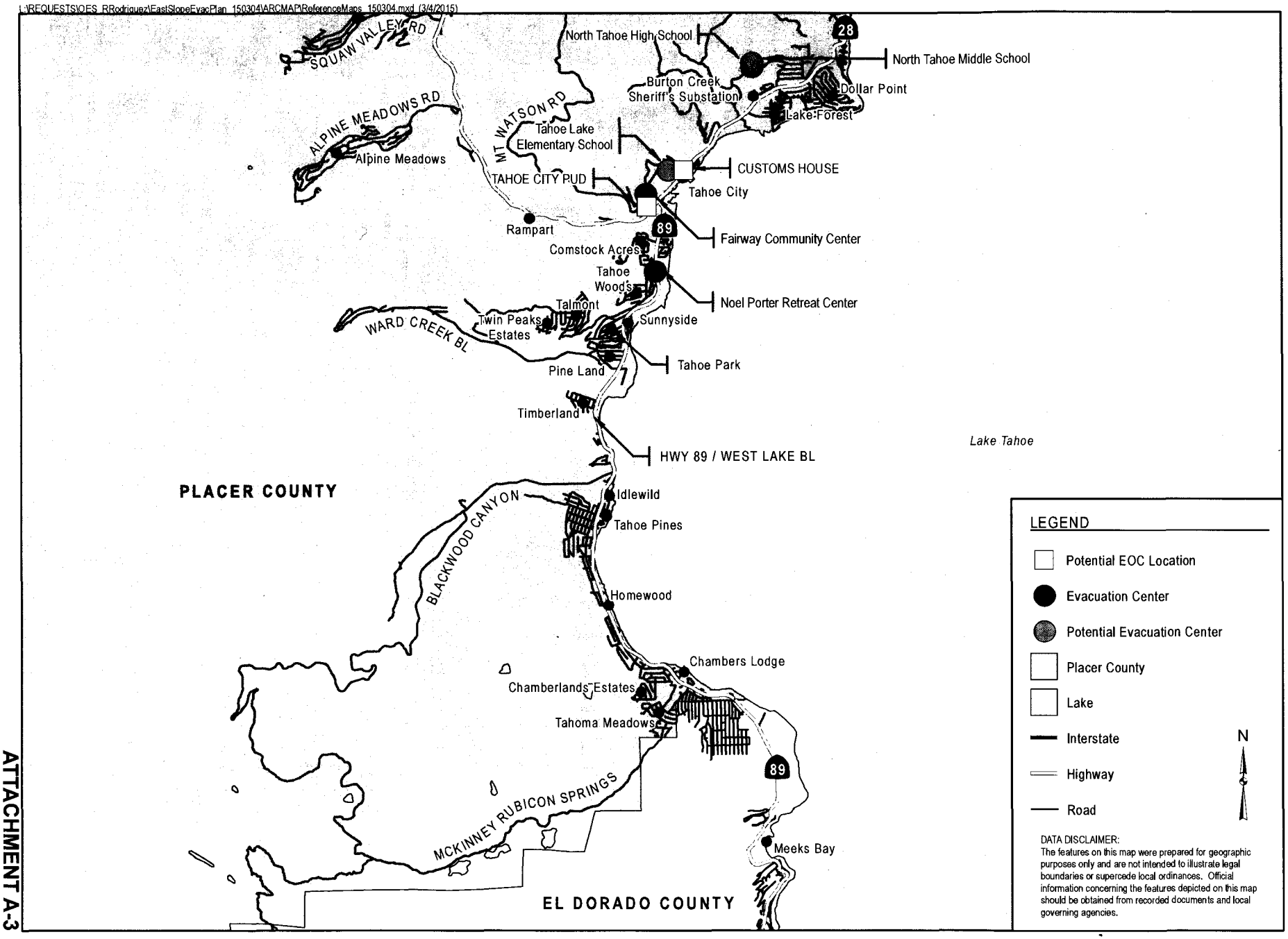
ATTACHMENT A-1

CISCO GROVE TO DONNER LAKE



TRUCKEE AND NORTH SHORE

ATTACHMENT A-2



WEST SHORE TO MEEKS BAY

ATTACHMENT A-3

ATTACHMENT B - EMERGENCY CONTACT INFORMATION

(All Numbers are (530) except as noted)

AGENCY	***OFFICE***	***Emergency/ After Hours/Weekends***
American Red Cross (ARC) - Tahoe	**916-993-7070**	**391-8234**
Alpine Springs County Water District	**583-2342**	**866-696-9608**
CA Dept. of Fish & Game (DF&G)	**916-358-2882**	**888-334-2258**
CAL FIRE - Truckee FFS		
BC - Troy Adamson	**582-9471**	
Dispatch: ECC-Grass Valley	**477-0641(ofc)**	**477-5761**
CA State Parks - Tahoma	**525-7232**	**916-358-0333 (Dispatch)**
CALTRANS - District 3	**582-7500**	**582-7550 (Dispatch)**
CHP - Truckee Area	**582-7500 (Public)**	**582-7550 (Dispatch)**
Lake Tahoe Basin Mgmt. Unit-North	**543-2600**	**642-5170 (ECC-Camino)**
Meeks Bay FPD (El Dorado County)		
Office	**525-7548**	**581-6335**
Chief - Tim Alameda	**525-7548**	**448-4365**
North Lake Tahoe FPD (Nevada)	**775- 831-0351**	**775 - 831-0587**
North Tahoe Fire Protection District	**583-6911**	**583-6911 x 605**
Chief: Mike Schwartz		**448-2524**
North Tahoe Public Utility District		
Office	**583-3796**	**546-4212**
GM: Cindy Gustafson	**546-4212**	**546-4212**
Northstar Community Service District		
Fire Dept	**562-1212**	**562-1212**
Fire Chief: Mark Shadowens		**308-1241**
Gen Mgr.	**562-0747 x101**	
Placer County		
(Contact all through Sheriff's Dispatch if unable to call direct)		
Placer County Fire	**889-0111**	**477-5761 (ECC-Grass Valley)**
CEO Rep-Tahoe: Jennifer Merchant	**546-1952**	**308-1243**
OES	**886-4600**	
Emergency Operation Center (Auburn)	**866-5300**	**(DURING ACTIVATION ONLY)**
OES Duty Officer	**886-4600**	**886-5375 (Dispatch)**
PIO -Tahoe: Robert Miller	**889-4080**	**308-2013**
HHS - Tahoe	**546-1900**	

Environmental Health	581-6240	
Animal Services	546-4260	308-1017 or 886-5375 (Dispatc
Sheriff's Office - Auburn Dispatch	886-5375	
Sheriff's Office - Tahoe	581-6300	
Tahoe Dispatch	886-5375	
Tahoe- Capt.: Denis Walsh	581-6312	
Public Works - Tahoe	581-6230	
Liberty Utilities	800-782-2506	
Reg'l Emer Mgr.: Blaine Ladd	721-7363	
Squaw Valley Fire Department	583-6111	
Chief: Pete Bansen	583-6111	523-6025
Duty Officer	583-6111	
Squaw Valley Pub Service District	583-4692	866-411-6917 (On Call)
General Manager: Mike Geary	583-4692 x 211	587-5223
Tahoe Area Regional Transit	550-1212	308-1020
Transit Manager Frank Silva	550-1212	308-1020
Tahoe City Public Utility District	583-3796	546-1215
GM: Cindy Gustafson	583-3796	546-1215
After Hours Answering Service		546-1215
Tahoe National Forest	265-4531	477-5761 (ECC-Grass Valley)
Tahoe-Truckee Sanitation Agency	587-2525	587-2525 ( )
Tahoe-Truckee Unified School District	582-2500	
Superintendent Dr.Rob Leri	582-2555	626-523-1267
Placer County - continued		
Truckee		
Town Mgr.: Tony Lashbrook	550-7700	582-2901
PIO: Alex Terrazas	550-7700	265-7880
Police Dispatch	550-2320	265-7880
Truckee Donner PUD	587-3896	
Truckee Fire Protection District	582-7850	
Chief: Bob Bena		308-2703
Truckee Tahoe Airport District	587-4540	
Truckee Sanitary District	587-3804	
US Coast Guard	583-4433	583-0911
US FS - Tahoe National Forest	265-4531	
US FS - Lake Tahoe Basin Mgmt. Unit	543-2600	

Washoe County Sheriff's - Incline		
Office	**775 - 328-4110**	
Dispatch	**775 - 765-9276**	
Water Quality Ctl Board-Lahontan	**542-5400**	**542-5400**
Admin Officer	**542-5428**	**542-5400**
Media Contacts: (All numbers are 24x7)		
Sierra Sun Newspaper	**583-3488**	
KTHO radio - South Lake Tahoe	**543-0590**	
KTKE radio - Truckee	**587-9999**	**550-0371**
KRLT radio - South Lake Tahoe	**775-580-7130**	**775-586-9399**
KKTO radio - Tahoe City/Reno	**916-278-8900**	
KUNR radio- Reno/Truckee	**775-682-6064**	**775-784-1867**
KOH radio AM - Reno (EAS)	**775-325-9178**	**775-789-6700**
KTVN - TV Reno	**775 - 858-2222**	**775-861-4290**
KOLO - TV Reno	**775 - 858-8888**	
Cable Television Carriers		
Southern link Communications	**587-6100**	
Charter	**775-348-2772**	

ATTACHMENT C
EMERGENCY SHELTERS AND EVACUATION CENTERS

Kings Beach

North Tahoe Event Center
8318 North Lake Boulevard
Kings Beach 96143
564-4212 Office
564-4212 After Hours
POC: William Selter/ Chief Engineer

Kings Beach Elementary
8125 Steelhead
Kings Beach 96143
546-2605 Office
530-546-2605 After Hours
POC: Kyle Mohagen/ Principal

Kings Beach United Methodist Church
8425 Dolly Varden Avenue
Kings Beach 96143
546-2290 Office
775-831-4200 After Hours
POC: Sandy Barnstead/ Pastor

Tahoe City:

Noel Porter Retreat Center
855 Westlake Boulevard
Tahoe City 95145
583-3014 Office
386-2834 After Hours
POC: Jenny Liem/ Executive Director

North Tahoe Middle School
2945 Polaris Road
Tahoe City 96145
581-7050 - Office
386-4310 After Hours
POC: Theresa Rensch/ Principal

North Tahoe High School
2945 Polaris Road
Tahoe City 96145
581-7000 Office
362-2438 After Hours
POC:Joann Mitchell/Principal

Tahoe Lake Elementary School
375 Grove Street
Tahoe City96145
583-3010 Office
582-2577 After Hours
POC: Mark Button/Head of Facilities

Fairway Community Center
330 Fairway Center
Tahoe City, CA 96145
583-3796 Office
546-1215 After Hours Answering Service
POC: Cindy Gustafson /General Manager
546-1215 After Hours (TCPUD)

ATTACHMENT C (CONTINUED)

Truckee:

Alder Creek Middle School
10931 Alder Drive
(530) 582-2750 - Office
(530) 550-9557 - Hien Larson
(530) 626-1403 - Steve Scott
(530) 308-7711 - Mark Button

Glenshire Elementary School
10990 Dorchester Drive
(530) 582-7675 - Office
(530) 587-2712 - Kathleen Gauthier
(530) 308-7711 - Mark Button

Sierra High School
11661 Donner Pass Road
(530) 582-2640 - Office
(530) 373-9409 - Greg Wohlman
(530) 308-7711 - Mark Button

Church of the Mountains
10069 Church Street
(530) 587-4407 - Office
(530) 550-9964 - Jeff Hall (Pastor)

Truckee Seventh Day Adventist Church
11662 Brockway Road
(530) 587-5067 - Office

Tahoe Truckee High School
11725 Donner Pass Road
(530) 582-2600 - Office
(530) 279-4683 - Logan Mallonee
(530) 786-7083 - John Carlson
(530) 308-7711 - Mark Button

Truckee Elementary School
11911 Donner Pass Road
(530) 582-2650 - Office
(530) 562-6211 - Valerie Simpson
(530) 308-7711 - Mark Button

Truckee Community Center
10046 Church Street
(530) 682-7720 -Office

Veterans Hall
10214 High Street
(530) 682-7720 - Office
(530) 582-5970 - Steve Randall

Sierra Mountain Comm Ed Ctr (TTUSD)
11603 Donner Pass Road
(530) 582-2640 - Office
(530) 308-7711 - Mark Button

ATTACHMENT D

POTENTIAL EOC LOCATIONS

* Primary location
(All phones are Area Code 530)

Custom House (Conference Room)*
775 North Lake Blvd
Tahoe City
581-6200 Office
581-6204 Fax
886-5375 After Hours/Disbatch

Tahoe Area Regional Transit
870 Cabin Creek Road
Truckee
550-1212 Office
550-0266 Fax
308-1020 After Hours

Tahoe City PUD
221 Fairway Drive
Tahoe City
583-3796 Office
583-1475 Fax
546-1215 After Hours Answering Service

Attachment E
Immediate Emergency Evacuation Guidelines

To be used by first-arriving fire and law enforcement on a threat to health and public safety causing consideration of an immediate emergency evacuation

1. **Identify map *control features* and event condition *trigger points* for directly affected or potentially affected areas.**

   - ***Control features*** are grid lines or map symbols for such things as schools, churches, hospitals, railroads, or other easily identifiable objects or landmarks.

   - ***Trigger points*** - are resource, weather or incident specific conditions that once arrived at are cause for immediate action. Examples are nearness of a fire to a structure or landmark, increasing wind speeds at a fire, approach of a rain storm, or the lack of needed resources. Any one of these can cause either an Evacuation *Order* to be issued or an Evacuation *Warning* to be changed to an Evacuation *Order.*

2. **Law enforcement and fire Incident Commanders collaborate and issue, through Dispatch, an evacuation warning, order or shelter in place order:**

   - **Evacuation Warning:** To warn the residents and the public in a potentially threatened area being considered for evacuation (Advise both the public and the media, and use map grids or *control features* to identify the limits of the area).

   - **Evacuation Order:** To evacuate areas under immediate threat (use map grids or *control features* to identify the specific area).

   - **Shelter In Place Order:** To direct residents to remain in place (issued due to hazardous conditions such as narrow roads, poor visibility, toxic gases, etc.)

3. **Use Traffic Control Points (TCP) and Closure "levels":**

   - **Level 1 -** Residents only; Escorts may be required.
   - **Level 2 -** Closed to all traffic except fire, law, emergency medical services, and critical resources, e.g., public works, power, telecommunications, etc. Escorts may be required.
   - **Level 3 -** Closed to all traffic except fire and law.
   - **Level 4 -** Closed to all traffic. Area blocked or not safe even for fire or law.

Examples of warning or evacuation orders:

- **"An Evacuation Warning has been issued for the Alpine Meadows Subdivision as a Potential Threat Area.** No closures are in affect at this time, however if the fire reaches Secret Town Canyon, an **Evacuation Order** will be issued and **Level 1** road closure implemented. Affected area is grids A3, A4 B3, B4, C3, and A5 of the Compass Map 2002 Placer County Street and Road Atlas."

- **"An Evacuation Order has been issued for the Sunnyside/Timberland area as an Immediate Threat Area. Level 3** road closure is in affect (closed to traffic except fire and law). Affected area is all area south of Ward Creek Boulevard/Pineland Drive and north of Blackwood Canyon Road. Two TCPs are set up on West Lake Boulevard – one at Pineland Drive and one at Blackwood Canyon Road "

EVACUATION CHECK LIST

___Use standardized map symbols and grid identifiers if possible
___Determine and consider direction of spread/threat
___Notify and update dispatch (PCSO, ECC – Grass Valley or Camino)
___Notify Duty Chief
___Request PCSO Sergeant (or higher) for evacuation, if not already present
___Establish Incident Command Post (ICP) with law, fire, others
___Request County OES and PIO resources
___If evacuation is significant, form Evacuation Branch and designate director
___Assess threat with other ICs and request appropriate fire and law resources
___Establish evacuation task force of fire/rescue, medical (ambulance) and law enforcement to evacuate non-ambulatory civilians in the threat area.
___Establish resource staging area(s)
___Determine threatened areas and road closure level
___Request dispatch use emergency notification system (Everbridge (Placer County), CodeRED (Nevada County), Nixle (Town of Truckee), etc.) to notify affected area, if necessary
___Identify trigger points and action to be taken when reached
___Establish traffic control points (use CAL TRANS, DPW, etc., if available)
___Establish evacuations routes
___Identify and establish evacuation centers
___Identify and establish potential "safe haven" locations
___Contact Media for information dissemination (use PIO if at scene, if not utilize dispatch). Instruct media to inform the public to call 911 if unable to evacuate.
___Establish MCI or Medical Group, as needed
___Notify Red Cross or appropriate agency
___Consider logistics, e.g. food, water, sanitation, blankets, shelters, counselors
___Request animal evacuation groups, if necessary
___Consider transport (school or public buses) for large groups (campers, church groups, senior citizen centers, etc.)
___Request DPW or CALTRANS keep roads physically cleared of obstacles and wrecks
___Assess feedback from command staff and field; Assess future incident potential
___Brief public officials, politicians, media, etc. as required/requested

Distribution:

American Red Cross
Alpine Springs County Water District
CA Department of Fish & Game
CAL FIRE – NYP Ranger Unit
CAL FIRE – Truckee FFS
CA Highway Patrol (CHP)
CA State Parks – Tahoma Office
CA Transportation (CALTRANS) – District 3
Meeks Bay Fire Protection District
Nevada County:
- Sheriff's Office
- Office of Emergency Services
- Town of Truckee

North Lake Tahoe Fire Protection District (Nevada)
North Tahoe Fire Protection District
North Tahoe Public Utilities District
Northstar Community Service District
Placer County:
- County Executive Office including
  - Asst Dir, Emergency Services
  - County Executive Officer Rep at Tahoe
- Facility Services
- Health and Human Services (HHS) including
  - Adult System of Care
  - Animal Services
  - Environmental Health
  - Human Services
- Office of Emergency Services (OES)
- Planning Department including
  - Tahoe Office
- Public Information Officer (PIO)
- Public Works including
  - Senior Engineer – Tahoe
  - Tahoe Area Regional Transit
- Sheriff's Office including
  - Field Operations and Auburn Dispatch
  - Tahoe Captain

Liberty Utilities
Squaw Valley Public Service District
Tahoe City Public Utility District
Tahoe-Truckee Sanitation Agency
Tahoe-Truckee Unified School District
Truckee – Town
Truckee Donner Public Utility District
Truckee Fire Protection District
Truckee Sanitary District
Truckee Tahoe Airport
US Coast Guard – Tahoe

Distribution (Continued)

US Forest Service
- Lake Tahoe Basin Management Unit
- Tahoe National Forest – Truckee

Washoe County, Nevada Sheriff's Office – Incline

Letter of Promulgation

East Side Emergency Evacuation Plan

2015 Update

The preservation of life and the protection of property and the natural environment are the responsibilities of government, primarily of public safety agencies and supporting individuals, units and organizations. Therefore, due to the high likelihood of a catastrophic wild fire or other disaster occurring in one or more of the communities of eastern Placer County, the *East Side Emergency Evacuation Plan* was developed. The plan helps ensure higher survivability by coordinating individual agency plans and the County Emergency Operations Plan for evacuations brought on by a larger disaster or emergency incident. Since the onset of an incident is often very chaotic, a well-coordinated and vetted plan such as this is critical to reducing confusion, speeding the response, and ensuring the safety of the evacuees and responders alike.

The *East Side Emergency Evacuation Plan* was written in cooperation with numerous public safety and public service agencies in Placer County and Nevada County. It deconflicts evacuation plans of public safety agencies and removes some uncertainly or confusion often present when time is truly of the essence.

On _____, 2015, the Placer County Board of Supervisors adopted Resolution No. _____ thereby formally approving and adopting the 2015 Update to the East Side Emergency Evacuation Plan.

All public safety individuals and first-responder agencies, potential mutual aid providers, and concerned citizens are encouraged to read this plan, be familiar with its concepts and be prepared to help when disaster strikes.

_____ _____

Kirk Uhler
Chair, Board of Supervisors

Jennifer Montgomery
Supervisor, District 5

Date: _____

Dated: _____