ENVIRONMENTAL INITIAL STUDY & MITIGATED NEGATIVE DECLARATION

Zone Amendment 22-0007
Parcel Map 22-0004
Maverik, Inc.

February 7, 2024

ENVIRONMENTAL INITIAL STUDY &
MITIGATED NEGATIVE DECLARATION
WITH
References and Documentation

Prepared by
SHASTA COUNTY DEPARTMENT OF RESOURCE MANAGEMENT
PLANNING DIVISION
1855 Placer Street, Suite 103
Redding, California 96001
SHASTA COUNTY

Technical Assistance by

350 Hartnell Avenue, Suite B
Redding, CA 96002-1875
(530) 221-5424

ENVIRONMENTAL CHECKLIST FORM
INITIAL STUDY & MITIGATED NEGATIVE DECLARATION

1. Project Title:
Zone Amendment 22-0004 and Parcel Map 22-0007 (Maverik, Inc.)

2. Lead Agency:
Shasta County Department of Resource Management, Planning Division
1855 Placer Street, Suite 103
Redding, CA 96001-1759

3. Contact Person and Phone Number:
Lio Salazar, Planning Division Manager (530) 225-5532

4. Project Location:
The approximately 30.49-acre project site is in unincorporated Shasta County on the northwest corner of the intersection of Knighton Road and Churn Creek Road, Redding, CA 96002 which is located approximately two miles south of the City of Redding and immediately east of the northbound on ramp to northbound Interstate 5 (I-5) (Assessor's Parcel Number (APN) 055-160-012, 055-160-009, 055-160-008).

4. Property Owner Name and Address:
GRH Pocatello Square, LLC Etal.
885 West Broad Street, Suite 300
Boise, ID, 83702

5. Applicant Name and Address:
Kevin Deis
Maverik, Inc.
185 South State Street
Salt Lake City, UT 84111

6. Representative Name and Address:
Kimley-Horn and Associates
555 Capitol Mall, Suite 300
Sacramento, CA 95814

7. General Plan Designation:
Commercial (C) and Part-Time Agricultural (A-cg)

8. Zoning:
Planned Development – Restrictive Flood (PD-F-2)

9. Description of Project:
The project is a proposal to change the zoning for two parcels totaling 15 acres from the Planned Development combined with the Restrictive Flood (PD-F-2) zone district to the Limited Agriculture combined with the Restrictive Flood (A-1-F-2) zone district, to change the zoning for a 6.85 acre portion of a 15.49-acre parcel from the Planned Development combined with the Restrictive Flood (PD-F2) to the Limited Agriculture combined with the Restrictive Flood (A-1-F-2) zone district, and to change a 8.64-acre portion of the same parcel from the PD-F-2 zone district to the Highway Commercial combined with the Restrictive Flood (C-H-F-2) zone district.

Additionally, the project proposes to subdivide the 15.49-acre parcel into two (2) parcels and a remainder parcel of 4.99-acres (Parcel 1), 3.65-acres (Parcel 2), and 6.85-acres (Remainder). The proposed C-H-F-2 zone district would include a Conceptual Development Plan and development standards to allow and govern the construction and operation of a 5,951-square-foot retail convenience store, sit-down restaurant and coffee shop, a 20-pump fuel island with a canopy for standard vehicles, a 10-pump fuel island with a canopy for trucks and recreational vehicles, a parking area with a total of 32 parking spaces, including 23 standard vehicle parking spaces, 2 accessible vehicle parking spaces and 8 designated electric vehicle parking spaces (one of which will be accessible) along with associated on-site landscape, lighting, commercial driveways and drainage improvements on proposed Parcel 1 (4.99-acres) with the conceptual development plan for proposed Parcel 2 being vacant land. Future development proposals for uses permissible under the proposed C-H-F-2 zone district would be subject to approval of a use permit to allow modification of the conceptual development plan. The impacts of a specific future use(s) and development proposal for Parcel 2 would be identified in the use permit application. The use permit application would be subject to review under California Environmental Quality Act (CEQA) and a discretionary decision regarding the environmental determination and merits of the proposed project would be subject to public hearing before the Shasta County Planning Commission.

Construction would include tree removal, grading to prepare the site for improvements, road and circulation improvements, including sidewalks, roadside drainage conveyances, and road widening, and an onsite wastewater treatment system to serve the retail convenience store, inclusive of sit-down restaurant, and coffee shop. No use or improvement of Parcel 2 and the remainder is proposed at this time. Any future development of these parcels for uses allowed in the Highway Commercial zone district would require approval of an application for a discretionary use permit which would be subject to review pursuant to the CEQA. No use or improvement is proposed for the two parcels totaling 15 acres that are proposed to be rezoned from PD-F-2 to A-1-F-2. Future by-right development of these parcel would be limited to agricultural and residential use and uses accessory thereto. Any future discretionary use proposed for these parcels would be subject to review pursuant to the CEQA. Additional project details are provided at #13 below.

10. Setting and Surrounding Land Uses:

The adjacent land to the north of the project site is undeveloped. It is designated as Part-Time Agricultural (A-cg) by the Shasta County General Plan and is zoned Planned Development combined with the Restrictive Flood (PD-F-2) zone district. The project site is bound by Churn Creek Road to the east. Adjacent to the east of Churn Creek Road are undeveloped parcels that have been used for agriculture and are also designated A-cg but are zoned Limited Agriculture combined with Restrictive Flood (A-1-F-2). The project site is bound by Knighton Road to the south. Land adjacent to the south of Knighton Road is developed with a TravelCenters of America (TA) Travel Center that occupies an approximate 15-acre parcel and provides services for semi-truck tractor trailer fueling, parking, repairs, and maintenance, as well as fueling for passenger vehicles, and a convenience store. This property is designated Commercial (C) by the Shasta County General Plan and is zoned Commercial Light Industrial combined with Restrictive Flood (C-M-F-2). To the west of the project site is the I-5/Knighton Road interchange. The onramp to the northbound lanes of I-5 is immediately adjacent to the project site. In the greater vicinity, land uses are primarily comprised of large lots that are designated A-cg by the Shasta County General Plan. These lots include a mix of undeveloped land and land developed for agricultural use and/or residential use. To the southeast of the intersection of Knighton Road and Churn Creek Road is Pacheco School and a mobile home park that is not currently occupied. Approximately five parcels of land adjacent to the southwest quadrant of the I-5/Knighton Road interchange are designated C by the Shasta County General Plan and are zoned C-H combined with the Design Review (C-H-DR) zone district. All these lots are undeveloped except for one that is developed with a non-conforming one-family residential use.

11. Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement.):

California Department of Fish and Wildlife
California Department of Transportation

California Regional Water Quality Control Board
Shasta County Air Quality Management District
Shasta County Environmental Health Division
Shasta County Building Division
Shasta County Fire Department

12. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code 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.?

In accordance with Public Resources Code (PRC) Section 21080.3.1, the Wintu Tribe of Northern California and Toyon-Wintu Center (Wintu Tribe) and Paskenta Band of Nomlaki Indians filed, and Shasta County received a request for formal notification of proposed projects within an area of Shasta County that is traditionally and culturally affiliated with the Tribes. Pursuant to PRC §21080.3.1 the Department of Resource Management sent a certified letter to notify the Tribes that the project was under review and to provide the Tribe 30 days from the receipt of the letter to request formal consultation on the project in writing.

Certified mail records show that on September 26, 2024, a certified tribal consultation letter was sent to the Tribes and was received by the Tribes on September 30, 2024. As of October 30, 2024, the Wintu Tribe of Northern California Tribe has not responded nor requested formal consultation. Therefore, the requirements of AB52 have been met with respect to the Wintu Tribe of Northern California and no AB52 project consultation with the Wintu Tribe of Northern California is required. The Paskenta Tribe of Nomlaki Indians responded to the certified tribal consultation letter on October 7, 2024, with a request for consultation. The County met with the Paskenta Tribe of Nomlaki Indians Tribal Historic Preservation Officer (THPO) on November 22, 2024, for formal consultation on the project. As a result of the formal consultation, the THPO requested that Cultural Sensitivity Training be conducted for all staff prior to the start of work on the project area and recommended tribal monitoring for all ground disturbance activities (grubbing, infrastructure installation, detention ponds, fuel tanks, leech lines). On December 30, 2024, the Tribe withdrew this request and recommendation.

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 per Public Resources Code section 5097.96 and the California Historical Resources Information System administered by the California Office of Historic Preservation. Please also note that Public Resources Code section 21082.3(c) contains provisions specific to confidentiality.

Information contained in the Cultural Resources Inventory for the Knighton Maverik Service Station, Shasta County, California (ENPLAN, 2022) related on the specific location of prehistoric and historic sites is confidential and exempt from the Freedom of Information Act (FOIA) and the California Public Records Act (CPRA); therefore, site specific cultural resource investigations are not attached to this Initial Study. Professionally qualified individuals, as determined by the California Office of Historic Preservation, may contact the Shasta County Department of Resource Management, Planning Division directly in order to inquire about its availability.

13. Additional Project Details:

Regional Setting

The project is in northern California and located specifically in Shasta County, which is approximately 188 miles northeast of San Francisco and approximately 100 miles south of the Oregon border. Shasta County occupies the northern reaches of the Sacramento Valley, with portions extending into the southern reaches of the Cascade Range.

Topography within the County ranges from the flat valley area in and around the City of Redding and project site, approximately 300 to 500 feet above mean sea level (msl), to steep mountainous areas including Mount Lassen which is 10,455 feet above msl. Mount Shasta is approximately 60 miles to the north and is within Siskiyou County which borders Shasta County to the north. The Sacramento River is the major watercourse within the County, flows out of the Cascade mountains to the north and through the center of the County and south into the Sacramento Valley. The river is located approximately 0.5 miles west of the project across I-5.

Local Setting

The adjacent parcel to the north is a vacant field that appears to be periodically mowed and/or use for agriculture. This area is designated as A-cg by the Shasta County General Plan. The project site is bound by Churn Creek Road to the east. Adjacent to the east of Churn Creek Road is an undeveloped parcel that has been used for agriculture and also is designated as A-cg. The project site is bound by Knighton Road to the south. The existing TA Travel Center occupies an approximately 15-acre parcel south of Knighton Road and provides services for semi-truck tractor trailer fueling, parking, repairs, and maintenance, as well as fueling for passenger vehicles, convenience store and restaurant. This area is designated as Commercial (C).

To the southeast of the intersection of Knighton Road and Churn Creek Road is Pacheco School. The school serves a total of 363 students between 4th to 8th Grade and is primarily accessed via Pacheco School Road that intersects with the easterly segment of Churn Creek Road approximately one mile to the east. This area is designated by the County as A-cg. To the west of the project site is the I-5/Knighton Road interchange. The northbound onramp to the northbound lanes of I-5 is adjacent to the west. Across I-5, the area is largely undeveloped but contain a series of rural residential properties also designated as A-cg by the Shasta County General Plan.

Existing Conditions

The project site is relatively flat, ranging in elevation from approximately 440 to 450 feet above msl. The northern portion of the site are the two parcels of land that are proposed to be rezoned from PD-F-2 to A-1-F-2. This portion of the site is currently a vacant field that has undergone intermittent mowing activities but now contains upland ruderal vegetation with mostly grasses. Within the northerly portion of this area there was an approximate 4.5-acre area previously used as a nursery. This use was removed between 2009 and 2010 the area has reverted to more natural vegetative patterns. Portions of the site were previously developed with a one-family home; the house and outbuildings were removed some time after 1998, and the site is now used as grazing land**.** The southern portion of the project site that is proposed to be rezoned from PD-F-2 to A-1-F-2 and C-H-F-2 displays similar characteristic to the northerly portion of the project site, including having been previously developed with a one-family residence.

The project site is identified as Urban and Built-Up Land and Grazing Land on the State of California Department of Conservation Important Farmland Map (see Figure 2, FMMP FARMLAND CLASSIFICATIONS). Urban and Built-Up Land is defined as is occupied by structures with a building density of at least 1 unit to 1.5 acres, or approximately 6 structures to a 10-acre parcel. Common examples include residential, industrial, commercial, institutional facilities, cemeteries, airports, golf courses, sanitary landfills, sewage treatment, and water control structures. The area that would be used for the leach field (discussed in additional detail below) is classified as Grazing Land (CDOC, 2018). Grazing Land is land on which the existing vegetation is suited to the grazing of livestock.

The property to the north of the project site and across Churn Creek Road is identified as Farmland of Local Importance. Farmland of Local Importance is defined as dryland grain producing lands. Also included are farmlands that are presently irrigated but do not meet the soil characteristics of prime or statewide. Onsite soils are comprised of Churn loam, 0 to 3 percent slopes and Tehama Loam, 0 to 3 percent slopes, MLRA 17 (see Figure 3, PROJECT SOILS).

The Federal Emergency Management Agency (FEMA) has mapped the 100-year and 500-year floodplains along the Sacramento River and creeks in the vicinity of the project site. The site and surrounding area are located within

the mapped 100-year floodplain Zone AO (FEMA, 2011) (see Figure 4, FLOODPLAIN MAP).

Existing General Plan
The project site is designated as C and A-cg in the Shasta County General Plan (see Figure 5, GENERAL PLAN LAND USE DESIGNATIONS). The C land use designation provides for a range of commercial activities and while it does identify the locations most suitable for commercial activities the specific nature of the uses that would be most appropriate for a specific location is left to the zoning code or a specific plan, should one apply to a given area. The General Plan discusses seven types of commercial districts, one of which is Highway Commercial. Highway commercial provides for the needs of recreation and business visitors and includes gas stations, and automotive and truck services. The locations of these designations are along access roads to I-5 and fronting on State highways. The proposed leach field area is located within the area designated A-cg.

Existing Zoning
The current zoning of the site is Planned Development (PD) combined with the Restrictive Flood (PD-F-2) district, approved by the Board of Supervisors on August 9, 2011, under Ordinance 378-2012 (Z08-003) along with a General Plan Amendment (GPA08-002) from A-cg to C for the portion of the project site that is currently designated A-cg with the intent of allowing a substantial and broad range of retail sales and service uses to be developed over the whole of project site and an adjoining parcel to the east as well as a portion of the parcel to the north. This ordinance is not operative as Shasta County voters set aside its operation by a referendum that overturned the associated General Plan Amendment upon certification of the June 5, 2012, Presidential Primary election.

Prior to adoption of the current PD zoning, the Board of Supervisors on by the September 9, 1986, approved Ordinance No. 378-1394 (ZA 9-86) to implement Tract Map 1675, which expired prior to recordation of the final map (see Figure 6, SHASTA COUNTY ZONING). The intent was to develop a highway service complex that would include a motel, restaurant, and mini-mart.

The purpose of the PD zone is to provide flexibility in the application of zoning standards to proposed development that incorporate an innovative mix of building types, land uses, open space, or residential densities. In relation to permitted uses, the zoning code states any use or combination of uses which are arranged and designed in such a manner as to result in a development which is internally compatible, compatible with surrounding uses and consistent with the general plan are permitted outright in the PD district.

Proposed Project
The proposed project includes a parcel map and rezone to subdivide the existing 15.49-acre parcel (APN 055-160-012) into two parcels and a remainder parcel. (see Figure 7, PARCEL MAP). Parcel 1 is approximately 4.99-acres in size and would include a 1.05-acre leach field area. Proposed development on Parcel 1 includes development of a Maverik fueling station, including a vehicle fueling station and a 5,951-square foot convenience store with a sit-down restaurant and coffee shop. The convenience store is approximately 5,951 square feet with primary access provided on the southern side of the building. The convenience store will provide food items including both fresh and packaged items, refrigerated drinks and frozen items, as well as other goods and merchandise to serve travel needs such as vehicles fluids and minor electronics such as phone charges, and personal care items. The proposed project will employ approximately 15 to 18 employees. The convenience store and service station would operate 24 hours a day, 7 days a week. On the southeast portion of Parcel 1, a total of 10 fuel dispensers (two rows of five pumps for a total of 20 fueling positions) and associated canopy would dispense both gasoline and diesel fuel for passenger vehicles. An additional 10 high-flow dispensers and associated canopy is proposed on the west portion of Parcel 1 for commercial truck fueling and underground storage tanks. The underground storage tanks for gasoline and diesel are proposed south of the passenger vehicle fueling island and marked as a no parking zone. These tanks would be double walled non-corrodible fiberglass. To reduce the emission of fumes or other materials and minimize impacts on surroundings areas each fueling position includes a vapor recovery system. Each underground storage tank would also include an emergency leak detection system monitored by staff who can immediately respond to any upset conditions in real time. The service station would provide both unleaded and diesel with an annual

throughput of approximately 3,780,000 gallons and 3,220,000 gallons, respectively. Onsite parking includes 23 standard vehicle parking spaces, 2 accessible vehicle parking spaces and 8 designated EV parking spaces, one of which will be accessible) (see Figure 8, PROPOSED SITE PLAN). Perimeter landscaping consisting of shrubs and trees will be provided to enhance site aesthetics. Stormwater treatment is provided onsite within landscaped areas adjacent to Knighton Road and Churn Creek Road (see Figure 9, LANDSCAPE PLAN; Figure 10, VISUAL SIMULATIONS A; and Figure 11, VISUAL SIMULATIONS B). The proposed improvements on Parcel 1 include a right in/right out access from Knighton Road via 50-foot driveway, and full access provided via an approximate 50-foot driveway from Churn Creek Road. Parcel 2 is approximately 3.65 acres with no proposed use or development proposed at this time. Parcel 3, the remainder Parcel, is approximately 6.85 acres and no proposed use or development proposed at this time. No use or development is proposed for the two parcels in the northern portion of the project site that are proposed to be rezoned from PD-F-2 to A-1-F-2.

Architectural Design
The proposed convenience store is 19 feet height at the building's parapet and approximately 29 feet to the top of the roof. The fuel canopy is approximately 23 feet high. The exterior of the building consists of metal roof elements, fiber cement, cultured stone, glass storefront, steel truss beams, etc. The exterior walls would have a stone base façade, windows providing visibility into and out of the store, and beige colored siding with vertical details to reduce massing. A green metal awning would be used above areas with windows, and between the awnings there would be a Maverik sign (64 square feet), capped with a pitched roof noting the primary entrance. The project proposes 1 pole sign that is 35 feet tall which includes a Maverik logo sign (69 square feet) and price/ gasoline type sign (105.4 square feet), one wall sign along the east side of the convenience store displaying the Maverik logo (14.35 square feet), and signage on the fueling canopy displaying Maverik logo signage (24 square feet). Refer to Figures 12a through 12d, PROJECT SIGNAGE, for an illustration of various proposed signs. Site illumination is illustrated on Figure 13, PHOTOMETRIC PLAN.

HVAC equipment will be situated on the store roof and screened from view by a parapet wall and is consistent with code requirements for screening roof mounted mechanical equipment and blending in with the surrounding community. The fuel canopy includes the same architectural elements and materials, and the design would be consistent with that of the convenience store building.

Site Access
Access to the site is provided at two driveways, one proposed to open onto along the project frontage (Knighton Road), and the other along Churn Creek Road. The proposed Churn Creek Road entrance will extend from the proposed east entrance off of Churn Creek Road, entering behind the convenience store. The second entrance is off of Knighton Road and provides immediate access to fueling station along the frontage of the parcel.

Landscaping
Onsite landscaping is limited to the perimeter of the project site and would consists of the planting of 23 trees and 143 shrubs of various varieties to enhance the site's aesthetics (see Figure 9, LANDSCAPE PLAN). The utilization of native shrubs would ensure the landscaping is low-maintenance and would conserve water. The proposed project has been designed to be consistent with the State of California's Model Water Efficient Landscape Ordinance (MWELO). Landscape irrigation would include automatic irrigation controller with soil moisture sensors/rain sensors; run-off prevention, low head drainage, and over spray; utilization of low volume/water efficient drip and rotary heads.

Utilities.
The proposed project would tie into existing stormwater, gas, electrical, and telecommunications utilities located within Knighton Road and Churn Creek Road, as needed.

- Stormwater. The proposed project includes vegetated landscaped areas on the north, east, south, and westerly sides of the project site. These areas would account for approximately 0.51 acres of the project

site. Along the westerly and southerly side, the along in the interior curb lines there would be inlets to the stormwater system. Stormwater in these areas would be collected and run through an oil and gas separator and then to a storm drain.

- Water. The proposed project would use an onsite water well for which a well permit from Shasta County would be applied. Based on other wells in the vicinity it is anticipated to be 100-200 feet in depth and depth to groundwater would be approximately 30 feet (DWR, 2022). The depth to the seasonal high groundwater table at the project is anticipated to be no less than about 11 feet to more than 19 feet below the ground surface (SHN, 2022). The proposed project is anticipated to require a peak water consumption of approximately 3,925.8 gallons per day (gpd) and an average of 2,944.35 gpd. Based on the peak water consumption estimate, the project's water demand is equivalent to approximately 4.4 acre-feet per year (AFY).

- Wastewater. The proposed project would use an onsite wastewater treatment system (OWTS) with septic tanks and leach field within the westerly portion of the project parcel. Wastewater from the convenience store would flow to the leach field via an approximate 500-foot leach line (underground pipe). The leach field would be engineered with an appropriate mix and or layering of soils and gravel to facilitate percolation of wastewater. The field would be approximately 1.05 acres. The OWTS would be designed in accordance with Shasta County OWTS design requirements.

Construction
Project construction will be conducted in one phase over approximately 7 months. Proposed grading activities include approximately 6,500 cubic yards of soil cut, approximately 12,500 cubic yards of soil fill, resulting in approximately 6,000 cubic yards of soil being imported to the site. With utilization of excavated soils from the proposed seepage pit and underground fuel storage tanks the site is anticipated to balance. Project construction is anticipated to being in December 2025.

Offsite Improvements.
Offsite Improvements include an extension of a water supply line, adjacent to the proposed leach field on the remainder parcel, from an existing private well located on APN 055-160-009.

Proposed improvements along the Churn Creek Road frontage include the construction of a project driveway and a two-way left turn lane to allow left turns into the project site. North of the project site (remainder parcel frontage) the road width would taper back to meet the road with at its current configuration. Southbound Churn Creek Road along the project frontage would be widened within the existing public right of way two accommodate the proposed new dedicated left turn and right turn lanes on the south bound leg of Churn Creek Road at the Knighton Road intersection.

Along the project frontage of Knighton Road, frontage improvements include the construction of a project driveway and the construction of a two-way left turn lane in Knighton Road to allow left turns into the project site.

The project would relocate an existing traffic signal pole located at the southeast corner of the project site to accommodate the proposed right turn lane on southbound Churn Creek Road.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

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

	Aesthetics		Agricultural Resources		Air Quality
	Biological Resources		Cultural Resources		Energy
	Geology / Soils		Greenhouse Gas Emissions		Hazards & Hazardous
	Hydrology / Water Quality		Land Use / Planning		Mineral Resources
	Noise		Population / Housing		Public Services
	Recreation		Transportation		Tribal Cultural Resources
	Utilities / Service Systems		Wildfire		Mandatory Findings of Significance

DETERMINATION: (To be completed by the Lead Agency)

On the basis of the initial evaluation:

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

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

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

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

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

Copies of the Initial Study and related materials and documentation may be obtained at the Planning Division of the Department of Resource Management, 1855 Placer Street, Suite 103, Redding, CA 96001. Contact Lio Salazar, Planning Division Manager at (530) 225-5532.

Lio Salazar
Planning Division Manager

2/7/25
Date

Sean Ewing
Director of Resource Management

2/7/25
Date

EVALUATION OF ENVIRONMENTAL IMPACTS:

1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parenthesis following each question. A "No Impact" answer is adequately supported if all the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less-than-significant with mitigation, or less-than-significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more, "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4) "Negative Declaration: Less-than-significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less-than-significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less-than-significant level (mitigation measures from Section XVIII, "Earlier Analyses," may be cross-referenced).

5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or Negative Declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:

   a) Earlier Analysis Used. Identify and state where they are available for review.

   b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.

   c) Mitigation Measures: For effects that are "Less-than-significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g. General Plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.

9) The explanation of each issue should identify the following:

   a) The significance criteria or threshold, if any, used to evaluate each question; and
   b) The mitigation measure identified, if any, to reduce the impact to less-than-significant.

Section I – Aesthetics

This section of the Initial Study describes the existing visual environment in and around the project area. The analysis assesses the potential for aesthetics impacts using accepted methods of evaluating visual quality, as well as identifying the type and degree of change the proposed project would likely have on the character of the surrounding area.

Environmental Setting

Scenic vistas are defined as expansive views of highly-valued landscapes from publicly accessible viewpoints. Scenic vistas include views of natural features such as topography, water courses, outcrops, and natural vegetation, as well as man-made scenic structures. The project study area is located in the southwest quadrant of Shasta County. The County has not designated specific scenic vistas in the immediate project area as a part of the General Plan (Shasta, 2004).

The project site is located on the north side of Knighton Road approximately 500 feet east of the north bound on-ramp to Interstate 5 (I-5). The site is approximately 450 feet above mean sea level (msl). Land uses adjoining the study area are primarily rural, with commercial and industrial businesses in the vicinity of the project site. There are two principle natural communities on site, pasture, and previously developed urban habitat (ENPLAN, 2022a).

According to Caltrans' California Scenic Highway Program and the National Scenic Byways Program, the proposed project is not located near a highway which has been listed as a State or federal Scenic Highway or as an Eligible State Scenic Highway-Not Officially Designated (Caltrans, 2022; FHWA, 2018).

Regulatory Setting

National Scenic Byways Program

The National Scenic Byways Program is part of the U.S. Department of Transportation, Federal Highway Administration (FHWA). Established in Title 23, Section 162 of the United Sates Code, the program is a grass-roots collaborative effort established to help recognize, preserve, and enhance selected roads throughout the United States. FHWA's May 18, 1995, interim policy sets forth the procedures for the designation by the U.S. Secretary of Transportation of certain roads as National Scenic Byways or All-American Roads based on their archaeological, cultural, historic, natural, recreational, and scenic qualities. There are 150 such designated byways in 46 states.

California Scenic Highway Program

California's Scenic Highway Program was created by the legislature in 1963. Its purpose is to protect and enhance the natural scenic beauty of California highways and adjacent corridors, through special conservation treatment. The State laws governing the Scenic Highway Program are found in the Streets and Highways Code, Sections 260 through 263. Caltrans has compiled a list of State highways that are designated as scenic and county highways that are eligible for designation as scenic.

Shasta County General Plan

The Shasta County General Plan Design Review Element, as amended through September 2004, provides the following visual resource and aesthetics objectives relative to the proposed project. There are no specific Shasta County General Plan policies that relate to aesthetics.

- *DR-1.* Promote a visually appealing developed environment in urban, suburban, town center, mixed use, and rural residential settings.

- *DR-2.* Provide the County's communities the opportunity to develop their individual and local character, as reflected

by citizens involved in their planning process.

Shasta County Code

Section 17.84.050 of the Shasta County Code (SCC) contains the following policy related to aesthetics that would apply to the proposed project:

"All lighting, exterior and interior, shall be designed and located so as to confine direct lighting to the premises. A light source shall not shine upon or illuminate directly on any surface other than the area required to be lighted. No lighting shall be of the type or in a location such that constitutes a hazard to vehicular traffic, either on private property or on abutting streets."

Impact Analysis

Degradation of the visual character of a site is usually addressed through a qualitative evaluation of the changes to the aesthetic characteristics of the existing environment and the proposed project-related modification that would alter the visual setting. In order to analyze the potential impacts of visual resources, as seen from potential public scenic views, and to document potential change in character or quality within the project area, the existing visual conditions as seen from Knighton Road has been evaluated.

Light spill is typically defined as the presence of unwanted light on properties adjacent to the property causing illumination and/or being illuminated. With respect to lighting, the degree of illumination may vary widely depending on the amount of light generated, height of the light source, presence of barriers or obstructions, type of light source, and weather conditions.

Glare is primarily a daytime occurrence caused by the reflection of sunlight or artificial light by highly polished surfaces such as window glass or reflective materials and, to a lesser degree, from broad expanses of light-colored surfaces. Daytime glare generation is common in urban areas and is typically associated with buildings with exterior facades largely or entirely comprised of highly reflective glass. Glare can also be produced during evening and nighttime hours by the reflection of artificial light sources such as automobile headlights.

The following includes an analysis of environmental parameters related to *Aesthetics* based on Appendix G of the State CEQA Guidelines. The discussion not only includes the areas for which there is potential for environmental impacts but also provides justification for the conclusions that either no impacts, less than significant impacts, or less than significant impacts with mitigation could occur.

I. AESTHETICS: Except as provided in Public Resources Code Section 21099, would the project:	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?				X
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway?				X
c) 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 a publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable			X	

I. AESTHETICS: Except as provided in Public Resources Code Section 21099, would the project:	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
zoning and other regulations governing scenic quality?				
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?			X	

Discussion: Based on the related documents listed in the Sources of Documentation for Initial Study Checklist, staff review of the project, observations on the project site and in the vicinity, the following findings can be made:

a) The project site is undeveloped land with frontage on Knighton Road and Churn Creek Road located 500 feet from the northbound on-ramp entrance to I-5 and across the street from the TA Travel Center. As noted above, the County has not designated a specific scenic vista in the immediate project area as a part of the General Plan and there is no designated State or federal scenic highways or scenic highway corridors in the vicinity of the proposed project. All proposed buildings and structures would be similar in visual character and impact to existing highway commercial buildings and structures located on the parcel south of and across the Knighton Road from the project site. Additionally, institutional buildings and structures associated with the Pacheco School are near the project site and the intersection of Knighton Road and Churn Creek Road. All proposed buildings and structures would meet adopted development standards for height and setbacks and the buildings and structures would not preclude and/or significantly obstruct long-distance views from public vantage points in the vicinity of the project site, including from Pacheco School, Knighton Road, and Churn Creek Road.

b) The County's General Plan identifies prominent natural or man-made features which immediately catch the eye, locations where the visual environment changes dramatically, and locations which mark the entrance to a community of geographic area as scenic assets. The proposed project is located on relatively flat land located near the eastern side of I-5 directly across from the TA Travel Center and is not identified as any of the above features in the County's General Plan. As previously mentioned above, there are no national, State, or County designated scenic vistas in the vicinity of the project site.

c) The project site is undeveloped land located along Knighton Road, 500 feet from the northbound on-ramp entrance to I-5, and across the street from the TA Travel Center. The County's General Plan identifies prominent natural or man-made features which immediately catch the eye, locations where the visual environment changes dramatically, and locations which mark the entrance to a community of geographic area as scenic assets. The proposed project is located on relatively flat land located near the eastern side of I-5 directly across from the TA Travel Center and is not identified as any of the above features in the County's General Plan. All proposed buildings and structures would be similar in visual character and impact to existing highway commercial buildings and structures located on the parcel south of and across the Knighton Road from the project site. Additionally, institutional buildings and structures associated with the Pacheco School are near the project site and the intersection of Knighton Road and Churn Creek Road. All proposed buildings and structures would meet adopted development standards for height and setbacks and the buildings and structures and would substantially degrade the existing visual character or quality of public views of the site and its surroundings, including from Pacheco School, Knighton Road, and Churn Creek Road.

d) Exterior light sources associated with the project would include parking lot lighting, canopy sign lighting, exterior wall-mounted lighting fixtures on the proposed building, as well as new street lighting. Parking lot lighting would include exterior pole-mounted light standards (maximum 25 feet high) located along the site's perimeter to provided safety and security lighting. The light standards and additional wall-mounted light fixtures on building structures would be used to ensure safety of the public and safe onsite pedestrian and vehicular circulation. In accordance with Shasta County Code (SCC) Section 17.84.050 all exterior and interior lighting, shall be designed and located so as to confine direct lighting to the premises. A light source shall not shine upon or illuminate directly on any surface other than the area required to be lighted. No lighting shall be of the type or in a location such that constitutes a hazard to vehicular traffic, either on private property or on abutting streets (Shasta, 2022).

As illustrated on Figure 13, PHOTOMETRIC PLAN, lighting for the project would be contained onsite with minor light spillover (0.3-foot candles) extending approximately 10 feet onto adjacent undeveloped properties to the north and east. Given setback requirements for future development on adjacent properties, site lighting and illumination associated with the proposed project would not create a significant impact on the adjoining properties. Sign lighting was not included in the photometric plan since this lighting is low voltage and low lumens meeting California Energy Commission (CEC) standards. Furthermore, the LED price

change signs are also within the CEC standards and are controlled by an automatic dimmer based on ambient light. Impacts would be less than significant.

Mitigation/Monitoring: None proposed.

Section II – Agricultural Resources

The purpose of this section of the Initial Study is to determine the extent to which the project contributes to the physical deterioration of agricultural resources. This section describes the agricultural resources within the project study area, and the applicable regulations that govern those resources.

Environmental Setting

The Department of Conservation (DOC) Farmland Mapping and Monitoring Program (FMMP) maps and classifies farmland. Classifications are based on a combination of physical and chemical characteristics of the soil and climate that determine the degree of suitability of the land for crop production. The project site does not contain designated farmland. Since the 1980s the project area was zoned Planned Development (PD) to encourage a highway service complex near the Interstate 5 (I-5) on/off ramps. The Shasta County General Plan Agricultural Lands Element expresses the importance for conservation of farmlands in the Churn Creek Bottom (Shasta, 2004a), however, policy CO-u of the Community Organization and Development Pattern specifies that commercial development in the Churn Creek Bottom area shall be strictly limited to the I-5 interchange/Knighton Road intersection (Shasta, 2004b). The proposed project site satisfies that expressed policy. The site is not located within an area of Prime Farmland as identified by the California Department of Conservation's Important Farmland Series Mapping and Monitoring Program (DOC, 2018). In addition, the DOC's Important Farmland Map for Shasta County identifies the project site as Urban and Built-Up Land (DOC, 2022).

According to the U.S. Department of Agriculture, Natural Resources Conservation Service (NRCS, 2022), two soil units have been mapped within the project study area: Churn loam, 0 to 3 percent slopes (CcA), Tehama loam, 0 to 3 percent slopes (TbA), MLRA 17. These soils classifications are considered "Prime Farmland if Irrigated."

According to the California Department of Food and Agriculture (CDFA), Shasta County was ranked 35th in the State for total value of agricultural production in 2020 without timber, and 34th with timber. Main agricultural commodities for total value of production include hay (other, unspecified); cattle, stockers, and feeders; miscellaneous nursery products; apiary products, bees, and queens; hay (alfalfa); range pasture; irrigated pasture; wild rice; and livestock (unspecified). According to the California Department of Conservation, Division of Land Resource Protection (2019), in 2018 Shasta County contained approximately 433,213 acres of agricultural land (ENPLAN, 2022b).

The California Land Conservation Act of 1965, commonly known as the Williamson Act, allows local governments to form contracts with private landowners to restrict specific parcels of land to agricultural or open space use. The project site is not under an active Williamson Act contract and there are no publicly-owned lands or designated natural resources areas the apply to adjacent properties (ENPLAN, 2022b).

Regulatory Setting

This section summarizes current federal, State, and local regulations relevant to the review of *Agricultural Resources* for this project. Ordinances, regulations, or standards that are applicable to the environmental review of agricultural resource impacts include the following:

California Farmland Mapping and Monitoring Program

The California Farmland Mapping and Monitoring Program (FMMP), which monitors the conversion of the State's farmland to and from agricultural use, relies on information from the NRCS soils surveys, NRCS land inventory and monitoring criteria, and land use and water availability. Topography, climate, soil quality, and available irrigation water all factor into the FMMP farmland classifications. The FMMP was established by the California DOC, under the Division of Land Resource Protection. Important Farmland Maps are compiled by the FMMP pursuant to §65570 of the California Government Code. The FMMP is an informational service only and does not constitute state regulation of local land use decisions. Under the FMMP, "Important Farmland Categories" were established based on soils characteristics that have significant agricultural production values.

California Land Conservation Act

The California Land Conservation Act of 1965, commonly referred to as the Williamson Act, is promulgated in California Government Code §51200-51297.4. The Williamson Act enables local governments to enter into contracts with private landowners for the purpose of restricting specific parcels of land to agricultural or related open space uses in return for reduced property tax assessments. Private land within locally designated agricultural preserve areas is eligible for enrollment under Williamson Act contracts.

Farmland Security Zone Contract

The DOC passed the Farmland Security Zone legislation (Govt. Code §51296) in 1998. The Farmland Security Zone allows counties to establish an additional program for farmlands to enter into contracts with the State. This legislation allows landowners whose land is under a Williamson Act contract to petition to the county board of supervisors to annul the Williamson Act contract for a Farmland Security Zone Contract. A Farmland Security Zone Contract is a 20-year contract that allows the property owner to receive 35 percent more in tax savings than a Williamson Act contract. Both of these contracts require that lands be within an established Agricultural Preserve. Agricultural lands that are not in a preserve face the greatest threat of conversion, as they are assessed higher property taxes due to their proximity to urbanization.

Forest Land and Timberland

Public Resources Code section 12220(g) defines Forest Land as *"land that can support 10% native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits."* Public Resources Code Section 4526 defines timberland as *"land, other than land owned by the federal government, which is available for, and capable of, growing a crop of trees of any commercial species used to produce lumber and other forest products, including Christmas trees."* Government Code section 51104(g) defines Timberland Production Zone (TPZ) as *"an area which has been zoned pursuant to [Government Code] Section 51112 or 51113 and is devoted to and used for growing and harvesting timber, or for growing and harvesting timber and compatible uses, as defined in subdivision (h)."*

Shasta County General Plan

The Shasta County General Plan Agricultural Lands Element, as amended through September 2004, provides the following policies relative to the proposed project:

- *AG-3*. Recognition by Shasta County residents that the preservation of agricultural lands for agricultural uses, both large and small scale, is in the public interest because it preserves local and regional food supplies and is an important contributing industry to the Shasta County economy.
- *AG-4*. Recognition by Shasta County residents that preservation of agricultural lands, both large and small-scale, provides privately maintained open-space, facilitates a rural lifestyle, and requires Countywide understanding of the problems facing ranchers and farmers.
- *AG-5*. Protection of agricultural lands from development pressures and or uses which will adversely impact or hinder existing or future agricultural operations.
- *AG-6*. Protection of water resources and supply systems vital for the continuation of agriculture.
- *CO-4***.** To guide development in a pattern that will minimize land use conflicts between adjacent land users.

Impact Analysis

CEQA Section 21095 and CEQA Guidelines Appendix G, together, define Prime, Unique, and Farmland of Statewide Importance as "Important Farmland," whose conversion may be considered significant. In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment (LESA) Model (1997, as updated) prepared by the California DOC as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection (CAL FIRE) regarding the State's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board (CARB).

For this project, the California LESA model was used for the farmland impact assessment. The California LESA model is comprised of six assessment factors: Two Land Evaluation (LE) factors are based upon measures of soil resource quality. Four Site Assessment (SA) factors provide measures of a given project's size, water resource availability, surrounding agricultural lands, and surrounding protected resource lands (e.g., lands under Williamson Act contracts). Each of these factors is separately rated on a 100-point scale. The factors are then weighted relative to one another and combined, resulting in a single numeric score that becomes the basis for making a determination of a project's potential significance. The LESA evaluation is included within the Farmland Impact Assessment (ENPLAN, 2022b) contained in Appendix A.

The following includes an analysis of environmental parameters related to *Agricultural Resources* based on Appendix G of the State CEQA Guidelines. The discussion not only includes the areas for which there is potential for environmental impacts but also provides justification for the conclusions that either no impacts, less than significant impacts, or less than significant impacts with mitigation could occur.

II. AGRICULTURE AND FORESTRY RESOURCES: In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a) Convert Prime Farmland, Unique Farmland, or Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?			X	
b) Conflict with existing zoning for agricultural use, or a Williamson Act Contract?				X
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?				X
d) Result in the loss of forest land or conversion of forest land to non-forest use?				X
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?			X	

Discussion: Based on the related documents listed in the Sources of Documentation for Initial Study Checklist, staff review of the project, observations on the project site and in the vicinity, and a Farmland Impact Assessment (ENPLAN, May 2022) the following findings can be made:

a) The proposed project is not located within an area of Prime Farmland as identified by the California Department of Conservation's Important Farmland Series Mapping and Monitoring Program (DOC, 2022). According to the Farmland Impact Assessment, the LESA analysis for the project site resulted in a LE rating of 42 and a SA rating of 12, for a total score of 54 (ENPLAN, 2022b). A loss of agricultural lands with a score between 40 and 59 is considered significant only if both the LE and SA ratings are each 20 or more. Therefore, the LESA model indicates that the project would have a less than significant impact on Prime Farmland, Unique Farmland, and Farmland of Statewide Importance.

b) The proposed project site nor its adjacent lands are currently under a Williamson Act contract or are zoned for agricultural use. Land to the east and across Churn Creek Road from the project site are zone Limited Agriculture (A-1). In addition, the proposed project site is not under a Farmland Security Zone contract or within an agricultural preserve. The project site and agricultural lands to the east are separated by Churn Creek Road, Agricultural uses in the A-1 zoned district are typically part-time in nature and small in scale. Production from such operations is many cases to serve the owner or, if for commercial production, for supplement income and it is unlikely that changes in traffic volume and/or patterns in the vicinity of the project would conflict

with agricultural operations on lands in the vicinity that are zoned for agriculture. Therefore, project implementation would not result in conflicts with existing agricultural zoning. No impact would occur in this regard.

c) The proposed project site is not zoned as either forest land or timberland. The project would not conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned Timberland Production. No impact would occur in this regard.

d) The proposed project is not located within existing forest land. The project would not result in the loss of forest land or conversion of forest land to non-forest use. No impact would occur in this regard.

e) Refer to impact discussion II.a, above. In addition, the proposed project is not located within or within close proximity to existing forest land. The project site is currently zoned Planned Development combined with the Restrictive Flood (PD-F-2). This zoning was originally approved by the Board of Supervisors in 2011 along with a General Plan Amendment from A-cg to C for the portion of the project site that is currently designated A-cg with the intent of allowing a broad range of retail sales and service uses to be developed over the whole of project site and an adjoining parcel to the east as well as a portion of the parcel to the north. This ordinance is not operative as Shasta County voters set aside its operation by a referendum that overturned the associated General Plan Amendment. The proposed project requires a rezone to Highway Commercial (C-H). The C-H zone is intended to be applied near freeway interchanges, fronting State highways, or along arterials that provide access to major recreation areas. The proposed project is located within 500 feet of the northbound on ramp for I-5 which satisfies the locational criteria of for this zone. The development of commercial uses as proposed may increase land values in the area. As land is developed, land prices generally increase, which could make it more difficult for ranchers to buy or lease land for agricultural operations and could result in the expansion of commercial uses and/or conversion of lands used for agriculture to rural residential land use, including through subdivision; however, Shasta County has discretionary review and approval authority over changes in General Plan land use designation and zoning, and uses that are not allowed by-right. Such potential land uses changes would be subject to environmental review pursuant to CEQA which would analyze the impacts of the change on agricultural resources (ENPLAN, 2022b).

Areas to the north and west of the development site are designated by the FMMP as Grazing Land, including the property identified as Parcel 2 (3.65 acres). Although no development is proposed on Parcel 2 at this time, development of the proposed project would likely preclude further grazing in this area due to the introduction of increased traffic and noise and other incompatible activities. Grazing Land is important to the local economy in Shasta County. The proposed project would result in the direct loss of approximately 2.17 acres of Grazing Land as mapped by the FMMP. In addition, the project would likely facilitate commercial development in the area immediately west of the development site. This would result in an additional loss of approximately 3.17 acres of designated Grazing Land. The conversion of a total of 5.34 acres of designated Grazing Land represents approximately 0.0013 percent of designated Grazing Land in Shasta County (ENPLAN, 2022b) and is considered a less than significant impact.

Mitigation/Monitoring: None proposed.

Section III – Air Quality

This section examines the air quality in the project area, includes a summary of applicable air quality regulations, and analyzes potential air quality impacts associated with the proposed project. Air quality impacts were assessed in accordance with methodologies recommended by the US Environmental Protection Agency (EPA), California Air Resources Board (CARB), and the Shasta County Air Quality Management District (SCAQMD). Where quantification was required, emissions were modeled using the California Emissions Estimator Model (CalEEMod).

Environmental Setting

Shasta County, including the far northern Sacramento Valley, currently exceeds the State's ambient standards for ozone (smog) and particulates (fine, airborne particles). Consequently, these pollutants are the focus of local air quality policy, especially when related to land use and transportation planning. Even with application of measures to reduce emissions for individual projects, cumulative impacts are unavoidable when ozone and/or particulate emissions are involved. For example, the primary source of emissions contributing to ozone is from vehicles. Any project that generates vehicle trips has the potential of contributing incrementally to the problem.

Thresholds are established by the SCAQMD for the important regional/local pollutants, including: Reactive Organic Gases (ROG) and Oxides of Nitrogen (NO_X), which are ozone precursors, and particulate matter 10 microns in size or less (PM_{10}). The mitigation thresholds for these pollutants are tiered at two levels as follows:

Level "A"	Level "B"
25 pounds per day of NO_X	137 pounds per day of NOx
25 pounds per day of ROG	137 pounds per day of ROG
80 pounds per day of PM_{10}	137 pounds per day of PM_{10}

Consistent with the Land Use Impact Analysis Program described in the Shasta County General Plan Air Quality Element; if a project has unmitigated emissions less than the Level "A" threshold, then it is viewed as a minor project (from an air quality perspective) that would not involve potentially significant impacts (from a CEQA perspective) and only application of Standard Mitigation Measures (SMM) is required to try to achieve at least a 20 percent reduction in emissions, or the best reduction feasible otherwise. Land uses that generate unmitigated emissions above Level "A" require application of appropriate Best Available Mitigation Measures (BAMM), in addition to the SMM, in order to achieve a net emission reduction of 20 percent or more and also would not involve potentially significant impacts. If, the project would generate emissions that exceed Level B thresholds, the project would be viewed as a major project (from an air quality perspective) and would involve potentially significant impacts (from a CEQA perspective). If after applying SMM, BAMM, and Special Best Available Mitigation Measures (SBAMM), project emissions are reduced to below the Level B thresholds, the potentially significant impacts of the project would be reduced to a less-than-significant level and the project could proceed with a Mitigated Negative Declaration with respect to emissions impacts from these pollutants. If the project still exceeds the Level "B" threshold after implementations of SMM, BAMM, and SBAMM, and if necessary, emissions offsets, impacts from project emissions of these pollutants would be considered significant, thereby requiring the preparations of and EIR.

Regulatory Setting

This section summarizes current federal, State, and local regulations relevant to the review of *Air Quality* for this project. Ordinances, regulations, or standards that are applicable to the environmental review of air quality impacts include the following:

Ambient Air Quality Standards

The federal Clean Air Act of 1971 and the Clean Air Act Amendments (1977) established the national ambient air quality standards (NAAQS), which are promulgated by the U.S. Environmental Protection Agency (EPA). The State of California has also adopted its own California ambient air quality standards (CAAQS), which are promulgated by CARB. Implementation of the project would occur in the Shasta County portion of the NSVAB, which is under the air quality regulatory jurisdiction of the SCAQMD and is subject to the rules and regulations adopted by the air district to achieve the NAAQS and CAAQS.
Shasta County Air Pollution Control District

The SCAQMD is designated by law to adopt and enforce regulations to achieve and maintain ambient air quality standards. The SCAQMD, along with other air districts in the NSVAB, has committed to jointly prepare the NSVAB Air Quality Attainment Plan for the purpose of achieving and maintaining healthful air quality throughout the air basin. In addition, the SCAQMD adopts and enforces controls on stationary sources of air pollutants through its permit and inspection programs, and it regulates agricultural burning. Other responsibilities include monitoring air quality, preparing clean air plans, and responding to citizen complaints concerning air quality. All projects in Shasta County are subject to applicable SCAQMD rules and regulations in effect at the time of construction. Descriptions of specific rules applicable to future construction resulting from implementation of the proposed project may include, but are not limited to:

- Architectural coatings and solvents used at the project shall be compliant with SCAQMD Rule 3-31, Architectural Coatings.
- Cutback and emulsified asphalt application shall be conducted in accordance with SCAQMD Rule 3-15, Cutback and Emulsified Asphalt.
- SCAQMD Rule 3-16, Fugitive, Indirect, or Non-Traditional Sources, controls the emission of fugitive dust during earth-moving, construction, demolition, bulk storage, and conditions resulting in wind erosion.
- SCAQMD Rule 3-32, Adhesives and Sealants, limits the emissions of volatile organic compounds (VOCs) from adhesives and sealants and associated primers, and from related surface preparation solvents, cleanup solvents, and strippers.
- SCAQMD Rule 3-33, Wood Products Coating Operations, limits the emissions of volatile organic compounds (VOCs) from coatings and strippers used on wood products and from products used in surface preparation and cleanup.

Shasta County General Plan

The Shasta County General Plan, as amended through September 2004, provides the following air quality objectives and policies relative to the proposed project:

- *AQ-1.* To protect and improve the County's air quality in accordance with Federal and State clean air laws in order to: (1) safeguard human health, and (2) minimize crop, plant, and property damage.
- *AQ-1a.* The County shall require builders/developers to limit fireplace installations in new development to low-emitting fireplaces conforming to a maximum emission limit of 7.5 grams per hour of total particulate matter by being equipped with an EPA-certified insert or by being individually certified to meet the above emission standard.
- *AQ-1d.* The County shall require residential development projects and projects categorized as sensitive receptors to be located an adequate distance from existing and potential sources of toxic emissions such as freeways, major arterial, industrial sites, and hazardous material locations.
- *AQ-2c.* Land use decisions, where feasible, should contribute to the improvement of air quality. New projects shall be required to reduce their respective air quality impacts to below levels of significance, or proceed as indicated in Policy AQ-2e.

- *AQ-2d.* Shasta County shall ensure that air quality impacts identified during CEQA review are: (1) consistently and fairly mitigated, and (2) mitigation measures are feasible.
- *AQ-2e.* Shasta County will cooperate with the AQMD in assuring that new projects with stationary sources of emissions of non-attainment pollutants or their precursors that exceed 25 tons per year shall provide appropriate emission offsets. A comparable program which offsets indirect emissions of these pollutants exceeding 25 tons per year from development projects shall also be utilized to mitigate air pollution impacts. An Environmental Impact Report will be required for all projects that have unmitigated emissions of non-attainment pollutants exceeding 25 tons per year.
- *AQ-2f.* Shasta County shall require appropriate Standard Mitigation Measures and Best Available Mitigation Measures on all discretionary land use applications as recommended by the AQMD in order to mitigate both direct and indirect emissions of non-attainment pollutants.
- *AQ-2g.* Significance thresholds as proposed by the AQMD for emissions shall be utilized when appropriate for: (1) Reactive Organic Gases (ROG) and Oxides of Nitrogen (NOx), both of which are precursors of ozone, and (2) inhalable particulate matter (PM10) in determining mitigation of air quality impacts.
- *AQ-4b.* The County's development standards shall require the paving of roads as a part of new development permits to the extent necessary to meet access and air quality objectives. These requirements shall be designed to help mitigate potentially significant adverse air quality impacts created by particulate emissions on both an individual and cumulative basis.
- *AQ-8a.* The County will encourage new development projects to reduce air quality impacts from area sources and energy consumption requirements for heating and cooling.
- *AQ-8b.* The County will encourage use of energy conservation features and low-emission equipment for all new residential and commercial development.

Impact Analysis

Air quality impacts were assessed in accordance with methodologies recommended by CARB and the SCAQMD. Where quantification was required, emissions were modeled using the California Emissions Estimator Model (CalEEMod). CalEEMod is a statewide land use emissions computer model designed to quantify potential criteria pollutant emissions associated with both construction and operations from a variety of land use projects. CalEEMod contains default values for much of the information needed to calculate emissions. However, project specific, user supplied information can also be used when it is available. Vehicle trip generation rates and trip distances for proposed land use were adjusted to reflect project-specific data obtained from the traffic analysis prepared for the proposed project. The CalEEMod model was run to calculate daily emissions during the summer and winter months.

The following includes an analysis of environmental parameters related to *Air Quality* based on Appendix G of the State CEQA Guidelines. The discussion not only includes the areas for which there is potential for environmental impacts but also provides justification for the conclusions that either no impacts, less than significant impacts, or less than significant impacts with mitigation could occur. This section analyzes the short-term air quality impacts associated with construction activities as well as the long-term operational impacts that may result due to development of the proposed project.

III. AIR QUALITY: Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?				X
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable Federal or State ambient air quality standard?		X		
c) Expose sensitive receptors to substantial pollutant concentrations?			X	
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?			X	

Discussion: Based on related documents listed in the Sources of Documentation for Initial Study Checklist, staff review of the project, observations on the project site and in the vicinity, Air Quality Modeling, (Kimley Horn 2022), and a Health Risk Assessment (Kimley Horn 2022) the following findings can be made:

a) The proposed project is located within the SCAQMD. The proposed project involves a gas station with a convenience store. The project site would occur on approximately 3.94 acres with a one-story structure. The approximately 5,951 square foot structure would be used for a convenience store. The proposed project would be constructed in one phase. The anticipated construction duration for the proposed project would be approximately seven months[1]. Stationary sources, such as structures and businesses, would comply with Shasta County rules and regulations and are generally not considered to have a significant air quality impact. The proposed project is considered a commercial use, and in addition, because it is not residential in nature would not directly induce growth in the county or result in long-term development that would conflict with the County's general plan growth forecast.

As shown in the discussion in III.b, construction emissions with implementation of the mitigation measures would not exceed SCAQMD thresholds. Emissions from the proposed project operations would exceed Level A thresholds, however mandatory implementation of SMMs and BAMMs in accordance with County General Plan policies would reduce these impacts. Construction and operation of the proposed project would not exceed Level B significance thresholds. Therefore, implementation of the proposed project would not obstruct implementation of an air quality plan and there would be no impacts.

b) Implementation of the proposed project would result in both short-term construction and long-term emissions of criteria air pollutants as discussed and evaluated below:

Short-Term Construction Emissions

Project construction activities would generate short-term emissions of criteria air pollutants. The criteria pollutants of primary concern within the project area include ozone-precursor pollutants (i.e., ROG and NO_x) and PM_{10} and particulate matter 2.5 microns in size or less ($PM_{2.5}$). Construction-generated emissions are short term and temporary, lasting only while construction activities occur, but would be considered a significant air quality impact if the volume of pollutants generated exceeds the Shasta County AQMD's thresholds of significance.

Construction results in the temporary generation of emissions during site preparation, site grading, road paving, and construction and installation of permanent improvements. Emissions are generated primarily from motor vehicle exhaust associated with construction equipment and vehicles utilized by workers, inspectors, and delivery drivers, and the movement of construction equipment, especially on unpaved surfaces. Emissions of airborne particulate matter are largely dependent on the amount of ground disturbance associated with site preparation activities, as well as weather conditions and the appropriate application of water.

The duration of construction activities associated with the project are estimated to last approximately seven months. The project's construction-related emissions were calculated using the Shasta County AQMD approved CalEEMod computer program, which is designed to model emissions for land use development projects, based on typical construction requirements. Project site preparation, and grading are anticipated to begin in December 2025. Paving is anticipated to be completed in August 2026. Building construction is estimated to begin March 2026 and last approximately six months to Fall 2026. Architectural coating would begin August of 2026 and last for 2 weeks. Refer the Air Quality Monitoring (Kimley Horn 2022), for additional information regarding the construction assumptions used in this analysis. Table 1, CONSTRUCTION RELATED EMISSIONS, displays the maximum daily emissions that are expected to be generated from the construction of the proposed project in comparison to the daily thresholds established by the SCAQMD.

Construction-generated emissions are short-term and temporary, lasting only as long as construction activities occur, but have the potential to represent a significant air quality impact. The project site was previously undeveloped and contains grasses, weeds, and several trees. The proposed project includes minor demolition of an existing foundation slab and curb and gutter. Temporary emissions from site preparation and excavation, as well as from motor vehicle exhaust associated with construction equipment

[1] A conservative, worst-case construction timeline has been modeled for analysis purposes. This involves modeling emissions at the earliest feasible date. Emissions in future years (i.e., due to a later construction start date or operational opening year) would be lower due to phased-in emissions standards, inspection and maintenance requirements, and fleet turnover. Project construction that occurs at a later date than what was modeled impacts would result in lower emissions than those analyzed due to the use of more energy-efficient and cleaner burning construction vehicle fleet mix, pursuant to state regulations that require vehicle fleet operators to phase-in less polluting heavy-duty equipment. As a result, Project-related construction emissions would be lower than the impacts disclosed herein. For emissions modeling purposes, conservatively analyzing the emissions using an earlier construction start date provides for a worst-case analysis and full disclosure of potential air quality impacts, as required by CEQA.

and the movement of equipment across unpaved surfaces, worker trips, etc., would occur. Table 1, CONSTRUCTION RELATED EMISSIONS, presents construction emissions generated by the proposed project in tons per year and pounds per day.

Table 1

CONSTRUCTION RELATED EMISSIONS

Construction Year	Pollutant (pounds per day)				
	Reactive Organic Gases (ROG)	**Nitrogen Oxide (NO_X)**	**Carbon Monoxide (CO)**	**Coarse Particulate Matter (PM_{10})**	**Particulate Matter ($PM_{2.5}$)**
2023					
Construction Related Emissions	2.73	27.57	20.14	21.07	11.31
Mitigated Emissions	0.96	20.27	24.97	8.61	4.42
2024					
Construction Related Emissions	23.24	19.51	24.98	1.62	1.01
Mitigated Emissions	23.24	18.78	25.15	1.38	0.81
Shasta County AQMD Significance Threshold "Level A" 1, 2	*25*	*25*	*none*	*80*	*none*
Shasta County AQMD Significance Threshold "Level B"	*137*	*137*	*none*	*137*	*none*
Exceed Level A Threshold?	**No**	**Yes**	**-**	**No**	**-**
Exceed Level A Threshold with Mitigation?	**No**	**No**	**-**	**No**	**-**
Exceed Level B Threshold?	**No**	**No**	**-**	**No**	**-**

NOTES: CO = carbon monoxide; NO_x = nitrogen oxide; $PM_{2.5}$ = particulate matter no more than 2.5 microns in diameter; PM_{10} = particulate matter no more than 10 microns in diameter; ROG = reactive organic gases; – = no threshold.

1. In developing these thresholds, Shasta County AQMD considered levels at which project emissions are cumulatively considerable. Consequently, exceedances of project-level thresholds would be cumulatively considerable.

2. Shasta County AQMD considers violations of the CO ambient air quality standard significant.

Source: Refer to the CalEEMod outputs provided in AIR QUALITY MODELING.

Based on the modeling conducted, short-term daily unmitigated emissions associated with the construction of the proposed project would exceed the Level A threshold for NO_X emissions. No criteria emissions would surpass the Level B significance threshold. Consistent with the Land Use Impact Analysis Program described in the Shasta County General Plan Air Quality Element, project construction will not result in a significant impact with respect to the criteria pollutants of primary concern because Level B significance thresholds would not be exceeded. Consistent with the Land Use Impact Analysis Program, Shasta County Shasta

County AQMD recommends that projects apply SMM and appropriate BAMM when a project exceeds Level A thresholds. As such, the implementation of the SMM and BAMM described below would be required for construction activities associated with the project. Implementation of these SMM and BMM would substantially reduce impacts resulting from construction-generated emissions associated with project construction and as shown in Table 1 would reduce NO_X emissions to levels below the Level A threshold. Therefore, there would be no significant construction related 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 impacts.

Standard Mitigation Measures

- All construction equipment shall be maintained and properly tuned in accordance with manufacturers' specifications. Equipment maintenance records shall be kept onsite and made available upon request by Shasta County AQMD.
- All material excavated, stockpiled, or graded shall be sufficiently covered, watered, or have soil binders to prevent fugitive dust from leaving property boundaries and causing a public nuisance or a violation of an ambient air standard. Watering shall occur at least twice daily with complete site coverage, preferably in the mid-morning and after work is completed each day.
- All unpaved areas (including unpaved roads) with vehicle traffic shall be watered periodically or have dust palliatives applied for stabilization of dust emissions.
- All onsite vehicles shall be limited to a speed of 15 miles per hour on unpaved roads.
- All land clearing, grading, earth-moving, or excavation activities on the project site shall be suspended when sustained winds are expected to exceed 20 miles per hour.
- All portions of the development site which have been stripped of vegetation by construction activities and left inactive for more than ten days shall be seeded and/or watered until a suitable grass cover is established.
- All trucks hauling dirt, sand, soil, or loose material shall be sufficiently watered, covered, or shall maintain at least 2 feet of freeboard (i.e., minimum vertical distance between top of the load and the trailer) in accordance with the requirements of California Vehicle Code Section 23114. This provision will be enforced by local law enforcement agencies.
- Wheel washers shall be installed where project vehicles and/or equipment enter and/or exit onto paved streets from unpaved roads. Vehicles and/or equipment shall be washed prior to each trip.
- Prior to final occupancy, the applicant shall re-establish ground cover on the construction site through seeding and watering.
- Off-road construction equipment shall not be left idling for periods longer than 5 minutes when not in use.
- Temporary traffic control shall be provided as appropriate during all phases of construction to improve traffic flow.
- Construction activities that could affect traffic flow shall be scheduled in off-peak hours.
- All public roadways used by the project contractor shall be maintained free from dust, dirt, and debris caused by construction activities. Streets shall be swept at the end of the day if visible soil materials are carried onto adjacent public paved roads. Wheel washers shall be used where vehicles enter and exit unpaved roads onto paved roads, or trucks and any equipment shall be washed off leaving the site with each trip.

Best Available Mitigation Measures

- During all construction activities, diesel-fueled excavators, forklifts, rubber-tired dozers, and tractors, shall be California Air Resources Board (CARB) Tier 4 interim or better as set forth in Section 2423 of Title 13 of the California Code of Regulations, and Part 89 of Title 40 of the Code of Federal Regulations.
- Provide bio-diesel as an alternative fuel to standard diesel.
- Provide vehicle charging stations.
- Limit idling time for delivery trucks to five minutes. Deliveries exceeding that 5 minutes must turn off truck engines.
- Provide an air compressor for auto tire inflation for drivers to maintain fuel efficiency with properly inflated tires.
- Utilize energy efficient lighting within the building and around fueling canopies.
- Utilize energy efficient controls for heating and air conditioning units within the building

Under policy of the Air Quality Element, a project has the potential to impact air quality primarily in two ways: (1) the project would generate vehicle trip emissions (with NO_X, ROG, and PM_{10}) that contribute cumulatively to local and regional air quality conditions; and (2) fugitive dust (particulate/PM_{10}) emissions are possible during construction activities. As a gas station and retail convenience store, including a sit-down restaurant and coffee shop, the proposed project does not have the potential to generate significant emission concentrations of other pollutants subject to State and federal ambient air quality standards.

Long-Term Operational Emissions

Operational emissions are typically generated from mobile sources (burning of fossil fuels in cars); energy sources (cooling and heating); and area sources (landscape equipment and household products). Table 2, LONG-TERM PROJECT OPERATIONAL EMISSIONS, provides the proposed project's maximum emissions during the operational phase. As shown in Table 2, emissions associated with operations of the proposed project would exceed Level A thresholds for NO_X mobile source emissions. The Shasta County AQMD recommends that projects apply SMM and appropriate BAMM when a project exceeds Level A thresholds. Projects with emissions levels below the Level B significance thresholds are considered less than significant.

The proposed project is required to comply with the applicable Title 24 Energy Efficiency Standards for Residential and Nonresidential Buildings (California Code of Regulations [CCR], Title 24, Part 6). These standards are updated, nominally every three years, to incorporate improved energy efficiency technologies and methods. The Building Official, or designee shall ensure compliance prior to the issuance of each building permit. The Title 24 Energy Efficiency Standards (Section 110.10) require buildings to be designed to have 15 percent of the roof area "solar ready" that will structurally accommodate later installation of rooftop solar panels. If future building operators pursue providing rooftop solar panels, they will submit plans for solar panels prior to occupancy. Increases in building energy efficiency results in a reduction of pollutant emissions. In addition to the SMM and BAMM described above, the implementation of a voluntary trip reduction program as well as a voluntary ride-sharing program for all employees would be required for long term operational activities associated with the project. Implementation of these SMM and BAMM would reduce impacts resulting from emissions generated by long-term operations as shown in Table 3.

Table 2

LONG-TERM UNMITIGATED PROJECT OPERATIONAL EMISSIONS

Emission Source	Pollutant (pounds per day)				
	Reactive Organic Gases (ROG)	**Nitrogen Oxide (NO_x)**	**Carbon Monoxide (CO)**	**Coarse Particulate Matter (PM_{10})**	**Particulate Matter ($PM_{2.5}$)**
Summer Emissions					
Area Source	0.26	<0.001	0.02	<0.001	<0.001
Energy Use	<0.001	0.02	0.01	<0.001	<0.001
Mobile Source	21.34	33.17	153.22	26.32	7.30
Total	**21.60**	**33.17**	**153.25**	**26.32**	**7.30**
Winter Emissions					
Area Source	0.26	<0.001	0.02	<0.001	<0.001
Energy Use	<0.001	0.02	0.01	<0.001	<0.001
Mobile Source	16.32	37.10	149.65	26.32	7.30
Total	**16.58**	**37.12**	**149.68**	**26.32**	**7.30**
Shasta County AQMD Significance Threshold "Level A/Level [1, 2]	*25/137*	*25/137*	-	*80/137*	-
Exceed Shasta County AQMD Threshold?	**No/No**	**Yes/No**	**NA**	**No/No**	**NA**

NOTES: CO = carbon monoxide; NO_x = nitrogen oxide; $PM_{2.5}$ = particulate matter no more than 2.5 microns in diameter; PM_{10} = particulate matter no more than 10 microns in diameter; ROG = reactive organic gases; – = no threshold.

1. In developing these thresholds, Shasta County AQMD considered levels at which project emissions are cumulatively considerable. Consequently, exceedances of project-level thresholds would be cumulatively considerable.

2. Shasta County AQMD considers violations of the CO ambient air quality standard significant.

Source: Refer to the CalEEMod outputs provided in AIR QUALITY MODELING.

Table 3, LONG-TERM PROJECT OPERATIONAL EMISSIONS WITH THE IMPLEMNTATION OF LEVEL "A" SMM AND BAMM, shows the operational criteria pollutant emissions with the implementation of SMMs and appropriate BAMMs for the project. Project emissions would not remain below the Level B significance threshold. Therefore, the impacts from long term project operational emission would be considered less than significant. Exceedance of Level A thresholds for NO_X would be reduced through the with implementation of SMMs and appropriate BAMMs for the project.

Table 3

LONG-TERM MITIGATED PROJECT OPERATIONAL EMISSIONS

Emission Source	Pollutant (pounds per day)				
	Reactive Organic Gases (ROG)	**Nitrogen Oxide (NO_x)**	**Carbon Monoxide (CO)**	**Coarse Particulate Matter (PM_{10})**	**Particulate Matter ($PM_{2.5}$)**
Summer Emissions					
Area Source	0.26	<0.001	0.01	<0.001	<0.001
Energy Use	<0.001	0.02	0.01	<0.001	<0.001
Mobile Source	21.25	32.87	151.80	26.03	7.22
Total	**21.51**	**32.88**	**151.82**	**26.03**	**7.22**
Winter Emissions					
Area Source	0.26	<0.001	0.01	<0.001	<0.001
Energy Use	<0.001	0.02	0.01	<0.001	<0.001
Mobile Source	16.22	36.77	148.38	26.03	7.22
Total	**16.48**	**36.79**	**148.40**	**26.03**	**7.22**
Shasta County AQMD Significance Threshold "Level A/Level B" 1, 2	*25/137*	*25/137*	-	*80/137*	-
Exceed Shasta County AQMD Threshold?	**No/No**	**Yes/No**	**NA**	**No/No**	**NA**

NOTES: CO = carbon monoxide; NO_x = nitrogen oxide; $PM_{2.5}$ = particulate matter no more than 2.5 microns in diameter; PM_{10} = particulate matter no more than 10 microns in diameter; ROG = reactive organic gases; – = no threshold.

1. In developing these thresholds, Shasta County AQMD considered levels at which project emissions are cumulatively considerable. Consequently, exceedances of project-level thresholds would be cumulatively considerable.
2. Shasta County AQMD considers violations of the CO ambient air quality standard significant.

Source: Refer to the CalEEMod outputs provided in AIR QUALITY MODELING.

Cumulative Emissions

As discussed above, the project's construction-related and operational emissions would have the potential to exceed Level A thresholds but not Level B significance thresholds.

The SCAQMD has not established separate significance thresholds for cumulative construction or operational emissions. The nature of air emissions is largely a cumulative impact. As a result, no single project is sufficient in size, by itself, to result in nonattainment of ambient air quality standards. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. The SCAQMD developed the thresholds of significance based on the level above which a project's individual emissions would result in a cumulatively considerable contribution to the Basin's existing air quality

conditions. Therefore, a project consistent with the Land Use Impact Analysis Program described in the Shasta County General Plan Air Quality Element, a project that exceeds the SCAQMD Level "B" thresholds would also be a cumulatively considerable contribution to a significant cumulative impact.

As shown above in Table 1, Table 2, and Table 3 the project's construction and long-term project operations emissions would not exceed the Level B thresholds of significance. Therefore, air quality emissions associated with the project would not result in a cumulatively considerable contribution to significant cumulative air quality impacts. Long-term project operational emissions would exceed Level A thresholds. However, implementation of SMMs and BAMMs would reduce these impacts.

c) Sensitive land uses are defined as facilities or land uses that include members of the population that are particularly sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses. Examples of these sensitive receptors are residences, schools, hospitals, and daycare centers. The State CEQA Guidelines indicate that a potentially significant impact could occur if a project would expose sensitive receptors to substantial pollutant concentrations. Pacheco Middle School is approximately 350 feet to the southeast of the project site.

Construction Toxic Air Contaminants

Project construction equipment and associated heavy-duty truck traffic would generate diesel particulate matter (DPM), which is a known toxic air contaminant (TAC). For construction activity, DPM is the primary toxic air contaminant of concern. On-road diesel-powered haul trucks traveling to and from the construction area to deliver materials and equipment are less of a concern because they would not stay on the site for long durations. Diesel exhaust from construction equipment operating at the site poses a health risk to nearby sensitive receptors.

The amount to which the receptors are exposed (a function of concentration and duration of exposure) is the primary factor used to determine health risk (i.e., potential exposure to TAC emission levels that exceed applicable standards). The use of diesel-powered construction equipment would be temporary and episodic. The duration of exposure would be short and exhaust from construction equipment dissipates rapidly. On-road diesel-powered haul trucks traveling to and from the construction area to deliver materials and equipment are less of a concern because they would not stay on the site for long durations. Current models and methodologies for conducting health risk assessments are associated with longer-term exposure periods of nine, 30, and 70 years, which do not correlate well with the temporary and highly variable nature of construction activities. California Office of Environmental Health Hazard Assessment has not identified short-term health effects from DPM. Construction is temporary and would be transient throughout the site (i.e., move from location to location) and would not generate emissions in a fixed location for extended periods of time.

Construction is subject to and would comply with California regulations (e.g., California Code of Regulations, Title 13, Division 3, Article 1, Chapter 10, Sections 2485 and 2449), which reduce DPM and criteria pollutant emissions from in-use off-road diesel-fueled vehicles and limit the idling of heavy-duty construction equipment to no more than five minutes. These regulations would further reduce nearby sensitive receptors' exposure to temporary and variable DPM emissions. Given the temporary and intermittent nature of construction activities likely to occur within specific locations in the project site (i.e., construction is not likely to occur in any one location for an extended time), the dose of DPM of any one receptor is exposed to would be limited. Therefore, considering the relatively short duration of DPM-emitting construction activity at any one location and the highly dispersive properties of DPM, sensitive receptors would not be exposed to substantial concentrations of construction-related TAC emissions. Carcinogenic health risk occurs from long-term exposure and not necessarily construction activities. For these reasons, DPM generated by construction activities, in and of itself, would not be expected to expose sensitive receptors to substantial amounts of air toxics and the project would have a less than significant impact.

Operational Toxic Air Contaminants

An operational Health Risk Assessment (HRA) was prepared for the project. The proposed project includes a fuel dispensing facility, which would be a source of fuel vapors that would include TACs such as benzene, methyl tertiary-butyl ether, toluene, and xylene. Benzene is the primary TAC associated with fuel dispensing facilities. Additionally, DPM emissions would be emitted from diesel-fueled trucks traveling along the designated delivery truck access routes to the travel center and emitted from trucks idling at the project site.

The HRA was conducted in accordance with guidance from the California Office of Environmental Health Hazard Assessment (OEHHA). Fuel dispensing facility emissions were computed based on the maximum allowable throughput of fuel (i.e., 9.6

million gallons per year). Emissions of benzene, which is a TAC, were computed using CARB emission factors for fuel-dispensing facilities and assuming that benzene makes up 0.3 percent of gasoline vapor. Total benzene emissions were calculated at 0.005 pounds per hour; refer to Appendix C for the details of the calculations.

Air dispersion modeling for the HRA was performed using the United States Environmental Protection Agency (U.S. EPA) AERMOD dispersion model. AERMOD is a steady-state, multiple- source, Gaussian dispersion model designed for use with emission sources situated in terrain where ground elevations can exceed the stack heights of the emission sources (not a factor in this case). AERMOD requires hourly meteorological data consisting of wind vector, wind speed, temperature, stability class, and mixing height. Uniform Cartesian receptors were used to evaluate the locations of the maximally exposed sensitive receptors. Surface and upper air meteorological data from the Redding Municipal Airport Monitoring Station was selected as being the most representative meteorology. In addition, National Elevation Dataset (NED) terrain data was imported into AERMOD for the project. Risk levels were calculated with CARB's Risk Assessment Stand Alone Tool (RAST) based on the California Office of Environmental Health Hazard Assessment (OEHHA) guidance document, Air Toxics Hot Spots Program Risk Assessment Guidelines (February 2015).

Note that the concentration estimate developed using this methodology is conservative and is not a specific prediction of the actual concentrations that would occur at the project site any one point in time. Actual 1-hour and annual average concentrations are dependent on many variables, particularly the number and type of vehicles and equipment operating at specific distances during time periods of adverse meteorology. A health risk computation was performed to determine the risk of developing an excess cancer risk calculated on these worst-case exposure duration scenarios. The chronic and carcinogenic health risk calculations are based on the standardized equations contained in the OEHHA Guidance Manual. Only the risk associated with the worst-case location of the project was assessed.

Results of this assessment are summarized in Table 4, OPERATIONAL HEALTH RISK. The risk results in Table 4 are based on the worst-case concentration and assume a 30-year exposure duration, age sensitivity factors (with a third trimester start age), and 95th percentile breathing rates. Maximum concentration of particulate matter exhaust would be 0.006 µg/m^3 and benzene concentrations would be 0.017 µg/m^3. The highest calculated carcinogenic risk from project construction would be approximately 6.76 per million, which would not exceed the 10 in one million threshold. The maximally exposed individual (MEI) (i.e., the closest sensitive receptor) would be located at the southeast corner of the Knighton Road and Pacheco Road intersection.

Table 4

OPERATIONAL HEALTH RISK

Emissions Sources	**Pollutant Concentration (µg/m^3)**	**Cancer Risk (per Million)**	**Chronic Hazard**	**Acute Hazard**
Trucks	0.006	5.41	0.001	0.02
Gas Dispensing Facility	0.017	1.35	0	0
Total	*N/A*	*6.76*	*0.001*	*0.02*
Threshold	*N/A*	*10*	*1.0*	*1.0*
Threshold Exceeded?	**No**	**No**	**No**	**No**
Refer to HEALTH RISK ASSESSMENT.				

Acute and chronic impacts were also evaluated and shown in Table 4. An acute or chronic hazard index of 1.0 is considered individually significant. The hazard index is calculated by dividing the acute or chronic exposure by the reference exposure level. The highest maximum chronic and acute hazard index from the project would be 0.001 and 0.02, respectively. Therefore, carcinogenic, and non-carcinogenic hazards are calculated to be within acceptable limits and a less than significant impact would occur.

Carbon Monoxide Hotspots

The primary mobile-source criteria pollutant of local concern is carbon monoxide. Concentrations of CO are a direct function of the number of vehicles, length of delay, and traffic flow conditions. Transport of this criteria pollutant is extremely limited; CO disperses rapidly with distance from the source under normal meteorological conditions. Under certain meteorological conditions, however, CO concentrations close to congested intersections that experience high levels of traffic and elevated background concentrations may reach unhealthy levels, affecting nearby sensitive receptors. Areas of high CO concentrations, or "hot spots," are typically associated with intersections that are projected to operate at unacceptable levels of service during the peak commute hours. CO concentration modeling is therefore typically conducted for intersections that are projected to operate at unacceptable levels of service during peak commute hours.

Shasta County is in attainment for CO and concentrations in the area have historically been low, and well within compliance with both state and federal ambient air quality standards. As such, the Shasta County AQMD does not require the analysis of CO hotspots. The overall effect in the County is that CO concentrations remain relatively low, and it is not anticipated that CO from project traffic would generate a CO hotspot. Although the Shasta County AQMD does not have thresholds for CO hotspots, the Bay Area Air Quality Management District (BAAQMD) has screening criteria and notes that CO impacts may be determined to be less than significant if a project would not increase traffic volumes at local intersections to more than 44,000 vehicles per hour, or 24,000 vehicles per hour for locations in heavily urban areas, where "urban canyons" formed by buildings tend to reduce air circulation. According to the *Draft Local Transportation Analysis* prepared for the project, the project would generate 4,565 net daily trips. The project's effects to existing vehicle distribution and travel speeds would be nominal. The project would not involve intersections with more than 24,000 or 44,000 vehicles per hour. As a result, the project would not have the potential to create a CO hotspot and impacts would be less than significant.

d) The occurrence and severity of odor impacts depends on numerous factors, including the nature, frequency, and intensity of the source; wind speed and direction; and the sensitivity of the receptors. While offensive odors rarely cause any physical harm, they can be unpleasant, leading to distress among members of the public and can generate citizen complaints to local governments and regulatory agencies. Projects with the potential to frequently expose people to objectionable odors would have a significant impact.

Project construction would use a variety of gasoline- or diesel-powered equipment that would emit exhaust fumes. While exhaust fumes, particularly diesel exhaust, may be considered objectionable by some people, construction-generated emissions would occur intermittently throughout the workday and would dissipate rapidly within increasing distance from the source. To reduce the emission of fumes or other materials and minimize impacts on surroundings areas each fueling position includes a vapor recovery system. There are sensitive receptors within approximately 400 feet of the project site; however, implementation of SMMs and BAMMs would reduce these emissions to the extent feasible based on the type and availability of equipment for a specific task. Impacts would be less than significant.

Mitigation Measures

The following mitigations measures have been developed to reduce potential impacts related to Biological Resources to less than significant levels:

III.b.1

Standard Mitigation Measures

- All construction equipment shall be maintained and properly tuned in accordance with manufacturers' specifications. Equipment maintenance records shall be kept onsite and made available upon request by Shasta County AQMD.

- All material excavated, stockpiled, or graded shall be sufficiently covered, watered, or have soil binders to prevent fugitive dust from leaving property boundaries and causing a public nuisance or a violation of an ambient air standard. Watering shall occur at least twice daily with complete site coverage, preferably in the mid-morning and after work is completed each day.
- All unpaved areas (including unpaved roads) with vehicle traffic shall be watered periodically or have dust palliatives applied for stabilization of dust emissions.
- All onsite vehicles shall be limited to a speed of 15 miles per hour on unpaved roads.
- All land clearing, grading, earth-moving, or excavation activities on the project site shall be suspended when sustained winds are expected to exceed 20 miles per hour.
- All portions of the development site which have been stripped of vegetation by construction activities and left inactive for more than ten days shall be seeded and/or watered until a suitable grass cover is established.
- All trucks hauling dirt, sand, soil, or loose material shall be sufficiently watered, covered, or shall maintain at least 2 feet of freeboard (i.e., minimum vertical distance between top of the load and the trailer) in accordance with the requirements of California Vehicle Code Section 23114. This provision will be enforced by local law enforcement agencies.
- Wheel washers shall be installed where project vehicles and/or equipment enter and/or exit onto paved streets from unpaved roads. Vehicles and/or equipment shall be washed prior to each trip.
- Prior to final occupancy, the applicant shall re-establish ground cover on the construction site through seeding and watering.
- Off-road construction equipment shall not be left idling for periods longer than 5 minutes when not in use.
- Temporary traffic control shall be provided as appropriate during all phases of construction to improve traffic flow.
- Construction activities that could affect traffic flow shall be scheduled in off-peak hours.
- All public roadways used by the project contractor shall be maintained free from dust, dirt, and debris caused by construction activities. Streets shall be swept at the end of the day if visible soil materials are carried onto adjacent public paved roads. Wheel washers shall be used where vehicles enter and exit unpaved roads onto paved roads, or trucks and any equipment shall be washed off leaving the site with each trip.

III.b.2

Best Available Mitigation Measures

- During all construction activities, diesel-fueled excavators, forklifts, rubber-tired dozers, and tractors, shall be California Air Resources Board (CARB) Tier 4 interim or better as set forth in Section 2423 of Title 13 of the California Code of Regulations, and Part 89 of Title 40 of the Code of Federal Regulations.
- Provide bio-diesel as an alternative fuel to standard diesel.
- Provide vehicle charging stations.

- Limit idling time for delivery trucks to five minutes. Deliveries exceeding that 5 minutes must turn off truck engines.
- Provide an air compressor for auto tire inflation for drivers to maintain fuel efficiency with properly inflated tires.
- Utilize energy efficient lighting within the building and around fueling canopies.
- Utilize energy efficient controls for heating and air conditioning units within the building

Under policy of the Air Quality Element, a project has the potential to impact air quality primarily in two ways: (1) the project would generate vehicle trip emissions (with NO_X, ROG, and PM_{10}) that contribute cumulatively to local and regional air quality conditions; and (2) fugitive dust (particulate/PM_{10}) emissions are possible during construction activities. As a gas station and retail convenience store, including a sit-down restaurant and coffee shop, the proposed project does not have the potential to generate significant emission concentrations of other pollutants subject to State and federal ambient air quality standards.

Section IV – Biological Resources

This section of the Initial Study describes the affected environment for biological resources and is based upon the *Biological Study Report - Knighton Road Maverik Convenience Store and Automotive Fuel Station* (ENPLAN, 2022a). The assessment summarizes the results of biological field surveys of the project area and describes the potential impacts on biological resources that would result from implementation of the proposed project. Additionally, this section provides mitigation measures that would reduce the impacts identified.

Environmental Setting

The proposed project site is nearly flat, and ranges in elevation from approximately 440 to 450 feet above mean sea level (msl) and is currently grazing land. The surrounding area is a mixture of urban (TA Travel Center and paved roadways), cropland (east of Churn Creek Road) and perennial grassland used for grazing. The proposed store and fuel station would be located immediately northwest of the intersection of Knighton Road and Churn Creek Road and would be accessed from either road. A narrow corridor for an underground sewer pipe would extend from the northwestern corner of the proposed parking lot to a planned leach field site adjacent to the Interstate 5 northbound on-ramp.

According to the Natural Resources Conservation Service Web Soil Survey (NRCS, 2022), two soil units are present on the study site: Churn loam, 0 to 3 percent slopes, and Tehama loam, 0 to 3 percent slopes. Neither soil unit is considered hydric or contains hydric inclusions. As a result of the field evaluation, two vegetation communities were identified in the study area: pasture and previously developed urban habitat.

In the study area, pasture habitat is present primarily in the western portion of the project site, in the location of the proposed leach field. The primary species associated with the onsite pasture habitat include tall fescue (*Festuca arundinacea*) and bulbous bluegrass (*Poa bulbosa*). Urban habitat is present in the eastern portion of the project site, at the location of the proposed fuel station and convenience store. Due to the previous presence of a home and outbuildings in and adjacent to the study area, this portion of the site contains various ornamental tree species. The most abundant trees are Northern California black walnut (*Juglans hindsii*) and mulberry (*Morus alba*). Other tree species include ornamental juniper (*Juniperus sp.*), interior live oak (*Quercus wislizeni*), valley oak (*Quercus lobata*), southern magnolia (*Magnolia grandiflora*), tree of heaven (*Ailanthus altissima*), and California bay (*Umbellularia californica*). The understory species include Himalayan blackberry (*Rubus armeniacus*), milk thistle (*Silybum marianum*), curly dock (*Rumex crispus*), and others (ENPLAN, 2022a).

Regulatory Setting

This section summarizes current federal, State, and local regulations relevant to the review of *Biological Resources* for this project. Ordinances, regulations, or standards that are applicable to the environmental review of biological resource impacts include the following:

Wetlands and Waters

The United States Army Corps of Engineers (USACE) has primary federal responsibility for administering regulations that concern waters of the U.S. (including wetlands). Section 404 of the Clean Water Act (CWA), regulates the discharge of dredged or fill material into waters of the U.S. The USACE requires that a permit be obtained prior to the placement of structures within, over, or under navigable

waters and/or discharges dredged or fill material into waters below the ordinary high water mark (OHWM). The USACE has established a series of nationwide permits (NWP) that authorize certain activities in waters of the U.S. Under CWA Section 401, a project requiring a USACE Section 404 permit is also required to obtain a State Water Quality Certification (or waiver) to ensure that the project will not violate established State water quality standards. The RWQCB regulates waters of the State and has a policy of no-net-loss of wetlands. The Regional Water Quality Control Board (RWQCB) typically requires mitigation for all impacts to wetlands before it will issue a water quality certification.

Federal Endangered Species Act

The U.S. Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS) implement the federal Endangered Species Act (FESA) of 1973. Under FESA, threatened and endangered species on the federal list and their habitats are protected from "take" unless a Section 10 Permit is granted to an individual or a Section 7 consultation and a Biological Opinion with incidental take provisions are rendered from the lead federal agency. Under FESA, habitat loss is considered to be an impact to the species. Under Section 7 of the FESA, all federal agencies (including the USFWS and NMFS) are required to ensure that any action they authorize, fund, or carry out will not likely jeopardize the continued existence of federally listed species or result in the destruction or adverse modification of critical habitat.

Federal Migratory Bird Treaty Act

Most bird species, (especially those that are breeding, migrating, or of limited distribution) are protected under federal and/or State regulations. Under the Migratory Bird Treaty Act (MBTA) of 1918, migratory bird species, their nests, and their eggs are protected from injury or death, and any project-related disturbances during the nesting period.

Federal Magnuson-Stevens Fishery Conservation and Management Act

The Magnuson-Stevens Fishery Conservation and Management Act, also known as the Sustainable Fisheries Act (Public Law 104-297), requires that all federal agencies consult with NMFS on projects authorized, funded, or undertaken by that agency that may adversely affect Essential Fish Habitat of commercially managed marine and anadromous fish species.

Federal Bald and Golden Eagle Protection Act

This Act provides for the protection of the bald eagle and the golden eagle by prohibiting, except under certain specified conditions, the taking, possession, and commerce of such birds and their occupied and unoccupied nests.

California Fish and Game Code §1600-1616 (Streambed Alteration)

California Fish and Game Code §1600 *et seq.*, requires that a project proponent notify the California Department of Fish and Wildlife (CDFW) prior to any work that would divert or obstruct the natural flow of any river, stream, or lake; change the bed, channel, or bank of any river, stream, or lake; use material from any river, stream, or lake; and/or deposit or dispose of material into any river, stream, or lake. The project proponent and the CDFW must enter into a Streambed Alteration Agreement (SAA) prior to an action that would result in such an impact. The SAA will include conditions that minimize/avoid potentially significant adverse impacts to riparian habitat and waters of the state.

California Fish and Game Code §3503 and 3503.5 (Nesting Bird Protections)

These sections of the Code provide regulatory protection to resident and migratory birds and all birds of prey within the State and make it unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by the Code.

California Endangered Species Act

The California Endangered Species Act (CESA) prohibits the take of State-listed threatened and endangered species. Under CESA, state agencies are required to consult with the CDFW when preparing CEQA documents. The CDFW can authorize take if an incidental take permit is issued by the Secretary of the Interior in compliance with the FESA, or if the director of the CDFW issues a permit under §2080 in those cases where it is demonstrated that the impacts are minimized and mitigated.

California Native Plant Protection Act

The California Native Plant Protection Act (NPPA) (California Fish and Game Code §1900 – 1913) includes measures to preserve, protect, and enhance rare and endangered native plants. The list of native plants afforded protection pursuant to the Native Plant Protection Act includes those listed as rare and endangered under the CESA. The NPPA states that no person will take, possess, sell, or import into the state, any rare or endangered native plant, except in compliance with provisions of the act.

Shasta County General Plan

The Shasta County General Plan provides goals, policies, and implementation measures to reduce impacts of projects on biological resources. Applicable goals and policies relative to the proposed project site are listed below:

- *FW-1.* Protection of significant fish, wildlife, and vegetation resources.
- *FW-2.* Provide for a balance between wildlife habitat protection and enhancement and the need to manage and use agricultural, mineral extraction, and timber land resources.
- *Policy FW-b.* Recognition that classification of some fish, wildlife, and vegetation resources designated and used as Timberlands, Mineral Resource, Croplands, or Grazing lands does, in most cases, protect habitat resources. However, if there is a conflict, the timber, mineral extraction, or agricultural land use classifications mentioned above shall prevail in a manner consistent with State and Federal laws.
- *Policy FW-c.* Projects that contain or may impact endangered and/or threatened plant or animal species, as officially designated by the California Fish and Game Commission and/or the U. S. Fish and Wildlife Service, shall be designed or conditioned to avoid any net adverse project impacts on those species.

Impact Analysis

Records reviewed for this evaluation consisted of the California Department of Fish and Wildlife (CDFW) California Natural Diversity Data Base (CNDDB) records for special-status plants, animals, and natural communities within a 5-mile radius of the study area (see Table 1 of the Biological Study Report - Knighton Road Maverik Convenience Store and Automotive Fuel Station (ENPLAN, 2022a)), the California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants for the Enterprise 7.5-minute quadrangle (see Table 2 of the Biological Study Report - Knighton Road Maverik Convenience Store and Automotive Fuel Station (ENPLAN, 2022a)), and the U.S. Fish and Wildlife Service (USFWS) records for federally listed, proposed, and candidate plant and animal species with the potential to occur in the study area (see Appendix C Biological Study Report - Knighton Road Maverik Convenience Store and Automotive Fuel Station (ENPLAN, 2022a)).The National Marine Fisheries Service (NMFS) was not consulted because the project site does not contain any streams that could potentially support fish.

The CNDDB records search covered a five-mile radius around the project site. This review of records addressed portions of the Balls Ferry, Cottonwood, Enterprise, Olinda, Palo Cedro, and Redding quadrangles. CNPS records were reviewed for the Enterprise quadrangle. The USFWS records searches were based on the study area location.

The following includes an analysis of environmental parameters related to Biological Resources based on Appendix G of the State CEQA Guidelines. The discussion not only includes the areas for which there is potential for environmental impacts but also provides justification for the conclusions that either no impacts, less than significant impacts, or less than significant impacts with mitigation could occur.

IV. <u>BIOLOGICAL RESOURCES</u>: Would the project:	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a) Have a substantial effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?		X		

IV. BIOLOGICAL RESOURCES: Would the project:	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?		X		
c) Have a substantial adverse effect on state or Federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?		X		
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?		X		
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?			X	
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community, Conservation Plan, or other approved local, regional, or State habitat conservation plan?				X

Discussion: Based on the related documents listed in the Sources of Documentation for Initial Study Checklist, staff review of the project, observations on the project site and in the vicinity, and a Biological Study Report, (ENPLAN 2022) the following findings can be made:

a) The following evaluation of potential impacts on special-status species is based on records searches and field studies is documented in the Biological Study Report prepared for the proposed project (ENPLAN, 2022) (see the Biological Study Report). The study includes an assessment of the following:

- Natural Communities
- Special-Status Species
- Nesting Migratory Birds
- Noxious Weeds

To determine the presence or absence of special-status plant and animal species, a botanical and wildlife survey was conducted on February 28, March 9, April 23, 2022. Some of the special-status species potentially occurring in the study area would not have been evident at the time the fieldwork was conducted. However, determination of their potential presence could readily be made based on observed habitat characteristics.

Natural Communities
CNDDB records identified three sensitive natural communities within a five-mile radius of the project area: Great Valley cottonwood riparian forest, Great Valley valley oak riparian forest, and Great Valley willow scrub. The USFWS does not identify designated critical habitat for federally listed species in the study area or vicinity.

In the study area, pasture habitat is present primarily in the western portion of the project site, in the location of the proposed leach field. The primary species associated with the onsite pasture habitat include tall fescue (Festuca arundinacea) and bulbous bluegrass (Poa bulbosa). Other common onsite species include yellow star-thistle (Centaurea solstitialis), shepherd's purse

(Capsella bursa-pastoris), rigid fiddleneck (Amsinckia retrorsa), milk thistle (Silybum marianum), and field mustard (Brassica rapa) (ENPLAN, 2022a).

Urban habitat is present in the eastern portion of the project site, at the location of the proposed fuel station and convenience store. Due to the previous presence of a home and outbuildings in and adjacent to the study area, this portion of the site contains various ornamental tree species. The most abundant trees are Northern California black walnut (Juglans hindsii) and mulberry (Morus alba). Other tree species include ornamental juniper (Juniperus sp.), interior live oak (Quercus wislizeni), valley oak (Quercus lobata), southern magnolia (Magnolia grandiflora), tree of heaven (Ailanthus altissima), and California bay (Umbellularia californica). The understory species include Himalayan blackberry (Rubus armeniacus), milk thistle (Silybum marianum), curly dock (Rumex crispus), and others. This urban community provides potential nesting and foraging habitat for birds, and habitat for various ground and arboreal rodents such as western gray squirrels (Sciurus griseus) (ENPLAN, 2022a).

The principal natural communities onsite are pasture and previously developed urban habitat; neither community is considered sensitive. A constructed roadside ditch is present along Churn Creek and Knighton roads in the urban habitat. This constructed roadside ditch averages approximately 2 feet in width and is approximately 517 feet long. The ditch conveys runoff from uplands and roadways and is not connected to any adjacent wetland, ditch, or riverine feature. All or portions of the ditch would be filled/culverted as part of the proposed project. Because the ditch is a "surface water," it is subject to the jurisdiction of the Regional Water Quality Control Board (RWQCB). Mitigation Measure IV.a.1 requires the project applicant to obtain the necessary permits or approvals prior to filling of the ditch. With implementation of Mitigation Measure IV.a.1 impacts would be less than significant.

Special-Status Plant Species

Review of the USFWS species list (see Appendix C of the Biological Study Report) for the project area identified one special-status plant species as having the potential to be affected by the proposed project: Slender Orcutt grass. The project site does not contain designated critical habitat for federally listed plant species; however, critical habitat for slender Orcutt grass is present approximately one mile east of the project site (ENPLAN, 2022a).

Review of California Natural Diversity Data Base (CNDDB) records (see Table 1 of the Biological Study Report) showed that four special-status plants have been reported within a five-mile radius of the study area: legenere, Red Bluff dwarf rush, silky cryptantha, and slender Orcutt grass. One non-status plant, Henderson's bent grass, has also been reported in the five-mile search radius. The California Native Plant Society (CNPS) Inventory (see Table 2 of the Biological Study Report) for the Enterprise quadrangle identified three additional non-status plants: dubious pea, Redding checkerbloom, and tripod buckwheat (ENPLAN, 2022a).

The potential for each of the special-status plant species to occur on the project site is evaluated in Table 3 of the Biological Study Report) . As documented in the table, none of these or any other special-status plant species were observed during the botanical field survey, nor are any expected to be present. Included as Appendix D of the Biological Study Report) is a list of vascular plants observed during the botanical surveys (ENPLAN, 2022a). Impacts would be less than significant.

Special-Status Wildlife Species

Review of the USFWS species list for the project area (see Appendix C of the Biological Study Report) identified the following federally listed animal species and candidates for federal listing as potentially being affected by the proposed project: valley elderberry longhorn beetle, monarch butterfly, California red-legged frog, conservancy fairy shrimp, vernal pool fairy shrimp, vernal pool tadpole shrimp, delta smelt, and the northern spotted owl. The USFWS does not identify designated critical habitat in the study area for any federally listed animal species; however, critical habitat for vernal pool fairy shrimp and vernal pool tadpole shrimp is present approximately 2.8 miles east of the project site (ENPLAN, 2022a).

Review of CNDDB records identified fourteen special-status animal species reported within a five-mile radius of the study area: bald eagle, bank swallow, Central Valley spring-run ESU Chinook salmon, Sacramento River winter-run ESU Chinook salmon, green sturgeon – southern DPS, osprey, Central Valley DPS steelhead, tricolored blackbird, valley elderberry longhorn beetle, vernal pool fairy shrimp, vernal pool tadpole shrimp, western pond turtle, western red bat, and western spadefoot. Additionally, six non-status animals have been reported in the five-mile search radius (ENPLAN, 2022a). The potential for each of the above special-status animal species to occur on the project site is further evaluated in Table 3 of the Biological Study Report. No special-status species were observed during the field survey and the project area does not provide suitable habitat for any special-status

animal species (ENPLAN, 2022). The Crotch's Bumble Bee has been listed as a candidate species for the California Endangered Species Act. While none were observed on the project site, a mitigation measure requiring preconstruction surveys is included. Impacts would be less than significant with mitigation incorporated.

Noxious Weeds

The introduction and spread of noxious weeds during construction activities has the potential to impact natural habitats. A noxious weed is a plant that has been defined as a pest by federal or state law. The California Department of Food and Agriculture (CDFA, 2022) maintains a list of plants that are considered threats to the well-being of the state. Each noxious weed identified by the CDFA receives a rating that reflects the importance of the pest, the likelihood that eradication or control efforts would be successful, and the present distribution of the pest within the state. Below is a description of ratings categories applied by CDFA:

- *Category A*. A pest of known economic or environmental detriment that is either not known to be established in California or it is present in a limited distribution that allows for the possibility of eradication or successful containment. A-rated pests are prohibited from entering the state because they have been determined to be detrimental to agriculture.

- *Category B.* A pest of known economic or environmental detriment and, if present in California, is of limited distribution. B-rated pests are eligible to enter the state if the receiving county has agreed to accept them.

- *Category C.* A pest of known economic or environmental detriment and, if present in California, it is usually widespread. C-rated organisms are eligible to enter the state as long as the commodities with which they are associated conform to pest cleanliness standards when found in nursery stock shipments.

According to California Invasive Plant Council (Cal-IPC, 2022) records, two of the plant species observed in the project area during the botanical survey have a California Department of Food and Agriculture weed ranking in Category C: bindweed (Convolvulus arvensis) and tree-of-heaven (Ailanthus altissima). Two additional species are included in the California Code of Regulations (CCR) Section 4500 list of California State Noxious Weeds but are otherwise not rated: yellow star-thistle and bull thistle. Another ten observed plant species were listed with Cal-IPC rating between "moderate" and "high." Mitigation Measure IV.a.2 specifies actions to be taken to reduce or eliminate the potential to spread noxious weeds. With implementation of Mitigation Measure IV.a.2 impacts would be less than significant.

b) Refer to impact discussion IV.a, above. Impacts would be less than significant with implementation of Mitigation Measure IV.a.1 and IV.a.2.

c) Refer to impact discussion IV.a, above. Impacts would be less than significant with implementation of Mitigation Measure IV.a.1 and IV.a.2.

d.) Under the Migratory Bird Treaty Act (MBTA) of 1918, migratory bird species, their nests, and their eggs are protected from injury or death, and any project-related disturbances during the nesting period. In addition, California Fish and Game Code Section 3503 provides regulatory protection to resident and migratory birds and all birds of prey within the State.

Although no nests were observed during the biological field screening, birds could potentially nest in vegetation present in the project area. If present during construction, nesting birds could be directly or indirectly affected by construction activities. Direct effects could include mortality resulting from tree removal or from construction equipment operating in an area containing an active nest with eggs or chicks. Indirect effects could include nest abandonment by adults in response to loud noise levels or human encroachment, or a reduction in the amount of food available to young birds due to changes in feeding behavior by adults (ENPLAN, 2022a).

In the local area, most birds nest between February 1 and August 31, and the potential for adversely affecting nesting birds can be greatly minimized by conducting vegetation removal before February 1 or after August 31. If this is not possible, a nesting survey should be conducted prior to commencement of construction. If active nests are found, the survey biologist would consult with CDFW and the USFWS regarding appropriate action to comply with the Migratory Bird Treaty Act and California Fish and Game Code Section 3503. Compliance measures may include, but are not limited to, exclusionary buffers, sound attenuation measures, seasonal work closures based on the known biology and life history of the species identified in the survey, as well as ongoing monitoring by biologists. Mitigation Measure IV.d.1 outlines recommended actions to reduce or eliminate direct and indirect effects on nesting birds. With implementation of Mitigation Measure IV.d.1 impacts would be less than significant.

e.) The principal natural communities in the study area are pasture and previously developed urban habitat; neither community is considered sensitive. Pasture habitat is present primarily in the western portion of the project site, in the location of the proposed leach field. Urban habitat is present in the eastern portion of the project site, at the location of the proposed fuel station and convenience store. Due to the previous presence of a home and outbuildings in and adjacent to the study area, this portion of the site contains various ornamental tree species as described above under impact discussion IV.a. This urban community provides the potential for nesting and foraging habitat for birds, and habitat for various ground and arboreal rodents (ENPLAN, 2022). As such, there is the potential that raptors and migratory birds could be impacted by tree removal and other major land-clearing activity necessary to construct the subdivision. To minimize impacts from construction, mitigation is provided below to encourage ground disturbance activities to occur between September 1 and January 31, and requiring a nest survey and appropriate nest-avoidance measures, if any work must occur during the nesting season (see Mitigation Measure IV.d.1).

The County has not adopted a Tree Management Ordinance, or local conservation plan that would conflict with the proposed project. The County's General Plan acknowledges that preservation fish and wildlife habitat area within the county will largely occur in areas are used for timber of agricultural practices (Shasta, 2004). The General Plan also recognizes that significant habitat areas will not fall under these classifications, and as a result are designated as Natural Resource Protection-Habitat (N-H) areas. Additionally, neither the proposed project site, nor adjacent lands are designated by the Shasta County Code (SCC) Chapter 17.14 – Habitat Protection (HP) District.

The proposed project is subject the requirements of SCC Chapter 17.84 – General Development Standards, Section 17.84.040 – Landscaping. The project current proposes to plant 148 shrubs and 23 trees onsite. The native trees will be planted for their aesthetics, to moderate temperatures, to serve as visual buffers between adjacent land uses, and to provide habitat for wildlife see Figure 9, LANDSCAPE PLAN). Approval of the proposed project constitutes a determination that the proposed project is consistent with the County's Landscaping Ordinance. Since the project must be consistent with the ordinance before a permit is issued, the proposed project would not result in a conflict with SCC Chapter 17.84. Impacts would be less than significant.

f.) A Habitat Conservation Plan (HCP) is a federal planning document that is prepared pursuant to Section 10 of the Federal Endangered Species Act (FESA). A Natural Community Conservation Plan (NCCP) is a State planning document administered by CDFW. There are no HCPs, NCCPs or other habitat conservation plans that apply to the proposed project. No impact would occur in this regard.

Mitigation Measures

The following mitigations measures have been developed to reduce potential impacts related to Biological Resources to less than significant levels:

IV.a.1

Prior to the issuance of grading or encroachment permit for construction of the roadside ditch along Knighton Road and Churn Creek Road, the project proponent shall obtain the necessary permits and approvals from the appropriate resource agencies. Permits/approvals may include issuance of a Nationwide Permit by the Army Corps of Engineers, issuance of Water Quality Certification by the State Water Board, or issuance of Waste Discharge Requirements (or a waiver of requirements) by the State Water Board.

IV.a.2

The potential for introduction and spread of noxious weeds shall be avoided/minimized by:

- Using only certified weed-free erosion control materials, mulch, and seed;
- Limiting any import or export of fill material to material that is not known to be weed free; and
- Requiring the construction contractor to thoroughly wash all equipment at a commercial wash facility prior to entering the job site and upon leaving the job site.

Prior to the issuance of the first permit for construction of a project improvement, including but not limited to a grading, sewage disposal, building or encroachment permit, the applicant shall provide and the Department of Resource Management shall review and approve a Noxious Weed Control Plan outlining how the above will be achieved, including sources to be used for certified weed-free erosion

control materials, mulch, and seed, details regarding the equipment washing locations and methods, how contractors and subcontractors will be informed of the plans requirements, and how the plan will be enforced by the applicant.

IV.a.3

Prior to the issuance of the first permit for construction of a project improvement, including but not limited to a grading, sewage disposal, building or encroachment permit, a qualified biologist, specifically those qualified under a research Memorandum of Understanding or authorizing Incidental Take Permit (as described on page 7 of CDFW's Guidelines), shall conduct surveys for special-status bumble bees prior to the start of construction. Three on-site surveys shall be conducted two to four weeks apart, weather depending, and when floral resources are present.

1. Species identification and photographic vouchers shall be submitted to CDFW and experts from the Bumble Bee Watch for species verification by an experienced taxonomist prior to the start of land modification and/or vegetation removal.

2. If special-status bumble bees are detected, a nesting survey as the protocol is described in CDFW's June 2023 Survey Considerations for CESA Candidate Bumble Bee Species, shall be performed throughout the project area.

3. If special-status bumble bees and/or their nests are detected, the potential for "take" as defined by Fish and Game Code section 86 shall be analyzed and quantified. If suitable avoidance and minimization measures to fully avoid take are not feasible, CDFW shall be consulted regarding the need for take authorization pursuant to Fish and Game Code section 2081(b). Otherwise, suitable avoidance and minimization measures to fully avoid take should be employed, and/or the formulation of a Mitigation and Monitoring Plan should be developed for impacts to suitable western bumble bee habitat.

4. All data, including negative and/or positive observations, shall be submitted to the CNDDB and Bumble Bee Watch.

IV.d.1

In order to avoid impacts to nesting birds and raptors protected under the federal Migratory Bird Treaty Act and California Fish and Game Code Section 3503 and Section 3503.5, including their nests and eggs, one of the following shall be implemented (removal of raptor nests at any time of year is prohibited unless appropriate permits are obtained):

- Vegetation removal and other ground-disturbance activities associated with construction shall occur between September 1 and January 31, when birds are not nesting; or
- If vegetation removal or ground disturbance activities occur during the nesting season (February 1 – August 31), a pre-construction nesting survey shall be conducted by a qualified biologist to identify active nests in and adjacent to the work area.

The survey shall consider acoustic impacts and line-of-sight disturbances occurring as a result of the project in order to determine a sufficient survey radius to avoid nesting birds. At a minimum, the survey report shall include a description of the area surveyed, date and time of the survey, ambient conditions, bird species observed in the area, a description of any active nests observed, any evidence of breeding behaviors (e.g., courtship, carrying nest materials or food, etc.), and a description of any outstanding conditions that may have impacted the survey results (e.g., weather conditions, excess noise, the presence of predators, etc.). The survey shall be conducted no more than one week prior to the initiation of construction. If construction activities are delayed or suspended for more than one week after the pre-construction survey, the site shall be resurveyed.

If active nests are found, appropriate actions shall be implemented to ensure compliance with the Migratory Bird Treaty Act and California Fish and Game Code. Compliance measures may include, but are not limited to, exclusion buffers, sound-attenuation measures, seasonal work closures based on the known biology and life history of the species identified in the survey, as well as ongoing monitoring by biologists.

Section V – Cultural Resources

The purpose of the section of the Initial Study is to identify any potential cultural resources within or adjacent to the proposed project, and to assist the Lead Agency, in this case the Shasta County, in determining whether such resources meet the office definitions of "historical resources," as provided in the California Public Resources Code (PRC), in particular under the California Environmental Quality Act (CEQA).

The purpose of the *Cultural Resource Inventory Report* (ENPLAN, 2022) is to satisfy the requirements of CEQA (all as amended). CEQA requires a lead agency to determine whether a project may have a significant effect on historical resources (Section 21084.1). If it can be demonstrated that a project will cause damage to resources Eligible for or Listed in the California Register of Historic Resources (CRHR), Tribal Cultural Resources (TCRs) and other resources on county or local lists, or those determined by the lead agency to be significant, the lead agency may require reasonable efforts be made to permit any or all of the resources to be preserved in place or left in an undisturbed state. To the extent that they cannot be left undisturbed, mitigation measures are required (Section 21083.2[a], [b], and [c]).

The analysis in this section has been prepared in accordance with Section 15064.5 of the State CEQA Guidelines, which considers the potential impacts on prehistoric, historic, and paleontological resources. This section describes the potential cultural resources within the project study area, and the applicable regulations that govern those resources.

Environmental Setting

The project site is relatively flat and is situated between approximately 440 and 450 feet above mean sea level (msl). The vegetation community consists of pastureland on the west end and residential landscaping on the east end. Dominant species on the west end of the site include tall fescue (*Festuca arundinacea*) and bulbous bluegrass (*Poa bulbosa*). Other common onsite species include yellow star thistle (*Centaurea solstitialis*), bull thistle (*Cirsium vulgare*), milk thistle (*Silybum marianum*), and field mustard (*Brassica rapa*). Most of these are also present on the east end along with the addition of ornamental juniper (*Juniperus sp*.), interior live oak (*Quercus wislizeni*), Northern California black walnut (*Juglans hindsii*), California bay (*Umbellularia californica*) and Himalayan blackberry (*Rubus armeniacus*). Two soil units are present on the study site: Churn loam, 0 to 3 percent slopes and Tehama loam, 0 to 3 percent slopes. Both soil units date from 11,500 to 7,000 years in age; given their age, these soil units are considered to have a potential for buried resources (ENPLAN, 2022).

Two soil units are present on the study site: Churn loam, 0 to 3 percent slopes and Tehama loam, 0 to 3 percent slopes. Both soil units date from 11,500 to 7,000 years in age; given their age, these soil units are considered to have a potential for buried resources (ENPLAN, 2022).

Ground disturbance varies from moderate to high, with the area having been irrigated and grazed for decades. A house was present in the western portion of the site from 1956 to 2004, and a structure of some type was depicted in the same location on USGS maps dating to 1901. Historical and contemporary land uses in the vicinity include pastureland as well as residential and commercial developments.

Regulatory Setting

This section summarizes current federal, State, and local regulations relevant to the review of *Cultural Resources* for this project. Ordinances, regulations, or standards that are applicable to the environmental review of biological resource impacts include the following:

National Register of Historic Places

To be eligible for listing on the National Register, a resource must be significant in American history, architecture, archaeology, engineering, or culture, and generally must be greater than 50 years in age. Districts, sites, buildings, structures, and objects of potential significance must meet one or more of the following four established criteria (36 CFR Section 60.4):

- *Criterion A.* Properties that are associated with events that have made a significant contribution to the broad patterns of our history.
- *Criterion B.* Properties that are associated with the lives of persons significant to our past.
- *Criterion C.* Properties that embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master; or that possess high artistic values; or that represent a significant and distinguishable entity whose components may lack individual distinction.
- *Criterion D.* Properties that have yielded, or may be likely to yield, information important in prehistory or history.

In addition to these criteria, a resource must retain integrity to be considered eligible for listing on the NRHP. Integrity is the authenticity of the physical identity that is evidenced by the survival of characteristics that existed during the resource's period of significance. Resources must retain enough of their character or appearance to be recognizable as resources and to convey the reasons for their significance. Integrity is the ability of a property to convey its significance. To be listed in the NRHP, a property must not only be shown

to be significant under the National Register criteria, but it must also possess integrity. The evaluation of a historic property's integrity is sometimes a subjective judgment, but it must always be grounded in an understanding of the property's physical elements and how they relate to its significance. National Register Bulletin 15 describes seven aspects of integrity used in order to determine a historic property's integrity:

1. *Location.* The relationship between the property and its location is often important in understanding why the property was created.
2. *Design.* The design aspect includes the combination of elements that create the form, plan, space, structure, and style of a property.
3. *Setting.* The setting is defined as the physical environment of a historic property.
4. *Materials.* Materials are the physical elements combined during a particular period of time and in a particular configuration to form a historic property.
5. *Workmanship.* Workmanship is the physical evidence of the crafts of a particular culture of people during any given period in history or prehistory.
6. *Feeling.* Feeling is described as a property's expression of the aesthetic or historic sense of a particular period of time.
7. *Association.* Association is the direct link between an important historic event or person and a historic property.

Section 101(d)(6)(A) of the National Historic Preservation Act (NHPA) allows properties of traditional religious and cultural importance to a Native American tribe to be determined eligible for NRHP inclusion. In addition, a broader range of Traditional Cultural Properties (TCPs) is also considered and may be determined eligible for or listed in the NRHP. A TCP is a property associated with the cultural practices or beliefs of a living community; TCPs are rooted in that community's history and are important in maintaining the continuing cultural identity of the community. In the NRHP programs, "culture" is understood to mean the traditions, beliefs, practices, lifeways, arts, crafts, and social institutions of any community, be it an Indian tribe, a local ethnic group, or the nation as a whole.

California Register of Historical Places

As provided in California Public Resources Code (PRC) Section 5020.4, the California Legislature established the CRHR in 1992. The CRHR is used as a guide by state and local agencies, private groups, and citizens to identify the state historical resources and properties to be protected, to the extent prudent and feasible, from substantial adverse change. The CRHR, as instituted by the California Public Resources Code, automatically includes all California properties already listed in the NRHP and those formally determined to be eligible for listing in the NRHP. The CRHR may also include various other types of historical resources that meet the criteria for eligibility, including the following:

- Individual historic resources.
- Resources that contribute to a historic district.
- Resources identified as significant in historic resource surveys.
- Resources with a significance rating of Category 3 through Category 5 in the State Inventory (Categories 3 and 4 refer to potential eligibility for the NRHP; Category 5 indicates a property with local significance).

The CRHR follows the lead of the NRHP in utilizing the 50-year threshold: a resource is usually considered for its historical significance only after it reaches the age of 50 years. This threshold is not absolute, but was selected as a reasonable span of time after which a professional evaluation of historical value/importance should be made. The criteria for listing resources in the CRHR were expressly developed to be in accordance with previously established criteria developed for listing on the NRHP. Section 15064.5(a)(3) of the CEQA Guidelines states that "[g]enerally, a resource shall be considered by the lead agency to be 'historically significant' if the resource meets the criteria for listing on the California Register of Historical Resources" (PRC Section 5024.1; 14 CCR 4852), including if the resource:

PRC Section 5024.1 requires an evaluation of historical resources to determine their eligibility for listing in the CRHR. The purpose of the register is to maintain listings of the State's historical resources and to indicate which properties are to be protected from substantial adverse change. The criteria for listing resources on the CRHR were expressly developed to be in accordance with previously established criteria developed for listing in the National Register of Historic Places (NRHP), enumerated below. According to PRC Section 5024.1(c) (1–4), a resource is considered historically significant if it (i) retains "substantial integrity," and (ii) meets at least one of the following criteria:

1. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;

2. Is associated with the lives of persons important in our past;
3. Embodies the distinctive characteristics of a type, period, region, or method of installation, or represents the work of an important creative individual, or possesses high artistic values; or
4. Has yielded, or may be likely to yield, information important in prehistory or history.

A historical resource is a resource listed in, or determined to be eligible for listing, in the CRHR (Section 21084.1), a resource included in a local register of historical resources (Section 15064.5[a][2]), or any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant (Section 15064.5[a][3]).

Impact Analysis
The vertical Area of Potential Effects (APE) for the proposed project consists of approximately 4.62 acres and measures approximately 250 feet (north-south) by 1,080 feet (east-west). Ground disturbance varies from moderate to high with the area having irrigated and grazed for several decades.

The vertical APE, which is associated with the potential for buried cultural resources, reflects the proposed depth of excavations associated with the project. Excavation for the proposed gasoline storage tanks would extend to approximately fifteen feet; the maximum depth of excavation for other elements of the development is estimated at approximately eight feet.

The following includes an analysis of environmental parameters related to *Cultural Resources* based on Appendix G of the State CEQA Guidelines. The discussion not only includes the areas for which there is potential for environmental impacts but also provides justification for the conclusions that either no impacts, less than significant impacts, or less than significant impacts with mitigation could occur.

V. CULTURAL RESOURCES: Would the project:	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource pursuant to *15064.5?				X
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to *15064.5?		X		
c) Disturb any human remains, including those interred outside of formal cemeteries?		X		

Discussion: Based on the related documents listed in the Sources of Documentation for Initial Study Checklist, staff review of the project, observations on the project site and in the vicinity, and a confidential Cultural Resource Inventory Report (ENPLAN 2022) the following findings can be made:

a) Based on the result of the Cultural Resource Inventory Report there are no NRHP, CRHR sites, California Historical Landmarks, California Points of Historical Interest, or historical properties located within the APE or within a half-mile radius of the project (ENPLAN, 2022). However, the following two resources were noted in the APE:

Knighton Ditch

Knighton Ditch runs approximately 750 feet starting near the I-5 interchange and ending at the Knighton House driveway. An approximately 300-foot section in the middle has been destroyed. The eastern section is approximately 230 feet long and starts with the remains of a distribution box and appears to be a flood irrigation lateral. Concrete pipes can be found in both sidewalls approximately every ten feet apparently designed to allow regulated release along the length of the ditch. The western portion of the ditch is approximately 210 feet long and contains no notable features.

Knighton House

The Knighton House is the foundation of a house that was built in 1956 and was torn down in 2004. The house was approximately 3,100 square feet in size, although portions are overgrown by blackberry and other vegetation making an exact measurement difficult to obtain. The concrete slab foundation contains ventilation ducts as well as piping and electrical connections. Also remaining are tile floors of bathrooms, asbestos tiles in kitchen/living area, and concrete tile in the breezeway/porch areas. Also remaining are two metal posts likely part of the back-porch roof. There is no sign that any portions of the house were later additions. The remains of the driveway start at the garage, curve around the front of the house and run in the direction of Churn Creek Road before disappearing into the grass.

Eligibility Consideration

Knighton House was originally constructed in 1956 and is therefore historic. Knighton Ditch is historic as its destruction during the construction of the driveway associated with the Knighton House shows it to be older than the house. The following summarizes the eligibility considerations given to Knighton House and Knighton Ditch. These resources meet none of the criteria (A-D; 1-4) for either registry as discussed below.

A/1. A property associated with events that have made a significant contribution to the board patterns of our national history or with events that have made a significant contribution to the broad patterns of California's history and cultural heritage. Research to date has not identified any clear association to important events for the Knighton Ditch or the Knighton House. There are no indications that they are associated with events that were significant in California or local history.

B/2. A property associated with the lives of persons significant to our past. There is no evidence of the Knighton Ditch or House having been related to any persons of significance.

C/3. A property that would embody the distinctive characteristics of a type, period, or method of construction, or that represents the work of a master, or that possesses high artistic values. Knighton House has been completely removed other than its foundation, which shows no particularly distinctive features. Knighton Ditch is one of thousands of irrigation ditches across California and is neither a standout example nor in particularly good condition.

D/4. A property that has yielded, or may be likely to yield, information important in prehistory or history. Knighton House is almost completely destroyed. The remaining foundation is unlikely to yield any information not already contained in county records. Knighton Ditch is likewise in poor condition and unlikely to yield any information of importance.

Conclusion

As discussed above Knighton House and Knighton Ditch do not meet any of the National or California Historic registry criteria (A-D, 1-4). Given this, it does not qualify for listing on the NRHP or the CRHR. It is neither a "Historic Property" as defined by NEPA nor "Historical Resource" as defined by CEQA. Therefore, the proposed project will not affect any resources on, or eligible for listing on, the National Register of Historic Places or California Register of Historical Resources.

b) A record search request was submitted to the Northeast Information Center of the California Historical Resources Information System at California State University, Chico (NEIC) on February 11, 2022, and covered an approximate half-mile radius around the APE for previously recorded archaeological sites and for previously conducted surveys. No response was received as of the date of the report prepared by ENPLAN. However, review of ENPLAN's in-house records showed that the APE has previously been survey on two occasions, in 1998 and 2005. A records search for a 26-acre area including the current APE was conducted by the NEIC on July 11, 2005. The search included review of the National Register of Historic Places, California Register of Historical Resources, California Points of Historical Interest, California Inventory of Historic Resources, and California Historical Landmarks. The records search found that no resources had previously been recorded in the current APE, and that a single prehistoric site (45-003548) was recorded within a quarter mile of the current APE (ENPLAN, 2022). There are no previously recorded archaeological resources within the APE. A pedestrian archaeological survey was conducted on April 10, 2022, in which the entire APE was surveyed. No prehistoric or historical archaeological sites were identified within the APE during the field survey.

The results of archival research, previous surveys within and adjacent to the study area, and the environmental context all contribute to an assessment of the sensitivity level for a given project area. The project is in an area that does not appear to be sensitive for prehistoric or historic occupation. The area is considered to have a low to moderate sensitivity for surface sites and low sensitivity for subsurface sites (ENPLAN, 2022). However, the possibility exists that cultural resources, including buried

archaeological materials, could exist in the area and may be uncovered during construction. Therefore, if any resources are found during the construction of the proposed project, they will be mitigated through implementation of Mitigation Measure V.b.1. Adherence to protocols established by Mitigation Measures V.b.1 and V.b.2 would serve to avoid impacts that would result in a substantial adverse change in the significance of an archaeological resource as defined in CEQA Guidelines Section 15064.5. Impacts would be less than significant with mitigation incorporated.

c) There are no known burial sites on or immediately adjacent to the proposed project site. If human remains are unearthed during future development of the site, the provisions of California Health and Safety Code Section 7050.5 shall apply. Under this Section, no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition, pursuant to California PRC Section 5097.98 and Mitigation Measures V.c.1 and V.b.2. Impacts are considered less than significant with mitigation incorporated.

Mitigation Measures

The following mitigation measures have been developed to reduce potential impacts related to Cultural Resources to less than significant levels:

V.b.1

Prior to the issuance of any grading or encroachment permit for the proposed project, the project applicant shall demonstrate that a qualified archaeologist has been retained to monitor and observe rough grading and trenching activities. If potentially significant archaeological resources are encountered during subsurface excavation activities, all construction activities within a 100-foot radius of the resource shall cease until a qualified archaeologist determines whether the resource requires further study. The County shall require that the applicant include a standard inadvertent discovery clause in every construction contract to inform contractors of this requirement. Any previously undiscovered resources found during construction shall be recorded on appropriate Department of Parks and Recreation forms and evaluated for significance in terms of California Environmental Quality Act criteria by a qualified archaeologist. Potentially significant cultural resources consist of but are not limited to stone, bone, fossils, wood, or shell artifacts or features, including hearths, structural remains, or historic dumpsites. If the resource is determined to be significant under CEQA, the County and a qualified archaeologist shall determine whether preservation in place is feasible. Such preservation in place is the preferred mitigation. If such preservation is infeasible, the qualified archaeologist shall prepare and implement a research design and archaeological data recovery plan for the resource. The archaeologist shall also conduct appropriate technical analyses, prepare a comprehensive written report and file it with the appropriate information center (California Historical Resources Information System), and provide for the permanent curation of the recovered materials.

V.b.2

Prior to the issuance of any grading or encroachment permit for the proposed project, a Cultural Awareness Training Program shall be provided to all construction managers and construction personnel prior to commencing any ground disturbance work at any of the project sites. The training shall be prepared and conducted by a qualified archaeologist to the satisfaction of the Environmental Review Officer. The training may be discontinued when ground disturbance is completed. Construction personnel shall not be permitted to operate equipment within the construction area unless they have attended the training. A copy of the training materials and/or training video, as well as a list of the names of all personnel who attended the training and copies of the signed acknowledgment forms shall be submitted to the Environmental Review Officer for their review and approval.

V.c.1

If in the event that previously unidentified evidence of human burial or human remains are discovered during project construction, work will stop at the discovery location, within 20 meters (66 feet), and any nearby area reasonably suspected to overlie human remains (Public Resources Code, Section 7050.5) the Shasta County Coroner must be informed and consulted, per State law. If the coroner determines the remains to be Native American, he or she shall contact the Native American Heritage Commission within 24 hours. The Native American Heritage Commission shall identify the person or persons it believes to be the most likely descendent. The most likely descendent will be given an opportunity to make recommendations for means of treatment of the human remains and any associated grave goods. when the commission is unable to identify a descendant or the descendants identified fail to make a recommendation, or the landowner or his or her authorized representative rejects the recommendation of the descendants and the mediation provided for in subdivision (k) of Section 5097.94, if invoked, fails to provide measures acceptable to the landowner, the landowner or his or her authorized representative shall reinter the human remains and items associated with Native American human remains with appropriate dignity on the property in a location not subject to further and future subsurface disturbance. Work in the area shall not continue until

the human remains are dealt with according to the recommendations of the County Coroner, Native American Heritage Commission and/or the most likely descendent have been implemented.

Section VI – Energy

The purpose of the section of the Initial Study is to analyze the potential direct and indirect environmental impacts associated with the project's projected energy consumption. Such impacts can include the depletion of nonrenewable resources (e.g., oil, natural gas, coal, etc.). Analyses of emissions of air quality and Greenhouse Gas (GHG) pollutants during both the construction and long-term operational phases of the project are analyzed in Section III, Air Quality, and Section VIII, Greenhouse Gas Emissions.

Environmental Setting

The Pacific Gas and Electric Company (PG&E) provides electric and natural gas services to certain areas in Shasta County. Electricity and natural gas service are available to most locations where land uses could be developed. PG&E will provide electrical sources to the project site.

The County's development review process includes a review and comment opportunity for utility companies, including PG&E, to provide input from each utility company on all development proposals. The input facilitates a detailed review of all projects by service purveyors to assess the potential demands for utility services on a project-by-project basis. Utility companies are bound by contract to update energy systems to meet any additional demand.

Regulatory Setting

This section summarizes current federal, State, and local regulations relevant to the review of *Energy* consumption for this project. Ordinances, regulations, or standards that are applicable to the environmental review of potential impacts related to energy consumption include the following:

California Energy Efficiency Standards for Residential and Nonresidential Buildings (Title 24)

Building energy efficiency standards for new residential and nonresidential buildings were adopted by the California Energy Resources Conservation and Development Commission (now the California Energy Commission (CEC)) in June 1977 and are updated every three years (CCR Title 24, Part 6). CCR Title 24, Part 6 requires the design of building shells and building components to conserve energy. The standards are updated periodically to allow for consideration and possible incorporation of new energy efficiency technologies and methods. On August 11, 2021, the CEC adopted the 2022 Energy Code. In December, it was approved by the California Building Standards Commission for inclusion into the California Building Standards Code. The 2022 Energy Code encourages efficient electric heat pumps, establishes electric-ready requirements for new homes, expands solar photovoltaic and battery storage standards, strengthens ventilation standards, and more. Buildings whose permit applications are applied for on or after January 1, 2023, must comply with the 2022 Energy Code.

California Green Building Standards

The California Green Building Standards Code (California Code of Regulations, Title 24, Part 11), commonly referred to as the CALGreen Code, is a statewide mandatory construction code that was developed and adopted by the California Building Standards Commission and the California Department of Housing and Community Development. The CALGreen standards require new residential and commercial buildings to comply with mandatory measures under the topics of planning and design, energy efficiency, water efficiency and conservation, material conservation and resource efficiency, and environmental quality. CALGreen also provides voluntary tiers and measures that local governments may adopt which encourage or require additional measures in the five green building topics. The most recent update to the CALGreen Code was adopted in 2019 and went into effect January 1, 2020.

2008 California Energy Action Plan Update

The California Public Utilities Commission and California Energy Commission *2008 Energy Action Plan Update* provides a status update to the *2005 Energy Action Plan II,* which is the State's principal energy planning and policy document. The plan continues the goals of the original *Energy Action Plan*, describes a coordinated implementation plan for State energy policies, and identifies specific action areas to ensure that California's energy is adequate, affordable, technologically advanced, and environmentally sound. First-priority actions to address California's increasing energy demands are energy efficiency, demand response (i.e., reduction of customer

energy usage during peak periods in order to address system reliability and support the best use of energy infrastructure), and the use of renewable sources of power. If these actions are unable to satisfy the increasing energy and capacity needs, the plan supports clean and efficient fossil-fired generation.

Renewable Energy Standards/Renewable Portfolio Standard

In 2002, California established its Renewable Portfolio Standard program[4] with the goal of increasing the annual percentage of renewable energy in the state's electricity mix by the equivalent of at least 1 percent of sales, with an aggregate total of 20 percent by 2017. The California Public Utilities Commission subsequently accelerated that goal to 2010 for retail sellers of electricity (Public Utilities Code Section 399.15(b)(1)). Then-Governor Schwarzenegger signed Executive Order S-14-08 in 2008, increasing the target to 33 percent renewable energy by 2020. In September 2009, then-Governor Schwarzenegger continued California's commitment to the Renewable Portfolio Standard by signing Executive Order S-21-09, which directs the CARB under its AB 32 authority to enact regulations to help the State meet its Renewable Portfolio Standard goal of 33 percent renewable energy by 2020. In September 2010, the CARB adopted its Renewable Electricity Standard regulations, which require all the State's load-serving entities to meet this target. In October 2015, then-Governor Brown signed into legislation Senate Bill 350, which requires retail sellers and publicly owned utilities to procure 50 percent of their electricity from eligible renewable energy resources by 2030. Signed in 2018, SB 100 revised the program's goal to achieve the 50 percent renewable resources target by December 31, 2026, and a 60 percent renewable resources target by December 31, 2030. SB 100 also established a further goal to have an electric grid that is entirely powered by clean energy by 2045. Under the bill, the State cannot increase carbon emissions elsewhere in the western grid or allow resource shuffling to achieve the 100 percent carbon-free electricity target.

Impact Analysis

The impact analysis for energy consumption focuses on the three sources of energy that are relevant to the proposed project: electricity, natural gas, and transportation fuel for vehicle trips associated with new development as well as the fuel necessary for project construction. The analysis of electricity/natural gas usage is based on California Emissions Estimator Model (CalEEMod) project specific data, which quantifies energy use for occupancy.

The following includes an analysis of environmental parameters related to *Energy* based on Appendix G of the State CEQA Guidelines. The discussion not only includes the areas for which there is potential for environmental impacts but also provides justification for the conclusions that either no impacts, less than significant impacts, or less than significant impacts with mitigation could occur.

[1] The Renewable Portfolio Standard is a flexible, market-driven policy to ensure that the public benefits of wind, solar, biomass, and geothermal energy continue to be realized as electricity markets become more competitive. The policy ensures that a minimum amount of renewable energy is included in the portfolio of electricity resources serving a state or country.

VI. ENERGY: Would the project:	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation?			X	
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?				X

Discussion: Based on the related documents listed in the Sources of Documentation for Initial Study Checklist, staff review of the project, observations on the project site and in the vicinity, the following findings can be made:

a) The project would not result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation. Direct energy use would involve the short-term use

[4] The Renewable Portfolio Standard is a flexible, market-driven policy to ensure that the public benefits of wind, solar, biomass, and geothermal energy continue to be realized as electricity markets become more competitive. The policy ensures that a minimum amount of renewable energy is included in the portfolio of electricity resources serving a state or country.

of energy for construction activities. Project construction would primarily consume diesel and gasoline through operation of construction equipment, material deliveries, and debris hauling. Construction is estimated to result in a short-term consumption of energy, representing a small demand on local and regional fuel supplies that would be easily accommodated and would be temporary.

Short-Term Construction

The energy consumption associated with construction of the proposed project includes primarily diesel fuel consumption from on-road hauling trips and off-road construction diesel equipment, and gasoline consumption from on-road worker commute and vendor trips. Temporary electric power for as-necessary lighting and electronic equipment (such as computers inside temporary construction trailers, and heating, ventilation, and air conditioning) would be powered by a generator. The amount of electricity used during construction would be minimal; typical demand would stem from the use of electrically powered hand tools and several construction trailers by managerial staff during the hours of construction activities. The majority of the energy used during construction would be from petroleum. This analysis relies on the construction equipment list and operational characteristics, as stated in Section III, AIR QUALITY, and Section VIII, Greenhouse Gas Emissions. The construction energy consumption for the project is provided in Table 5, Project Energy Consumption During Construction, and followed by an analysis of impacts based on those quantifications.

Table 5
Project Energy Consumption During Construction

Source	Project Construction Usage	Shasta County Annual Energy Consumption	Percentage Increase Countywide
Diesel Use	**Gallons**		
On-Road Construction Trips [1]	4,170	41,017,430	0.0102%
Off-Road Construction Equipment [2]	16,717		0.0408%
Construction Diesel Total	**20,888**		**0.0509%**
Gasoline	**Gallons**		
On-Road Construction Trips [1]	1,676	94,389,470	0.0018%

NOTES:
1. On-road mobile source fuel use based on vehicle miles traveled (VMT) from CalEEMod and fleet-average fuel consumption in gallons per mile from EMFAC2021 in Shasta County for construction year 2023 and 2024.
2. Off-road mobile source fuel usage based on a fuel usage rate of 0.05 gallons of diesel per horsepower (hp)-hour from USEPA.
Abbreviations: CalEEMod: California Emission Estimation Model; EMFAC: Emission Factor Model 2021; kWh: kilowatt-hour;
See AIR QUALITY MODELING.
Sources: AWMA, 1992; DOE 2016; USEPA 1996.

In total, construction of the proposed project is anticipated to consume approximately 20,888 gallons of diesel and 1,676 gallons of gasoline. The project's fuel from the entire construction period would increase fuel use in the County by approximately 0.0509 percent for diesel and 0.0018 percent for gasoline.

There are no unusual project characteristics that would necessitate the use of construction equipment that would be less energy-efficient than at comparable construction sites in the region or state. In addition, some incidental energy conservation would occur during construction through compliance with State requirements that equipment not in use for more than five minutes be turned off. Project construction equipment would also be required to comply with the latest EPA and CARB engine emissions standards. These engines use highly efficient combustion engines to minimize unnecessary fuel consumption.

The CEQA Guideline Appendix G and Appendix F criteria requires the project's effects on local and regional energy supplies and on the requirements for additional capacity to be addressed. A 0.0509 percent increase in construction fuel demand is not anticipated to trigger the need for additional capacity. Fuel consumption is based on a conservative construction phasing and conservative estimates for annual construction fuel consumption. Longer phases would result in lower construction intensity and a lower annual fuel consumption, resulting in lower annual demand on energy supplies. Additionally, use of construction fuel would cease once the project is fully developed. As such, project construction would have a nominal effect on the local and regional energy supplies. Therefore, it is expected that construction fuel consumption associated with the project would not be inefficient, wasteful, or unnecessary. The project would not substantially affect existing energy or fuel supplies, or resources and

new capacity would not be required. Impacts would be less than significant in this regard.

Long-Term Operations

Energy use related to the proposed project would include energy directly consumed for special lighting, ventilation, and air conditioning systems, as well as fuel usage from on-road vehicles. Quantifications of operational energy consumption are provided for the proposed project are provided in Table 6, Annual Energy Consumption During Operations, below.

The proposed project would annually consume approximately 47 MWh of electricity, 631 therms of natural gas, 138,633 gallons of diesel, and 488,269 gallons of gasoline. It should also be noted that the proposed project design and materials would comply with the 2022 Building Energy Efficiency Standards, which takes effect on January 1, 2023.

The proposed project's anticipated electricity demand (approximately 47 MWh) would be nominal compared to overall demand in PG&E service area. Total electricity demand in PG&E's service area was 78,518,835 MWh in 2020 (CEC, 2022). Therefore, the projected electrical demand would not significantly impact PG&E's level of service. Regarding natural gas, Shasta County consumed 16,482,526 therms of natural gas in 2020. Therefore, the project's operational energy consumption for space and water heating would represent 0.0038 percent of the natural gas consumption in the County.

Table 6
Annual Energy Consumption During Operations

Source	Project Operational Usage	Shasta County Annual Energy Consumption	Percentage Increase Countywide
	Megawatt Hour/Year (MWh/year)		
Electricity Use[1]	47.132	808,058.771	0.0058%
	Therms/year		
Natural Gas Use[1]	631	16,482,526	0.0038%
	Gallons/Year		
Diesel Use[2]	138,633	41,017,430	0.3380%
	Gallons/Year		
Gasoline Use[2]	488,269	94,389,470	0.5173%
Notes: 1. The electricity and natural gas usage are based on project-specific estimates and CalEEMod defaults. 2. Calculated based on the mobile source fuel use based on vehicle miles traveled (VMT) and fleet-average fuel consumption (in gallons per mile) from EMFAC2021 for operational year 2023. Abbreviations: CalEEMod: California Emission Estimation Model; EMFAC: California Air Resources Board Emission Factor Model; kBTU: thousand British Thermal Units; kWh: kilowatt-hour See AIR QUALITY MODELING.			

In 2021, Californians consumed approximately 13,822,186,081 gallons of gasoline and approximately 3,141,798,776 gallons of diesel fuel (CDTFA, 2022). Shasta County annual gasoline fuel use in 2024 is anticipated to be 94,389,470 gallons and diesel fuel use is 41,017,430 gallons. Expected project operational use of gasoline and diesel would represent approximately 0.5173 percent of current gasoline use and 0.3380 percent of current diesel use in the County (CARB, 2022).

As the proposed project would not exceed one percent of Shasta County use in gallons of gasoline and diesel during the operational phase, project operations would not affect the existing energy or fuel supplies or resources. The proposed project would comply with applicable energy standards and new capacity would not be required. Impacts would be less than significant in this regard.

b) The proposed project will not conflict with any State or local plans for renewable energy or energy efficiency. Project design and operation would comply with State Building Energy Efficiency Standards, appliance efficiency regulations, and green building standards. As discussed above, project development would not cause inefficient, wasteful, and unnecessary energy consumption, and impacts would be less than significant. The proposed project would be required to comply with existing regulations and would be directly affected by the outcomes (vehicle trips and energy consumption would be less carbon intensive due to statewide compliance with future low carbon fuel standard amendments and increasingly stringent Renewable Portfolio Standards). Therefore, the proposed project would comply with existing State energy standards and would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. No impacts would occur in this regard.

Mitigation/Monitoring: None proposed.

Section VII – Geology and Soils

The purpose of this section of the Initial Study is to describe the geologic and seismic setting of the project area, identify potential impacts associated with implementation of the proposed project, and, as necessary, recommend mitigation to reduce the significance of impacts. The issues addressed in this section are risks associated with faults, strong seismic ground shaking, seismic-related ground failure such as liquefaction, landslides, and unstable geological units and/or soils.

Environmental Setting

Based upon the mineral land classification conducted by the Department of Conservation (DOC), Division of Mines and Geology, the project site is located within an area designated as alluvial deposits of the Riverbank Formation (DOC, 1997). This formation is typically characterized by weathered reddish gravel, sand, and silt.

Active faults are defined as faults that have had surface displacement in the Holocene epoch (in the past 11,000 years) based on CCR Division 2, Title 14, also known as the Alquist-Priolo Earthquake Fault Zoning Act (A-P Act). Potentially active faults are defined by the A-P Act as faults showing surface displacement during mid to late Quaternary time (about 1.6 million years before present) that have a relatively high potential for ground rupture. In general, Quaternary faults that do not record evidence of Holocene surface displacement are not considered as being active by the State. In addition, the California Geologic Survey (CGS) evaluates the activity rating of a fault in fault evaluation reports (FER). FERs compile available geologic and seismologic data and evaluate if a fault should be zoned as active, potentially active, or inactive. If a FER evaluates a fault as active, then it is typically incorporated into a Special Studies Zone in accordance with the Alquist-Priolo Earthquake Hazards Act. The project site is not located within an Alquist-Priolo Earthquake Fault Zone and no active faults are known to pass through the project site (DOC, 2021; DOC, 2015).

Based on the most recent available data, no active or potentially active faults are reported to be present within the boundaries of the project site (DOC, 2015). Regional active faults within about 15 miles of the proposed project include the Bear Creek fault zone and the Battle Creek fault zone (DOC, 2015).

According to the U.S. Department of Agriculture, Natural Resources Conservation Service (NRCS, 2022), two soil units have been mapped within the project study area (refer to Table 7, SOIL TYPES AND CHARACTERISTICS).

Table 7
Soil Types and Characteristics

Soil Name	Landform and Parent Material	Drainage	Surface Runoff	Permeability	Shrink-Swell Potential
Churn loam, 0 to 3 percent	Stream terraces – Alluvium	Well Drained	Medium	Moderate	Moderate
Tehama loam, 0 to 3 percent slopes, MLRA 17	Stream terraces – Fine-silty alluvium derived from sedimentary rock	Well Drained	High	Moderate	Moderate
Source: United States Department of Agriculture, Natural Resources Conservation Service. 2022.					

The project site elevation is approximately 450 feet above mean sea level (msl). According to DOC's Fire Perimeters and Deep Landslide Susceptibility mapping, the project study area is not considered to be at risk for landslides (DOC, 2015).

Regulatory Setting

This section summarizes current federal, State, and local regulations relevant to the review of *Geology and Soils* for this project. Ordinances, regulations, or standards that are applicable to the environmental review of potential impacts related to geology and soils include the following:

Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act was passed in 1972 (originally enacted as the Alquist-Priolo Special Studies Zones Act and renamed in 1994) and is intended to reduce the risk to life and property from surface fault rupture during earthquakes. The main purpose of the law is to prevent the construction of buildings used for human occupancy on the surface trace of active faults. The law only addresses the hazard of surface fault rupture and is not directed toward other earthquake hazards. The Alquist-Priolo Act requires the State Geologist to establish regulatory zones known as "Earthquake Fault Zones" around the surface traces of active faults and to issue appropriate maps. The maps are distributed to all affected cities, counties, and state agencies for their use in planning efforts. Local agencies must regulate most development projects within the zones. Projects include all land divisions and most structures for human occupancy.

Seismic Hazard Mapping Act

The Seismic Hazard Mapping Act (SHMA) was adopted by the state in 1990 to protect the public from the effects of non-surface fault rupture earthquake hazards, including strong ground shaking, liquefaction, seismically induced landslides, or other ground failure caused by earthquakes. The goal of the act is to minimize loss of life and property by identifying and mitigating seismic hazards. The California Geological Survey prepares seismic hazard zone maps and provides them to local governments; these maps identify areas susceptible to amplified shaking, liquefaction, earthquake-induced landslides, and other ground failures. SHMA requires responsible agencies to only approve projects within seismic hazard zones following a site-specific investigation to determine if the hazard is present, and if so, the inclusion of appropriate mitigation(s). In addition, the SHMA requires real estate sellers and agents at the time of sale to disclose whether a property is within one of the designated seismic hazard zones.
2022 California Building Code

The California Building Code (CBC), which is codified in CCR Title 24, Part 2, was promulgated to safeguard the public health, safety, and general welfare by establishing minimum standards related to structural strength, egress facilities, and general building stability. The purpose of the CBC is to regulate and control the design, construction, quality of materials, use/occupancy, location, and maintenance of all building and structures within its jurisdiction. Title 24 is administered by the California Building Standards Commission, which, by law, is responsible for coordinating all building standards. Under State law, all building standards must be centralized in Title 24, or they are not enforceable.

Impact Analysis

The following includes an analysis of environmental parameters related to *Geology and Soils* based on Appendix G of the State CEQA Guidelines. The discussion not only includes the areas for which there is potential for environmental impacts but also provides justification for the conclusions that either no impacts, less than significant impacts, or less than significant impacts with mitigation could occur.

VII. GEOLOGY AND SOILS: Would the project:	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: a) i) Rupture of a known earthquake, fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publications 42. ii) Strong seismic ground shaking? iii) Seismic-related ground failure, including liquefaction?			X	

VII. GEOLOGY AND SOILS: Would the project:	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
iv) Landslides?				
b) Result in substantial soil erosion or the loss of topsoil?			X	
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?			X	
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?			X	
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?			X	
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?			X	

Discussion: Based on the related documents listed in the Sources of Documentation for Initial Study Checklist, staff review of the project, observations on the project site and in the vicinity, and a Preliminary Private Sewage Disposal System Plan (Kimley Horn 2024) the following findings can be made:

a) i. Rupture of a known earthquake fault:

There are no Alquist-Priolo earthquake faults designated in the subject area of Shasta County. Regional active faults within about 15 miles of the proposed project include the Bear Creek fault zone and the Battle Creek fault zone (DOC, 2019). The nearest known active fault is the Rocky Ledge fault, located about 45.25 miles northeast of the site (DOC, 2022). There are no other documented earthquake faults in the immediate vicinity that pose a significant risk. Shasta County is entirely within Seismic Zone 3 of the California Building Code, and the greater Redding area is located in an area designated in the Health and Safety Element Seismic and Geologic Hazards Element of the General Plan as an area of moderate seismicity (Shasta, 2004). Impacts would be less than significant.

ii. Strong seismic ground shaking:

The entire northern California region is subject to the potential for moderate to strong seismic shaking due to distant seismic sources. Seismic shaking can be generated on faults many miles from the project vicinity. An earthquake is caused by a sudden slip on a fault. Stresses in the earth's outer layer push the sides of the fault together. Stress builds up, and the rocks slip suddenly, releasing energy in waves that travel through the earth's crust and cause the shaking that is felt during an earthquake.

According to the Shasta County and City of Anderson Multi-Jurisdictional Hazard Mitigation Plan, the County is at a relatively low risk of exposure to strong seismic shaking (Shasta, 2017). It should be noted however that no region is immune from potential earthquake damage. Seismic shaking potential is considered minimal, and the hazard is not higher or lower at the project site than throughout the region. Impacts would be less than significant.

iii. Seismic-related ground failure, including liquefaction:

Liquefaction results from an applied stress on the soil, such as earthquake shaking or other sudden change in stress condition, and is primarily associated with saturated, cohesionless soil layers located close to the ground surface. During liquefaction, soils lose strength and ground failure may occur. This is most likely to occur in alluvial (geologically recent, unconsolidated sediments) and stream channel deposits, especially when the groundwater table is high. As shown in Table 7, above, soils in the project area include alluvium or terrace deposits that are well drained and depth to groundwater is estimated at approximately 30 feet below ground surface. Before final design and the commencement of construction, a design-level geotechnical investigation with recommendations will be prepared. Necessary recommendations will present geotechnical engineering conclusions and specific

recommendations for site preparation, foundation design, site drainage, addressing expansive soils, and pavement design to achieve compliance with the California Building Code. Impacts would be less than significant.

iv. Landslides:

As described above, the project site elevation is approximately 450 feet above msl. The project is not located on or near any documented landslide hazard areas, and there is no evidence of ground slippage or subsidence occurring naturally on the site. Most of the project study area is considered to be at low risk for landslides (DOC, 2015). No impact is anticipated in this regard.

b) Earthwork, grading, and soil stockpiling activities associated with construction will be conducted in accordance with the conditions of a grading permit issued by the County of Shasta and a Construction Stormwater Pollution Prevention Plan (SWPPP) and Notice of Intent (NOI) administered by the Central Valley Regional Water Quality Control Board (CVRWQCB). These requirements include:

- County of Shasta Grading Ordinance. This ordinance requires the application of erosion control measures in accordance with the County Grading, Excavating, and Filling Chapter (SCC Chapter 12.12, Sections 12.12.010 through 12.12.110). In practice, the permit shall require the applicant to provide a permanent erosion plan to be implemented upon completion of the project, which plan shall be approved prior to the commencement of any work. For any project which disturbs more than five acres, or where the director of the department of resource management or the director of the department of public works determines that a project may adversely impact a watercourse, the plan shall be prepared by a registered civil engineer experienced in erosion control, a certified professional soil erosion and sediment control specialist, or a soil scientist certified by the American Registry of Certified Professionals in Agronomy, Crops and Soils.

- California Regional Water Quality Board "Construction Activity Storm Water Permit." This permit applies state standards for erosion-control measures during construction of the proposed project.

- California Regional Water Quality Control Board "Project Storm Water Pollution Prevention Plan (SWPPP)." This plan emphasizes stormwater best management practices (BMPs) and is required as part of the Construction Activity Storm Water Permit. The objectives of the SWPPP are to identify the sources of sediment and other pollutants that affect the quality of stormwater discharges and to describe and ensure the implementation of practices to reduce sediment and other pollutants in stormwater discharges.

- The Construction SWPPP will specify BMPs for erosion and sediment control measures. Therefore, the potential for substantial soil erosion and loss of topsoil is considered to be less than significant.

Actions for compliance with these regulations are addressed under standard conditions of approval, which are uniformly applied to all land development projects. Since the project is subject to uniformly applied ordinances and policies and the overall risk of erosion is low, potential impacts related to soil erosion and sedimentation are less than significant.

c) Refer to impact discussion VII.a, above. Impacts would be less than significant.

d) Expansive soils have high shrink-swell potential that expand when wet and shrink when dry. This can result in damage to foundations and structures. Soils at the project site presently consist of sandy and clay loams that present a moderate potential for expansion. As discussed above under impact discussion VII.a.iii, a design-level geotechnical investigation with recommendations will be prepared. Necessary recommendations will present geotechnical engineering conclusions and specific recommendations for site preparation, foundation design, site drainage, addressing expansive soils, and pavement design to achieve compliance with the California Building Code, which would reduce risk associated with expansive soils. Impacts would be less than significant.

e) Implementation of the proposed project would require the use of an onsite wastewater treatment system (OWTS) with septic tank and leach field within the westerly portion of the project parcel. Wastewater from the convenience store would flow to the leach field via an approximate 500-foot leach line (underground pipe). The leach field would be engineered with an appropriate mix and or layering of soils and gravel to facilitate percolation of wastewater. The field would contain a total of 100 leach lines spaced approximately 10 feet apart, each being approximately 59 feet in length. The total area of the leach field would be 37,259 square feet or 0.86 acres. The OWTS would be designed to accommodate the anticipated peak 3,149.8 gallons per day (gpd) and average of 2,944.35 gpd of wastewater generated by the project. The OWTS disposal system would be designed in accordance with Shasta County OWTS design requirements based on the Preliminary Private Sewage Disposal System Plan. The study determined that onsite soils could support the use of a septic system. Impacts would be less than significant.

f) No paleontological resources or unique geologic features have been identified on the proposed project site, and the potential for their occurrence is considered minimal. No impact is anticipated in this regard.

Mitigation/Monitoring: None proposed.

Section VIII – Greenhouse Gas Emissions

This section of the Initial Study evaluates greenhouse gas (GHG) emissions associated with the proposed project and analyzes project compliance with applicable regulations. Consideration of the project's consistency with applicable plans, policies, and regulations, as well as the introduction of new sources of GHGs, is included in this section.

Environmental Setting

Global climate change refers to changes in average climatic conditions on Earth as a whole, including temperature, wind patterns and precipitation. Global temperatures are moderated by naturally occurring atmospheric gases, including water vapor, carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O), as well as hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6). These "greenhouse" gases (GHGs) allow solar radiation (sunlight) into the Earth's atmosphere but prevent radiative heat from escaping, thus warming the Earth's atmosphere. GHGs are emitted by both natural processes and human activities. Concentrations of GHG have increased in the atmosphere since the industrial revolution. Human activities that generate GHG emissions include combustion of fossil fuels (CO_2 and N_2O); natural gas generated from landfills, fermentation of manure and cattle farming (CH_4); and industrial processes such as nylon and nitric acid production (N_2O).

GHGs have varying global warming potential (GWP). The GWP is the potential of a gas or aerosol to trap heat in the atmosphere; it is the "cumulative radiative forcing effect 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 GWP is CO_2; therefore, CO_2 has a GWP factor of 1. The other main GHGs that have been attributed to human activity include CH_4, which has a GWP factor of 28, and N_2O, which has a GWP factor of 265. When accounting for GHGs, all types of GHG emissions are expressed in terms of CO_2 equivalents (CO_2e) and are typically quantified in metric tons (MT) or million metric tons (MMT).

Global climate change is not confined to a particular project area and is generally accepted as the consequence of GHG emissions from global industrialization over the last 200 years. A typical project, even a very large one, does not generate enough GHG emissions on its own to influence global climate change significantly; hence, the issue of global climate change is, by definition, a cumulative environmental impact.

Regulatory Setting

This section summarizes current federal, State, and local regulations relevant to the review of *Greenhouse Gas Emissions* for this project. Ordinances, regulations, or standards that are applicable to the environmental review of potential impacts related to greenhouse gases include the following:

California Renewable Portfolio Standard

In 2002, California established a Renewable Portfolio Standard (RPS) that requires a retail seller of electricity to include in its resource portfolio a certain amount of electricity from renewable energy sources, such as wind, geothermal, small hydro, and solar energy. The retailer can satisfy this obligation by using renewable energy from its own facilities, purchasing renewable energy from another supplier's facilities, using Renewable Energy Credits (RECs) that certify renewable energy has been created, or a combination of all of these. California's RPS requirements have been accelerated and expanded a number of times since the program's inception. Most recently, then-Governor Jerry Brown signed into law Senate Bill (SB) 100 in September 2018, which requires utilities to procure 60 percent of their electricity from renewables by 2030, and sets as a state policy that state agencies and end-use retail customers receive 100 percent of energy from renewable and zero-carbon resources by 2045. In addition, SB 350 requires California utilities to develop Integrated Resource Plans (IRPs) that incorporate a GHG emission reduction planning component. Compliance with the California RPS requires Surprise Valley Electric Corporation and Pacific Power to develop and implement an IRP that demonstrates they are on schedule to comply with the goals of providing 60 percent renewable sources by 2030. To ensure retail sellers meet their RPS requirement, the California Public Utilities Commission (CPUC) is responsible for establishing enforcement procedures and imposing penalties for non-compliance with the program (CPUC, 2018).

Executive Order S-3-05

In 2005, in recognition of California's vulnerability to the effects of climate change, then-Governor Arnold Schwarzenegger established Executive Order S-3-05. This order sets forth target dates by which statewide GHG emissions would be reduced. These include 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.

Assembly Bill 32 (California Global Warming Solutions Act of 2006)
The primary legislation that has driven GHG regulation and analysis in California is the California Global Warming Solutions Act of 2006 (AB 32; California Health and Safety Code Division 25.5, Sections 38500 - 38599), which instructs CARB to develop and enforce regulations for the reporting and verifying of statewide GHG emissions. The act directed CARB to set a greenhouse gas emissions limit based on 1990 levels, to be achieved by 2020. The bill set a timeline for adopting a scoping plan for achieving GHG reductions in a technologically and economically feasible manner.

Executive Order B-30-15

In April 2015, Governor Edmund G. Brown, Jr. signed Executive Order B-30-15 in order to establish an interim GHG reduction goal for California of 40 percent below 1990 levels by 2030. This target GHG reduction by 2030 would make it possible for California to reach the ultimate goal of reducing GHG emissions by 80 percent under 1990 levels by the year 2050.

Senate Bill 32

On September 8, 2016, Governor Jerry Brown signed Senate Bill 32 (Pavley - Chapter 249, Stats. of 2016), requiring California to reduce GHG emissions to 40 percent below 1990 levels by 2030. SB 32 states that: "In adopting rules and regulations to achieve the maximum technologically feasible and cost-effective greenhouse gas emissions reductions authorized by this division, the state [air resources] board shall ensure that statewide greenhouse gas emissions are reduced to at least 40 percent below the statewide greenhouse gas emissions limit no later than December 31, 2030." SB 32 codifies the interim target created by EO B-30-15 for 2030.
CARB Climate Change Scoping Plan.

CARB Climate Change Scoping Plan

The California Air Resources Board (CARB) adopted the Scoping Plan to achieve the goals of AB 32. The Scoping Plan establishes an overall framework for the measures that would be adopted to reduce California's GHG emissions. CARB determined that achieving the 1990 emissions level would require a reduction of GHG emissions of approximately 29 percent below what would otherwise occur in 2020 in the absence of new laws and regulations (referred to as "business-as-usual"). The Scoping Plan functions as a roadmap to achieve GHG reductions in California required by AB 32 through subsequently enacted regulations. AB 32 requires CARB to update the Scoping Plan at least once every five years. CARB adopted the first major update to the Scoping Plan on May 22, 2014. The updated Scoping Plan summarizes recent science related to climate change, including anticipated impacts to California and the levels of GHG reduction necessary to likely avoid risking irreparable damage. It identifies the actions California has already taken to reduce GHG emissions and focuses on areas where further reductions could be achieved to help meet the 2020 target established by AB 32.

On December 14, 2017, CARB adopted a second update to the Scoping Plan[5]. The 2017 Scoping Plan details how the State will reduce GHG emissions to meet the 2030 target set by Executive Order B-30-15 and codified by SB 32. Other objectives listed in the 2017 Scoping plan are to provide direct GHG emissions reductions; support climate investment in disadvantaged communities; and support the Clean Power Plan and other Federal actions.

California Building Energy Efficiency Standards and Green Building Standards

Title 24 of the California Code of Regulations regulates how each new home and business is built or altered in California. It includes requirements for the structural, plumbing, electrical, and mechanical systems of buildings, and for fire and life safety, energy conservation, green design, and accessibility in and about buildings. Two sections of Title 24 – Part 6, the California Energy Code, and Part 11, the California Green Building Standards Code or CalGreen Code – contain standards that address GHG emissions related to construction. The current 2019 Title 24 standards became effective January 1, 2020. buildings constructed under the 2019 Title 24 standards are estimated to use about 30 percent less energy than those constructed under the 2016 Title 24 standards.

Shasta County Air Quality Management District

The Shasta County AQMD does not have an adopted Climate Action Plan, greenhouse gas threshold of significance, or guidance document for assessing project-level greenhouse gas impacts under CEQA. The following Shasta County AQMD rule is applicable to the project: "Rule 3:28 Stationary Internal Combustion Engines. This rule applies to any gaseous, diesel, or any other liquid-fueled stationary internal combustion engine within the boundaries of the air district, including emergency standby engines. Emergency standby internal engines may be operated only during emergencies and for testing and maintenance purposes. Testing and maintenance shall be limited to no more than 100 hours per year."

In 2010, the Shasta County AQMD initiated the regional climate action planning (RCAP) process and released a draft RCAP in 2011. The Draft RCAP contains a 2008 baseline GHG emissions inventory for the community, business-as-usual emissions forecasts for year 2020, the adjusted business-as-usual forecasts for 2020, and emission reduction measures the County may implement. However, the draft RCAP has not been adopted and, therefore, is not used to assess the project's greenhouse gas emissions.

The County's current General Plan (2004) does not contain goals or policies directly aimed at reducing greenhouse gas emissions. Goals and policies within the Circulation Element, Air Quality Element affect or reduce greenhouse gas generation through requiring or promote alternative transit infrastructure.

There are currently no State, regional, or county guidelines or thresholds with which to direct project-level CEQA review. As a result,

5 California Air Resources Board, *California's 2017 Climate Change Scoping Plan,* https://www.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf Accessed May 9, 2018.

Shasta County reserves the right to use a qualitative and/or quantitative threshold of significance until a specific quantitative threshold is adopted by the state or regional air district. The United States Environmental Protection Agency (EPA) identifies four primary constituents that are most representative of the GHG emissions. They are:

- *Carbon Dioxide (CO_2).* Emitted primarily through the burning of fossil fuels. Other sources include the burning of solid waste and wood and/or wood products and cement manufacturing.
- *Methane (CH_4).* Emissions occur during the production and transport of fuels, such as coal and natural gas. Additional emissions are generated by livestock and agricultural land uses, as well as the decomposition of solid waste.
- *Nitrous Oxide (N_2O).* The principal emitters include agricultural and industrial land uses and fossil fuel and waste combustion.

Fluorinated Gases. These can be emitted during some industrial activities. Also, many of these gases are substitutes for ozone-depleting substances, such as CFC's, which have been used historically as refrigerants. Collectively, these gases are often referred to as "high global-warming potential" gases.

The primary generators of GHG emissions in the United States are electricity generation and transportation. The EPA estimates that nearly 85 percent of the nation's GHG emissions are comprised of carbon dioxide (CO_2). The majority of CO_2 is generated by petroleum consumption associated with transportation and coal consumption associated with electricity generation. The remaining emissions are predominately the result of natural-gas consumption associated with a variety of uses.

Impact Analysis

The project's construction and operational emissions were calculated using the California Emissions Estimator Model (CalEEMod). Details of the modeling assumptions and emission factors are provided in Air Quality Modeling prepared for the project. For construction, CalEEMod calculates emissions from off-road equipment usage and on-road vehicle travel associated with haul, delivery, and construction worker trips. GHG emissions during construction were forecasted based on the proposed construction schedule, and applying the mobile-source and fugitive dust emissions factors derived from CalEEMod. The project's construction-related GHG emissions would be generated from off-road construction equipment, on-road hauling, and vendor (material delivery) trucks, and worker vehicles. The project's operations-related GHG emissions would be generated by vehicular traffic, area sources (e.g., landscaping maintenance, consumer products), electrical generation, natural gas consumption, water supply and wastewater treatment, and solid waste.

The following includes an analysis of environmental parameters related to *Greenhouse Gas Emissions* based on Appendix G of the State CEQA Guidelines. The discussion not only includes the areas for which there is potential for environmental impacts but also provides justification for the conclusions that either no impacts, less than significant impacts, or less than significant impacts with mitigation could occur.

VIII. GREENHOUSE GAS EMISSIONS: Would the project:	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			X	
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?				X

Discussion: Based on these comments, the related documents listed in the Sources of Documentation for Initial Study Checklist, staff review of the project, observations on the project site and in the vicinity, and Air Quality Modeling (Kimley Horn 2022) the following findings can be made:

a) Implementation of the proposed project would result in direct emissions of CO_2, N_2O, and CH_4 during construction and operational phases of the project as evaluated below:

Short-Term Construction Greenhouse Gas Emissions

Construction of the proposed project would result in direct emissions of CO_2, N_2O, and CH_4 from the operation of construction equipment and the transport of materials and construction workers to and from the project site.

Several State-led GHG emissions-reducing regulations have recently taken effect, and changes to regulations will continue to take effect in the near future that will substantially reduce GHG emissions. For instance, implementation of Assembly Bill 1493 (the Pavley Standard) (Health and Safety Code Sections 42823 and 43018.5) will significantly reduce the amount of GHGs emitted from passenger vehicles. The Pavley Standard is aimed at reducing GHG emissions from noncommercial passenger vehicles and light-duty trucks of model years 2009–2016 by requiring increased fuel efficiency standards of automobile manufacturers. The program combines the control of smog, soot, and GHG emissions with requirements for greater numbers of zero-emission vehicles. By 2025, when the rules will be fully implemented, new automobiles will emit 34 percent fewer global warming gases and 75 percent fewer smog-forming emissions.

The electricity provider for the project, Pacific Gas and Electric Company (PG&E), is subject to California's Renewables Portfolio Standard (RPS). The RPS required 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, which had the effect of reducing GHG emissions generated during energy production. REU will be required to achieve the 50 percent renewable energy goal by 2030 established by SB 100.

The proposed project would result in direct GHG emissions from construction and operation related activities. Total GHG emissions generated during construction are presented in Table 8, Construction Greenhouse Gas Emissions. The CalEEMod outputs are contained within the Air Quality Monitoring.

Table 8
Construction Greenhouse Gas Emissions

Construction Year and Season	**CO_2e Emissions, metric tons/year**
Total (2023 & 2024)	227
Emissions amortized over 30 years	7.56
Source: CalEEMod version 2020.4.0. Refer to AIR QUALITY MODELING for model outputs.	

As shown in Table 8**,** project construction-related activities would generate approximately 227 $MTCO_2e$ of GHG emissions over the course of construction. One-time, short-term construction GHG emissions are typically summed and amortized over a 30-year period.[6] It is reasonable to look at a 30-year time frame for buildings since this is a typical interval before a new building requires the first major renovation.[7] The amortized project emissions would be approximately 7.56 $MTCO_2e$ per year. Once construction is complete, the generation of construction related GHG emissions would cease. Shasta County AQMD does not have a threshold for construction GHG emissions. The amortized construction emissions are combined with the annual operational emissions discussed below.

Long-Term Operational Greenhouse Gas Emissions

Operational or long-term emissions occur over the life of a project. Operational GHG emissions would also result from indirect sources, such as offsite generation of electrical power, the energy required to convey water to, and wastewater from the project, the emissions associated with solid waste generated from the project, and any fugitive refrigerants from air conditioning or refrigerators. Total GHG emissions associated with the proposed project are summarized in Table 9, Project Greenhouse Gas Emissions. As shown in Table 9, the project would generate approximately 5,021 $MTCO_2e$ annually from both construction and operations.

Table 9
Project Greenhouse Gas Emissions

Emissions Source	**$MTCO_2e$[1] per Year**
Construction (amortized over 30 years)	7.56
Area	0.002
Energy	8
Mobile	4,996
Waste	9
Water	0.74

6 The project 30-year amortization period is based on the South Coast Air Quality Management District (South Coast Air Quality Management District, *Minutes for the GHG CEQA Significance Threshold Stakeholder Working Group #13,* August 26, 2009).

7 International Energy Agency, *Energy Efficiency Requirements in Building Codes, Energy Efficiency Policies for New Buildings*, March 2008.

Total Annual Project GHG Emissions[2]	**5,021**
Threshold[3]	10,000
Threshold Exceeded?	***No***
NOTE: [1]. Emissions were calculated using CalEEMod version 2020.4.0. [2]Total values are from CalEEMod and may not add up due to rounding. [3] Shasta County AQMD does not have a GHG operational threshold, therefore the CAPCOA threshold of 10,000 $MTCO_2e$ was utilized. Source: CalEEMod version 2020.4.0. Refer to AIR QUALITY MODELING for model outputs.	

Table 9 shows that the proposed project would result in approximately 5,021 $MTCO_2e$ per year from amortized construction, area, energy, mobile, waste, and water usage. Shasta County AQMD does not have a GHG threshold, therefore the CAPCOA threshold of 10,000 $MTCO_2e$[8] was utilized. The proposed project would not exceed the numeric threshold of 10,000 $MTCO_2e$. Thus, the proposed project would have a less than significant impact with respect to GHG emissions. In addition, with continued implementation of various statewide measures, the proposed project's operational energy and mobile source emissions (approximately 99 percent of total project emissions) would continue to decline in the future. GHG operational emissions would be less than significant in this regard.

b) As of 2022, Shasta County has not updated the Regional Climate Action Plan (RCAP) which was processed and released in 2011. The project would not conflict with any other applicable plan, policies, or regulations adopted to reduce GHG emission. As noted, in threshold "a" above, the project is in conformance with the County's air quality policies and thresholds, and with state guidelines and regulations, and implementation of SMMs and BAMMs, above. The proposed project would have no impact on any plans, policies, or regulations related to GHG emissions.

California Air Resource Board Scoping Plan Consistency

The California State Legislature adopted AB 32 in 2006. AB 32 focuses on reducing GHGs (CO_2, CH_4, NO_X, HFCs, PFCs, and SF_6) to 1990 levels by the year 2020. Pursuant to the requirements in AB 32, CARB adopted the *Climate Change Scoping Plan* (Scoping Plan) in 2008, which outlines actions recommended to obtain that goal. The Scoping Plan provides a range of GHG reduction actions that include direct regulations, alternative compliance mechanisms, monetary and non-monetary incentives, voluntary actions, market-based mechanisms such as the cap-and-trade program, and an AB 32 implementation fee to fund the program. As shown in Table 10, Project Consistency with Applicable CARB Scoping Plan Measures, the proposed project is consistent with most of the strategies, while others are not applicable to the proposed project.

The 2017 Scoping Plan Update identifies additional GHG reduction measures necessary to achieve the 2030 target. These measures build upon those identified in the first update to the Scoping Plan in 2013. Although a number of these measures are currently established as policies and measures, some measures have not yet been formally proposed or adopted. It is expected that these actions to reduce GHG emissions will be adopted as required to achieve statewide GHG emissions targets. As such, impacts related to consistency with the Scoping Plan would be less than significant.

Table 10
Project Consistency with Applicable CARB Scoping Plan Measures

Scoping Plan Sector	Scoping Plan Measure	Implementing Regulations	Project Consistency
Transportation	California Cap-and-Trade Program Linked to Western Climate Initiative	Regulation for the California Cap on GHG Emissions and Market-Based Compliance Mechanism October 20, 2015 (CCR 95800)	**Consistent.** The Cap-and-Trade Program applies to large industrial sources such as power plants, refineries, and cement manufacturers. However, the regulation indirectly affects people who use the products and services produced by these industrial sources when increased cost of products or services (such as electricity and fuel) are transferred to the consumers. The Cap-and-Trade Program covers the GHG emissions associated with electricity consumed in California, generated in-state or imported. Accordingly, GHG emissions associated with CEQA projects' electricity usage are covered

8 As discussed by the California Air Pollution Control Officer's Association (CAPCOA) in their CEQA and Climate Change White Paper (2008), the 10,000 $MTCO_2e$ threshold corresponds to CARB's mandatory reporting threshold considered by the Market Advisory Committee for inclusion in the GHG Cap and Trade program and is anticipated to capture approximately half of new residential or commercial development.

Scoping Plan Sector	Scoping Plan Measure	Implementing Regulations	Project Consistency
			by the Cap-and-Trade Program. The Cap-and-Trade Program also covers fuel suppliers (natural gas and propane fuel providers and transportation fuel providers) to address emissions from such fuels and combustion of other fossil fuels not directly covered at large sources in the Program's first compliance period.
	California Light-Duty Vehicle GHG Standards	Pavley I 2005 Regulations to Control GHG Emissions from Motor Vehicles Pavley I 2005 Regulations to Control GHG Emissions from Motor Vehicles	**Consistent.** This measure applies to all new vehicles starting with model year 2012. The proposed project would not conflict with its implementation as it would apply to all new passenger vehicles purchased in California. Passenger vehicles, model year 2012 and later, associated with construction and operation of the proposed project would be required to comply with the Pavley emissions standards.
		2012 LEV III California GHG and Criteria Pollutant Exhaust and Evaporative Emission Standards	**Consistent.** The LEV III amendments provide reductions from new vehicles sold in California between 2017 and 2025. Passenger vehicles associated with the site would comply with LEV III standards.
	Low Carbon Fuel Standard	2009 readopted in 2015. Regulations to Achieve GHG Emission Reductions Subarticle 7. Low Carbon Fuel Standard CCR 95480	**Consistent.** This measure applies to transportation fuels utilized by vehicles in California. The proposed project would not conflict with implementation of this measure. Motor vehicles associated with construction and operation of the proposed project would utilize low carbon transportation fuels as required under this measure.
	Regional Transportation-Related GHG Targets.	SB 375. Cal. Public Resources Code §§ 21155, 21155.1, 21155.2, 21159.28	**Consistent.** The proposed project would provide development in the region that is consistent with the growth projections in the Shasta County 2015 Regional Transportation Plan.[9]
	Goods Movement	Goods Movement Action Plan January 2007	**Not applicable.** The proposed project does not propose any changes to maritime, rail, or intermodal facilities or forms of transportation.
Transportation (cont'd)	Medium/Heavy-Duty Vehicle	2010 Amendments to the Truck and Bus Regulation, the Drayage Truck Regulation and the Tractor-Trailer GHG Regulation	**Consistent.** This measure applies to medium and heavy-duty vehicles that operate in the state. The proposed project would not conflict with implementation of this measure. Medium and heavy-duty vehicles associated with construction and operation of the proposed project would be required to comply with the requirements of this regulation.
	High Speed Rail	Funded under SB 862	**Not applicable.** This is a statewide measure that cannot be implemented by a project applicant or Lead Agency.
Electricity and Natural Gas	Energy Efficiency	Title 20 Appliance Efficiency Regulation	**Consistent.** The proposed project would not conflict with implementation of this measure. The proposed project would comply with the latest energy efficiency standards.
		Title 24 Part 6 Energy Efficiency Standards for Residential and Non-Residential	

9 Shasta Regional Transportation Agency. *2015 Regional Transportation Plan for Shasta County*.

Scoping Plan Sector	Scoping Plan Measure	Implementing Regulations	Project Consistency
		Building Title 24 Part 11 California Green Building Code Standards	
	Renewable Portfolio Standard/Renewable Electricity Standard.	2010 Regulation to Implement the Renewable Electricity Standard (33% 2020)	**Consistent:** The proposed project would obtain electricity from the electric utility, Pacific Gas & Electric Company. According to the 2021 Corporate Sustainability Report, PG&E obtained 30.6 percent of its power supply from renewable sources in 2020 including solar, wind, geothermal, biomass, and hydroelectric.
	Million Solar Roofs Program	SB 350 Clean Energy and Pollution Reduction Act of 2015 (50% 2030)	
	Million Solar Roofs Program	Tax Incentive Program	**Consistent.** This measure is to increase solar throughout California, which is being done by various electricity providers and existing solar programs. The program provides incentives that are in place at the time of construction.
Water	Water	Title 24 Part 11 California Green Building Code Standards SBX 7-7—The Water Conservation Act of 2009 Model Water Efficient Landscape Ordinance	**Consistent.** The proposed project would comply with the CalGreen standards, which requires a 20 percent reduction in indoor water use.
Green Buildings	Green Building Strategy	Title 24 Part 11 California Green Building Code Standards	**Consistent.** The State is to increase the use of green building practices. The proposed project would implement required green building strategies through existing regulation that requires the proposed project to comply with various CalGreen requirements.
Industry	Industrial Emissions	2010 CARB Mandatory Reporting Regulation	**Not applicable.** The Mandatory Reporting Regulation requires facilities and entities with more than 10,000 $MTCO_2e$ of combustion and process emissions, all facilities belonging to certain industries, and all electric power entities to submit an annual GHG emissions data report directly to CARB. As shown above, mobile source emissions make up the majority of emissions and project stationary source GHG emissions would not exceed 10,000 $MTCO_2e$. Therefore, this regulation would not apply.
Recycling and Waste Management	Recycling and Waste	Title 24 Part 11 California Green Building Code Standards AB 341 Statewide 75 Percent Diversion Goal	**Consistent.** The proposed project would not conflict with implementation of these measures. The proposed project is required to achieve the recycling mandates via compliance with the CALGreen code.
Forests	Sustainable Forests	Cap and Trade Offset Projects	**Not applicable.** The proposed project is in an area designated for urban uses. No forested lands exist on-site.

Scoping Plan Sector	Scoping Plan Measure	Implementing Regulations	Project Consistency
High Global Warming Potential	High Global Warming Potential Gases	CARB Refrigerant Management Program CCR 95380	**Not applicable.** The regulations are applicable to refrigerants used by large air conditioning systems and large commercial and industrial refrigerators and cold storage system. The proposed project would not conflict with the refrigerant management regulations adopted by CARB.
Agriculture	Agriculture	Cap and Trade Offset Projects for Livestock and Rice Cultivation	**Not applicable.** The proposed project site is designated for urban development. No grazing, feedlot, or other agricultural activities that generate manure occur currently exist on-site or are proposed to be implemented by the proposed project.
Source: CARB. *California's 2017 Climate Change Scoping Plan.* November 2017; CARB. *Climate Change Scoping Plan.* December 2008.			

The proposed project is estimated to result in approximately 5,021 $MTCO_2e$ per year, therefore the GHG emissions caused by long-term operation of the proposed project would be less than significant. Regarding goals for 2050 under Executive Order S-3-05, at this time it is not possible to quantify the emissions savings from future regulatory measures, as they have not yet been developed; nevertheless, it can be anticipated that operation of the proposed project would benefit from the implementation of current and potential future regulations (e.g., improvements in vehicle emissions, SB 100/renewable electricity portfolio improvements, etc.) enacted to meet an 80 percent reduction below 1990 levels by 2050.

The majority of the GHG reductions from the Scoping Plan would result from continuation of the Cap-and-Trade regulation. Assembly Bill 398 (2017) extends the state's Cap-and-Trade program through 2030 and the Scoping Plan provide a comprehensive plan for the state to achieve its GHG targets through a variety of regulations enacted at the state level. Additional reductions are achieved from electricity sector standards (i.e., utility providers to supply 60 percent renewable electricity by 2030 and 100 percent renewable by 2045), doubling the energy efficiency savings at end uses, additional reductions from the LCFS, implementing the short-lived GHG strategy (e.g., hydrofluorocarbons), and implementing the Mobile Source Strategy and Sustainable Freight Action Plan. The proposed project demonstrates consistency with the Scoping Plan goals, and would not conflict with any applicable plan, policy, or regulation of an agency adopted to reduce GHG emissions, including Title 24, AB 32, and SB 32. Therefore, impacts would not occur.

Cumulative Impacts

As discussed above, the proposed project would not cause a new GHG impact to occur. Therefore, the proposed project would not cause either a new cumulative impact to occur, nor an increase in the severity of a cumulative impact previously disclosed.

Mitigation/Monitoring: None proposed.

Section IX – Hazards and Hazardous Materials

The purpose of this section of the Initial Study is to identify, to the extent feasible, the potential for hazards associated with historic and current site uses, surrounding sites, and recognized environmental conditions in connection with the proposed project site and to identify potential risks to human health, including uses of the proposed project site, workers, and construction workers. Information in this section focuses on the potential for the proposed project to create a significant hazard to the public or the environment through the use, transport, disposal, or accidental release of hazardous materials.

Environmental Setting

Hazards are those physical safety factors that can cause injury or death, and while by themselves in isolation may not pose a significant safety hazard to the public, when combined with development of projects can exacerbate hazardous conditions. Hazardous materials are typically chemicals or processes that are used or generated by a project that could pose harm to people, working at the site or on adjacent areas. Many of these chemicals can cause hazardous conditions to occur should they be improperly disposed of or accidentally spilled as part of project development or operations.

The Shasta County Environmental Health Department (SCEHD) is the administering agency and the Certified Unified Program Agency (CUPA) for Shasta County with responsibility for regulating hazardous materials handlers, hazardous waste generators, underground storage tank facilities, above ground storage tanks, and stationary sources handling regulated substances. A Hazardous Materials Business Plan (HMBP) is required of businesses in Shasta County that handle, use, generate, or store hazardous materials. The primary purpose of this plan is to provide readily available information regarding the location, type, and health risks of hazardous materials to emergency response personnel, authorized government officials, and the public. Large cases of hazardous materials contamination or violations are referred to the Central Valley Regional Water Quality Control Board (CVRWQCB) and the California Department of

Toxic Substances Control (DTSC).

Under Government Code Section 65962.5, both the DTSC and the State Water Resources Control Board (SWRCB) are required to maintain lists of sites known to have hazardous substances present in the environment. Both agencies maintain up-to-date lists on their websites. A search of the DTSC and SWRCB lists identified no open cases of hazardous waste violations within one-mile of the project site.

The U.S. Environmental Protection Agency (EPA) maintains the Enforcement and Compliance History Online (ECHO) program. The ECHO website provides environmental regulatory compliance and enforcement information for approximately 800,000 regulated facilities nationwide. The ECHO website includes environmental permit, inspection, violation, enforcement action, and penalty information about EPA-regulated facilities. Facilities included on the site are Clean Air Act (CAA) stationary sources; Clean Water Act (CWA) facilities with direct discharge permits, under the National Pollutant Discharge Elimination System; generators and handlers of hazardous waste, regulated under the Resource Conservation and Recovery Act (RCRA); and public drinking water systems, regulated under the Safe Drinking Water Act (SDWA). ECHO also includes information about EPA cases under other environmental statutes. When available, information is provided on surrounding demographics, and ECHO includes other EPA environmental data sets to provide additional context for analyses, such as Toxics Release Inventory data. According to the ECHO program, the project site is not listed as having a hazardous materials violation (EPA, 2022).

Fire protection services for the project area are provided by the California Department of Forestry and Fire Protection (CAL FIRE), based in the Redding area. The Shasta County Fire Department (SCFD) contracts with CAL FIRE to manage and oversee the operation of SCFD. Both the SCFD and CAL FIRE maintain automatic and mutual aid agreements with adjacent fire districts, including the Redding Fire Department (RFD) and City of Anderson Fire District. CAL FIRE's *Fire and Resource Assessment Program* (FRAP) designates lands in three general classifications, "Moderate", "High" and "Very High" Fire Hazard Severity Zones. The 2007 FRAP (updated May 2008) does not identify the project site or surrounding vicinity as a part of a designated fire hazard severity zone (CAL FIRE, 2008). Additionally, the project site does not fall within a State Responsibility Area (SRA). The proposed project is within the area served by CAL FIRE Redding Station No. 43 located at 6103 Airport Road approximately 2.9 miles northeast of the proposed project.

Regulatory Setting

Hazardous materials refer generally to hazardous substances, hazardous waste, and other materials that exhibit corrosive, poisonous, flammable, and/or reactive properties and have the potential to harm human health and/or the environment. Hazardous materials are used in products (household cleaners, industrial solvents, paint, pesticides, etc.) and in the manufacturing of products (electronics, newspapers, plastic products, etc.). Hazardous materials can include petroleum, natural gas, synthetic gas, acutely toxic chemicals, and other toxic chemicals that are used in agriculture, commercial, and industrial uses; businesses; hospitals; and households. Accidental releases of hazardous materials have a variety of causes, including highway incidents, warehouse fires, train derailments, shipping accidents, and industrial incidents.

The term "hazardous materials" as used in this section includes all materials defined in the California Health and Safety Code Section 25501(n): *"A material that, because of its quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace or the environment. 'Hazardous materials' include, but are not limited to, hazardous substances, hazardous waste, and any material that a handler or the unified program agency has a reasonable basis for believing that it would be injurious to the health and safety of persons or harmful to the environment if released into the workplace or the environment."*

The term includes chemicals regulated by the United States Department of Transportation (USDOT), the United States Environmental Protection Agency (EPA), the California Department of Toxic Substances Control (DTSC), the California Governor's Office of Emergency Services (OES), and other agencies as hazardous materials, wastes, or substances. "Hazardous waste" is any hazardous material that has been discarded, except materials specifically excluded by regulation. Hazardous materials that have been intentionally disposed of or inadvertently released fall within the definition of "discarded" materials and can result in the creation of hazardous waste. Hazardous wastes are broadly characterized by their ignitability, toxicity, corrosivity, reactivity, radioactivity, or bioactivity. Federal and State hazardous waste definitions are similar, but distinct enough that the federal Resource Conservation and Recovery Act (RCRA) hazardous wastes and State non-RCRA hazardous wastes have separate classifications. Hazardous wastes require special handling and disposal because of their potential to impact public health and the environment. Some materials are designated "acutely" or "extremely" hazardous under relevant statutes and regulations.

Hazardous materials and wastes can pose a significant actual or potential hazard to human health and the environment when improperly treated, stored, transported, disposed of, or otherwise managed. Many federal, State, and local programs that regulate the use, storage, and transportation of hazardous materials and hazardous waste are in place to prevent these unwanted consequences. These regulatory programs are designed to reduce the danger that hazardous substances may pose to people and businesses under normal daily circumstances and as a result of emergencies and disasters.

Potential hazards and the use and transportation of hazardous substances are regulated by an overlapping set of adopted city, county, State, and federal plans, policies, and regulations. In general, federal, and State legislation empowers regulation by local agencies;

however, both State and federal agencies such as the FAA and RWQCBs retain a substantial direct regulatory role.

Current federal, State, and local regulations relevant to the review of *Hazards and Hazardous Materials* for this project are summarized below. Ordinances, regulations, or standards that are applicable to the environmental review of potential impacts related to hazards and hazardous materials include the following:

California Environmental Protection Agency

One of the primary agencies that regulate hazardous materials is the Cal EPA. The state, through Cal EPA, is authorized by the EPA to enforce and implement certain federal hazardous materials laws and regulations. The California DTSC, a department of the Cal EPA, protects California and Californians from exposure to hazardous waste, primarily under the authority of the RCRA and the California Health and Safety Code. The DTSC requirements include the need for written programs and response plans, such as Hazardous Materials Business Plans. DTSC programs include dealing with cleanups of improper hazardous waste management; evaluation of samples taken from sites; enforcement of regulations regarding use, storage, and disposal of hazardous materials; and encouragement of pollution prevention.

Unified Hazardous Waste and Hazardous Materials Management Regulatory Program

In January 1996, Cal-EPA adopted regulations implementing a "Unified Hazardous Waste and Hazardous Materials Management Regulatory Program" (Unified Program). The six elements of the Unified Program are as follows: 1) hazardous waste generators and hazardous waste on-site treatment; 2) underground storage tanks; 3) above-ground storage tanks; 4) hazardous material release response plans and inventories 5) risk management and prevention programs; and 6) Unified Fire Code hazardous materials management plans and inventories. The Unified Program is implemented at the local level by a local agency — the Certified Unified Program Agency (CUPA). The CUPA is responsible for consolidating the administration of the six program elements within its jurisdiction. As mentioned above, the SCEHD is the designated CUPA in the County.

Emergency Response to Hazardous Materials Incidents

To coordinate emergency services provided by local, state, and federal agencies, California has developed an Emergency Response Plan pursuant to the Emergency Services Act. The Plan is administered by the state Office of Emergency Services. Local agencies are required to develop area plans for an organized response to releases of hazardous materials that are dependent on Business Plans submitted by handlers of hazardous materials and waste within that agency's area. Pursuant to California Health and Safety Code, Section 25503(a) and CCR Section 2729, any business handling hazardous material must establish and implement a Hazardous Materials Business Plan. These Business Plans are then submitted to the local administering agency. In the County, the administering agency is SCEHD.

California Division of Occupational Safety and Health

Like OSHA at the federal level, the California Division of Occupational Safety and Health (Cal/OSHA) is the responsible State-level agency for ensuring workplace safety. Cal/OSHA assumes primary responsibility for the adoption and enforcement of standards regarding workplace safety and safety practices. In the event that a site is contaminated, a site safety plan must be crafted and implemented to protect the safety of workers. Site safety plans establish policies, practices, and procedures to prevent the exposure of workers and members of the public to hazardous materials originating from contaminated sites or buildings.

California Building Code

The State of California provided a minimum standard for building design through the California Building Code (CBC), which is in Part 2 of Title 24 of the California Code of Regulations. Commercial buildings are plan-checked by the County for compliance with the CBC. Typical fire safety requirements of the CBC included; the installation of sprinklers, establishment of fire resistance standards for fire doors, certain building materials, and particular types of construction, and the clearance of debris and vegetation within a prescribed distance from occupied structures in wildlife hazard areas.

California Vehicle Code

The State of California regulates the transportation of hazardous waste originating or passing through the state. Common carriers are licensed by the California Highway Patrol (CHP) pursuant to the California Vehicle Code, Section 32000. This section requires licensing for every motor (common) carrier who transports, for a fee, in excess of 500 pounds of hazardous materials at one time and every carrier, if not for hire, who carries more than 1,000 pounds of hazardous material of the type requiring placards. Common carriers conduct a large portion of the business in the delivery of hazardous materials.

California Department of Forestry and Fire Protection

The California Department of Forestry and Fire Protection (CAL FIRE) has mapped fire threat potential throughout California. CAL FIRE ranks fire threat based on the availability of fuel and the likelihood of an area burning (based on topography, fire history, and climate). The rankings include no fire threat, moderate, high, and very high fire threat. CAL FIRE produced the 2010 Strategic Fire Plan

for California, with goals, objectives, and policies to prepare for and mitigate the effects of fire on California's natural and built environments.

California Fire Code

The California Fire Code (CFC) is Part 9 of the California Building Standards Code (California Code of Regulations, Title 24). Updated every 3 years, the CFC includes provisions and standards for emergency planning and preparedness, fire service features, fire protection systems, hazardous materials, fire flow requirements, and fire hydrant locations and distribution. Similar to the CBC, the CFC is generally adopted on a jurisdiction-by-jurisdiction basis, subject to further modification based on local conditions.

Shasta County General Plan

The Public Safety Group, Hazardous Materials subsection, of the General Plan contains policies regarding contact and release of hazardous materials. These policies are intended protect persons and property from accidental release of hazardous materials. The following General Plan objectives and policies are applicable to the proposed project:

- *HM-I*. Protection of life and property from contact with hazardous materials through site design and land use regulations and storage and transportation standards.
- *HM-2.* Protection of life and property in the event of the accidental release of hazardous materials through emergency preparedness planning.
    - *Policy HM-a.* The County shall make every effort to inform applicants for discretionary and nondiscretionary projects which are located within potential border zone property of known hazardous waste facilities that they must comply with State requirements regarding hazardous waste facilities. A map shall be prepared and maintained which identifies these areas.

Impact Analysis

The following includes an analysis of environmental parameters related to *Hazards and Hazardous Materials* based on Appendix G of the State CEQA Guidelines. The discussion not only includes the areas for which there is potential for environmental impacts but also provides justification for the conclusions that either no impacts, less than significant impacts, or less than significant impacts with mitigation could occur.

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

IX. **HAZARDS AND HAZARDOUS MATERIALS:** Would the project:	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
emergency response plan or emergency evacuation plan?				
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?				X

Discussion: Based on these comments, the related documents listed in the Sources of Documentation for Initial Study Checklist, staff review of the project, observations on the project site and in the vicinity, the following findings can be made:

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? The proposed project would routinely use and store gasoline, diesel, and other hazardous materials related to the operation of a gas station. Businesses that store hazardous materials are subject to the Shasta County's HMBP program, which is regulated by the Shasta County Environmental Health Division (SCEHD) as part of the County's CUPA. The program requires the preparation of a document that provides an inventory of hazardous materials onsite, emergency plans and procedures in the event of an accidental release, and training for employees on safety procedures for handling hazardous materials and in the event of a release or threatened release. These plans are routine documents that are intended to disclose the presence of hazardous materials and provide information on what to do if materials are inadvertently released. The proposed project is subject to preparation of a HMBP.

The proposed project could potentially result in accidental chemical releases from hazardous materials use, storage, or transport. Proper BMPs, preparation of a SWPPP, and hazardous material handling protocols would be required to ensure safe storage, handling, transport, use, and disposal of all hazard materials during the construction phase of the project. Construction would be required to adhere to state and federal health and safety requirements that are intended to minimize hazardous materials risks to the public, such as California Occupational Safety and Health Regulations (Cal OSHA) requirements, the Hazardous Waste Control Act, the California Accidental Release Prevention program, and the California Health and Safety Code.

The proposed project also involves the construction and operation of a service station, which would include the installation and maintenance of underground storage tanks (UST) for the storage of gasoline onsite. New underground storage tanks to be installed would be double-walled, fiberglass with interstitial sensor mechanisms in place to alert the presence of a leak. Given the review by the Shasta County Fire Department (SCFD), SCEHD, and the Shasta County Building Division, the storage of fuel in underground storage tanks will be carried out in accordance with Shasta County Code (SCC) Chapter 8.24 – Underground Storage of Hazardous Substances, which specifies responsibility of unauthorized releases, investigation and records, and violations and enforcement actions.

The new tanks will be designed in a manner that provides spill and overflow protection, in accordance with Division 20, Chapter 6.7, of the California Health and Safety Code, section 25290.1(a). The proposed project would comply with the California State Water Resources Control (SWRC) Board UST Program which stipulates regulations for leak prevention and emergency response cleanup.

Service stations are subject to routine inspection by federal, State, and local regulatory agencies with jurisdiction over fuel dispensing facilities. The service station's storage and delivery of the hazardous materials would comply with all applicable federal, State, and local regulation in order to functionally operate, including but not limited to Section 2540.7 – Gasoline Dispensing and Service Stations, of Cal OSHA; Chapter 38 – Liquefied Petroleum Gases, of the California Fire Code (CFC); the Resource Conservation and Recovery Act (RCRA); and the SCFD and SCEHD standards. These regulatory requirements minimize health risk to the public associated with fuel service stations' hazardous materials. Given these requirements, the proposed project would not result in a significant impact associated with the routine transport, use or disposal of hazardous materials because of cumulative routine inspections, regulation, and required compliance with applicable federal, State, and local laws surrounding service station operation, delivery, storage, and fuel dispensing. Impacts would be less than significant.

b) As discussed under impact discussion IX.a above, construction and operation of the proposed project, including service station operation, delivery, storage, and fuel dispensing, would comply with all applicable federal, State, and local laws and regulations in order to reduce the likelihood and severity of accidents during construction and operation.

Short-Term Construction

Potential construction-related hazards could be created during the course of construction given that construction activities involve the use of heavy equipment, which uses small and incidental amounts of oils and fuels and other potentially flammable substances. The level of risk associated with the accidental release of hazardous substances is not considered significant due to the small volume and low concentration of hazardous materials used during construction. The construction contractor would be required

to use standard construction controls and safety procedures that would avoid and minimize the potential for accidental release of such substances into the environment. Standard construction practices would be observed such that any materials released are appropriately contained and remediated as required by local, State, and federal law. Impacts would be less than significant.

Long-Term Operation

Any hazardous material handling associated with the operation of the proposed project would be limited in both quantity and concentration to the smallest possible limits. Pursuant to Cal OSHA and SCEHD requirements, all hazardous material stored onsite would be accompanied by a Material Safety Data Sheet, which would inform onsite operators of necessary remediation processes in the event of accidental release. The proposed project will follow current regulations and programs for regulated hazardous materials to further mitigate any risk of releasing hazardous materials into the environment due to foreseeable upset and accident conditions. Impacts would be less than significant.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?
The proposed project would be constructed on the northwest corner of the Knighton Road and Churn Creek Road intersection approximately 400 feet northwest of the Pacheco Elementary and Junior High campus which is situated in the vicinity of a similar highway commercial use, the adjacent TA Travel Center. The proposed project will be required to comply with local and State regulations regarding operations with hazardous materials. Additionally, the project will be required to utilize storage of hazardous materials which would comply with manufacturer recommendations and local and State regulations These measures would reduce potential impacts from hazardous materials or substances to a less than significant level.

A Health Risk Assessment (HRA) was prepared for the project in order to assess potential health impacts of the project on surrounding sensitive receptors. The HRA found that carcinogenic risk resulting from the project would not exceed the 10 in one million threshold. The calculations conservatively assume no cleaner technology with lower emissions in future years. Therefore, carcinogenic hazards are calculated to be within acceptable limits and a less than significant impact would occur. The highest maximum chronic and acute hazard index from the project would be 0.0013 and 0.012, respectively. Therefore, non-carcinogenic hazards are calculated to be within acceptable limits and a less than significant impact would occur (KHA, 2022).

d) Under Government Code Section 65962.5, both the DTSC and the SWRCB are required to maintain lists of sites known to have hazardous substances present in the environment. Both agencies maintain up-to-date lists on their websites. A search of the DTSC and SWRCB lists identified no open cases of hazardous waste violations on the project site. Therefore, the project site is not on a parcel included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 (DTSC, 2022; SWRCB, 2022). As a result, this would not create a significant hazard to the public or to the environment. No impact would occur in this regard.

e) The Redding Municipal Airport is located approximately 1.6 miles east of the proposed project. The airport currently averages 290 operations (takeoffs and landings) each day (COR, 2015). The proposed project is not located within the established Approach Clear Zone for the airport and is outside the 55 dB to 60 dB noise contours. As a result, the proposed project would not result in a safety hazard or excessive noise for people working onsite. No impact would occur in this regard.

f) Currently, the County has not adopted comprehensive emergency evacuation plan applicable to this area; however, due to the location of the proposed project immediate access to Interstate 5 (I-5) is available. Two proposed driveway connections are provided to the project site. The proposed Churn Creek Road entrance will extend from the proposed east entrance off Churn Creek Road, entering behind the convenience store. The second entrance is off Knighton Road and provides immediate access to the fueling station along the frontage of the parcel. The proposed project would also be fully accessible to emergency vehicles through design of parking and vehicle drive aisles.

No roadway closures are anticipated during construction. However, if temporary closures would be required, emergency access would be maintained at all times. Construction effects would be temporary, and all areas would be returned to pre-project conditions upon completion of construction. As a result, the proposed project would not impair implementation of any emergency response plan or emergency evaluation plan as it would not alter existing roadways, or physically interfere with existing roadway patterns. Impacts would be less than significant.

g) The proposed project is within the area served by CAL FIRE Station No. 43 - Redding located at 6103 Airport Road approximately 2.9 miles northeast of the proposed project. As previously discussed above, CAL FIRE's FRAP FHSZ data viewer does not identify the project site or surrounding vicinity as a part of a designated fire hazard severity zone (CAL FIRE, 2022). Additionally, the project site does not fall within a State Responsibility Area (SRA) and is therefore designated as a LRA (CAL FIRE, 2022). The proposed project would provide appropriate fire suppression based on the California Building Code and County requirements. Compliance with applicable regulations and regular inspection of project facilities would reduce wildfire risks. No impact would occur in this regard.

Mitigation/Monitoring: None proposed.

Section X. – Hydrology and Water Quality

The purpose of this section of the Initial Study is to describe the hydrologic and water quality setting of the proposed project site and surrounding area. This section also evaluates potential long-term and short-term water quality impacts associated with construction and long-term operation of the proposed project.

Environmental Setting

The proposed project encompasses approximately 15.94 acres of undeveloped vacant land. The project site is relatively flat, ranging in elevation from approximately 440 to 450 feet above mean sea level (msl). Portions of the site were previously developed with a single-family home; the house and outbuildings were removed some time after 1998, and the site is now used as grazing land. The surrounding area is a mixture of urban (TA Travel Center and paved roadways), cropland (east of Churn Creek Road), and perennial grassland used for grazing. Onsite development would be limited to approximately 3.94 acres (Parcel 1) (see Figure 8, PROPOSED SITE PLAN). Parcel 2 is approximately 3.17 acres with no use or development proposed at this time.

Surface Water

As previously described in Section 2.0, PROJECT DESCRIPTION, a small constructed roadside ditch is present along the southern and eastern boundaries of the project site, along Knighton and Churn Creek roads. The ditch averages about 2 feet in width and is approximately 517 feet long. The ditch conveys runoff from uplands and roadways and is not connected to any adjacent wetland, ditch, or riverine feature. No other surface water conveyance or wetland features are present onsite.

The Federal Emergency Management Agency (FEMA) has mapped the 100-year and 500-year floodplains along the Sacramento River and creeks in the vicinity of the project site. The site and surrounding area are located within the mapped 100-year floodplain, Zone AO with a flood depth of two feet (FEMA, 2011). The project parcel is currently zoned Planned Development (PD) combined with the Restrictive Flood District (F-2). Developments that are proposed within these designations are subject to development standards specified by Shasta County Code (SCC) Chapter 17.70 – Restrictive Flood (F-2) District to minimize flood damage and reduce exposure to flood hazards.

Groundwater

The project site and surrounding area is located within the Sacramento River hydrologic region of northern California within the Redding Groundwater Basin (RGWB), Enterprise Subbasin (DWR, 2021). The RGWB underlies approximately 544 square miles in the north end of the Sacramento Valley; the Enterprise Subbasin is approximately 95 square miles in the northeast portion of the Redding Basin. The Enterprise Subbasin comprises the portion of the Redding Groundwater Basin bounded on the west and southwest by the Sacramento River, on the north by the Klamath Mountains, and on the east by Little Cow Creek and Cow Creek (DWR, 2004).

The County is a member of the Redding Area Water Council (RAWC), a consortium of water purveyors that operate in Shasta County. In 1998, the Shasta County Water Agency, on behalf of the RAWC, prepared the *Coordinated AB 3030 Groundwater Management Plan* for the RGWB. The groundwater management plan was prepared to provide a mechanism for both the public and private stakeholders in the RGWB to evaluate, manage, protect, and preserve local groundwater resources. The County is also participating in a consortium of nearby groundwater users to form a Groundwater Sustainability Agency (GSA) pursuant to the requirements of AB 1739, SB 1168, and SB 1319 collectively known as the Sustainable Groundwater Management Act (SGMA).

The Enterprise Subbasin is identified as a medium priority basin under the SGMA (DWR, 2022). Based on other wells in the vicinity, depth to groundwater it is anticipated to be between 100 to 200 feet in depth and depth to groundwater would be approximately 30 feet (DWR, 2022). Based on this data, including onsite field investigation, the depth to the seasonal high groundwater table at the project is anticipated to be no less than about 11 feet to more than 19 feet below the ground surface (SHN, 2022).

Regulatory Setting

This section summarizes current federal, State, and local regulations relevant to the review of *Hydrology and Water Quality* for this project. Ordinances, regulations, or standards that are applicable to the environmental review of potential impacts related to hydrology and water quality include the following:

Clean Water Act

The Clean Water Act (CWA) is a federal law that protects the nation's surface waters, including lakes, rivers, coastal wetlands, and "waters of the United States." The CWA specifies that discharges to waters are illegal, unless authorized by an appropriate permit. The permits regulate the discharge of dredged and fill materials, construction-related stormwater discharges, and activities that may result in discharges of pollutants to waters of the United States. If waters of the U.S. are located on a project site, a proposed project is likely to discharge to them, and if impacts on them are anticipated, the project must obtain a CWA Section 401 Water Quality Certification from the appropriate Regional Water Quality Control Board (RWQCB).

Federal Anti-Degradation Policy

The federal Anti-Degradation Policy is part of the CWA (Section 303(d)) and is designed to protect water quality and water resources. The policy directs states to adopt a statewide policy that includes the following primary provisions: (1) existing instream uses and water quality necessary to protect those uses shall be maintained and protected; (2) where existing water quality is better than necessary to support fishing and swimming conditions, that quality shall be maintained and protected unless the state finds that allowing lower water quality is necessary for important local economic or social development; and (3) where high-quality waters constitute an outstanding national resource, such as waters of national and state parks, wildlife refuges, and waters of exceptional recreational or ecological significance, that water quality shall be maintained and protected.

Safe Drinking Water Act

Under the 1974 Safe Drinking Water Act (Public Law 93-523), most recently amended in 1996, USEPA regulates contaminants of concern to domestic water supply, which are those that pose a public health threat or that alter the aesthetic acceptability of the water. These types of contaminants are classified as either primary or secondary Maximum Contaminant Levels (MCLs). MCLs and the process for setting these standards are reviewed triennially.

National Pollutant Discharge Elimination System

The NPDES program is administered by the U.S. Environmental Protection Agency (EPA), which delegated oversight in California to the Regional Water Quality Control Boards. The NPDES program provides general permits and individual permits. The general permits are for construction projects that disturb more than one acre of land. The general permit requires the applicant to file a public Notice of Intent (NOI) to discharge stormwater and to prepare and implement a Stormwater Pollution Prevention Plan (SWPPP). The SWPPP includes a site map, description of proposed activities, demonstration of compliance with applicable ordinances and regulations, and a description of Best Management Practices (BMPs) that would be implemented to reduce erosion and discharge of construction-related pollutants. The CWA-established NPDES permit program regulates municipal and industrial discharges to surface waters of the United States from their municipal separate storm sewer systems (MS4s). Under the NPDES program, all facilities that discharge pollutants into waters of the United States are required to obtain a NPDES permit. Requirements for stormwater discharges are also regulated under this program.

State Water Resources Control Board Waste Discharge Requirements

Waste discharges that can be exempted from the California Code of Regulations (CCR) requirements are issued waste discharge requirements (WDRs) and are regulated by the WDR Program. Typical discharge types include domestic or municipal wastewater, food processing related wastewater, and industrial wastewater.

Statewide General Construction Permit

Construction projects of 1 acre or more are regulated under the Construction General Permit, Order No. 2012-0006-DWQ, issued by the SWRCB. Under the terms of the permit, applicants must file permit registration documents with the SWRCB prior to the start of construction, including a Notice of Intent, risk assessment, site map, SWPPP, annual fee, and signed certification statement.

State Anti-Degradation Policy

In 1968, as required under the Federal Anti-Degradation Policy, the SWRCB adopted an Anti- Degradation Policy, formally known as the *Statement of Policy with Respect to Maintaining High Quality Waters in California* (State Water Board Resolution No. 68-16). Under the Anti-Degradation Policy, any actions that can adversely affect water quality in surface and ground waters must be consistent with maximum benefit to the people of the State, not unreasonably affect present and anticipated beneficial use of the water, and not result in water quality less than that prescribed in water quality plans and policies.

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act acts in cooperation with the CWA to establish the SWRCB. The SWRCB is divided into nine regions, each overseen by a RWQCB. The SWRCB, and thus each RWQCB, is responsible for protecting California's surface waters and groundwater supplies. The Porter-Cologne Water Quality Control Act develops Basin Plans that designate the beneficial uses of California's rivers and groundwater basins. The Basin Plans also establish narrative and numerical water quality objectives for those waters. Basin Plans are updated every three years and provide the basis of determining waste discharge requirements, taking enforcement actions, and evaluating clean water grant proposals. The Porter-Cologne Water Quality Control Act is also responsible for implementing CWA Sections 401-402 and 303(d) to SWRCB and RWQCBs.

Water Quality Control Plan, Fifth Edition, for the Sacramento and San Joaquin River Basins

The CVRWQCB adopted a Water Quality Control Plan, Fifth Edition (revised May 2018), for the Sacramento and San Joaquin River

Basins (Basin Plan) that designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan. Waste discharge requirements (WDRs) were adopted in order to attain the beneficial uses listed for the Basin Plan area. Water quality objectives are established for numerous constituents, including bacteria; chemical constituents such as trace elements, mercury, and methylmercury; pH; dissolved oxygen; pesticides; and salinity.

Sustainable Groundwater Management Act

In 2014, California enacted the Sustainable Groundwater Management Act (SGMA; Water Code Section 10720 et seq.). SGMA and related amendments to California law require all groundwater basins designated as high or medium priority in the DWR California Statewide Groundwater Elevation Monitoring (CASGEM) Program, and that are subject to critical overdraft conditions, must be managed under a new Groundwater Sustainability Plan (GSP) or a coordinated set of GSPs. High or medium priority basins that are not subject to a critical overdraft must be regulated under one or more GSPs by 2022. Where GSPs are required, one or more local Groundwater Sustainability Agencies (GSAs) must be formed to implement applicable GSPs. A GSA has the authority to require registration of groundwater wells, measure and manage extractions, require reports, and assess fees, and to request revisions of basin boundaries, including establishing new subbasins.

Onsite Wastewater Treatment System Requirements

The California Water Code authorizes the SWRCB to regulate all discharges, including those from Onsite Wastewater Treatment Systems (OWTS), which could adversely impact water quality. The policies of the SWRCB are implemented locally through nine Regional Water Quality Control Boards. Historically, each regional board developed basin plans that outlined water quality objectives in their respective jurisdictions as well as policies and programs to achieve those objectives.

Discharges are regulated through the use of Waste Discharge Requirements (WDRs). Shasta County is in Region Five which is the Central Valley Regional Water Quality Control Board (CVRWQCB). The SWRCB regulatory authority extends to individual OWTS. General guidelines for the Siting, Design, and Construction of OWTS were part of each regional board's basin plans. The SWRCB and the regional boards recognize the advantages and efficiencies of OWTS regulation by local agencies. Consequently, while the regional boards retained primacy over large and specialized systems, direct regulatory authority for individual OWTS has been delegated to individual counties that implement the regulations through a Local Agency Management Program (LAMP).

The State OWTS Policy and LAMP are the culmination of the actions required by Assembly Bill 885 (AB 885). AB 885 as introduced to the California State assembly on February 25, 1999, would have impacted only coastal counties. However, the final version approved on September 27, 2000, was more inclusive, affecting all California counties. This legislation directed the SWRCB to develop regulations or standards for OWTS to be implemented statewide by qualified local agencies that issue sewage disposal system permits, which in Shasta County is the Environmental Health Division of the Department of Resource Management (SCEHD).

The SWRCB adopted the Water Quality Control Policy (State OWTS Policy) for Siting, Design, Operation, and Maintenance of Onsite Wastewater Treatment Systems on June 19, 2012. The Policy was subsequently approved by the Office of Administrative Law on November 13, 2012, and became effective on May 13, 2013. The OWTS Policy allows local agencies to approve OWTS, based on a local ordinance, and LAMP after approval by the applicable regional board.

Without an approved LAMP the County could only issue septic system permits for those few sites meeting the restrictive soil requirements of State OWTS Policy Tier 1. All other sites would potentially be subject to the WDR process. However, under an approved LAMP, the requirement to obtain WDRs is conditionally waived for OWTS that are in conformance with the LAMP.

Impact Analysis

The following includes an analysis of environmental parameters related to *Hydrology and Water Quality* based on Appendix G of the State CEQA Guidelines. The discussion not only includes the areas for which there is potential for environmental impacts but also provides justification for the conclusions that either no impacts, less than significant impacts, or less than significant impacts with mitigation could occur.

X. HYDROLOGY AND WATER QUALITY: Would the project:	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?			X	

X. **HYDROLOGY AND WATER QUALITY:** Would the project:	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin.			X	
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or through the addition of impervious surfaces, in a manner which would: (i) result in substantial erosion or siltation on- or off-site: (ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite; (iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or (iv) impede or redirect flows?		X		
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?				X
e) Conflict with or obstruct implementation of a water quality control plan or sustainable management plan?				X

Discussion: Based on the related documents listed in the Sources of Documentation for Initial Study Checklist, staff review of the project, observations on the project site and in the vicinity, a Preliminary Drainage Report (Kimley Horn 2024) and a Preliminary Private Sewage Disposal System Plan (Kimley Horn 2024) the following findings can be made:

a) Wastewater generated by the proposed project would be managed through the use an OWTS with septic tank and leach field. Wastewater from the convenience store would flow to the leach field via an approximate 500-foot leach line (underground pipe). The leach field would be engineered with an appropriate mix and or layering of soils and gravel to facilitate percolation of wastewater. The field would contain a total of 100 leach lines spaced approximately 10 feet apart, each being approximately 59 feet in length. The total area of the leach field would be 37,259 square feet or 0.86 acres. The OWTS would be designed to accommodate the anticipated peak 3,149.8 gallons per day (gpd) and average of 2,944.35 gpd of wastewater generated by the project. The OWTS disposal system would be designed in accordance with Shasta County OWTS design requirements based on the *Septic Suitability and Infiltration Testing Investigation Report* (SHN, 2022). As discussed above, the requirement to obtain WDRs is conditionally waived for OWTS that are in conformance with a LAMP (SCEHD, 2019). Since the proposed project will be required to demonstrate compliance with the County's LAMP prior to construction impacts are considered less than significant.

b) The proposed project would use an onsite water well and is anticipated to require a peak water consumption of approximately 3,925.8 gallons per day (gpd) and an average of 2,944.35 gpd. Based on the peak water consumption the proposed project would use approximately 4.4 acre-feet per year. Refer to impact discussion X.e, below for a full assessment of the project's impact to the RGWB. Impacts would be less than significant.

c) i. Construction controls are discussed separately from other water quality management measures because they are temporary and specific to the type of construction. Construction within the project area has the potential to produce typical pollutants such as nutrients, suspended solids, heavy metals, pesticides and herbicides, toxic chemicals related to construction and cleaning, waste materials (including wash water), paints, wood, paper, concrete, food containers, sanitary wastes, fuel, and lubricants. The greatest potential impact to water quality may exist during construction when the vegetation is removed, exposing underlying soils to erosion. Therefore, the vegetation should be left undisturbed as much as possible.

The SWRCB is responsible for implementing the CWA and has issued a statewide General Permit (Water Quality Order 2012-006-DWQ) for construction activities within the State. The State General Construction Activity Storm Water Permit (CGP) is implemented and enforced by the RWQCBs. The CGP applies to construction activity that disturbs one acre or more, and requires the preparation and implementation of a SWPPP that identifies BMPs to minimize pollutants from discharging from the construction site to the maximum extent practicable. The BMPs, that must be implemented, can be categorized into two major categories: 1) erosion and sediment control BMPs, and 2) non-storm water management and materials management BMPs. Erosion and sediment control BMPs fall into four main subcategories:

- Erosion controls
- Sediment controls
- Wind Erosion controls
- Tracking controls

Erosion controls include practices to stabilize soil, in order to protect the soil in its existing location and prevent soil particles from migration. Examples of erosion control BMPs are: preserving existing vegetation, mulching and hydroseeding. Sediment controls are practices to collect soil particles after they have migrated, but before the sediment leaves the site. Examples of sediment control BMPs are: street sweeping, fiber rolls, silt fencing, gravel bags, sand bags, storm drain inlet protection, sediment traps and detention basins. Wind erosion controls prevent soil particles from leaving the site in the air. Examples of wind erosion control BMPs include: applying water or other dust suppressants to exposed soils on the site. Tracking controls prevent sediment from being tracked off site via vehicles leaving the site to the extent practicable.

Non-storm water management and material management controls reduce non-sediment related pollutants from potentially leaving the construction site to the extent practicable. The CGP prohibits the discharge of materials other than storm water and authorized non-storm water discharges (such as irrigation and pipe flushing and testing). Non-storm water BMPs tend to be management practices with the purpose of preventing storm water from coming into contact with potential pollutants. Examples of non-storm water BMPs include: preventing illicit discharges and implementing good practices for vehicle and equipment maintenance, cleaning and fueling operations, such as using drip pans under vehicles. Waste and materials management BMPs include implementing practices and procedures to prevent pollution from materials used on construction sites. Examples of materials management BMPs include:

- Good housekeeping activities, such as covering stored materials and elevating them off the ground, in a central location.
- Securely locating portable toilets away from the storm drainage system and performing routine maintenance.
- Providing a central location for concrete wash out and performing routine maintenance.
- Providing several dumpsters and trash cans throughout the construction site for litter/floatable management.
- Covering and/or containing stockpiled materials and overall good housekeeping on the site.

The SWRCB has also adopted a statewide general permit (Water Quality Order No. R-5-2016-0040) for small MS4s covered under the CWA to efficiently regulate numerous storm water discharges under a single permit. Permitees must meet the requirements in Provision D of the General Permit which require the development and implementation of a Storm Water Management Plan (SWMP) with the goal of reducing the discharge of pollutants to the maximum extent practicable. The SWMP must include the following six minimum control measures:

- Public Education and Outreach on Storm Water Impacts
- Public Involvement/Participation
- Illicit Discharge Detection and Elimination
- Construction Site Storm Water Runoff Control
- Post-Construction Storm Water Management in New Development
- Redevelopment and Pollution Prevention/Good Housekeeping for Municipal Operations

Earthwork, grading, and soil stockpiling activities associated with project construction are required to meet Shasta County Code Chapter 12.12 and be conducted in accordance with the conditions of a SWPPP and Notice of Intent (NOI) administered by the CVRWQCB. The SWPPP will specify BMPs for erosion and sediment control measures. The final improvement plans for the project must also incorporate specific design measures intended to limit pollutant discharges in stormwater from urban improvements as established under the State's NPDES general permit, which the County is obligated to follow in accordance with State Water Quality Control Order No. 2012-0006-DWQ. Stormwater runoff from all structures, impervious, and pervious areas shall be collected from the project site and retained/treated by BMPs in accordance with Phase II MS4 Permit (Water Quality Order No. R5-2016-0040). Therefore, the potential for substantial soil erosion and loss of topsoil associated with the proposed project is considered to be less than significant.

ii. The proposed project is located within a Federal Emergency Management Agency (FEMA) Special Flood Hazard Area (Zone AO) (FEMA, 2011). The project parcel is currently zoned Planned Development (PD) combined with the Restrictive Flood District (F-2). Implementation of the proposed project will be required to adhere to development standards specified by Shasta County Code (SCC) Chapter 17.70 – Restrictive Flood (F-2) District which require projects located within a flood zone to minimize flood damage and reduce exposure to flood hazards. Satisfying the requirements of SCC Chapter 17.70 would serve to reduce potential impacts of developing within Zone AO. In addition, all storm drain facilities are proposed to be designed and constructed consistent with the intent of applicable Shasta County requirements including the County's Phase II MS4 Permit (Water Quality Order No. R5-2016-0040). With implementation of Mitigation Measures X.c.1 and X.c.2 impacts would be less than significant.

iii. Refer to impact discussions under X.c.i, above. Impacts would be less than significant with mitigation incorporated.

iv. Refer to impact discussion under X.c.i, above. Impacts would be less than significant with mitigation incorporated.

d) There are no levees near the proposed project. The threat of a tsunami wave is not applicable to inland areas; there is no potential for the generation of a seiche. As previously described above, the proposed project is located within a Federal Emergency Management Agency (FEMA) Special Flood Hazard Area (Zone AO) (FEMA, 2011).

Two major dams are in the general vicinity of the proposed project: Shasta Dam and Whiskeytown Dam. The Shasta County General Plan does not contain dam inundation maps, however, according to Figure 4-5 and Figure 4-6 of the Health and Safety Element of the City of Redding General Plan, the proposed project is located within both the Shasta Dam and Whiskeytown Dam Failure inundation area (COR, 2000).

Uncontrolled releases from Shasta Dam, although very unlikely, would devastate the entire northern Central Valley including the proposed project. The Sacramento River and its tributaries would overtop banks and levees. Massive flooding in the lowlands along the river would occur and Interstate 5 (I-5), the main west coast transportation artery, would be affected by closure and possible structural damage. As a result, large portions of Redding and some areas of unincorporated Shasta County along the Sacramento River, including the proposed project site, would be directly affected by a dam overflow or failure. Although these are two different types of events, the results are the same - uncontrolled releases from Shasta Dam or Whiskeytown Dam.

Dam Overflow

Although it is highly unlikely, a dam overflow is more likely than a dam failure. A dam overflow would be characterized by an "overtopping" of the dam. The design of the structure includes three large spillway gates to minimize the possibility of a true overtopping of the dam. During an intense and prolonged storm period that might bring water levels near the top of the dam, these spillway gates would be lowered allowing water to be discharged down the spillway. Controlling, or funneling, the discharge down the spillway prevents structural erosion along the base and sides of the dam, protects the turbine power generation plant at the base of the dam, and allows control of the release in cubic feet per second. Shasta Dam has never overflowed in its 60-year history[10]. There are no reports of Whiskeytown Dam overflowing as well.

Dam Failure

A dam failure is less likely than a dam overflow. A dam failure would be characterized by a structural breach of the dam. Flooding and overtopping, earthquakes, release blockages, landslides, lack of maintenance, improper operation, poor construction, vandalism, or terrorism typify dam failures. California has had about 45 failures of nonfederal dams. These failures occurred for a variety of reasons, the most common being overtopping of earthen dams. Some of the other reasons include specific shortcomings in the dams themselves or inadequate assessment of the surrounding geomorphologic characteristics. Shasta Dam is a federal dam, one of the largest concrete dams in the world, and secured firmly on bedrock.

Although there is a history of 45 dam failures within the State of California, most of the failures were earthen dams. Of the concrete dams that failed, all were of the "thin-arch" design. Shasta Dam is a federally controlled and inspected dam and is considered a "thick arch." Seismic activity is monitored, and tunnels throughout the dam itself allow inspectors to monitor for cracks and seepage. The dam is built on bedrock and is geomorphologically sound. The probability of a dam failure is extremely low[11]. Although Whiskeytown Dam is comprised of an earthen embankment structure, it continues to be inspected regularly by federal officials to ensure dam integrity and safety.

Conclusion

The proposed project, like many developed areas along in proximity to the Sacramento River, is located within the mapped inundation areas of Shasta Dam and Whiskeytown Dam. As noted above, neither dam has ever overtopped, and the probability of dam failure is considered extremely low. In addition, the County maintains an Emergency Operations Center (EOC), including communication and coordination with USBR, to help coordinate information and resources should the County experience a large event such as dam overflow or failure.

While the proposed project would result in a new commercial development onsite, the risk of the release of pollutants from inundation of the project site as a result of a catastrophic failure or overtopping of either dam is not considered significant given the dam type, construction, the historical context of dam operations and management, and ongoing coordination between the County and USBR. In addition, refer to impact discussion under X.c.i, above, regarding the minimization of floodplain impacts. Impacts would be less than significant with mitigation incorporated.

e) The proposed project is located within the Sacramento River Basin. The *Water Quality Control Plan for the California Regional Water Quality Control Board Central Valley Region (Fifth Edition)* was prepared for the Sacramento River Basin and the San

10 City of Redding. 2015. *Local Hazard Mitigation Plan*. Page. 77. November 2015.
11 Ibid.

Joaquin River Basin. The Basin Plan includes water quality objectives for the San Joaquin River. Implementation of the plan is conducted through the NPDES permits and waste discharge requirements for pollution (CVRWQCB, 2018). Implementation of the proposed project would not result in a conflict with Basin Plan for the Sacramento River Basin.

Water for the proposed project would be provided by one new onsite water well. Based on other wells in the vicinity it is anticipated to be between 100 to 200 feet in depth and depth to groundwater would be approximately 30 feet (DWR, 2022); however, seasonal high groundwater table onsite anticipated to be no less than about 11 feet to more than 19 feet below the ground surface (SHN, 2022). The proposed project is anticipated to require a peak water consumption of approximately 3,925.8 gallons per day (gpd) and an average of 2,944.35 gpd. Based on the peak water consumption estimate, the project's water demand is equivalent to approximately 1.43 million gallons per year or 4.4-acre feet per year (AFY).

The proposed project's annual water demand represents 0.000008 percent of the available groundwater in the RGWB. In addition, the proposed project would comply with federal, State, and local regulations and policies regarding water conservation. For these reasons, the proposed project would have a less than significant impact on groundwater supplies and groundwater recharge.

As previously discussed above, the project site and surrounding area is located within the Sacramento River hydrologic region of northern California within the Redding Groundwater Basin, Enterprise Subbasin (DWR, 2021). It is important to note that the RGWB is not an adjudicated basin. As the basin is not in overdraft, no legal pumping limit has been set; therefore, no overdraft mitigation efforts are currently underway. Though no safe yield has been established for the RGWB, groundwater modeling as part of the *Coordinated AB3030 Groundwater Management Plan* indicates that the RGWB is resilient to severe drought conditions and is able to recover with one year of normal rainfall (COR, 2016). However, as previously described above, the Enterprise Subbasin of the RGWB, in which the project is located, has been identified as a medium priority basin under the SGMA. As a result, the Enterprise Anderson Groundwater Sustainability Agency (EAGSA) was formed consisting of the overlying members of the RGWB. As required, the EAGSA created a Groundwater Sustainability Plan (GSP) for both the Enterprise and Anderson subbasins in 2022.

Through the efforts of the EAGSA, the GSP will identify the long-term management and use of groundwater within the Enterprise and Anderson subbasins in a manner that can be maintained without causing undesirable results. Undesirable results are generally defined with these sustainability indicators: (a) chronic lowering of groundwater levels (not including overdraft during a drought, if a basin is otherwise managed); (b) significant and unreasonable reductions in groundwater storage; (c) significant and unreasonable seawater intrusion; (d) significant and unreasonable degradation of water quality; (e) significant and unreasonable land subsidence; and (f) surface water depletions that have significant and unreasonable adverse impacts on beneficial uses (Water Code Section 10721[w]).

Each of these indicators will be evaluated in the GSP. The GSP will also document the minimum threshold conditions at which a sustainability indicator becomes significant and unreasonable. Then, the GSP must establish a measurable objective reflecting the basin's desired groundwater conditions, and provide for achievement of the sustainability goal within 20 years.

Given the current and foreseeable status of the RGWB as a non-adjudicated basin, coupled with the requirements of the SGMA Act, MS4 permits and federal, State, and local regulations and policies regarding water conservation, impacts to groundwater supplies and groundwater recharge within the RGWB, implementation of the proposed project would not result in adverse impacts to groundwater resources. Impacts would be less than significant.

Mitigation/Monitoring: The following mitigations measures have been developed to reduce potential impacts related to Hydrology and Water Quality to less than significant levels:

Mitigation Measures

X.c.1

Prior to issuance of a grading permit or encroachment permit, the project applicant shall submit a final post construction stormwater management plan to the County concurrent with site improvement plans. 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 offsite 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.

X.c.2

To minimize public and private losses due to flooding within Zone AO, prior to issuance of a grading permit and/or building permit, the project applicant shall provide engineering plans and calculations demonstrating compliance with SCC Chapter 17.70 – Restrictive Flood (F-2) District. The plans shall be prepared to the satisfaction of and approved by the County Building Official.

Section XI – Land Use and Planning

This section of the Initial Study describes the impacts on land use and planning that would result from implementation of the proposed

project, including consistency with relevant local land use plans and compatibility with surrounding land uses.

Environmental Setting

The project site lies within a rural residential and agriculture area of Shasta County immediately east of Interstate 5 (I-5), and directly north of the TA Travel Center. The TA Travel Center includes truck filling areas and general truck stop amenities, which also includes a Pizza Hut Express, Shell gas station, Popeyes Louisiana Kitchen, Country Pride, and a Western Union. The proposed project lies within the Churn Creek Bottom area of Shasta County which has historically been and largely continues to be an agricultural community. The land use designation of the project site and adjoining properties are provided in Table 11, EXISITNG LAND USE AND ZONING DESIGNATIONS. Existing agricultural uses are found to the north and east, the commercial TA Travel Center is found to the south, and a vacant proposed commercial parcel is located to the west. The nearest sensitive receptors are located at the Pacheco School approximately 500 feet to the southeast (the southeast corner of the Knighton Road/Churn Creek Road intersection).

Table 11
EXISTING LAND USE AND ZONING DESIGNATIONS

Direction from Site	Land Use Designation	Zoning
Project Site	Commercial (C)	Planned Development (PD)
North	Agricultural Small Scale Cropland/Grazing (A-cg)	Planned Development (PD)
East	Agricultural Small Scale Cropland/Grazing (A-cg)	Limited Agriculture (A-1)
South	Commercial (C)	Commercial-Light Industrial (C-M)
West	Commercial (C)	Planned Development (PD)
Source: County of Shasta. 2022.		

As noted above, land to the north and east have a General Plan classification of Agricultural Small Scale Cropland/Grazing (A-cg) with corresponding zoning designations of Planned Development (PD) and Limited Agriculture (A-1); land to the south and west has a General Plan classification of Commercial (C) and a zoning designation of Office Commercial, Commercial-Light Industrial, Commercial Recreation (C-M) and Planned Development (PD). The General Plan's Community Organization and Development Pattern Element specifies in objective CO-u "*Commercial development in the Churn Creek Bottom area shall be strictly limited to the I-5 interchange/Knighton Road intersection*".

Regulatory Setting

This section summarizes current State and local regulations relevant to the review of *Land Use and Planning* for this project. Ordinances, regulations, or standards that are applicable to the environmental review of potential impacts related to land use and planning include the following:

Shasta County General Plan

The Shasta County General Plan is a statement of public policy reflecting the aspirations and values of Shasta County residents which is adopted by their elected representatives. The Shasta County General Plan, amended 2004, identifies strategies, policies, and implementation recommendations for land use within its planning area. The Shasta County General Plan is a long-range comprehensive plan that governs growth and development in the unincorporated areas of Shasta County. The function of the General Plan is to provide a policy framework that must be reflected in the zoning ordinance, specific plans, and other development guidelines.

Shasta County Zoning Ordinance

The Shasta County Zoning Plan, amended 2003, is a tool to assist the County in attaining goals identified in the Shasta County General Plan. The Shasta County Zoning Plan consists of the establishment of various zoning districts to be used within the unincorporated territory of the County. As a legal instrument, the zoning map has immediate force and effect and is one of the key tools in implementing the General Plan's policies. The purpose of the Shasta County Zoning Plan provisions is to promote and protect the public health, safety, peace, morals, comfort, convenience, and general welfare; to implement the Shasta County General Plan, and to facilitate and guide growth in accordance with the Shasta County General Plan; and to protect the social and economic stability of residential, commercial, industrial, resource production, and recreational.

Shasta County Community Plan Areas

Shasta County includes has a number of plans made specifically for designated community or plan areas (i.e., the Cottonwood Community Plan). These plans describe policies and objectives specifically related to that area. The proposed project in not located within a community plan.

Impact Analysis

California Government Code Section 65860 requires zoning to be consistent with the general plan. Consistency with the general plan is possible only if the local government, in this case Shasta County, has officially adopted a general plan. The land uses authorized in the Shasta County Zoning Plan must be compatible with the objectives, policies, general land uses, and programs specified in the Shasta County General Plan. General plan consistency does not mean strict conformity of a project with each and every general plan objective and policy. Rather, a project is consistent if it is in agreement or harmony with the general plan considered as a whole. In other words, a project may not have to strictly or substantially conform to a particular general plan policy or policies.

For the purposes of this analysis, relevant planning documents, particularly the Shasta County General Plan and the Shasta County Municipal Code, were consulted. The proposed project was qualitatively assessed to determine whether it would conflict with any applicable land use plan, policy, or regulations. If the proposed project was determined to conflict with a relevant plan, a determination was then made as to whether the conflict or inconsistency would result in a significant physical environmental impact that would otherwise be mitigated or avoided without implementation of the proposed project.

The following includes an analysis of environmental parameters related to *Land Use and Planning* based on Appendix G of the State CEQA Guidelines. The discussion not only includes the areas for which there is potential for environmental impacts but also provides justification for the conclusions that either no impacts, less than significant impacts, or less than significant impacts with mitigation could occur.

XI. LAND USE AND PLANNING: Would the project:	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a) Physically divide an established community?				X
b) 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?				X

Discussion: Based on the related documents listed in the Sources of Documentation for Initial Study Checklist, staff review of the project, observations on the project site and in the vicinity, the following findings can be made:

a) The proposed project will not physically divide an established community, as it would be developed on a vacant site on the northwest quadrant of the I-5/Knighton Road interchange and located across from the existing TA Travel Center. The proposed project would occur adjacent to the existing roadways, including Knighton Road, Churn Creek Road, and the on and off ramps of I-5. Site access is limited to Knighton Road and Churn Creek Road. No impact would occur in this regard.

b) The proposed project is consistent with the existing Commercial (C) and Part-Time Agricultural (A-cg) General Plan land use designations for the site, and no changes to the existing land use designation is required to allow the proposed development. The General Plan discusses seven types of commercial districts, one of which is Highway Commercial (C-H). The C-H zone district provides for the needs of recreation and business visitors and includes gas stations, and automotive and truck services. The C-H zone district is intended to be applied along access roads to I-5, fronting on State highways or along arterials providing access to major recreation designations. In cases where a highway commercial use is proposed in a resource area, it may be permitted if the surrounding resource uses will not be adversely impacted. The locations of these designations are along access roads to I-5 and fronting on State highways. The C-H zone district is consistent with all General Plan land use designation provided it application is consistent with locational requirements specified in the General Plan.

The A-1 district is intended to be applied to areas capable of supporting crop production by part-time or second income operators, including, existing lands used for this purpose and lands which are not now but could be used for this purpose based on resource characteristics (soils, climate, access to water). The A-1 zone district is consistent with the A-cg land use designation.

The project applicant to change the zoning for two parcels totaling 15 acres from the Planned Development combined with the Restrictive Flood (PD-F-2) zone district to the Limited Agriculture combined with the Restrictive Flood (A-1-F-2) zone district, to change the zoning for a 6.85 acre portion of a 15.49-acre parcel from the Planned Development combined with the Restrictive Flood (PD-F2) to the Limited Agriculture combined with the Restrictive Flood (A-1-F-2) zone district, and to change a 8.64-acre portion of the same parcel from the PD-F-2 zone district to the Highway Commercial combined with the Restrictive Flood (C-H-F-2) zone district. Additionally, the project proposes to subdivide the 15.49-acre parcel into two (2) parcels and a remainder parcel of 4.99-acres (Parcel 1), 3.65-acres (Parcel 2), and 6.85-acres (Remainder). The proposed C-H-F-2 zone district would include a Conceptual Development Plan and development standards to allow and govern the construction and operation of a 5,961-square-foot retail convenience store, sit-down restaurant and coffee shop, a 20-pump fuel island with a canopy for standard vehicles, a 10-pump fuel

island with a canopy for trucks and RVs, a parking area with a total of 32 parking spaces, including 23 standard vehicle parking spaces, 2 accessible vehicle parking spaces and 8 designated EV parking spaces (one of which will be accessible) along with associated on-site landscape, lighting, commercial driveways and drainage improvements on proposed Parcel 1 (4.99-acres) with the conceptual development plan for proposed Parcel 2 being vacant land. Future development proposals for uses permissible under the proposed C-H-F-2 zone district would be subject to approval of a use permit to allow modification of the conceptual development plan. The impacts of a specific future use(s) and development proposal for Parcel 2 would be identified in the use permit application. The use permit application would be subject to review under CEQA and a discretionary decision regarding the environmental determination and merits of the proposed project would be subject to public hearing before the Shasta County Planning Commission.

Implementation of the proposed project would be consistent with A-cg land use designation and the County A-I zone district as prescribed in SCC Chapter 17.04 – Limited Agriculture (A-1) District.

Implementation of the proposed project would be consistent with the A-cg and C land use designations and the Highway Commercial zone district as prescribed in SCC Chapter 17.48 – Highway Commercial (C-H) District.

As discussed in each resource section of this Initial Study, the proposed project is consistent with applicable policies and objectives of the County's General Plan and regulations of the regulatory agencies identified in Environmental Checklist Form of this Initial Study. Where necessary, mitigation measures are included to reduce impacts to less than significant levels. Therefore, the proposed project would not conflict with any plans, policies, or regulations adopted for the purpose of avoiding or mitigating an environmental effect. No impact would occur in this regard.

Mitigation/Monitoring: None proposed.

Section XII – Mineral Resources

The purpose of this section of the Initial Study is to address potential impacts of the proposed project on mineral resources. This section also discusses the proposed project in the context of regional and local mineral resources and addresses the potential impacts to mineral resource deposits that may occur as a result of implementation of the proposed project.

Environmental Setting

A mineral resource is land on which known deposits of commercially viable mineral or aggregate deposits exist. This designation is applied to sites determined by the State Division of Mines and Geology as being a resource of regional significance and is intended to help maintain any quarrying operations and protect them from encroachment of incompatible uses. The State-mandated Surface Mining and Reclamation Act of 1975 requires the identification and classification of mineral resources in areas within the State subject to urban development or other irreversible land uses that could otherwise prevent the extraction of mineral resources. These designations categorize land as Mineral Resource Zones (MRZ) MRZ-1 through MRZ-4.

The California Department of Conservation's (DOC) Division of Mine Reclamation (DMR) compiles data on the current status of mines and the commodities produced. The California Geological Survey (CGS) produces Mineral Land Classification (MLC) studies that identify areas with potentially important mineral resources that should be considered in local and regional planning. According to the CGS Information Warehouse, areas of significant mineral resources or areas of locally important minerals have been identified and mapped by the DOC for Shasta County (DOC, 2022; 1997).

Based upon the mineral land classification conducted by the DMR, the project site is located within an area designated as alluvial terraces and fans of the Riverbank Formation (DOC, 1997). In addition, based on mapping prepared by the DOC, this area of the County does not contain oil, natural gas, geothermal fields, or mineral resource zones (MRZ). The project site and surrounding area is not located within or near a combining district as specified by the Shasta County Municipal Code Chapter 17.71 – Mineral Resource Buffer (MRB) District (Shasta, 1999).

Regulatory Setting

This section summarizes current State and local regulations relevant to the review of *Mineral Resources* for this project. Ordinances, regulations, or standards that are applicable to the environmental review of potential impacts related to mineral resources include the following:

Surface Mining and Reclamation Act

The Surface Mining and Reclamation Act of 1975 (SMARA, Public Resources Code, Sections 2710-2796) provides a comprehensive surface mining and reclamation policy with the regulation of surface mining operations to assure that adverse environmental impacts are minimized, and mined lands are reclaimed to a usable condition. SMARA also encourages the production, conservation, and protection of the state's mineral resources. Public Resources Code Section 2207 provides annual reporting requirements for all mines in the state, under which the State Mining and Geology Board is also granted authority and obligations. SMARA also requires the State Geologist to classify land into MRZs according to its known or inferred mineral potential. The primary goal of mineral land classification

is to ensure that the mineral potential of land is recognized by local government decision makers and considered before land-use decisions are made that could preclude mining.

Division of Mine Reclamation

In 1991, the Division of Mine Reclamation (DMR) was created to provide a measure of oversight for local governments as they administer the Surface Mining and Reclamation Act (SMARA) within their respective jurisdictions. While the primary focus is on existing mining operations and the return of those mined lands to a usable and safe condition, issues relating to abandoned legacy mines are addressed through the Abandoned Mine Lands Unit.

Impact Analysis

The following includes an analysis of environmental parameters related to *Mineral Resources* based on Appendix G of the State CEQA Guidelines. The discussion not only includes the areas for which there is potential for environmental impacts but also provides justification for the conclusions that either no impacts, less than significant impacts, or less than significant impacts with mitigation could occur.

XII. MINERAL RESOURCES: Would the project:	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State?				X
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local General Plan, specific plan or other land use plan?				X

Discussion: Based on the related documents listed in the Sources of Documentation for Initial Study Checklist, staff review of the project, observations on the project site and in the vicinity, the following findings can be made:

a) The 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. There are no known mineral resources of regional value located on or near the proposed project site. No impact would occur in this regard.

a) b) The proposed project would not result in the loss of availability of a locally-important mineral resource recovery site delineated on a County's General Plan or other land use plan. The proposed project is not located within or adjacent to a specific plan adopted by the County. The proposed project is not identified in the General Plan as having any known mineral resource value, or as being located within any "Mineral Resource Buffer" district. No impact would occur in this regard.

Mitigation/Monitoring: None proposed.

Section XIII – Noise

The purpose of this section of the Initial Study is to evaluate noise source impacts to onsite and surrounding land uses as a result of project implementation.

Environmental Setting

The dominant noise environment in the project area is defined by traffic noise, primarily Interstate 5 located just west of the project site, and traffic along Knighton Road. Additionally, to the northeast there is the Redding Municipal Airport. Redding Municipal Airport provides services to commercial, air cargo, military, and private aircraft. Services and facilities available on the airfield include hangar storage, tie-downs, fixed base operator services, flight instruction, aircraft rental, aircraft maintenance, and fueling. The airfield also provides support to California Department of Forestry and Fire Protection (CAL FIRE) and the US Forest Service (USFS). The Airport encompasses approximately 1,500 acres of land. The current runway system consists of two runways, with the primary instrument runway at 7,003 feet. The Airport averages 290 operations (takeoffs and landings) each day (COR, 2015). The *Airport Master Plan for Redding Municipal Airport* (November 2015) depicts the projected future noise contours for the airport in the build out year 2034. Future noise contours, even those associated with a new parallel runway, remain almost entirely on airport property (COR, 2015).

The nearest sensitive receptors to the site are located at Pacheco School. This school is within 400 feet of the project site at the southwest

corner of the Knighton Road, Churn Creek Road, and Pacheco Road intersection. Distance to sensitive receptors is described below in Table 12, Distance to Sensitive Receptors.

Table 12
Distance to Sensitive Receptors

Use	Distance from Project Site
Pacheco School	350 feet southeast
Residential	670 feet northeast
Residential	1200 feet west

The project site is primarily surrounded by vacant lands and open space uses. There is a commercial land use to the south of the project site. Existing mobile noise sources in the project area are generated primarily along Knighton Road and I-5, which are south and west of the project site respectively. The primary sources of stationary noise in the project vicinity are those associated with the operations of nearby commercial and educational uses in active operation.

Regulatory Setting

California Government Code

California Government Code Section 65302 (f) mandates that the legislative body of each county and city adopt a noise element as part of its comprehensive general plan. The local noise element must recognize the land use compatibility guidelines established by the State Department of Health Services. The guidelines rank noise land use compatibility in terms of "normally acceptable", "conditionally acceptable", "normally unacceptable", and "clearly unacceptable" noise levels for various land use types. Single-family homes are "normally acceptable" in exterior noise environments up to 60 CNEL and "conditionally acceptable" up to 70 CNEL. Multiple-family residential uses are "normally acceptable" up to 65 CNEL and "conditionally acceptable" up to 70 CNEL. Schools, libraries, and churches are "normally acceptable" up to 70 CNEL, as are office buildings and business, commercial, and professional uses.

Title 24 - Building Code

The state's noise insulation standards are codified in the California Code of Regulations, Title 24: Part 1, Building Standards Administrative Code, and Part 2, California Building Code. These noise standards are applied to new construction in California for the purpose of interior noise compatibility from exterior noise sources. The regulations specify that acoustical studies must be prepared when noise-sensitive structures, such as residential buildings, schools, or hospitals, are located near major transportation noise sources, and where such noise sources create an exterior noise level of 65 dBA CNEL or higher. Acoustical studies that accompany building plans must demonstrate that the structure has been designed to limit interior noise in habitable rooms to acceptable noise levels. For new residential buildings, schools, and hospitals, the acceptable interior noise limit for new construction is 45 dBA CNEL.

Shasta County General Plan

The Shasta County General Plan Noise Element has the following Exterior Noise Standards, shown in Table 13, Noise Level Performance Standards for New Projects. The Noise Element establishes 55 dB Ldn as the daytime standard acceptable exterior noise level and 50 dB Ldn for nighttime exterior noise levels.

Table 13
Noise Level Performance Standards for New Projects

Noise Level Descriptor	Day Time (7 a.m. to 10 p.m.)	Nighttime (10 p.m. to 7 a.m.)
Hourly L_{eq}, dB	55	50

Impact Analysis

Fundamentals of Sound and Environmental Noise

Sound is technically described in terms of amplitude (loudness) and frequency (pitch). The standard unit of sound amplitude measurement is the decibel (dB). The decibel scale is a logarithmic scale that describes the physical intensity of the pressure vibrations which make up any sound. The pitch of the sound is related to the frequency of the pressure vibration. Because the human ear is not equally sensitive to a given sound level at all frequencies, a special frequency-dependent rating scale has been devised to relate noise to human sensitivity. The A-weighted decibel scale (dBA) provides this compensation by discriminating against frequencies in a manner approximating the sensitivity of the human ear.

Noise, on the other hand, is typically defined as unwanted sound because of its potential to disrupt sleep, to interfere with speech communication, and to damage hearing. A typical noise environment consists of a base of steady "background" noise that is the sum of

many distant and indistinguishable noise sources. Superimposed on this background noise is the sound from individual local sources. These can vary from an occasional aircraft or train passing by to virtually continuous noise from, for example, traffic on a major highway. Noise can mask important sounds and disrupt communication between individuals in a variety of settings. This process can cause anything from a slight irritation to a serious safety hazard, depending on the circumstance. Noise can disrupt face-to-face communication and telephone communication, and the enjoyment of music and television in the home. It can also disrupt effective communication between teachers and pupils in schools, and can cause fatigue and vocal strain in those who need to communicate in spite of the noise.

Ground-Borne Vibrations

Vibration is an oscillatory motion through a solid medium in which the motion's amplitude can be described in terms of displacement, velocity, or acceleration. The peak particle velocity (PPV) or the root mean square (RMS) velocity is usually used to describe vibration amplitudes. PPV is defined as the maximum instantaneous peak or vibration signal, while RMS is defined as the square root of the average of the squared amplitude of the signal. PPV is typically used for evaluating potential building damage, whereas RMS is typically more suitable for evaluating human response. Typically, ground-borne vibration, generated by man-made activities, attenuates rapidly with distance from the source of vibration. Man-made vibration issues are therefore usually confined to short distances (i.e., 500 feet or less) from the source.

Both construction and operation of development projects can generate ground-borne vibration. In general, demolition of structures preceding construction generates the highest vibrations. Construction equipment such as vibratory compactors or rollers, pile drivers, and pavement breakers can generate perceptible vibration during construction activities. Heavy trucks can also generate ground-borne vibrations that vary depending on vehicle type, weight, and pavement conditions.

The following includes an analysis of environmental parameters related to noise based on Appendix G of the State CEQA Guidelines. The discussion not only includes the areas for which there is potential for environmental impacts but also provides justification for the conclusions that either no impacts, less than significant impacts, or less than significant impacts with mitigation could occur.

XIII. NOISE: Would the project result in:	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?			X	
b) Generation of excessive groundborne vibration or groundborne noise levels			X	
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?			X	

Discussion: Based on the related documents listed in the Sources of Documentation for Initial Study Checklist, staff review of the project, observations on the project site and in the vicinity, the following findings can be made:

a) *Short-Term Construction*

Construction noise typically occurs intermittently and varies depending on the nature or phase of construction (e.g., land clearing, grading, excavation, paving). Noise generated by construction equipment, including earth movers, material handlers, and portable generators, can reach high levels. During construction, exterior noise levels could affect residential uses in the vicinity of the construction site as well as Pacheco School which is situated approximately 400 feet to the southeast. Noise levels typically attenuate (or drop off) at a rate of 6 dB per doubling of distance from point sources, such as industrial machinery.

Construction activities associated with development of the proposed project would include site preparation, minor grading, paving, building construction, and architectural coating. Such activities would require graders, scrapers, and tractors during site preparation; graders, dozers, and tractors during grading; cranes, forklifts, generators, tractors, and welders during building construction; pavers, rollers, mixers, tractors, and paving equipment during paving; and air compressors during architectural coating. Grading and excavation phases of project construction tend to be the shortest in duration and create the highest construction noise levels due to the operation of heavy equipment required to complete these activities. It should be noted that

only a limited amount of equipment can operate near a given location at a particular time. Equipment typically used during this stage includes heavy-duty trucks, backhoes, bulldozers, excavators, front-end loaders, and scrapers. Operating cycles for these types of construction equipment may involve one or two minutes of full-power operation followed by three to four minutes at lower power settings. Other primary sources of noise would be shorter-duration incidents, such as dropping large pieces of equipment or the hydraulic movement of machinery lifts, which would last less than one minute.

Noise generated by construction equipment, including earth movers, material handlers, and portable generators, can reach high levels. Typical noise levels associated with individual construction equipment are listed in Table 14, Typical Construction Noise Levels.

Table 14
Typical Construction Noise Levels

Equipment	Typical Noise Level (dBA) at 50 feet from Source	Typical Noise Level (dBA) at 400 feet from Source[1]
Air Compressor	80	61.9
Backhoe	80	61.9
Compactor	82	63.9
Concrete Mixer	85	66.9
Concrete Pump	82	63.9
Concrete Vibrator	76	57.9
Crane, Derrick	88	69.9
Crane, Mobile	83	64.9
Dozer	85	66.9
Generator	82	63.9
Grader	85	66.9
Impact Wrench	85	66.9
Jack Hammer	88	69.9
Loader	80	61.9
Paver	85	66.9
Pneumatic Tool	85	66.9
Pump	77	58.9
Roller	85	66.9
Saw	76	57.9
Scraper	85	66.9
Shovel	82	63.9
Truck	84	65.9

Note:
[1.] Calculated using the inverse square law formula for sound attenuation: $dBA_2 = dBA_1+20Log(d_1/d_2)$, where: dBA_2 = estimated noise level at receptor; dBA_1 = reference noise level; d_1 = reference distance; d_2 = receptor location distance
Source: Federal Transit Administration, *Transit Noise and Vibration Impact Assessment Manual*, September 2018.

The nearest sensitive receptor to the project site is located approximately 400 feet southeast of the site. The highest anticipated construction noise level of 69.9 dBA at 400 feet is expected to occur (crane, derrick, and jack hammer). Additionally, most construction would occur throughout the project site and would not be concentrated at a single point near sensitive receptors. Construction would comply with Shasta County General Plan Noise Element (Section 5.5).

As noted earlier, Pacheco School is located approximately 400 feet southeast of the project site. There are no noise sensitive uses immediately adjacent to the site. Based on the noise levels discussed above and the distance to nearest receptors, construction noise would result in a less than significant impact.

Construction Traffic Noise. Construction noise may be generated by large trucks moving materials to and from the project site. Large trucks would be necessary to deliver building materials as well as remove dump materials. Excavation and cut and fill would be required. Based on the California Emissions Estimator Model (CalEEMod) default assumptions for this project, as analyzed in Appendix B, the project would generate the highest number of daily trips during the building construction phase. The model estimates that the project would generate up to 71 worker trips and 28 vendor trips per day for building construction. Because of the logarithmic nature of noise levels, a doubling of the traffic volume (assuming that the speed and vehicle mix do not also change) would result in a noise level increase of 3 dBA. The 99 project construction trips (71 worker trips plus 28 vendor trip) would not double the existing traffic volume per day. Construction related traffic noise would not be noticeably different in character and volume than existing traffic noise which include passenger and commercial vehicles and would not create a significant noise impact.

California establishes noise limits for vehicles licensed to operate on public roads using a pass-by test procedure. Pass-by noise refers to the noise level produced by an individual vehicle as it travels past a fixed location. The pass-by procedure measures the total noise emissions of a moving vehicle with a microphone. When the vehicle reaches the microphone, the vehicle is at full throttle acceleration at an engine speed calculated for its displacement.

For heavy trucks, the State pass-by standard is consistent with the federal limit of 80 dB. The State pass-by standard for light

trucks and passenger cars (less than 4.5 tons gross vehicle rating) is also 80 dB at 15 meters from the centerline. According to the FHWA, dump trucks typically generate noise levels of 77 dBA and flatbed trucks typically generate noise levels of 74 dBA, at a distance of 50 feet from the truck (FHWA, 2006).

The majority of construction would occur throughout the project site and would not be concentrated at a single point near sensitive receptors. Additionally, construction activities would be limited to daytime hours and would conform to the standard time-of-day restrictions imposed by the County for discretionary projects. The proposed project would be required to adhere to the standard permit conditions which would ensure that all construction equipment is equipped with properly operating and maintained mufflers and other State required noise attenuation devices, helping to reduce noise at the source. Additionally, project construction would be more than 50 feet from the closest structure. Therefore, following with compliance standard permit conditions, construction noise levels would not exceed the County's standards.

Project implementation would create new sources of noise in the project vicinity but would be located approximately 400 feet from the nearest sensitive receptors. New sources of noise associated with the project that could potentially impact the nearest sensitive receptors include offsite traffic, mechanical equipment, delivery trucks, loading, parking areas, and landscape maintenance. However, the project would be compatible with land uses in the surrounding area and would not generate a substantial increase in the ambient noise environment over existing conditions. Construction would occur Monday through Friday between the hours of 7 a.m. and 10 p.m. Since heavy construction work associated with the project is limited in scope and by existing regulation, the anticipated noise impact to neighboring receptors is considered less than significant.

Long-Term Operations

Implementation of the proposed project would create new sources of noise in the project vicinity. The major noise sources associated with the project would include mechanical equipment, parking area noise, truck noise, traffic noise, and landscape maintenance.

Mechanical Equipment. Regarding mechanical equipment, the project would generate stationary-source noise associated with heating, ventilation, and air conditioning (HVAC) units. HVAC units typically generate noise levels of approximately 52 dBA at 50 feet (Berger et al, 2010). The nearest existing sensitive receptor's property lines are located approximately 400 feet from the project site. At 400 feet, mechanical equipment noise levels would be 33.9 dBA. This noise level is below the County's 55 dBA exterior standard. The project would not place mechanical equipment near sensitive receptors, and noise from this equipment would not be perceptible at the closest sensitive receptor (Pacheco School to the southeast of the project site). Impacts would be less than significant.

Parking Area. Traffic associated with parking areas is typically not of sufficient volume to exceed community noise standards, which are based on a time-averaged scale such as the CNEL scale. However, the instantaneous maximum sound levels generated by a car door slamming, engine starting up and car pass-bys range from 53 to 61 dBA at 50 feet (Kariel, 1991). This may be an annoyance to noise-sensitive receptors. Parking lot noise can also be considered a "stationary" noise source.

Conversations in parking areas may also be an annoyance to sensitive receptors. Sound levels of speech typically range from 33 dBA at 48 feet for normal speech to 50 dBA at 50 feet for very loud speech (Berger et al, 2010). It should be noted that parking lot noise are instantaneous noise levels compared to noise standards in the CNEL scale, which are averaged over time. As a result, actual noise levels over time resulting from parking lot activities would be far lower.

The proposed project includes surface parking. Noise impacts associated with parking would be a maximum of 42.9 dBA at the closest receptors approximately 400 feet away. In addition, parking lot noise would also be partially masked by the background noise from traffic along Knighton Road. Noise associated with parking lot activities is not anticipated to exceed the County's Noise Standards during operation. Impacts would be less than significant.

Truck Noise. Truck noise would be generated by the trucks' diesel engines, exhaust systems, and brakes during low gear shifting' braking activities while approaching the truck fueling stations. In addition, the Project would also require deliveries of gasoline, diesel, and supplies for the convenience store. Typically, heavy truck operations generate a noise level of 68 dBA at a distance of 30 feet. The closest sensitive receptor is located approximately 400 feet to the southeast; therefore, truck noise would attenuate to approximately 45.5 dBA, below the County's and nighttime standard of 55 dBA and 50 dBA, respectively. Noise levels associated with trucks' activities would not exceed the County's standards. Impacts would be less than significant.

Traffic Noise. Implementation of the project would generate increased traffic volumes along study roadway segments. The project is expected to generate 4,565 average daily trips, which would result in noise increases on project area roadways. In general, a traffic noise increase of less than 3 dBA is barely perceptible to people, while a 5-dBA increase is readily noticeable (Caltrans, 2013). Generally, traffic volumes on project area roadways would have to approximately double for the resulting traffic noise levels to increase by 3 dBA. Therefore, permanent increases in ambient noise levels of less than 3 dBA are considered to be less than significant.

Landscape Maintenance Activities. Development and operation of the project includes new landscaping that would require

periodic maintenance. Noise generated by a gasoline-powered lawnmower is estimated to be approximately 70 dBA at a distance of 5 feet. Landscape Maintenance activities would be 31.9 dBA at the closest sensitive receptor approximately 400 feet away. Landscaping equipment generates noise at the surrounding uses under existing conditions. Maintenance activities would operate during daytime hours for brief periods of time and would not permanently increase ambient noise levels in the project vicinity and would be consistent with activities that currently occur at the surrounding uses. Therefore, with adherence to the County's Noise Element, impacts associated with landscape maintenance would be less than significant.

b) There are no federal, State, or local regulatory standards for ground-borne vibration. However, various criteria have been established to assist in the evaluation of vibration impacts. For instance, the California Department of Transportation (Caltrans) has developed vibration criteria based on human perception and structural damage risks. For most structures, Caltrans considers a peak particle velocity (ppv) threshold of 0.2 inches per second (in/sec) to be the level at which architectural damage (i.e., minor cracking of plaster walls and ceilings) to normal structures may occur. Below 0.10 in/sec ppv there is virtually no risk of 'architectural' damage to normal buildings. Levels above 0.4 in/sec ppv may possibly cause structural damage (Caltrans, 2020). In terms of human annoyance, continuous vibrations in excess of 0.08 in/sec ppv are identified by Caltrans as readily perceptible level for ground vibration. Ground vibration in excess of 0.2 in/sec ppv can be expected to result in increased levels of annoyance to people within buildings (Caltrans, 2020).

Increases in groundborne vibration levels from the proposed project would be primarily associated with short-term construction-related activities. Project construction would require the use of off-road equipment, such as tractors, concrete mixers, and haul trucks. The proposed project is not expected to use major groundborne vibration–generating construction equipment, such as pile drivers. Construction equipment groundborne vibration levels are summarized in Table 15, Typical Construction Equipment Vibration Levels, below.

Table 15
Typical Construction Equipment Vibration Levels

Equipment	Peak Particle Velocity at 25 Feet (in/sec)	Peak Particle Velocity at 225 Feet (in/sec) [1]	Peak Particle Velocity at 400 Feet (in/sec) [1]
Large bulldozer	0.089	0.0033	0.0014
Caisson drilling	0.089	0.0033	0.0014
Loaded trucks	0.076	0.0028	0.0012
Jackhammer	0.035	0.0013	0.0005
Small bulldozer	0.003	0.0001	0.0000

Based on the vibration levels, ground vibration generated by construction equipment would not be anticipated to exceed approximately 0.089 inches per second peak particle velocity (ppv) at 25 feet. Predicted vibration levels at the nearest on and offsite structures (225 feet for non-residential structures and 400 feet for school structures) would not exceed the minimum recommended criteria for structural damage and human annoyance (0.2 ppv). Impacts would be less than significant.

c) The proposed project site is located outside of the 60 CNEL noise contour of Redding Municipal Airport and is located approximately 1.8 mile west of the airport. The California Occupational Safety and Health Administration (Cal OSHA) standard requires employers to implement hearing conservation programs when noise exposure is at or above 85 dBA averaged over an eight-hour time-weighted average. Employees would not be exposed to noise levels at or above 85 dBA over and eight-hour time. Impacts would be less than significant impact.

Mitigation/Monitoring: None proposed.

Section XIV – Population and Housing

This section addresses potential impacts of the project on population, housing, and employment at the project site and provides an overview of current population estimates and projected population growth.

Environmental Setting

According to the Shasta Regional Transportation Agency's 2018 *Regional Transportation Plan* (RTP) for Shasta County, population in the County is anticipated to grow at a rate of 0.8 percent per year, with an estimated population of 214,364 persons in Shasta County by 2035 (SRTA, 2015).

The County of Shasta's population was 182,020 (DOF, 2022a). Between January 2021 and January 2022, the County's population shrunk from 182,020 to 180,531 (DOF, 2022a). This reflects a reduction by about -0.8% compared to about -1.0% for Redding. Redding's population consists of approximately 52% of the County's population (DOF, 2022a). Shasta County's population was 182,155 in 2020 and has consistently decreased -.30 percent annually since then (DOF, 2022b). Shasta County has an estimated 79,865 housing units, with a vacancy rate of 8.1% and an average of 2.41 persons per household (DOF, 2022b). Shasta County's growth rate is consistent with the growth rates of the cities within it. Median household income for the County in 2020 was $28,442 (US Census,

2020).

Regulatory Setting

This section summarizes current federal, State, and local regulations relevant to the review of *Population and Housing* for this project. Ordinances, regulations, or standards that are applicable to the environmental review of potential impacts related to population and housing include the following:

State of California Housing Element Law

State law requires each city and county to adopt a general plan for future growth. This plan must include a housing element that identifies housing needs for all economic segments and provides opportunities for housing development to meet that need. At the State level, the California Department of Housing and Community Development (HCD) estimates the relative shares of California's projected population growth that could occur in each county in the State based on Department of Finance (DOF) population projections and economic projections.

Shasta County Housing Element

The County's 2000-2028 Housing Element includes policies and programs to address the County's housing needs through 2028, and provides a comprehensive analysis of the County's demographic, economic, and housing characteristics as required by State law. The Element also contain an evaluation of the County's progress in implementing its last Housing Element. Based on the County's housing needs, available resources, constraints and opportunities for housing production and preservation, and its past performance, the current Housing Element establishes a strategy of goals, measurable objectives, and related policies and programs to address present and future housing needs of the County.

Impact Analysis

The following includes an analysis of environmental parameters related to *Population and Housing* based on Appendix G of the State CEQA Guidelines. The discussion not only includes the areas for which there is potential for environmental impacts but also provides justification for the conclusions that either no impacts, less than significant impacts, or less than significant impacts with mitigation could occur.

XIV. POPULATION AND HOUSING: Would the project:	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?			X	
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				X

Discussion: Based on the related documents listed in the Sources of Documentation for Initial Study Checklist, staff review of the project, observations on the project site and in the vicinity, the following findings can be made:

a) The proposed project would create opportunity for commercial uses along the Interstate 5 (I-5) corridor of the County, as planned and anticipated by the General Plan. Implementation of the proposed project would not result in direct population growth because it does not include the construction of housing units. As discussed in 13. Proposed Project on page 5 above, the proposed would require up to 18 employees. Based on a 2.41 average household size for Shasta County, the addition of up to 18 employees would potentially increase the County's population by 43 persons, assuming all employees would relocate from outside the local area with families. The increase of 43 residents would represent a less than 1 percent increase to the County's current population. The project would not induce unplanned population growth and does not propose the extension of any new roads or utilities not anticipated by the General Plan. Therefore, unplanned population growth in the area would not be substantial and related impacts would be less-than-significant.

b) The project site is currently vacant and would not result in the displacement of existing people or housing. No impact would occur in this regard.

Mitigation/Monitoring: None proposed.

Section XV – Public Services

This section of the Initial Study describes the affected environment for public services that serve the project area. It also describes the impacts on existing public services that would result from implementation of the proposed project and mitigation measures, if necessary, that would reduce these impacts.

Environmental Setting

Fire Protection

Fire protection services for the project area are provided by California Department of Forestry and Fire Protection (CAL FIRE), based in the Redding area. The Shasta County Fire Department (SCFD) contracts with CAL FIRE to manage and oversee the operation of SCFD. Both the SCFD and CAL FIRE maintain automatic and mutual aid agreements with adjacent fire districts, including the Redding Fire Department (RFD) and City of Anderson Fire District. The proposed project is within the area served by CAL FIRE Redding Station No. 43 located at 6103 Airport Road approximately 2.9 miles northeast of the proposed project.

The SCFD maintains fire protection requirements and standards for new development projects, including standards for defensible space, hydrant spacing, fire flow, access and roadway requirements, and limitations on building materials, as well as requiring adequate roadway widths. The County Fire Marshall reviews all projects wherein an entitlement is being sought by the County (maps, use permits, etc.) prior to any building permit approval of construction for compliance with State and local requirements.

Police Protection

Law enforcement for the proposed project is provided primarily by the Shasta County Sheriff Office (SCSO), located at 300 Park Marina Circle Redding, CA 96001. The SCSO serves approximately 3,700 square miles of unincorporated area. The main patrol station is located in Redding with additional stations located in Burney and Shasta Lake.

Schools

The project site is located in the Pacheco Elementary School District and Anderson Union High School District. Pacheco Elementary and Junior High is located in close vicinity of the proposed project (at the southeast corner of the Knighton Road/Churn Creek Road intersection).

Parks

Shasta County has a variety of recreational options available to its residents and visitors. The county contains extensive State and federal public lands, regional serving parks, and county public land (Balls Ferry Fishing Access, Battle Creek Fishing Access, French Gulch Park, Hat Creek Park, Lake Britton Fishing Access, Lake McCumber, and Pit River. In addition, there are tens of thousands of acres of rivers, lakes, forests, and other public land available for recreation in Lassen National Park, the Shasta and Whiskeytown National Recreation Areas, the National Forests, and other public land administered by Bureau of Land Management. There are no existing regional or local community parks in the immediate vicinity of the proposed project site. The closest community parks are located north of the proposed project in the City of Redding.

Other Public Facilities

Shasta County provides library services throughout the County, including in the City of Redding. The County has three library branches: the Burney Branch Library (located at 37038 Siskiyou Street), the Anderson Branch Library (located at 3200 West Center Street), and the Redding Branch Library (located at 1100 Parkview Avenue). The Burney Branch Library opened in 1949, and was the first of the Shasta County library branches. The Redding Branch library is the most recent library addition, having opened on March 3, 2007.

Impact Analysis

The following includes an analysis of environmental parameters related to *Public Services* based on Appendix G of the State CEQA Guidelines. The discussion not only includes the areas for which there is potential for environmental impacts but also provides justification for the conclusions that either no impacts, less than significant impacts, or less than significant impacts with mitigation could 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:	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
Fire Protection?				X
Police Protection?				X
Schools?				X
Parks?				X
Other public facilities?				X

Discussion: Based on the related documents listed in the Sources of Documentation for Initial Study Checklist, staff review of the project, observations on the project site and in the vicinity, the following findings can be made:

The project would not 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:

Fire Protection:

As described above, the proposed project is located approximately 2.9 miles from the nearest CAL FIRE station. The project site and surround area are currently served by the County for fire protection and the devolvement of the proposed project would not increase the response time required for CAL FIRE. While additional SCFD oversite may be required the proposed project, the project would not require additional fire facilities to serve the commercial uses and is not anticipated to create an additional burden on exiting fire facilities. It should also be noted that the SCFD/CAL FIRE receives funding from the County's General Fund. Property taxes generated from the proposed project would result in increased property tax revenue to the General Fund that would assist in offsetting increased costs associated with fire protection services.

The provision of new or physically altered fire facilities is not associated with providing service to the proposed project. It should be noted, however, that compliance with fire safety standards and requirements such as interior sprinkler systems, fire alarms, emergency access, and adequate fire flow that would be verified during the building permit plan check process would reduce fire protection impacts and in turn, any immediate need for new or physically altered fire facilities. No impact would occur in this regard.

Police Protection:

Implementation of the proposed project would not result in a significant increase in demand for law enforcement resulting in new or expanded law enforcement facilities. The need for expanded facilities is based on the staffing levels these facilities must accommodate. Law enforcement staffing levels are generally based on the population/ officer ratio, and an increase in population is usually the result of an increase in housing or employment. The proposed project would result in minimal employment opportunities. As the proposed project would neither increase the population nor result in substantial employment gains, project implementation would not result in the need for increase in law enforcement or related facilities.

Similar to fire protection services, law enforcement services are monitored by the County Board of Supervisors on a regular basis. If additional services are needed, the County Board of Supervisors will allocate resources to address the need as funding is identified. There is nothing unique about the proposed project that would require significantly greater law enforcement service or result in a need for new facilities. It should be noted, however, that compliance with basic safety and security measures (i.e., well maintained, and well-lit parking areas and onsite security cameras) would help to reduce incidents requiring law enforcement involvement. The provision of new or physically altered law enforcement facilities is not associated with providing service to the proposed project. The proposed project would not result in the need to alter or construct facilities for law enforcement services. No impact would occur in this regard.

Schools:

The project is located in the Pacheco Elementary School District and Anderson Union High School District. The proposed project would not result in the construction of new residential uses; therefore, the proposed project would not directly require the construction of additional school facilities and/or expansion of existing school facilities.

Developer fees for residential and commercial construction are collected by the Shasta County Office of Education (SCOE) on behalf

of the school districts of Shasta County. The fees collected are used by the districts for construction and reconstruction of school facilities and may be used to pay bonds, notes, loans, leases, or other installment agreement for temporary and permanent facilities. For 2024/2025, school fees are assessed at and $0.84 per square foot for commercial/industrial construction (SCOE, 2022). Based on the estimated square footage, the proposed project would generate approximately $4,998 in school impact fees. These fees are collected at the building permit stage. The payment of school fee is consistent with Section 65995(3)(h) of the California Government Code and is considered adequate mitigation for indirect impacts on school facilities. No impact would occur in this regard.

Parks:

Refer to discussion under Section XVI, RECREATION, below. The project will not cause a physical deterioration of an existing park facility or cause an adverse physical impact associated with a new park facility. No impact would occur in this regard.

Other public facilities:

The proposed project does not involve a substantial change in the land use, does not substantially increase the numbers of people employed in the region, and does not create or require new housing or related facilities, an increased demand on public facilities is unlikely to occur. No impact would occur in this regard.

Mitigation/Monitoring: None proposed.

Section XVI – Recreation

This section of the Initial Study discusses any increased demand for various recreational facilities and identifies any potential need for new recreational facilities generated by the proposed project. This section also describes the recreational resources within the project area.

Environmental Setting

- Shasta County provides an array of recreational opportunities through federal, State and County parks, forests, and fishing areas. These facilities include; Shasta-Trinity National Forest, Bureau of Land Management holdings, McArthur-Burney Falls Memorial State Park, Castle Crags State Park, Shasta Historic Park, and several fishing access areas. Five federal forests and national park sites lie within Shasta County, including Lassen National Forest, Shasta-Trinity National Forest, Whiskeytown National Recreation Area, and Lassen Volcanic National Park. There are no existing regional or local community parks in the immediate vicinity of the proposed project site. The closest community parks are located north of the proposed project in the City of Redding.

Regulatory Setting

This section summarizes current State and local regulations relevant to the review of *Recreation* for this project. Ordinances, regulations, or standards that are applicable to the environmental review of potential impacts related to recreation include the following:

Quimby Act

The Quimby Act provides for a maximum of three acres of park dedication/fee per 1,000 persons unless the amount of existing neighborhood and community parkland exceeds that limit. If a jurisdiction exceeds the three acres per 1,000 persons, then the jurisdiction is eligible to adopt the higher five acres per 1,000 persons standard. Given that the proposed project is not a residential subdivision, it is not subject to the requirements of the Quimby Act.

Shasta County Parks, Trails and Open Space Plan

The Shasta County *Parks, Trails and Open Space Plan* addresses issues and opportunities for improving the provision of parks, trails, and open space throughout Shasta County. The plan outlines a set of strategies and recommendations for meeting current and future community needs based on changing trends in recreation, new patterns for recreation participation, and new areas of growth and development in the County. The plan has a minimum local parkland of 40 acres for the four designated town centers, including Burney/Johnson Park, Cottonwood, Fall River Mills/McArthur, and Palo Cedro. The minimum local parkland for the 25 designated rural community centers is a total of 125 acres. The proposed project is not located within a designated town center or rural community center. This plan was not adopted by the Shasta County Board of Supervisors and therefore does not hold regulatory authority but is referenced in this document as a source of data and information on park, trails, and open space.

Shasta County General Plan

- The Shasta County General Plan addresses recreation needs as part of community development. While urban residents have established park agencies working to provide a variety of developed recreation opportunities, residents in rural areas lack the facilities that provide a place to gather and play. The General Plan requires town centers to develop community plans to include

planning and implementation strategies for park and recreation facilities. The Open Space and Recreation Element deals with recreation at the countywide level and recreation as is relates to the County tourist industry. The Element includes a discussion of the resources and facilities provided by federal, State and County governments, as well as private interests, which are designed to accommodate users from the entire County. Applicable goals relative to the proposed project within these elements are below:

- *Policy OSR-a.* Protection of the open space resources under Shasta County jurisdiction shall be achieved primarily through policies recognizing the contributions of these resources to the economy of the County. Specifically, the Timber, Croplands, Grazing, and Small-Scale Croplands/Grazing, and Natural Resource Protection Habitat land use designations shall be used for this purpose. Other open space resources generally with no known economic value for timber, croplands, or grazing shall be classified as Natural Resources Protection – Open Space (N-O). The purpose of this N-O classification is to recognize open space values by permitting low density residential development along with the resource uses. Typically, lands classified as N-O are adjacent to major landforms, riparian corridors, habitat areas, etc. Residential densities that do not exceed one dwelling per twenty acres may be permitted. In recognition of their resource or open space value, federally-owned lands shall be classified as N-O. Land changed from public to private ownership shall remain in the N-O designation unless an approved General Plan amendment places the property in a more appropriate land use designation.

Impact Analysis

- The following includes an analysis of environmental parameters related to *Recreation* based on Appendix G of the State CEQA Guidelines. The discussion not only includes the areas for which there is potential for environmental impacts but also provides justification for the conclusions that either no impacts, less than significant impacts, or less than significant impacts with mitigation could occur.

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

Discussion: Based on the related documents listed in the Sources of Documentation for Initial Study Checklist, staff review of the project, observations on the project site and in the vicinity, the following findings can be made:

a) As described under impact discussion XIV.a, above, the proposed project would require up to 18 employees. Based on a 2.41 average household size for Shasta County, the addition of up to 18 employees would potentially increase the County's population by 43 persons, assuming all employees would relocate from outside the local area with families. The increase of 43 residents would represent a less than 1 percent increase to the County's current population. The proposed project does not result in a significant increase in housing or population in the County resulting in an increased use of neighborhood or regional parks. In addition, as a highway oriented commercial development, the proposed project would generally be served by both the local and traveling populations. As a result, implementation of the proposed project will not cause a physical deterioration of an existing recreation facility or cause an adverse physical impact associated with a new recreation facility. No impact would occur in this regard.

b) The proposed project does not include recreational facilities, nor would it require the construction or expansion of recreational facilities which might have an adverse effect on the environment. School facilities are typically used for sports and recreation. The City of Redding, located to the north of the project, also has a number of recreational facilities. In addition, there are tens of thousands of acres of rivers, lakes, forests, and other public lands available for recreation in Lassen National Park, the Shasta and Whiskeytown National Recreation Areas, the National Forests, and other public land administered by the Bureau of Land Management. Additionally, as stated above under impact discussion XVI.a, implementation of the proposed project would not result in substantially increased use of any area recreational facilities and would therefore not require construction of new or expansion of any other existing recreational facilities. No impact would occur in this regard.

Mitigation/Monitoring: None proposed.

Section XVII – Transportation

The purpose of the evaluation is to address traffic and transportation impacts of the proposed project on surrounding streets and intersections, as well as provide an assessment of Vehicle Miles of Travel (VMT).

Environmental Setting

Access to the proposed project site is provided by way of Knighton Road and Churn Creek Road. According to the Shasta County General Plan Circulation Element, Knighton Road (from Happy Valley Road to Airport Road) is classified as a 4-lane arterial. Churn Creek Road (from Rancho Road to Knighton Road) is classified as a 2-lane collector (Shasta, 2004). Knighton Road is the nearest roadway to the proposed project site with existing bicycle facilities (east of Churn Creek Road). According to the County of Shasta's General Plan Circulation Element Churn Creek Road is designated as a bikeway route to provide access between Pacheco School and Churn Creek Estates subdivision (Shasta, 2004).

Shasta Regional Transportation Agency's *Regional Active Transportation Plan* lists a future bike lane from Rancho Road to Knighton Road along Churn Creek Road (SRTA, 2019). The Shasta County *2010 Bicycle Transportation Plan* lists Knighton Road as a (other bike plan) segment (Shasta, 2010).

Transit service provided by the Redding Area Bus Authority (RABA) is not currently available near the project area or along roadways anticipated to carry the majority of additional project trips (RABA, 2022).

Regulatory Setting

This section summarizes current State and local regulations relevant to the review of *Transportation* for this project. Ordinances, regulations, or standards that are applicable to the environmental review of potential impacts related to transportation include the following:

Shasta County General Plan

The Shasta County General Plan Circulation Element sets forth future plans for the transportation systems in the County and represents the County's overall transportation plan to accommodate the movement of people and goods within and through the County. It establishes goals and policies to achieve a balanced transportation system that adequately serves the growth and development anticipated in the Land Use Element. The transportation plan consists not only of the physical transportation system itself, such as streets, highways, bicycle routes, and trails, but also the various modes of transportation, such as cars, rail, buses, trucks (goods movement), bicycles, and walking.

Shasta County Regional Transportation Plan

The Shasta Regional Transportation Agency (SRTA) is the agency responsible for transportation planning for the Shasta County region, including the three cities and the unincorporated area. SRTA's responsibility includes development and adoption of transportation policy direction, review and coordination of transportation planning, preparation, and endorsement of an *Overall Work Program* (OWP), a *Regional Transportation Plan* (RTP), a *Regional Transportation Improvement Plan* (RTIP), and a *Federal Transportation Improvement Plan* (FTIP).

Shasta County 2010 Bicycle Transportation Plan

The Shasta County *Bicycle Transportation Plan* (BTP) provides the long-term framework to improve and encourage bicycle transportation throughout the Shasta County. The overall goal of the BTP is to provide a safe, effective, efficient, balanced, and coordinated bicycling system that serves the needs of the people within the unincorporated region of Shasta County. The BTP supports the bicycle transportation goals within the general plans of Shasta County, and the cities of Anderson, Redding, and Shasta Lake. Additionally, the BTP provides a transportation environment that encourages and promotes non-motorized means of transportation.

Senate Bill 743

Passed in 2013, SB 743 changes the focus of transportation impact analysis in the California Environmental Quality Act (CEQA) from measuring impacts to drivers, to measuring the impact of driving. The change has been made by replacing level of service (LOS) with VMT. This shift in transportation impact focus is intended to better align transportation impact analysis and mitigation outcomes with the State's goals to reduce greenhouse gas (GHG) emissions, encourage infill development, and improve public health through more active transportation. Level of service or other delay metrics may still be used to evaluate the impact of projects but is not used to determine a significant impact under CEQA.

Impact Analysis

A Local Transportation Analysis (LTA) was performed in accordance with the scope of work commonly required by the County of

Shasta, and in a manner consistent with the City of Redding's *Traffic Impact Analysis Guidelines* (see Local Transportation Analysis Memorandum, Kimley Horn, November 2024). Implementation of the proposed project is estimated to generate 425 trips occurring during the AM peak-hour and 342 trips occurring during the PM peak-hour. The LTA found that the addition of the proposed project trips combined with the proposed project access configuration does not result in deficient operations at any of the study intersections (KHA, 2022).

The following includes an analysis of environmental parameters related to *Transportation* based on Appendix G of the State CEQA Guidelines. The discussion not only includes the areas for which there is potential for environmental impacts but also provides justification for the conclusions that either no impacts, less than significant impacts, or less than significant impacts with mitigation could occur.

XVII. TRANSPORTATION: Would the project:	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?			X	
b) Conflict or be inconsistent with CEQA Guidelines Section 15064.3 subdivision (b)?			X	
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			X	
d) Result in inadequate emergency access?			X	

Discussion: Based on the related documents listed in the Sources of Documentation for Initial Study Checklist, staff review of the project, observations on the project site and in the vicinity, a Local Transportation Analysis Memorandum (Kimley Horn 2024), and a VMT Impacts Memorandum (Kimley Horn 2023) the following findings can be made:

a) The proposed project fronts Knighton Road and is therefore not anticipated to disrupt county designated bikeways. The project does not propose additional bicycle facility construction along Knighton Road. Knighton Road does not currently provide sidewalk on the proposed development (north) side, but sidewalks are currently provided along the south side of Knighton Road between the Interstate 5 off-ramp and in front of the Pacheco School. The project proposes to add sidewalk along the north side of Knighton Road and west side of Churn Creek Road along the project frontage. The project is not anticipated to add a significant number of pedestrian trips to the network due to the lack of nearby development and proximate transit facilities. The City of Redding Bikeway Action Plan 2010-2015 proposes a Class 2 bikeway along Churn Creek Road from intersection of Rancho Road to the north southward though the intersection of Churn Creek and Knighton Road. This corridor while within the City of Redding's sphere of influence, is not located within the City of Redding's jurisdiction and the Plan has not been adopted by Shasta County. The Plan does not specify a funding source or specific timeline for implementation of the subject bikeway. Construction of the project may impede development of a Class 2 bikeway on the western side of Churn Creek for a short distance but would not prelude bicycle travel along the project frontage in accordance with applicable traffic laws. The subject planned bikeway would facilitate connection to a Class 3 to Class 2 bikeway that is proposed to continue east along from the Churn Creek Road/Knighton Road intersection. Bicycles approaching the intersection would have to enter traffic at the intersection to turn left and head east. That movement would likely occur as they approach the project site in order to execute the turn safely with the flow of traffic through the intersection. Therefore, additionally, the proposed project would not conflict with any potential future bicycle lane along Churn Creek Road or any other bicycle facilities.

   The proposed project is not anticipated to affect RABA operations. Trips generated by the proposed project are not anticipated to generate sufficient demand to warrant transit network expansion. Therefore, implementation of the proposed project will not conflict with a program plan, ordinance or policy addressing the circulation systems, including transit, roadway, bicycle, and pedestrian facilities. Impacts would be less than significant.

b) SB 743 was signed into law in 2013, with the intent to better align CEQA practices with statewide sustainability goals related to efficient land use, greater multimodal choices, and greenhouse gas reductions. The provisions of SB 743 became effective statewide on July 1, 2020. Under SB 743, impacts will be determined by changes to VMT. VMT measures the number and length of vehicle trips made on a daily basis. VMT is a useful indicator of overall land use and transportation efficiency, where the most efficient system is one that minimizes VMT by encouraging shorter vehicle trip lengths, more walking and biking, or increased

carpooling and transit.

Because of SB 743, for a CEQA analysis, determining the potential for exceeding an agency's LOS thresholds transportation/traffic impacts is no longer valid and VMT thresholds are used instead. However, Shasta County has not yet established VMT thresholds. In order to assist in this type of circumstance, in December 2018, the California Governor's Office of Planning and Research (OPR) released its final Technical Advisory on Evaluating Transportation Impacts in CEQA (OPR, 2018). Generally, the OPR recommends that a reduction of 15 percent or more in existing VMT should be the target. Following is a summary of OPR's recommended VMT impact thresholds and methodologies for land use projects:

- The extent to which the proposed project's VMT impacts can be presumed to be less than significant has been determined based on review of the OPR directive's screening criteria and general guidance.
- The OPR Small Project criteria is not applicable to this project. The project is projected to generate approximately 767 primary daily vehicle trips. As the 110 ADT threshold for automobile trips is exceeded, the project's VMT impacts cannot be presumed to be less than significant.
- The project is not an Affordable Housing Project, and this OPR screening criteria does not apply.

For retail projects, OPR provides the following direction.

- Generally, lead agencies should analyze the effects of a retail project by assessing the change in total VMT because retail projects typically reroute travel from other retail destinations. A retail project might lead to increases or decreases in VMT, depending on previously existing retail travel patterns.

The OPR also provides guidance regarding Screening Thresholds that would allow agencies to quickly identify when a project should be expected to cause a less than significant impact without conducting as detailed study. The OPR states:

"By adding retail opportunities into the urban fabric and thereby improving retail destination proximity, local-serving retail development tends to shorten trips and reduce VMT. Thus, lead agencies generally may presume such development creates a less-than-significant transportation impact. Regional-serving retail development, on the other hand, which can lead to substitution of longer trips for shorter ones, may tend to have a significant impact. Where such development decreases VMT, lead agencies should consider the impact to be less than significant.

Many cities and counties define local-serving and regional-serving retail in their zoning codes. Lead agencies may refer to those local definitions when available, but should also consider any project-specific information, such as market studies or economic impacts analyses that might bear on customers' travel behavior. Because lead agencies will best understand their own communities and the likely travel behaviors of future project users, they are likely in the best position to decide when a project will likely be local-serving. Generally, however, retail development including stores larger than 50,000 square feet might be considered regional-serving, and so lead agencies should undertake an analysis to determine whether the project might increase or decrease VMT."

The proposed project will attract customers residing locally in this area of Shasta County, but its primary customer base will be travelers already on I-5. The project will provide fuel, convenience items and food service to travelers who simply drive off and back on to nearby I-5 to reach the project. The project's impacts on regional VMT would not be significant. This conclusion is consistent with the OPR presumption that the VMT effects of locally serving retail uses of 50,000 square feet or less may be considered to be less than significant. Therefore, the proposed project's impact on regional VMT can be presumed to be less than significant under the OPR Locally Serving Retail criteria.

c) The proposed project would not substantially increase hazards to vehicle safety due to increased traffic at locations with geometric design features (e.g., sharp curves or dangerous intersections). Regular vehicles visiting the project site during construction will be comprised of automobiles and trucks permitted under the California Vehicle Code and no farm equipment is expected. The project does not introduce incompatible users (e.g., farm equipment) to a roadway or transportation facility not intended for those users. The project's impact with regard to roadway design and users is not considered significant. Impacts would be less than significant.

d) Access to the site is provided at two driveways, one proposed to open onto along the project frontage (Knighton Road), and the other along Churn Creek Road. The proposed Churn Creek Road entrance will extend from the proposed east entrance off Churn Creek Road, entering behind the convenience store. The second entrance is off Knighton Road and provides immediate access to the fueling station along the frontage of the parcel. The proposed project would also be fully accessible to emergency vehicles through design of parking and vehicle drive aisles. Impacts would be less than significant.

Mitigation/Monitoring: None proposed.

Section XVIII – Tribal Cultural Resources

This section of the Initial Study describes the affected environment and regulatory setting for Tribal Cultural Resources (TCRs) on the project site. Ethnographic information is presented for the Wintu, the larger cultural group identified for the project location.

Environmental Setting

At the time of European-American contact (1830-1840), the project vicinity appears to have been inhabited by the Dau-pom (Stillwater) Wintu. The Wintu belong to the family of Penutian speakers, a linguistic language stock whose members are found throughout California within four main language families including Wintuan, Maiduan, Yokutsan, and Utian (Moratto 1984). Wintuan language subgroups consist of Wintu (Northern Wintuan), Nomlaki (Central Wintuan), and Patwin (Southern Wintuan) (Kroeber 1925). The Wintu were further divided into nine major groups based upon their geographic location, including the Dau-pom subgroup (DuBois 1935).
The Wintu diet/subsistence strategy was similar to many other California groups, and was focused on three predictable resources—acorns, deer, and salmon—all of which were of high nutritional value, easily stored, and dependably available on a seasonal basis. The Wintu lived in permanent villages along the upper Sacramento and Trinity Rivers during the winter, subsisting mainly on stored foods. In the spring and summer months, they moved upland to temporary resource procurement camps (in brush shelters) usually located no more than three to four days' walk from the main village. Food resources were periodically returned to the base camp for storage, which was guarded by those unable to participate in the gathering rounds.

Regulatory Setting

This section summarizes current State and local regulations relevant to the review of *Tribal Cultural Resources* for this project. Ordinances, regulations, or standards that are applicable to the environmental review of potential impacts related to Tribal Cultural Resources include the following:

Assembly Bill 52

Assembly Bill 52 (AB 52) amended CEQA to require that: 1) a lead agency provide notice to any California Native American tribes that have requested notice of projects proposed by the lead agency; and 2) for any tribe that responded to the notice within 30 days of receipt with a request for consultation, the lead agency must consult with the tribe. Topics that may be addressed during consultation include tribal cultural resources, the potential significance of project impacts, type of environmental document that should be prepared, and possible mitigation measures and project alternatives.

1) Sites, features, places, cultural landscapes (geographically defined in terms of the size and scope), sacred places, and objects with cultural value to a California Native American tribe that are either of the following:

    (a) included or determined to be eligible for inclusion in the California Register of Historical Resources; and/or

    (b) included in a local register of historical resources as defined in subdivision (k) of Section 5020.1; and/or

2) a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Section 5024.1. In applying the criteria set forth in subdivision (c) of Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.

Because criteria (a) and (b) also meet the definition of a Historical Resource under CEQA, a TCR may also require additional consideration as a Historical Resource. TCRs may or may not exhibit archaeological, cultural, or physical indicators.

Recognizing that California tribes are experts in their tribal cultural resources and heritage, AB 52 requires that CEQA lead agencies provide tribes that requested notification an opportunity to consult at the commencement of the CEQA process to identify TCRs. Furthermore, because a significant effect on a TCR is considered a significant impact on the environment under CEQA, consultation is used to develop appropriate avoidance, impact minimization, and mitigation measures.

Tribal Consultation

Tribal consultation pursuant to AB 52, as summarized above in Section 12 on Page 3, failed to identify any TCRs within the project area. Additional information about potential impacts to TCRs was drawn from the ethnographic context, the results of the cultural resources records search and field survey, and the results of a search of the Sacred Lands File of the NAHC. The Sacred Lands File failed to identify any sacred lands or tribal resources in or near the project area. The cultural resources records search and field survey also determined that there are no significant Native American archaeological sites within the project area.

Impact Analysis

The following includes an analysis of environmental parameters related to *Tribal Cultural Resources* based on Appendix G of the State CEQA Guidelines. The discussion not only includes the areas for which there is potential for environmental impacts but also provides

justification for the conclusions that either no impacts, less than significant impacts, or less than significant impacts with mitigation could occur.

XVIII. TRIBAL CULTURAL RESOURCES: Would the project:	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a) 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: i) 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 ii) 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.		X		

Discussion: Based on the related documents listed in the Sources of Documentation for Initial Study Checklist, an Archaeological Inventory Survey completed by Brian F. Hill, MA, staff review of the project, observations on the project site and in the vicinity, the following findings can be made:

a) i.) As discussed in Section V, CULTURAL RESOURCES, impact discussion V.a, based on the project area archival research and previous surveys within and adjacent to the study area, the site is located in an area that does not appear to be sensitive for prehistoric or historic occupation and the area is considered to have a low to moderate sensitivity for surface sites and low sensitivity for subsurface sites (ENPLAN, 2022). The Area of Potential Effect (APE) has previously been surveyed on two occasions, in 1998 and 2005. A records search for a 26-acre area including the current APE was conducted by the NEIC on July 11, 2005. The search included review of the National Register of Historic Places, California Register of Historical Resources, California Points of Historical Interest, California Inventory of Historic Resources, and California Historical Landmarks. The records search found that no resources had previously been recorded in the current APE, and that a single prehistoric site (45-003548) was recorded within a quarter mile of the current APE (ENPLAN, 2022). None of these surveys noted potential buried resources. Mitigation Measures V.b.1 and V.b.2 address the inadvertent discovery of cultural resources and human remains during construction. Impacts would be less than significant.

ii.) As described above, no known TCRs have been identified (as defined in PRC Section 21074) within the project area. Therefore, the project would not cause a significant adverse change in the significance of a TCR that is either listed in, or eligible for listing in, the CRHR, or in a local register of historical resources as defined in PRC Section 5020.1(k). The proposed project would not cause a substantial adverse effect to a known TCR.

Although no California Native American tribe submitted a written request to the County for formal consultation pursuant to PRC Section 21080.3.1, ENPLAN contacted the NAHC and several Native American representatives and organizations and requested information related to cultural resources that could be impacted by the proposed project. No responses were received. Mitigation Measures V.b.1and V.b.2 address the inadvertent discovery of cultural resources and human remains during construction. Impacts would be less than significant.

Mitigation/Monitoring: The following mitigations measures have been developed to reduce potential impacts related to Tribal Cultural Resources to less than significant levels:

Refer to Mitigation Measure V.b.1 and V.b.2 in Section V, CULTURAL RESOURCES.

Section XIX – Utilities and Service Systems

This section of the Initial Study addresses the proposed project's potential impacts on certain utilities and services: electric, water, wastewater, stormwater, and solid waste.

Environmental Setting

The project site is located outside of local service areas for water and sewer. As a result, the proposed project will require onsite septic facilities and an onsite water well. The project will tie into the existing stormwater, gas, electrical, and telecommunications utilities located in the Knighton Road and Churn Creek Road area.

Water

Water service is not currently provided to the proposed project site. The project proposes to construct one onsite water well to provide the estimated 4.4-acre feet per year of water to serve onsite operations. The depth to the seasonal high groundwater table at the project is anticipated to be no less than about 11 feet to more than 19 feet below the ground surface (SHN, 2022). The proposed project is located within the Redding Groundwater Basin (RGWB). The RGWB underlies approximately 544 square miles in the north end of the Sacramento Valley. The project site is located over the Enterprise Subbasin that comprises approximately 95 square miles in the northeast portion of the RGWB. As described in the City of Redding's 2015 *Urban Water Management Plan*, the RGWB is not an adjudicated basin. As the basin is not in overdraft, no legal pumping limit has been set; therefore, no overdraft mitigation efforts are currently underway. Though no safe yield has been established for the RGWB, groundwater modeling as part of the *Coordinated AB 3030 Groundwater Management Plan* indicates that the RGBW is resilient to severe drought conditions and is able to recover with one year of normal rainfall (COR, 2016a; 2016b). The entire RGWB groundwater storage capacity is 5.5-million-acre feet (AF). The project site is specifically located within the Enterprise Subbasin of the RGWB.

The County is also participating in a consortium of nearby groundwater users to form a Groundwater Sustainability Agency (GSA) pursuant to the requirements of AB 1739, SB 1168, and SB 1319 collectively known as the Sustainable Groundwater Management Act (SGMA). Specifically, for this area of Shasta County, groundwater is monitored, reported, and managed by the Enterprise Anderson Groundwater Sustainability Agency. The Enterprise Subbasin is identified as a medium priority basin under the SGMA (DWR, 2021).

Wastewater

The proposed project is currently located outside an existing wastewater service area. As a result, the proposed project will require to provide an onsite septic system.

Solid Waste

Solid waste collection service in the area is provided by the Shasta County Waste Management Agency (SCWMA). Solid waste generated by the proposed project would be disposed of at Shasta County's West Central Landfill located south of the community of Igo, 9.2 miles west of State Route 273 (SR-273). Total capacity of the landfill is 13 million cubic yards (cy) with a remaining capacity of 5.2 million cy. The California Department of Resources Recycling and Recovery (CalRecycle) provides solid waste disposal and recycling information for jurisdictions in the State, including the SCWMA. In 2019 (the most recent year with available data) the majority of SCWMA's solid waste was disposed of at the West Central Landfill (CalRecycle, 2021a). According to the figures published by the CalRecycle in 2019, the West Central Landfill received approximately 56 percent of SCWMA's solid waste, or 52,144 tons (CalRecycle, 2021a).

Stormwater

Currently no stormwater facilities are present onsite, although existing infrastructure is available adjacent to the site along Knighton Road.

Utilities

Electricity and natural gas service in the project area are provided by Pacific Gas & Electric Company (PG&E). PG&E is regulated by

the California Public Utilities Commission (CPUC) and is required to update existing systems to meet any additional demand. PG&E has overhead electric lines running north/south along Churn Creek Road, and east/west along Knighton Road. Currently, there are lines that serve the surrounding area with the nearest gas distribution facilities located along Knighton Road. The close proximity of natural gas facilities would allow services to be extended to the proposed project site. Existing phone lines are located adjacent to the project Site. Telecommunication will be through existing company and personal cell phones. No new telecommunication facilities will be required to serve the proposed project.

Regulatory Setting

This section summarizes current State and local regulations relevant to the review of *Utilities and Service Systems* for this project. Ordinances, regulations, or standards that are applicable to the environmental review of potential impacts related to utilities and service systems include the following:

Sustainable Groundwater Management Act of 2014

In 2014, California enacted the Sustainable Groundwater Management Act (SGMA; Water Code Section 10720 et seq.). SGMA, and related amendments to California law, require that all groundwater basins designated as high or medium priority in the California Department of Water Resources (DWR) California Statewide Groundwater Elevation Monitoring (CASGEM) Program, and that are subject to critical overdraft conditions, must be managed under a new GSP or a coordinated set of GSPs, by January 31, 2020. High or medium priority basins that are not subject to a critical overdraft must be regulated under one or more GSPs by 2022.

California Integrated Waste Management Act

The California Integrated Waste Management Act of 1989, or Assembly Bill (AB) 939, required the implementation of integrated waste management plans, and mandated that local jurisdictions divert at least 50 percent of all solid waste generated (from 1990 levels), beginning January 1, 2000, and divert at least 75 percent by 2010. Projects that would have an adverse effect on waste diversion goals are required to include waste diversion mitigation measures to assist in reducing these impacts to less than significant levels. With the passage of Senate Bill (SB) 1016 (the Per Capita Disposal Measurement System) in 2006, only per capita disposal rates are measured to determine if a jurisdiction's efforts are meeting the intent of AB 939.

California Solid Waste Reuse and Recycling Access Act

The California Solid Waste Reuse and the Recycling Access Act of 1991 (AB 1327) is codified in Public Resources Code Sections 42900-42911. As amended, AB 1327 requires each local jurisdiction to adopt an ordinance requiring commercial, industrial, or institutional building, marina, or residential buildings having five or more living units to provide an adequate storage area for the collection and removal of recyclable materials. The size of these storage areas is to be determined by the appropriate jurisdictions' ordinance. If no such ordinance exists in the jurisdiction, the Cal Recycle model ordinance shall take effect.

Impact Analysis

The following includes an analysis of environmental parameters related to *Utilities and Service Systems* based on Appendix G of the State CEQA Guidelines. The discussion not only includes the areas for which there is potential for environmental impacts but also provides justification for the conclusions that either no impacts, less than significant impacts, or less than significant impacts with mitigation could occur.

XIX. <u>UTILITIES AND SERVICE SYSTEMS</u>: Would the project:	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas or telecommunications facilities, the construction or relocations of which could cause significant environmental effects?		X		

XIX. UTILITIES AND SERVICE SYSTEMS: Would the project:	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?			X	
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?			X	
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?			X	
e) Comply with Federal, State, and local management and reduction statutes and regulations related to solid waste?			X	

Discussion: Based on the related documents listed in the Sources of Documentation for Initial Study Checklist, staff review of the project, observations on the project site and in the vicinity, the following findings can be made:

a) The proposed project would require the following improvements related to utilities and service systems:

Water

The proposed project, considering its location would use an onsite water well for which a well permit from Shasta County would be applied. Based on other wells in the vicinity it is anticipated to be 100-200 feet in depth and depth to groundwater would be approximately 30 feet (DWR, 2022). The proposed project is anticipated to require a peak water consumption of approximately 3,925.8 gallons per day (gpd) and an average of 2,944.35 gpd. Based on the peak water consumption estimate, the project's water demand is equivalent to approximately 1.43 million gallons per year or 4.4-acre feet per year (AFY).

The proposed project's annual water demand represents 0.000008 percent of the available groundwater in the RGWB. The demands of the proposed project can be accommodated by the existing water resources as sufficient water supplies are available to serve the project and reasonably foreseeable future development during normal, dry, and multiple day years. Therefore, implementation of the project would have a less than significant impact on groundwater supply.

The proposed project has also been designed to be consistent with the State of California's Model Water Efficient Landscape Ordinance (MWELO). Landscape irrigation would include automatic irrigation controller with soil moisture sensors/rain sensors; run-off prevention, low head drainage, and over spray; utilization of low volume/water efficient drip and rotary heads. The proposed project would also comply with the California Health and Safety Code, California Plumbing Code, California Energy Commission's proposed Appliance Efficiency Regulations, and with County rules, regulations, and policies, which include adopted shortage measures. Compliance would result in building features that would address indoor and outdoor water efficiency measures, and would ensure that the project federal, State, and local laws and regulations related to water conservation. Impacts would be less than significant.

Wastewater

As previously described in 9. Project Description on Page 1 above, project implementation would require the construction and operation of an onsite wastewater treatment system (OWTS) with septic tank and leach field. Wastewater from the convenience store would flow to the leach field via an approximate 500-foot underground leach line. The leach field would contain a total of 100 leach lines spaced approximately 10 feet apart, each being approximately 59 feet in length. The total area of the leach field would be 37,259 square feet or 0.86 acres. The OWTS would be designed to accommodate the anticipated peak 3,149.8 gallons per day (gpd) and average of 2,944.35 gpd of wastewater generated by the project. The OWTS disposal system would be designed in accordance with Shasta County OWTS design requirements based on the Septic Suitability and Infiltration Testing Investigation Report (SHN, 2022). Therefore, provision of wastewater treatment services would be adequately accommodated and would not adversely affect the existing and projected demand. Impacts would be less than significant.

Stormwater

Stormwater runoff from onsite buildings, impervious areas, and pervious areas will be collected and retained/treated by Best Management Practices (BMPs). This includes vegetated landscaped areas on the north, east, south, and westerly sides of the project site. These areas would account for approximately 0.51 acres of the project site. Stormwater in these areas would be collected and run through an oil and gas separator and then to a storm drain. Along the westerly and southerly side, the along in the interior curb lines the project would construct inlets to connect to the stormwater system.

All storm drain facilities are proposed to be designed and constructed consistent with the intent of applicable Shasta County requirements including the County's Phase II MS4 Permit (Water Quality Order No. R5-2016-0040). No offsite stormwater facilities will be expanded as a result of the proposed project. With implementation of Mitigation Measure X.c.1 in Section X, HYDROLOGY AND WATER QUALITY, impacts would be less than significant.

Utilities

Implementation of the proposed project would not require the relocation or construction of expanded electricity, gas, and telecommunication facilities. Impacts would be less than significant.

b) Refer to impact discussion XIX.a. Impacts would be less than significant.

c) Refer to impact discussion XIX.a. Impacts would be less than significant.

d) 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. According to CalRecycle, the estimated solid waste generation rates for employees is 26.6 pounds per employee per day (CalRecycle, 2021b). Based on this information and an anticipated maximum of 18 employees at full operation, the proposed project would produce approximately 478.8 pounds per day (lbs/day) or 87.38 tons annually.

The West Central Landfill has approximately 120 to 320 tons per day of capacity; therefore, the landfill would support the increase in solid waste during construction and operation of the proposed project. Onsite recycling would reduce the potential amount of waste disposed of at the West Central Landfill and would contribute to the recycling goals set forth by the County, California Building Code, and Assembly Bill (AB) 939. Operational activities would be required to comply with all federal, State, and local statues and regulations related to solid waste. Waste Management Company is the primary solid waste disposal provider to the area, and it operated the Anderson Landfill which has a capacity of approximately1,850 tons per day of capacity with a total capacity of 9,028,000 through its estimated closure date of 2075. Impacts would be less than significant.

e) The proposed project would comply with federal, State, and local management and reduction statutes and regulations related to solid waste. The County regulates and operates programs that promote the proper disposal of toxic and hazardous materials from households and businesses throughout the County, including those created by the project. AB 939 requires the County to attain specific waste diversion goals and the California Solid Waste Reuse and Recycling Access Act of 1991, as amended, requires expanded or new development projects to incorporate storage areas for recycling bins into the proposed project design. Reuse and recycling of construction debris would reduce operating expenses and save valuable landfill space.

Project implementation would generate solid waste during construction. Common construction waste may include metals, masonry, plastic pipe, rocks, dirt, cardboard, or green waste related to land development. AB 939, SB 1016, AB 341, and AB 1826 require the County to meet specific waste diversion goals. The West Central Landfill has available capacity to accommodate solid construction waste generated by the proposed project. In addition, the Anderson Landfill also has available capacity to accommodate solid construction waste generated by the proposed project. Impacts would be less than significant.

Mitigation/Monitoring: None proposed.

Refer to Mitigation Measure X.c.1 in Section X, HYDROLOGY AND WATER QUALITY. Impacts would be less than significant with mitigation incorporated.

Section XX – Wildfire

This section of the Initial Study provides an analysis of potential wildfire impacts. The analysis considers potential impacts of the project on emergency access and evacuation routes to, through, and from the project area and the exacerbation of fire risk or that may result in temporary or ongoing impacts to the environment during or following a fire.

Environmental Setting

Human activities such as equipment operation cause the vast majority of wildland fires that occur on average each in throughout the State. According to the County's *Multi-Jurisdictional Hazard Mitigation Plan*, wildland fire is an ongoing concern for County (Shasta, 2011). Generally, the fire season extends from early spring through late fall of each year during the hotter, dryer months. Drought may extend the fire season in Shasta County, including its cities. Fire conditions arise from a combination of high temperatures, low moisture

content in the air and fuel, accumulation of vegetation, and high winds.

Shasta Area Safety Communications Agency (SHASCOM) is the consolidated 9-1-1 emergency response agency serving Shasta County. SHASCOM's communications center provides emergency dispatching services to the Shasta County Fire and Sheriff's Departments, Redding Police and Fire Departments, the Anderson Police Department, the California Highway Patrol (CHP), and ambulance services. The center is located at 3101 South Street, in Redding.

Fire protection services for the project area are provided by the California Department of Forestry and Fire Protection (CAL FIRE), based in the Redding area. The Shasta County Fire Department (SCFD) contracts with CAL FIRE to manage and oversee the operation of SCFD. Both the SCFD and CAL FIRE maintain automatic and mutual aid agreements with adjacent fire districts, including the Redding Fire Department (RFD) and City of Anderson Fire District. The proposed project is within the area served by CAL FIRE Redding Station No. 43 located at 6103 Airport Road approximately 2.9 miles northeast of the site.

CAL FIRE has mapped areas of significant fire hazards in the state through its Fire and Resources Assessment Program (FRAP). These maps place areas of the state into different fire hazard severity zones (FHSZ) based on a hazard scoring system using subjective criteria for fuels, fire history, terrain influences, housing density, and occurrence of severe fire weather where urban conflagration could result in catastrophic losses. This classification system designates lands in three general classifications, "Moderate", "High," and "Very High" Fire Hazard Severity Zones.

As part of this mapping system, land where CAL FIRE is responsible for wildland fire protection and generally located in unincorporated areas is classified as a State Responsibility Area (SRA). Where local fire protection agencies, such as the SCDF, are responsible for wildfire protection, the land is classified as a Local Responsibility Area (LRA). The FRAP FHSZ data viewer does not identify the project site or surrounding vicinity as a part of a designated fire hazard severity zone (CAL FIRE, 2022). Additionally, the project site does not fall within a State Responsibility Area (SRA) and is therefore designated as a LRA (CAL FIRE, 2022).

Regulatory Setting

This section summarizes current federal, State, and local regulations relevant to the review of *Wildfire* for this project. Ordinances, regulations, or standards that are applicable to the environmental review of potential impacts related to wildfire hazards include the following:

California Department of Forestry and Fire Protection

CAL FIRE protects the people of California from fires, responds to emergencies, and protects and enhances forest, range, and watershed values providing social, economic, and environmental benefits to rural and urban citizens. The Office of the State Fire Marshal supports CAL FIRE's mission by focusing on fire prevention. It provides support through a wide variety of fire safety responsibilities including by regulating buildings in which people live, congregate, or are confined; by controlling substances and products which may, in and of themselves, or by their misuse, cause injuries, death, and destruction by fire; by providing statewide direction for fire prevention in wildland areas; by regulating hazardous liquid pipelines; by reviewing regulations and building standards; and by providing training and education in fire protection methods and responsibilities.

California Fire Code

The California Fire Code (CFC) is contained within Title 24, Chapter 9 of the California Code of Regulations. Based on the International Fire Code, the CFC is created by the California Buildings Standards Commission and regulates the use, handling, and storage requirements for hazardous materials at fixed facilities. Similar to the International Fire Code, the CFC and CBC use a hazards classification system to determine the appropriate measures to incorporate to protect life and property.

California Public Resources Code

California Public Resources Code Section 4290 requires minimum fire safety standards related to defensible space that are applicable to SRA lands and lands classified and designated as VHFHSZs. California Public Resources Code Section 4291 requires a reduction of fire hazards around buildings, which requires 100 feet of vegetation management around all buildings and is the primary mechanism for conducting fire prevention activities on private property within CAL FIRE jurisdiction.

Shasta County General Plan

The Public Safety Group, Fire Safety and Sheriff Protection subsection, of the Shasta County General Plan contains policies regarding fire protection and development practices within an identified high risk fire hazard area. These policies are intended to protect persons and structures from fires and ensure that development minimizes the risk of creating fire hazards or defending against those hazards. The following General Plan objectives and policies are applicable to the proposed project:

FS-I. Protect development from wildland and non-wildland fires by requiring new development projects to incorporate effective site

and building design measures commensurate with level of potential risk presented by such a hazard and by discouraging and/or preventing development from locating in high-risk fire hazard areas.

FS-2. Protection of life and property from crime by encouraging new development projects to incorporate effective defensible space design techniques.

- *Policy FS-a.* Alt new land use projects shall conform to the County Fire Safety Standards.
- *Policy FS-b.* Known fire hazard information should be reported as part of every General Plan amendment, zone change, use permit, variance, building site approval, and all other land development applications subject to the requirements of the California Environmental Quality Act (CEQA).
- *Policy FS-e.* Development in areas requiring expanded levels of police and fire services shall participate in adopted County programs designed to offset the added costs for providing the expanded level of services.

Shasta County Multi-Jurisdictional Hazard Mitigation Plan

The Shasta County *Multi-Jurisdictional Hazard Mitigation Plan* includes resources and information to assist in planning for hazards. The plan provides a list of actions that may assist Shasta County and the City of Anderson in reducing risk and preventing loss from future hazard events. The emphasis of the *Multi-Jurisdictional Hazard Mitigation Plan* is on the assessment and avoidance of identified risks, implementing loss reduction measures for existing exposures, and ensuring critical services and facilities survive a disaster. Hazard mitigation strategies and measures avoid losses by limiting new exposures identified in hazard areas, alter the hazard by eliminating or reducing the frequency of occurrence, avert the hazard by redirecting the impact by means of a structure or adapt to the hazard by modifying structures or standards.

Impact Analysis

The following includes an analysis of environmental parameters related to *Wildfire* based on Appendix G of the State CEQA Guidelines. The discussion not only includes the areas for which there is potential for environmental impacts but also provides justification for the conclusions that either no impacts, less than significant impacts, or less than significant impacts with mitigation could occur.

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

Discussion: Based on the related documents listed in the Sources of Documentation for Initial Study Checklist, staff review of the project, observations on the project site and in the vicinity, the following findings can be made:

a) Emergency response plans include elements to maintain continuity of government, emergency functions of governmental agencies, mobilization and application of resources, mutual aid, and public information. Emergency response plans are maintained at the federal, State, and local levels for all types of disaster, both natural and human-caused. Local governments have the primary responsibility for preparedness and response activities. Shasta County has numerous levels of emergency response and evacuation plans, including the *Emergency Operations Plan*, approved in 2025. The *Emergency Operations Plan* is used by all key partner agencies within the County to respond to major emergencies and disasters, and describes the roles and responsibilities between the County and its departments with local jurisdictions within the County (Shasta, 2025).

In addition to the *Emergency Operations Plan*, the County has also developed and adopted the *Shasta County Multi-Jurisdictional Hazard Mitigation Plan* (Shasta, 2023) that identifies risks and ways to minimize damage caused by natural and human-caused disasters. Potential hazards or events that may trigger an emergency response in the County include earthquakes, floods, wildland fires, landslides, droughts, and freezes.

Currently, the County has not adopted comprehensive emergency evacuation plan applicable to this area; however, due to the location of the proposed project immediate access to Interstate 5 (I-5) is available. Two proposed driveway connections are provided to the project site. The proposed Churn Creek Road entrance will extend from the proposed east entrance off Churn Creek Road, entering behind the convenience store. The second entrance is off Knighton Road and provides immediate access to the fueling station along the frontage of the parcel. The project would also be fully accessible to emergency vehicles through design of parking and vehicle drive aisles. As a result, the proposed project would not impair implementation of any emergency response plan or emergency evaluation plan as it would not alter existing roadways, physically interfere with existing roadway patterns, and can be developed in accordance with County fire standards. Impacts would be less than significant.

b) The proposed project is located not located within a designated fire hazard severity zone or SRA. The proposed project would not result in any alterations to slope, wind, or other factors that could potentially exacerbate wildfire risks onsite or within the project vicinity. The proposed project would provide appropriate fire suppression based on the California Building Code and County requirements. Compliance with applicable regulations and regular inspection of project facilities would reduce wildfire risks and the exposure to pollutant concentrations or uncontrolled spread of wildfire. No impact would occur in this regard.

c) As described in impact discussion XX.b above, project facilities would be constructed, designed, inspected, and maintained in accordance with applicable regulations to reduce fire risk. No new utilities will be extended to the project site, although the project will require to connect to existing adjacent power sources. Implementation of the proposed project would not require the installation of any other infrastructure or utilities that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment. No impact would occur in this regard.

d) The proposed project is located within a Federal Emergency Management Agency (FEMA) Special Flood Hazard Area (Zone AO) (FEMA, 2011). The project parcel is currently zoned Planned Development (PD) combined with the Restrictive Flood District (F-2). Implementation of the proposed project will be required to adhere to development standards specified by Shasta County Code (SCC) Chapter 17.70 – Restrictive Flood (F-2) District which require projects located within a flood zone to minimize flood damage and reduce exposure to flood hazards. Satisfying the requirements of SCC Chapter 17.70 will reduce the impact to a less than significant level.

e) The topography of the project site is relatively flat, and the soils on the site are not susceptible to landslides (refer to Section VII, GEOLOGY AND SOILS). Additionally, as discussed above, the project is not located within an SRA or land classified as a fire hazard severity zone (CAL FIRE, 2022). As a result, the proposed project will not expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes, nor are there any sheer or unstable cliffs in the immediate area. There is no reason to believe that the proposed project would be exposed to significant risks from flooding or landslides as a result of post fire runoff. Impacts would be less than significant.

Mitigation/Monitoring: None proposed.

XXI. MANDATORY FINDINGS OF SIGNIFICANCE:	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below the 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		
b) Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection the effects of past projects, the effects of other current projects, and the effects of probable		X		

XXI. MANDATORY FINDINGS OF SIGNIFICANCE:	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
future projects)?				
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?			X	

Discussion:

a) Evaluation of the proposed project as provided in Section IV, BIOLOGICAL RESOURCES, has shown that the activities of the proposed project do not have the potential to degrade the quality of the environment and will not substantially reduce the habitat or cause wildlife populations to drop below self-sustaining levels. Mitigation measures for biological resources have been developed to reduce potential impacts on sensitive habitats and species to less than significant levels. Refer to Mitigation Measures IV.a.1, IV.a.2, IV.a.3 and IV.d.1 in Section IV, BIOLOGICAL RESOURCES.

Also, based on the discussion and findings in Section V, CULTURAL RESOURCES, there is evidence to support a finding that the proposed project is not eligible for listing in the National Register of Historic Places (NRHP) or the California Register of Historic Resources (CRHR) under any significance criteria. The project is located in an area that does not appear to be sensitive for prehistoric or historic occupation and is considered to have a low to moderate sensitivity for surface sites and very low sensitivity for subsurface sites. Although no archaeological deposits or features were found during the Cultural Resources Inventory Report (ENPLAN, 2022), implementation of mitigation measures will ensure that any additional archaeological deposits or features may be discovered are fully protected during implementation of the project. Refer to Mitigation Measures V.b.1, V.b.2, and V.c.1 in Section V, CULTURAL RESOURCES.

b) As discussed throughout this document, implementation of the proposed project has the potential to result in impacts to the environment that are individually limited, but are not cumulatively considerable, including impacts to biological and cultural resources. In addition, as discussed in Section III, AIR QUALITY, the project will contribute to regionwide cumulative air quality impacts. However, under policy of the General Plan, application of Standard Mitigation Measures (SMMs) and Best Available Mitigation Measures (BAMMs) impacts would be less than significant.

In all instances where the project has the potential to contribute to cumulatively considerable impacts to the environment (including the resources listed above) mitigation measures have been imposed to reduce the potential effects to less than significant levels. As such, with incorporation of the mitigation measures imposed throughout this Initial Study, including compliance with local, State, and federal rules and regulations, the proposed project would not contribute to environmental effects that are individually limited, but cumulatively considerable, and impacts would be less than significant.

c) The potential for the proposed project to result in environmental effects that could adversely affect human beings, either directly or indirectly, has been discussed throughout this document. In instances where the proposed project has the potential to result in direct or indirect adverse effects to human beings, including impacts to air quality and cultural resources, mitigation measures have been applied to reduce the impact to below a level of significance. In other instances, the project design and compliance with existing laws and regulations would reduce impacts of the project to less than significant levels. Therefore, the proposed project as designed, mitigated, and in compliance with existing regulatory requirements, would not have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly. Therefore, impacts would be less than significant with mitigation incorporated.

Mitigation/Monitoring: With the mitigation measures being proposed, the impacts from the project would be less-than-significant. See the attached Mitigation Monitoring Program (MMP) for a complete listing of the proposed mitigation measures, timing/implementation of the measures, and enforcement/monitoring agent(s).

INITIAL STUDY COMMENTS

PROJECT NUMBER ZA22-0007 & PM22-0004 – Maverick, Inc.

GENERAL COMMENTS:

Special Studies: The following project-specific studies have been completed for the proposal and will be considered as part of the record of decision for the Mitigated Negative Declaration. These studies are available for review through the Shasta County Planning Division and online via the link CEQA Documents and Notices (non-EIR documents) | Shasta County California or via the browser web address at: https://www.shastacounty.gov/planning/page/ceqa-documents-and-notices-non-eir-documents.

1. Farmland Impact Assessment, ENPLAN, May 2022
2. Air Quality Modeling, Kimley Horn, April 2022
3. Health Risk Assessment, Kimley Horn, May 2022
4. Biological Study Report, ENPLAN, May 2022
5. Cultural Resource Inventory Report, ENPLAN, June 2022 (Confidential)
6. Preliminary Private Sewage Disposal System Plan, Kimley Horn, March 2024
7. Preliminary Drainage Report, Kimley Horn, November 2024
8. Local Transportation Analysis Memorandum, Kimley Horn, November 2024
9. VMT Impacts Memorandum, Kimley Horn, 2023

Agency Referrals: Prior to an environmental recommendation, referrals for this project were sent to agencies thought to have responsible agency or reviewing agency authority. The responses to those referrals (attached), where appropriate, have been incorporated into this document and will be considered as part of the record of decision for the Mitigated Negative Declaration. Copies of all referral comments may be reviewed through the Shasta County Planning Division. To date, referral comments have been received from the following State agencies or any other agencies which have identified CEQA concerns:

1. California Department of Fish and Wildlife
2. California Regional Water Quality Control Board
3. California Department of Transportation
4. Paskenta Band of Nomlaki Indians
5. Anderson Cottonwood Irrigation District

Conclusion/Summary: Based on a field review by the Planning Division and other agency staff, early consultation review comments from other agencies, information provided by the applicant, and existing information available to the Planning Division, the project, as revised and mitigated, is not anticipated to result in any significant environmental impacts.

SOURCES OF DOCUMENTATION FOR INITIAL STUDY CHECKLIST

All headings of this source document correspond to the headings of the initial study checklist. In addition to the resources listed below, initial study analysis may also be based on field observations by the staff person responsible for completing the initial study. Most resource materials are on file in the office of the Shasta County Department of Resource Management, Planning Division, 1855 Placer Street, Suite 103, Redding, CA 96001, Phone: (530) 225-5532.

GENERAL PLAN AND ZONING

1. Shasta County General Plan and land use designation maps.
2. Applicable community plans, airport plans and specific plans.
3. Shasta County Zoning Ordinance (Shasta County Code Title 17) and zone district maps.

ENVIRONMENTAL IMPACTS

1. AESTHETICS

1. Shasta County General Plan, Section 6.8 Scenic Highways, and Section 7.6 Design Review.
2. Zoning Standards per Shasta County Code, Title 17.
3. Caltrans (California Department of Transportation). 2022. California State Scenic Highway System Map. [Online]: https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aacaaAccessed May 19, 2022.
4. ENPLAN. 2022a. Biological Study Report, Knighton Road Maverik Convenience Store and Automotive Fuel Station. May 2022.
5. FHWA (Federal Highways Administration) National Scenic Byways Program. 2018. [Online]: https://www.fhwa.dot.gov/byways/states/CA. Accessed May 19, 2022.
6. National Wild and Scenic Rivers System. 2018. [Online]: https://www.rivers.gov/california.php. Accessed May 19, 2022.

II. AGRICULTURAL AND FORESTRY RESOURCES

3. Shasta County General Plan, Section 6.1 Agricultural Lands.
4. Shasta County General Plan, Section 6.2 Timber Lands.
5. Soil Survey of Shasta County Area, California, published by U.S. Department of Agriculture, Soil Conservation Service and Forest Service, August 1974.
6. DOC (California Department of Conservation). 2022. Farmland Mapping and Monitoring Program. [Online]: https://maps.conservation.ca.gov/DLRP/CIFF/. Accessed May 19, 2022.
7. DOC. 2018. Farmland of Local Importance. [Online]: https://www.conservation.ca.gov/dlrp/fmmp/Documents/Farmland_of_Local_Importance_2018.pdf. Accessed: May 19, 2022.
8. ENPLAN. 2022b. Farmland Impact Assessment – Maverik Convenience Store and Automotive Fuel Station. May 2022.
9. NRCS (Natural Resources Conservation Service). 2022. Web Soil Survey-Soil Map. [Online]: https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx Accessed May 19, 2022.

III. AIR QUALITY

1. Shasta County General Plan Section, 6.5 Air Quality.
2. Northern Sacramento Valley Air Basin, 2021 Air Quality Attainment Plan.
3. Records of, or consultation with, the Shasta County Department of Resource Management, Air Quality Management District.
4, KHA (Kimley-Horn and Associates). 2022. Health Risk Assessment, Maverik Gas Station, Shasta County, CA. May 2022.
5. 5SCAQMD (Shasta County Air Quality Management District). 2022. Air Quality Maintenance Plan and Implementing Measures. 2022.

IV. BIOLOGICAL RESOURCES

1. Shasta County General Plan, Section 6.2 Timberlands, and Section 6.7 Fish and Wildlife Habitat.
2. Designated Endangered, Threatened, or Rare Plants and Candidates with Official Listing Dates, published by the California Department of Fish and Wildlife.
3. Natural Diversity Data Base Records of the California Department of Fish and Wildlife.
4. Federal Listing of Rare and Endangered Species.
5. Shasta County General Plan, Section 6.7 Fish and Wildlife Habitat.
6. State and Federal List of Endangered and Threatened Animals of California, published by the California Department of Fish and Wildlife.
7. Natural Diversity Data Base Records of the California Department of Fish and Wildlife.
8 CDFW (California Department of Fish and Wildlife). 2022. California Natural Diversity Database. March 2022.
9. CAL-IPC (California Invasive Plant Council). 2022. The Cal-IPC Inventory. 2022.
10. ENPLAN. 2022a. Biological Study Report, Knighton Road Maverik Convenience Store and Automotive Fuel Station. May 2022.
11. NRCS (Natural Resources Conservation Service). 2022. Web Soil Survey. [Online]: http://websoilsurvey.ncrs.usda.gov/app/. Accessed June 6, 2022.

12. Shasta. 1984. Shasta County General Plan Environmental Impact Report, SCH #80050918. January 10, 1984.
13. Shasta. 2019. Shasta County Code Chapter 17.84 – General Development Standards. Updated through April 11, 2022.
14. Shasta. 1999. Shasta County Code Chapter 17.14 – Habitat Protection (HP) District. Updated through April 11, 2022.

V. CULTURAL RESOURCES

1. Shasta County General Plan, Section 6.10 Heritage Resources.
2. Records of, or consultation with, the following:
   a. The Northeast Information Center of the California Historical Resources Information System, Department of Anthropology, California State University, Chico.
   b. State Office of Historic Preservation.
   c. Local Native American representatives.
   d. Shasta Historical Society.
3. ENPLAN. 2022. Cultural Resources Inventory Report, Knighton Maverik Service Station, Shasta County, California. June 2022.

VI. ENERGY

1. California Global Warming Solutions Act of 2006 (AB 32)
2. California Code of Regulations Title 24, Part 6 – California Energy Code
3. California Code of Regulations Title 24, Part 11 – California Green Building Standards Code (CALGreen)
4. CARB (California Air Resources Board). 2022. EMFAC2021. [Online]: https://arb.ca.gov/emfac/emissions-inventory/7a5f3de4fc915c6b3412d61d726307fc4b4ebf1d, accessed April 29, 2022.
5. CDTFA (California Department of Tax and Fee Administration). 2022. Net Taxable Gasoline Gallons and Taxable Diesel Gallons 10 Year Report. [Online]: https://www.cdtfa.ca.gov/taxes-and-fees/spftrpts.htm, accessed April 27, 2022.
6. CEC (California Energy Commission). 2022. Energy Consumption Data Management System. California Energy Consumption Database. [Online]: http://ecdms.energy.ca.gov/. Accessed April 2022.
7. CPUC (California Public Utilities Commission). 2011. California Long-Term Energy Efficiency Strategic Plan. January 2011.
8. Shasta (County of Shasta). 2004. Shasta County General Plan. September 2004.
9. SRTA (Shasta Regional Transportation Agency). 2018. Regional Transportation Plan and Sustainable Communities Strategy for the Shasta Region. October 9, 2018.

VII. GEOLOGY AND SOILS

1. Shasta County General Plan, Section 5.1 Seismic and Geologic Hazards, Section 6.1 Agricultural Lands, and Section 6.3 Minerals.
2. County of Shasta, Erosion and Sediment Control Standards, Design Manual
3. Soil Survey of Shasta County Area, California, published by U.S. Department of Agriculture, Soil Conservation Service and Forest Service, August 1974.
4. Alquist - Priolo, Earthquake Fault Zoning Maps.
5. DOC (California Department of Conservation). 2015. *Fault Activity Map of California (2010)*. [Online]: https://gis.conservation.ca.gov/server/rest/services/CGS/FaultActivinityMapCA/MapServer. Accessed May 20, 2022.
6. DOC. 2021. *EQ ZAPP: California Earthquake Hazards Zone Application*. [Online]: https://maps.conservation.ca.gov/cgs/EQZApp/app/. Accessed May 20, 2022.
7. DOC. 2015. *Fire Perimeters and Deep Landslide Susceptibility*. [Online]: https://Fire Perimeters and Deep-Seated Landslide Susceptibility (ca.gov). Accessed May 20, 2022.
8. DOC. 2018. *Earthquake Fault Zones, A Guide for Government Agencies, Property Owners/Developers, and Geoscience Practitioners for Assessing Fault Rupture Hazards in California – Special Publication 42.* Revised 2018.
9. DOC. 1997. *Mineral Land Classification of Alluvial Sand and Gravel, Crushed Stone, Volcanic Cinders, Limestone, and Diatomite within Shasta County, California – DMG Open File Report 97-03*. 1997.
10. FEMA (Federal Emergency Management Agency). 2011. *Flood Insurance Rate Map Panel #06089C1563G*. March 17, 2011.
11. NRCS (Natural Resources Conservation Service). 2022.*Web Soil Survey Report- Shasta County Area, California.* [Online]: https://websoilsurvey.nrcs.usda.gov/app/. Accessed May 25, 2022.
12. Shasta County Environmental Health Division. 2019. *Shasta County Local Agency Management Program (LAMP) for Onsite Wastewater Treatment System (OWTS)*. 2019.
13. Shasta. 1993. *Shasta County Code Chapter 12.12*. 1993.
14. Shasta and COA (City of Anderson). 2017. *Multi-Jurisdictional Hazard Mitigation Plan*. November 16, 2017. [Online]: https://www.co.shasta.ca.us/docs/libraries/public-works-docs/hmp-documents/shasta-county-hazard-mitigation-plan-november-2017.pdf. Accessed May 20, 2022.
15. SHN (SHN Consulting Engineers and Geologists). 2022. *Septic Suitability and Infiltration Testing Investigation Report Findings for the Proposed Maverik Fueling Stations, 19482 Knighton Road, Shasta County*. May 2, 2022.

VIII. GREENHOUSE GAS EMISSIONS

1. Shasta Regional Climate Action Plan
2. California Air Pollution Control Officers Association (White Paper) CEQA & Climate Change, Evaluating and Addressing

Greenhouse Gas Emissions from Projects Subject to the California Environmental Quality Act
3. IEA (International Energy Agency). 2008. *Energy Efficiency Requirements in Building Codes, Energy Efficiency Policies for New Buildings*. March 2008.
4. SRTA (Shasta Regional Transportation Agency). 2018. *Regional Transportation Plan and Sustainable Communities Strategy for the Shasta Region*. October 9, 2018.
5. California Office of the Attorney General. 2010. *The California Environmental Quality Act Addressing Global Warming Impacts at the Local Agency Level.* Updated January 6, 2010.

IX. HAZARDS AND HAZARDOUS MATERIALS

1. Shasta County General Plan, Section 5.4 Fire Safety and Sheriff Protection, and Section 5.6 Hazardous Materials.
2. County of Shasta Multi-Hazard Functional Plan
3. Records of, or consultation with, the following:
   a. Shasta County Department of Resource Management, Environmental Health Division.
   b. Shasta County Fire Prevention Officer.
   c. Shasta County Sheriff's Department, Office of Emergency Services.
   d. Shasta County Department of Public Works.
   e. California Environmental Protection Agency, California Regional Water Quality Control Board, Central Valley Region.
4. CAL FIRE (California Department of Forestry and Fire Protection). 2022. *State Responsibility Area Viewer.* [Online]: https://calfire-forestry.maps.arcgis.com. Accessed: May 23, 2022.
5. CAL FIRE. 2008. *Fire Hazard Severity Zones.* [Online]: https://osfm.fire.ca.gov/media/5992/redding.pdf. Accessed May 2022.
6. DTSC (California Department of Toxics Substances Control). 2022. *Envirostor Database*. [Online]: https://www.envirostor.dtsc.ca.gov. Accessed May 23, 2022.
7. EPA (U.S. Environmental Protection Agency). 2022. *Enforcement and Compliance History Online*. [Online]: https://echo.epa.gov/detailed-facility-report?fid=11000072329. Accessed May 23, 2022.
8. KHA. 2022. *Health Risk Assessment Maverik Gas Station Shasta County, California*. May 2022.7.
9. SCFD (Shasta County Fire Department). 2018. *Annual Report*. April 2019.
10. Shasta. 2017. *Multi-Jurisdictional Hazard Mitigation Plan*. November 16, 2017. [Online]: https://www.co.shasta.ca.us/docs/libraries/public-works-docs/hmp-documents/shasta-county-hazard-mitigation-plan-november-2017.pdf. Accessed May 20, 2022.
11. Shasta. 2022. *Shasta County Code Chapter 8.08 – Fire Hazard Regulations.* Updated through April 11, 2022.
12. Shasta. 2022. *Shasta County Code Chapter 8.24 – Underground Storage of Hazardous Substances.* Updated through April 11, 2022.
13. SWRCB (State Water Resources Control Board). 2022. *GeoTracker*. [Online]: https://geotracker.waterboards.ca.gov. Accessed May 31, 2022.

X. HYDROLOGY AND WATER QUALITY

1. Shasta County General Plan, Section 5.2 Flood Protection, Section 5.3 Dam Failure Inundation, and Section 6.6 Water Resources and Water Quality.
2. Flood Boundary and Floodway Maps and Flood Insurance Rate Maps for Shasta County prepared by the Federal Emergency Management Agency, as revised to date.
3. Records of, or consultation with, the Shasta County Department of Public Works acting as the Flood Control Agency and Community Water Systems manager.
4. COR (City of Redding). 2000. *City of Redding General Plan 2000 – 2020, Health and Safety Element*. October 3, 2000.
5. COR. 2016. *2015 City of Redding Urban Water Management Plan*. June 2016.
6. COR. 2015. *Local Hazard Mitigation Plan*. November 2015.
7. CVRWQCB (Central Valley Regional Water Quality Control Board). 2018. The Water Quality Control Plan (Basin Plan) for the California Regional Water Quality Control Board Central Valley Region (Fifth Edition), The Sacramento River Basin and The San Joaquin River Basin. Revised May 2018.
8. DWR (California Department of Water Resources). 2022. *Sustainable Groundwater Management Act (SGMA) Data Viewer*. [Online]: https://sgma.water.ca.gove/webgis/. Accessed May 28, 2022.
9. DWR. 2004. Sacramento River Hydrologic Region, Redding Groundwater Basin, Enterprise Subbasin Groundwater Bulletin 118. Updated February 27, 2004.
10. FEMA (Federal Emergency Management Agency). 2011. *Flood Insurance Rate Map Panel #06089C1564G*. March 17, 2011.
11. Shasta. 2017. *Multi-Jurisdictional Hazard Mitigation Plan*. November 16, 2017. [Online]: https://www.co.shasta.ca.us/docs/libraries/public-works-docs/hmp-documents/shasta-county-hazard-mitigation-plan-november-2017.pdf. Accessed May 20, 2022.
12. SCEHD (Shasta County Environmental Health Division). 2019. *Shasta County Local Agency Management Program (LAMP) for Onsite Wastewater Treatment System (OWTS)*. 2019.

13. SHN (SHN Consulting Engineers and Geologists). 2022. *Septic Suitability and Infiltration Testing Investigation Report of Findings for the Proposed Maverik Fueling Station, 19482 Knighton Road, Redding, Shasta County.* May 2, 2022.
14. SWRCB (California State Water Resources Control Board). 2012. *National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities Order No. 2012-0006-DWQ, NPDES No. CAS000002*. July 17, 2012.
15. SWRCB. 2013. *State Water Resources Control Board Water Quality Order No. 2013-0001 DWQ NPDES General Permit No. CAS000004, Waste Discharge Requirements (WDRs) for Stormwater Discharges from Small Municipal Separate Storm Sewer Systems (MS4s) (General Permit)*. February 5, 2013.

XI. LAND USE AND PLANNING

1. Shasta County General Plan land use designation maps and zone district maps.
2. Shasta County Assessor's Office land use data.

XII. MINERAL RESOURCES

1. Shasta County General Plan Section 6.3 Minerals.
2. DOC (California Department of Conservation). 2022. *The CGS Information Warehouse: MLC*. [Online]: https://maps.conservation.ca.gov/cgs/informationwarehouse/mlc/. Accessed May 26, 2022.
3. DOC. 1997. *Mineral Land Classification of Alluvial Sand and Gravel, Crushed Stone, Volcanic Cinders, Limestone, and Diatomite within Shasta County, California – DMG Open File Report 97-03*. 1997.
4. Shasta. 1999. *Shasta County Code Chapter 17.71 – Mineral Resource Buffer (MRB) District.* Updated through April 11, 2022.

XIII. NOISE

1. Shasta County General Plan, Section 5.5 Noise and Technical Appendix B.
2, Caltrans (California Department of Transportation). 2013. *Technical Supplement to the Traffic Noise Analysis Protocol*. September 2013.
3, Caltrans. 2020. *Traffic Noise Analysis Protocol*. April 2020.
4. COR (City of Redding). 2015. *Airport Master Plan for Redding Municipal Airport*. November 2015.
5. Shasta (County of Shasta). 2004. *Shasta County General Plan*. September 2004.
6. Elliott H. Berger, Rick Neitzel, and Cynthia A. Kladden. 2010. *Noise Navigator Sound Level Database with Over 1700 Measurement Values*. 2010.
7. Kariel, H. G. 1991. *Noise in Rural Recreational Environments*, Canadian Acoustics 19(5), 3-10, 1991.

XIV. POPULATION AND HOUSING

1. Shasta County General Plan, Section 7.1 Community Organization and Development Patterns.
2. Census data from U.S. Department of Commerce, Bureau of the Census.
3. Census data from the California Department of Finance.
4. Shasta County General Plan, Section 7.3 Housing Element.
5. Shasta County Department of Housing and Community Action Programs.
6. DOF (California Department of Finance). 2022a. *Report E-1 Population Estimates for Cities, Counties, and the State January 1, 2021 and 2022.* May 2, 2022
7. DOF. 2022b. *Table E-5: City/County Population and Housing Estimates*. May 2022.
8. SRTA (Shasta Regional Transportation Agency). 2018. *Regional Transportation Plan and Sustainable Communities Strategy for the Shasta Region*. October 9, 2018.
9. US Census (United States Census Bureau). 2020. American *Community Survey 5-Year Estimates- Table S0701 Geographic Mobility by Selected Characteristics in The United States*. [Online]: https://data.census.gov/cedsci/table?q=Shasta%20County&tid=ACSST5Y2020.S0701&moe=false. Accessed May 24, 2022.

XV. PUBLIC SERVICES

1. Shasta County General Plan, Section 7.5 Public Facilities.
2. Records of, or consultation with, the following:
   a. Shasta County Fire Prevention Officer.
   b. Shasta County Sheriff's Department.
   c. Shasta County Office of Education.
   d. Shasta County Department of Public Works.
3. SCOE (Shasta County Office of Education). 2022. *Developer Fee Services*. [Online]: https://www.shastacoe.org/administrative-services-division/business-services/developer-fee-services. Accessed May 24, 2022.

XVI. RECREATION

1. Shasta County General Plan, Section 6.9 Open Space and Recreation.
2. Shasta. 2009. *Parks, Trails, and Open Space Plan*. August 2009.

XVII. TRANSPORTATION/TRAFFIC

1. Shasta County General Plan, Section 7.4 Circulation.
2. Records of, or consultation with, the following:

a. Shasta County Department of Public Works.
b. Shasta County Regional Transportation Planning Agency.
c. Shasta County Congestion Management Plan/Transit Development Plan.
3. Institute of Transportation Engineers, Trip Generation Rates.
4. KHA (Kimley-Horn Associates). 2022. *Maverik Gas Station, Shasta County, CA – Local Transportation Analysis*. March 9, 2022.
5. OPR (Governor's Office of Planning and Research). 2018. *Technical Advisory on Evaluating Transportation Impacts in CEQA*. December 2018.
6. RABA (Redding Area Bus Authority). 2022. *Redding Area Bus Authority (RABA) Ride Guide*. 2022.
7. Shasta (Shasta County). 2010. *Bikeway Transportation Plan*. June 2010.
8. SRTA (Shasta County Regional Transportation Agency). 2018. *Regional Active Transportation Plan.* Updated August 2019.

XVIII. TRIBAL CULTURAL RESOURCES

1. Tribal Consultation in accordance with Public Resources Code section 21080.3.1
2. ENPLAN. 2022. Cultural Resources Inventory Report, Knighton Maverik Service Station, Shasta County, California. June 2022.

XIX. UTILITIES AND SERVICE SYSTEMS

1. Records of, or consultation with, the following:
a. Pacific Gas and Electric Company.
b. Pacific Power and Light Company.
c. Pacific Bell Telephone Company.
d. Citizens Utilities Company.
e. T.C.I.
f. Marks Cablevision.
g. Shasta County Department of Resource Management, Environmental Health Division.
h. Shasta County Department of Public Works.
2. CalRecycle (California Department of Resources Recycling and Recovery). 2021a. *Disposal Reporting System (DRS): Jurisdiction Disposal and Alternative Daily Cover (ADC) Tons by Facility*. [Online]: https://www2.calrecycle.ca.gov/LGCentral/DisposalReporting/Destination/DisposalByFacility. Accessed June 15, 2022.
3. CalRecycle. 2021b. *Jurisdiction Diversion/Disposal Rate Summary*. [Online]: https://www2.calrecycle.ca.gov/LGCentral/DiversionProgram/JurisdictionDiversionPost2006. Accessed June 15, 2022.
4. COR (City of Redding). 2016a. *Urban Water Management Plan*. June 2016.
5. COR. 2016b. *Water Utility Master Plan*. Update 2016.
6. DWR (California Department of Water Resources). 2021. *Sustainable Groundwater Management Act (SGMA) Data Viewer*. [Online]: https://sgma.water.ca.gove/webgis/. Accessed June 15, 2022.
7. DWR. 2022. *Well Completion Report Map Application*. [Online]: https://dwr.maps.arcgis.com/apps/webappviewer/index.html?id=181078580a214c0986e2da28f8623b37. Accessed: February 17, 2022.
8. DWR. 2004. Sacramento River Hydrologic Region, Redding Groundwater Basin, Enterprise Subbasin Groundwater Bulletin 118. Updated February 27, 2004.
9. Shasta County Environmental Health Division. 2019. *Shasta County Local Agency Management Program (LAMP) for Onsite Wastewater Treatment System (OWTS)*. 2019.
10. SHN (SHN Consulting Engineers and Geologists). 2022. *Septic Suitability and Infiltration Testing Investigation Report of Findings for the Proposed Maverik Fueling Station, 19482 Knighton Road, Redding Shasta County; APN 055-160-012.* May 2022.

XX. WILDFIRE

1. Office of the State Fire Marshall-CALFIRE Fire Hazard Severity Zone Maps
2. CAL FIRE (California Department of Forestry and Fire Protection). 2022. State Responsibility Area Viewer. [Online]: https://calfire-forestry.maps.arcgis.com. Accessed: May 25, 2022.
3. CAL FIRE. 2022. Fire Hazard Severity Zones. [Online]: https://egis.fire.ca.gov/FHSZ/. Accessed May 25, 2022.
4. FEMA (Federal Emergency Management Agency). 2011. Flood Insurance Rate Map Panel #06089C1564G. March 17, 2011.
5. SCFD (Shasta County Fire Department). 2018. Annual Report. April 2019.
6. Shasta (County of Shasta). 2004. Shasta County General Plan. September 2004.
7. Shasta. 2017. Multi-Jurisdictional Hazard Mitigation Plan. November 2023.
8. Shasta. 2022. Shasta County Code Chapter 17.70 – Restrictive Flood (F-2) District. Updated through April 11, 2022.
9. Shasta. 2022. Shasta County Code Chapter 8.08 – Fire Hazard Regulations. Updated through April 11, 2022.

XXI. MANDATORY FINDINGS OF SIGNIFICANCE

None

Mitigation Measure/Condition	Timing/Implementation	Enforcement/Monitoring	Verification (Date & Initials)
Section III. Air Quality **III.b.1** *Standard Mitigation Measures* • All construction equipment shall be maintained and properly tuned in accordance with manufacturers' specifications. Equipment maintenance records shall be kept onsite and made available upon request by Shasta County AQMD. • All material excavated, stockpiled, or graded shall be sufficiently covered, watered, or have soil binders to prevent fugitive dust from leaving property boundaries and causing a public nuisance or a violation of an ambient air standard. Watering shall occur at least twice daily with complete site coverage, preferably in the mid-morning and after work is completed each day. • All unpaved areas (including unpaved roads) with vehicle traffic shall be watered periodically or have dust palliatives applied for stabilization of dust emissions. • All onsite vehicles shall be limited to a speed of 15 miles per hour on unpaved roads. • All land clearing, grading, earth-moving, or excavation activities on the project site shall be suspended when sustained winds are expected to exceed 20 miles per hour. • All portions of the development site which have been stripped of vegetation by construction activities and left inactive for more than ten days shall be seeded and/or watered until a suitable grass cover is established. • All trucks hauling dirt, sand, soil, or loose material shall be sufficiently watered, covered, or shall maintain at least 2 feet of freeboard (i.e., minimum vertical distance between top of the load and the trailer) in accordance with the requirements of California Vehicle Code Section 23114. This provision will be enforced by local law enforcement agencies. • Wheel washers shall be installed where project vehicles and/or equipment enter and/or exit onto paved streets from unpaved roads. Vehicles and/or equipment shall be washed prior to each trip. • Prior to final occupancy, the applicant shall re-establish ground cover on the construction site through seeding and watering.	Prior to issuance of a Grading or Encroachment Permit Prior to the issuance of the first permit for construction of a project improvement Prior to the issuance of the first permit for construction of a project improvement,	Resource Management, Planning Division Resource Management, Planning Division Resource Management, Planning Division	

Mitigation Measure/Condition	Timing/Implementation	Enforcement/Monitoring	Verification (Date & Initials)
• Off-road construction equipment shall not be left idling for periods longer than 5 minutes when not in use. • Temporary traffic control shall be provided as appropriate during all phases of construction to improve traffic flow. • Construction activities that could affect traffic flow shall be scheduled in off-peak hours. • All public roadways used by the project contractor shall be maintained free from dust, dirt, and debris caused by construction activities. Streets shall be swept at the end of the day if visible soil materials are carried onto adjacent public paved roads. Wheel washers shall be used where vehicles enter and exit unpaved roads onto paved roads, or trucks and any equipment shall be washed off leaving the site with each trip. **III.b.2** Best Available Mitigation Measures • During all construction activities, diesel-fueled excavators, forklifts, rubber-tired dozers, and tractors, shall be California Air Resources Board (CARB) Tier 4 interim or better as set forth in Section 2423 of Title 13 of the California Code of Regulations, and Part 89 of Title 40 of the Code of Federal Regulations. • Provide bio-diesel as an alternative fuel to standard diesel. • Provide vehicle charging stations. • Limit idling time for delivery trucks to five minutes. Deliveries exceeding that 5 minutes must turn off truck engines. • Provide an air compressor for auto tire inflation for drivers to maintain fuel efficiency with properly inflated tires. • Utilize energy efficient lighting within the building and around fueling canopies. • Utilize energy efficient controls for heating and air conditioning units within the building. **Section IV. Biological Resources** **IV.a.1** Prior to the issuance of grading or encroachment permit for construction of the roadside ditch along Knighton Road and Churn Creek Road, the project proponent shall obtain the necessary permits and approvals from the appropriate resource agencies. Permits/approvals may include issuance of a Nationwide Permit by the Army Corps of Engineers, issuance of Water Quality Certification by the State Water Board, or issuance of Waste Discharge Requirements (or a waiver of requirements) by the State Water Board.	Prior to the issuance of the first permit for construction of a project improvement.	Resource Management, Planning Division	

Mitigation Measure/Condition	Timing/Implementation	Enforcement/Monitoring	Verification (Date & Initials)
IV.a.2 The potential for introduction and spread of noxious weeds shall be avoided/minimized by: • Using only certified weed-free erosion control materials, mulch, and seed; • Limiting any import or export of fill material to material that is not known to be weed free; and • Requiring the construction contractor to thoroughly wash all equipment at a commercial wash facility prior to entering the job site and upon leaving the job site. Prior to the issuance of the first permit for construction of a project improvement, including but not limited to a grading, sewage disposal, building or encroachment permit, the applicant shall provide and the Department of Resource Management shall review and approve a Noxious Weed Control Plan outlining how the above will be achieved, including sources to be used for certified weed-free erosion control materials, mulch, and seed, details regarding the equipment washing locations and methods, how contractors and subcontractors will be informed of the plans requirements, and how the plan will be enforced by the applicant. **IV.a.3** Prior to the issuance of the first permit for construction of a project improvement, including but not limited to a grading, sewage disposal, building or encroachment permit, a qualified biologist, specifically those qualified under a research Memorandum of Understanding or authorizing Incidental Take Permit (as described on page 7 of CDFW's Guidelines), shall conduct surveys for special-status bumble bees prior to the start of construction. Three on-site surveys shall be conducted two to four weeks apart, weather depending, and when floral resources are present. 1. Species identification and photographic vouchers shall be submitted to CDFW and experts from the Bumble Bee Watch for species verification by an experienced taxonomist prior to the start of land modification and/or vegetation removal. 2. If special-status bumble bees are detected, a nesting survey as the protocol is described in CDFW's June 2023 Survey Considerations for CESA Candidate Bumble Bee Species, shall be performed throughout the project area. 3. If special-status bumble bees and/or their nests are detected, the potential for	Prior to issuance of a Grading or Encroachment Permit	Resource Management, Planning Division	

Mitigation Measure/Condition	Timing/Implementation	Enforcement/Monitoring	Verification (Date & Initials)
"take" as defined by Fish and Game Code section 86 shall be analyzed and quantified. If suitable avoidance and minimization measures to fully avoid take are not feasible, CDFW shall be consulted regarding the need for take authorization pursuant to Fish and Game Code section 2081(b). Otherwise, suitable avoidance and minimization measures to fully avoid take should be employed, and/or the formulation of a Mitigation and Monitoring Plan should be developed for impacts to suitable western bumble bee habitat. 4. All data, including negative and/or positive observations, shall be submitted to the CNDDB and Bumble Bee Watch.	Prior to issuance of a Grading or Encroachment Permit	Resource Management, Planning Division	
IV.d.1 In order to avoid impacts to nesting birds and raptors protected under the federal Migratory Bird Treaty Act and California Fish and Game Code Section 3503 and Section 3503.5, including their nests and eggs, one of the following shall be implemented (removal of raptor nests at any time of year is prohibited unless appropriate permits are obtained): • Vegetation removal and other ground-disturbance activities associated with construction shall occur between September 1 and January 31, when birds are not nesting; or • If vegetation removal or ground disturbance activities occur during the nesting season (February 1 – August 31), a pre-construction nesting survey shall be conducted by a qualified biologist to identify active nests in and adjacent to the work area . The survey shall consider acoustic impacts and line-of-sight disturbances occurring as a result of the project in order to determine a sufficient survey radius to avoid nesting birds. At a minimum, the survey report shall include a description of the area surveyed, date and time of the survey, ambient conditions, bird species observed in the area, a description of any active nests observed, any evidence of breeding behaviors (e.g., courtship, carrying nest materials or food, etc.), and a description of any outstanding conditions that may have impacted the survey results (e.g., weather conditions, excess noise, the presence of predators, etc.). The survey shall be conducted no more than one week prior to the initiation of construction. If construction activities are delayed or suspended for more than one week after the pre-construction survey, the site shall be resurveyed. If active nests are found, appropriate actions shall be implemented to ensure compliance with the Migratory Bird Treaty Act and California Fish and Game Code.	Through completion of project construction	Resource Management, Planning Division	

Mitigation Measure/Condition	Timing/Implementation	Enforcement/Monitoring	Verification (Date & Initials)
Compliance measures may include, but are not limited to, exclusion buffers, sound-attenuation measures, seasonal work closures based on the known biology and life history of the species identified in the survey, as well as ongoing monitoring by biologists.	Prior to issuance of a Grading or Encroachment Permit	Resource Management, Planning Division	
Section V. Cultural Resources			
V.b.1 Prior to the issuance of any grading or encroachment permit for the proposed project, the project applicant shall demonstrate that a qualified archaeologist has been retained to monitor and observe rough grading and trenching activities. If potentially significant archaeological resources are encountered during subsurface excavation activities, all construction activities within a 100-foot radius of the resource shall cease until a qualified archaeologist determines whether the resource requires further study. The County shall require that the applicant include a standard inadvertent discovery clause in every construction contract to inform contractors of this requirement. Any previously undiscovered resources found during construction shall be recorded on appropriate Department of Parks and Recreation forms and evaluated for significance in terms of California Environmental Quality Act criteria by a qualified archaeologist. Potentially significant cultural resources consist of but are not limited to stone, bone, fossils, wood, or shell artifacts or features, including hearths, structural remains, or historic dumpsites. If the resource is determined to be significant under CEQA, the County and a qualified archaeologist shall determine whether preservation in place is feasible. Such preservation in place is the preferred mitigation. If such preservation is infeasible, the qualified archaeologist shall prepare and implement a research design and archaeological data recovery plan for the resource. The archaeologist shall also conduct appropriate technical analyses, prepare a comprehensive written report and file it with the appropriate information center (California Historical Resources Information System), and provide for the permanent curation of the recovered materials.	Prior to issuance of a Grading or Building Permit	Resource Management, Planning Division	
V.b.2 Prior to the issuance of any grading or encroachment permit for the proposed project, a Cultural Awareness Training Program shall be provided to all construction managers and construction personnel prior to commencing any ground disturbance work at any of the project sites. The training shall be prepared and conducted by a qualified archaeologist to the satisfaction of the County Planning Department. The training may be discontinued when ground disturbance is completed. Construction personnel shall not be permitted to operate equipment within the construction area unless they have attended the training. A copy of the training materials and/or training video, as well			

Mitigation Measure/Condition	Timing/Implementation	Enforcement/Monitoring	Verification (Date & Initials)
as a list of the names of all personnel who attended the training and copies of the signed acknowledgment forms shall be submitted to the County Planning Department for their review and approval. **V.c.1** If in the event that previously unidentified evidence of human burial or human remains are discovered during project construction, work will stop at the discovery location, within 20 meters (66 feet), and any nearby area reasonably suspected to overlie human remains (Public Resources Code, Section 7050.5) the Shasta County Coroner must be informed and consulted, per State law. If the coroner determines the remains to be Native American, he or she shall contact the Native American Heritage Commission within 24 hours. The Native American Heritage Commission shall identify the person or persons it believes to be the most likely descendent. The most likely descendent will be given an opportunity to make recommendations for means of treatment of the human remains and any associated grave goods. when the commission is unable to identify a descendant or the descendants identified fail to make a recommendation, or the landowner or his or her authorized representative rejects the recommendation of the descendants and the mediation provided for in subdivision (k) of Section 5097.94, if invoked, fails to provide measures acceptable to the landowner, the landowner or his or her authorized representative shall reinter the human remains and items associated with Native American human remains with appropriate dignity on the property in a location not subject to further and future subsurface disturbance. Work in the area shall not continue until the human remains are dealt with according to the recommendations of the County Coroner, Native American Heritage Commission and/or the most likely descendent have been implemented. **Section X. Hydrology and Water Quality** **X.c.1** Prior to issuance of a grading permit or encroachment permit, the project applicant shall submit a final post construction stormwater management plan to the County concurrent with site improvement plans. 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 offsite 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. **X.c.2**			

Mitigation Measure/Condition	Timing/Implementation	Enforcement/Monitoring	Verification (Date & Initials)
To minimize public and private losses due to flooding within Zone AO, prior to issuance of a grading permit and/or building permit, the project applicant shall provide engineering plans and calculations demonstrating compliance with SCC Chapter 17.70 – Restrictive Flood (F-2) District. The plans shall be prepared to the satisfaction of and approved by the County Building Official. **Section XVIII. Tribal Cultural Resources** Refer to Mitigation Measure V.b.1 and V.b.2 in Section V. Cultural Resources **Section XIX. Utilities and Service Systems** Refer to Mitigation Measure X.c.1 in Section X. Hydrology and Water Quality			

David Schlegel

From: Iacona, Erika@Wildlife <Erika.Iacona@Wildlife.ca.gov>
Sent: Thursday, October 17, 2024 10:36 AM
To: David Schlegel
Subject: Early Consultation for Use Permit 22-0004 and Zone Amendment 22-0007, APN 055-160-012

Dear David Schlegel,

The California Department of Fish and Wildlife (CDFW) has received the consultation request for Use Permit 22-0004 and Zone Amendment 22-0007, is proposing to develop a convenience store and automotive fuel station on Knighton Road in Shasta County (Project). As a trustee for the state's fish and wildlife resources, CDFW has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and their habitat. As a responsible agency, CDFW administers the California Endangered Species Act (CESA) and other provisions of the Fish and Game Code that conserve the state's fish and wildlife public trust resources. CDFW offers the following comments and recommendations to the Lead Agency in our role as a trustee and responsible agency pursuant to the California Environmental Quality Act (CEQA), California Public Resources Code section 21000 et seq.

CDFW has reviewed the 2022 Biological Study Report (BSR), 2022 Draft Initial Study and Mitigated Negative Declaration (ISMND), and ISMND Figures. CDFW supports some of the proposed measures including landscaping with regionally appropriate native species, vegetated storm water drainage areas and nesting bird protection measures.

Since the BSR and ISMND were written, the state listing status of several species under CESA has changed (e.g., listing of Crotch's bumble bee) and the recognized ranges have changed. CDFW recommends updating all special status species lists and reevaluating those species with potential to occur based on current information.

Crotch's Bumble Bee
On September 30, 2022, the California Fish and Game Commission accepted a petition to list Crotch's bumble bee (*Bombus crotchii*, CBB) as endangered under CESA, advancing the species to the candidacy stage of the CESA listing process. Candidate species are granted full protection under CESA during this period. Take of any endangered, threatened, or candidate species that results from the Project is prohibited, except as authorized by state law (Fish & G. Code, §§ 86, 2062, 2067, 2068, 2080, 2085; Cal. Code Regs., tit. 14, § 786.9). Additionally, CBB has a state ranking of S2, of which are imperiled and extremely rare (often five or fewer populations) and is listed as an invertebrate of conservation priority under the Terrestrial and Vernal Pool Invertebrates of Conservation Priority.

CBB thrives in regions that offer a diverse array of flowering plants with suitable nesting sites, such as those available throughout the Project area. CBB may inhabit diverse habitats including woodlands, grasslands, shrublands, agricultural lands and urban landscapes. Without appropriate avoidance and

minimization measures for CBB, direct mortality and potentially significant indirect impacts associated with ground- and vegetation-disturbing activities may occur as a result of the Project. Indirect impacts may include loss of foraging plants, changes in foraging behavior, burrow collapse, nest abandonment, reduced nest success, and a reduction in health and vigor of eggs, young and/or queens.
Due to potentially suitable habitat throughout the Project area and the potential for significant impacts to CBB, CDFW recommends a CCB habitat assessment is performed by a qualified biologist. Please reference June 2023 Survey Considerations for California Endangered Species Act (CESA) Candidate Bumble Bee Species.

California Endangered Species Act
Please be advised that a CESA Incidental Take Permit must be obtained if the Project has the potential to result in "take" (hunt, pursue, catch, capture, kill, or attempt thereof) of plants or animals listed under CESA, either during construction or over the life of the project. Issuance of a CESA permit is subject to CEQA documentation; the CEQA document must specify impacts, mitigation measures, and a mitigation monitoring and reporting program. If the Project has the potential to result in take of a CESA-listed species, early consultation is encouraged, as significant modification to the Project may be necessary to minimize and fully mitigate impacts as required by Fish and Game Code Section 2081(b)(2).

Avoiding Inadvertent Wildlife Entrapment
If Project activities include trenching or excavating, CDFW recommends securely covering any open trench or excavation prior to stopping work each day and/or a wildlife exit ramp should be installed to prevent wildlife entrapment. If pipes are left out onsite, CDFW recommends inspection for wildlife prior to burying, capping, moving, or filling.

Submitting Data
CEQA requires that information developed in environmental documents be incorporated into a database which may be used to make subsequent or supplemental environmental determinations. (Public Resources Code, § 21003, subd. (e).) Accordingly, please report any special status species and natural communities detected during this Project's surveys to the CNDDB. For additional information about submitting data, please Submitting Data to the CNDDB.

Conclusion
CDFW looks forward to continued and regular consultation with the Lead Agency regarding biological resources and is eager to begin collaboration early in the Project development process. CDFW encourages the Lead Agency to engage CDFW as soon as possible and well before the formulation of the environmental document to discuss avoidance, minimization, and mitigation strategies. If you have any questions, please contact Erika Iacona, Senior Environmental Scientist, Specialist by email at R1CEQARedding@wildlife.ca.gov.

Please send all future consultation requests to R1CEQARedding@wildlife.ca.gov.

Kindly,
Erika
--
Erika Iacona
Senior Environmental Scientist, Specialist
R1 Climate and Conservation Planning
(530) 806-1389
601 Locust Street

Central Valley Regional Water Quality Control Board

8 October 2024

David Schlegel
Shasta County Department of Resource Management, Planning Division
1855 Placer Street, Suite 103
Redding, CA 96001

COMMENTS ON ZONE AMENDMENT 22-0007 & PARCEL MAP 22-0004 (MAVERIK AUTO & TRUCK/RV SERVICE STATION), APN NUMBERS 055-160-012, 0055-160-008, 055-160-009, & 055-160-008, REDDING, SHASTA COUNTY

The Central Valley Regional Water Quality Control Board (Central Valley Water Board) is a responsible agency for this project, as defined by the California Environmental Quality Act (CEQA). On 2 October 2024, we received your request for comments on Zone Amendment 22-0007 & Parcel Map 22-0004 (Maverik Auto & Truck/RV Service Station (Project).

The proposed project is to subdivide the 15.94-acre parcel into 2 parcels and a remainder and to amend the existing Planned Development zoning to the Highway Commercial (C-H) zone district in order to construct a 5,961-square-foot retail convenience store, sit-down restaurant and coffee shop, a 20-pump fuel island with a canopy for standard vehicles, a 10-pump fuel island with a canopy for trucks and RVs with 22 standard vehicle parking spaces, 2 accessible vehicle parking spaces and 8 designated EV parking spaces along with associated on-site landscape, lighting, commercial driveways and drainage improvements on Proposed Parcel 1 (4.99-acres). Construction of the project would include tree removal, grading to prepare the site for improvements, significant road and circulation improvements including roadside drainage conveyances and road widening along with the construction of an onsite wastewater treatment system to support the service station use described above. Proposed Parcel 2 would be 3.65-acres and has no current proposed use but would be eligible for uses which are permitted in the C-H zone district. The proposed remainder parcel would be 6.85-acres. The Project site is located on the northwest corner of Knighton Road and Churn Creek Road in the South Redding area.

Based on our review of the information submitted for the proposed project, we have the following comments:

Clean Water Act (CWA) Section 401, Water Quality Certification

The Central Valley Water Board has regulatory authority over wetlands and waterways under the Federal Clean Water Act (CWA) and the California Water Code, Division 7 (CWC). Discharge of dredged or fill material to waters of the United States requires a CWA Section 401 Water Quality Certification from the Central Valley Water Board. Typical activities include any modifications to these waters, such as stream crossings, stream bank modifications, filling of wetlands, etc. 401 Certifications are issued in combination with CWA Section 404 Permits issued by the Army Corps of Engineers. The proposed project must be evaluated for the presence of jurisdictional waters, including wetlands and other waters of the State. Steps must be taken to first avoid and minimize impacts to these waters, and then mitigate for unavoidable impacts. Both the Section 404 Permit and Section 401 Water Quality Certification must be obtained prior to site disturbance. Any person discharging dredge or fill materials to waters of the State must file a report of waste discharge pursuant to Sections 13376 and 13260 of the California Water Code. Both the requirements to submit a report of waste discharge and apply for a Water Quality Certification may be met using the same application form, found at Water Boards 401 Water Quality Certification and/or WDRs Application (https://www.waterboards.ca.gov/water_issues/programs/cwa401/#resources).

General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (CGP)

Construction activity, including demolition, resulting in a land disturbance of one acre or more must obtain coverage under the CGP. The Project must be conditioned to implement storm water pollution controls during construction and post-construction as required by the CGP. To apply for coverage under the CGP the property owner must submit Permit Registration Documents electronically prior to construction. Detailed information on the CGP can be found on the State Water Board website NPDES 2022 Construction Stormwater General Permit | California State Water Resources Control Board
(https://www.waterboards.ca.gov/water_issues/programs/stormwater/construction/general_permit_reissuance.html).

Isolated wetlands and other waters not covered by the Federal Clean Water Act

Some wetlands and other waters are considered "geographically isolated" from navigable waters and are not within the jurisdiction of the Clean Water Act. (e.g., isolated wetlands, vernal pools, or stream banks above the ordinary high-water mark). Discharge of dredged or fill material to these waters may require either individual or general waste discharge requirements from the Central Valley Water Board. If the U.S. Army Corps of Engineers determine that isolated wetlands or other waters exist at the project site, and the project impacts or has potential to impact these non-jurisdictional waters, a Report of Waste Discharge and filing fee must be submitted to the Central Valley Water Board. The Central Valley Water Board will consider the information provided and either issue or waive Waste Discharge Requirements. Failure to obtain waste discharge requirements or a waiver may result in enforcement action.

Any person discharging dredge or fill materials to waters of the State must file a report of waste discharge pursuant to Sections 13376 and 13260 of the CWC. Both the requirements to submit a report of waste discharge and apply for a Water Quality Certification may be met using the same application form, found at Water Boards 401 Water Quality Certification and/or WDRs Application (https://www.waterboards.ca.gov/water_issues/programs/cwa401/#resources).

Post-Construction Storm Water Requirements

Studies have found the amount of impervious surface in a community is strongly correlated with the impacts on community's water quality. New development and redevelopment result in increased impervious surfaces in a community. Post-construction programs and design standards are most efficient when they involve (i) low impact design; (ii) source controls; and (iii) treatment controls. To comply with Phase II Municipal Storm Water Permit requirements, Shasta County Department of Public Works must ensure that new developments comply with specific design strategies and standards to provide source and treatment controls to minimize the short and long-term impacts on receiving water quality. The design standards include minimum sizing criteria for treatment controls and established maintenance requirements. The proposed project must be conditioned to comply with post-construction standards adopted by Shasta County Department of Public Works in compliance with their Phase II Municipal Storm Water Permit.

If you have any questions or comments regarding this matter, please contact me at (530) 224-4784 or by email at Jerred.Ferguson@waterboards.ca.gov.

Jerred Ferguson
Environmental Scientist
Storm Water & Water Quality Certification Unit

JTF: db

cc:
via email: Suzzi Grigoryan, Toluca Lake
Brian Huffaker, Boise, ID
Brittnee Elliott, Boise, ID

From: Battles, Michael@DOT
To: David Schlegel
Cc: Grah, Kathy M@DOT; Clark, Skip@DOT; Babcock, Kelly M@DOT
Subject: Caltrans Comments-Maverik Gas Station, Knighton Road
Date: Tuesday, October 22, 2024 3:03:53 PM

Good afternoon David,

Thank you for the opportunity to review and comment on the Environmental Impact Study for the proposed Maverik Gas Station, to be located on Knighton Road, Shasta County. Below are Caltrans comments regarding the project as currently proposed:

Traffic Operations Comments

VMT: A previous submittal was reviewed and found to be acceptable. No comments or conditions.

Operations: The provided analysis demonstrates that the proposed development should not adversely affect the operation of the freeway interchange. LOS and ramp queueing are both acceptable.

Exhibit 15 demonstrates that an STAA truck may be able to make a left turn from EB Knighton to NB Churn Creek Road but the path of travel will fall outside the lane and utilize both the shoulder and crosswalk. Since this is not a State facility, Caltrans does not have conditions, but recommend improvements to the intersection to mitigate this condition.

Safety: We are concerned with the recommendation to change the EB Left at the Knighton/Churn Creek intersection to protected-permissive. Given the high approach speeds from WB Knighton Road, despite the adequate sight distance, the proposed condition could increase the likelihood of high-speed broadside and head on collisions. Both of these type of collisions are associated with greater injuries and fatalities. Prior to accepting the proposed mitigation, it is recommended that a safety analysis be performed by a licensed civil engineer to quantify the potential ramifications to collisions and severity.

Once again, thank you for the opportunity to review and comment on the proposed Maverik Gas Station project on Knighton Road. Please let me know if there are any questions or comments.

Sincerely,

Mike Battles
Local Development Review Coordinator
Caltrans District 2

October 7, 2024

Shasta County Department of Resource Management
1855 Placer Street
Redding, California 96001

RE: Maverik Churn Creek Knighton Road

Dear: David Schlegel

Thank you for your project notification letter dated September 30, 2024, regarding the opportunity to engage in formal consultation under Assembly Bill 52 and the California Environmental Quality Act for the proposed Cultural Resources Identification Effort for the proposed Maverik Churn Creek Knighton Road in Tehama County, California. We appreciate your effort to contact us and hereby request consultation.

As you know, Public Resources Code §21080.3.1 (a) states that "The legislation finds and declares that California Native American tribes traditionally and culturally affiliated with a geographic area may have expertise concerning their tribal cultural resources."

The Cultural Resources Department has reviewed the proposed project and concluded that it is within the Aboriginal territories of the Paskenta Band of Nomlaki Indians. Therefore, we have a cultural interest and authority in the proposed project area and would like to initiate a formal consultation with the lead agency. At the time of consultation, please provide the Cultural Resources Department with the proposed project timeline, project details and cultural resources studies of the area.

Please contact the following individual to coordinate a date and time for the Consultation meeting:

Laverne Bill, Tribal Historic Preservation Officer
Paskenta Band of Nomlaki Indians
Office: (530) 781-6699
Email: lbill@paskenta.org

Please refer to the following number **P-09302024-03** for any correspondence concerning this project.

Thank you for providing us with the opportunity to comment.

Sincerely,

Laverne Bill
Tribal Historic Preservation Officer

SHASTA COUNTY DEPARTMENT OF RESOURCE MANAGEMENT
PLANNING DIVISION
1855 Placer Street, Suite 103, Redding, CA 96001

Date Sent: September 20, 2024

TO INTERESTED/AFFECTED AGENCIES:
Shasta County, acting as the lead agency under the California Environmental Quality Act (CEQA), has determined that an Initial Study will be required for the project described below. This is a request for informal consultation with your agency, as required by CEQA Guidelines Section 15063 (g), prior to the preparation of the formal Initial Study. A draft initial study can be provided in addition to this referral for your review as the applicant has provided several studies for environmental review and proposes mitigation measures to address project impacts. If you'd like a copy of the draft initial study please email me at dschlegel@shastacounty.gov. Please review and comment on the project and return this form (with comments attached if more space is needed) prior to: **October 22, 2024**.

* *

PROJECT DATA

PROJECT: Zone Amendment 22-0007 & Parcel Map 22-0004 (Maverik Auto & Truck/RV Service Station)

APPLICANT/OWNER: GRH Pocatello Square LLC, ETAL c/o Hawkins Companies LLC, 855 Broad Street, Suite 300, Boise, ID 83702

REPRESENTATIVE: Suzzi Grigoryan, 10061 Riverside Drive, #760, Toluca Lake, CA 91602

PROJECT DESCRIPTION: GRH Pocatello Square, LLC, via a team of consultants has applied for Zone Amendment 22-0007 & Parcel Map 22-0004 to subdivide the 15.94-acre parcel adjacent to Knighton Road (APN: 055-160-012) into 2 Parcels and a remainder and to amend the existing Planned Development (PD) zoning to the Highway Commercial (C-H) zone district in order to construct a 5,961-square-foot retail convenience store, sit-down restaurant and coffee shop, a 20-pump fuel island with a canopy for standard vehicles, a 10-pump fuel island with a canopy for trucks and RVs with 22 standard vehicle parking spaces, 2 accessible vehicle parking spaces and 8 designated EV parking spaces along with associated on-site landscape, lighting, commercial driveways and drainage improvements on Proposed Parcel 1 (4.99-acres). Construction of the project would include tree removal, grading to prepare the site for improvements, significant road and circulation improvements including roadside drainage conveyances and road widening along with the construction of an onsite wastewater treatment system to support the service station use described above. Proposed Parcel 2 would be 3.65-acres and has no current proposed use but would be eligible for uses which are permitted in the C-H zone district. The proposed remainder parcel would be 6.85-acres. The land is currently undeveloped.

LOCATION: The project site is located on the northwest corner of Knighton Road and Churn Creek Road in the South Redding area (Assessor's Parcel Numbers 055-160-008, 055-160-009 & 055-160-008).

* *

AGENCY RESPONSE

☐ No Comment: Note: Your agency's approval will be assumed if no response is received by the above date.

☒ We have reviewed the subject proposal and offer the following comment(s):
No additional Storm drain Connections into ACID Canal unless permit applied for, appropriate fees paid, and Board of Directors approves. What is the plan for our open ditch

Signed: [signature], General Manager

For (Agency): Anderson Cottonwood Irrigation District

Contact Operations Manager Ben Duv
530 364-3803 or Gen Mgr Daniel R
530 209-1350 for questions

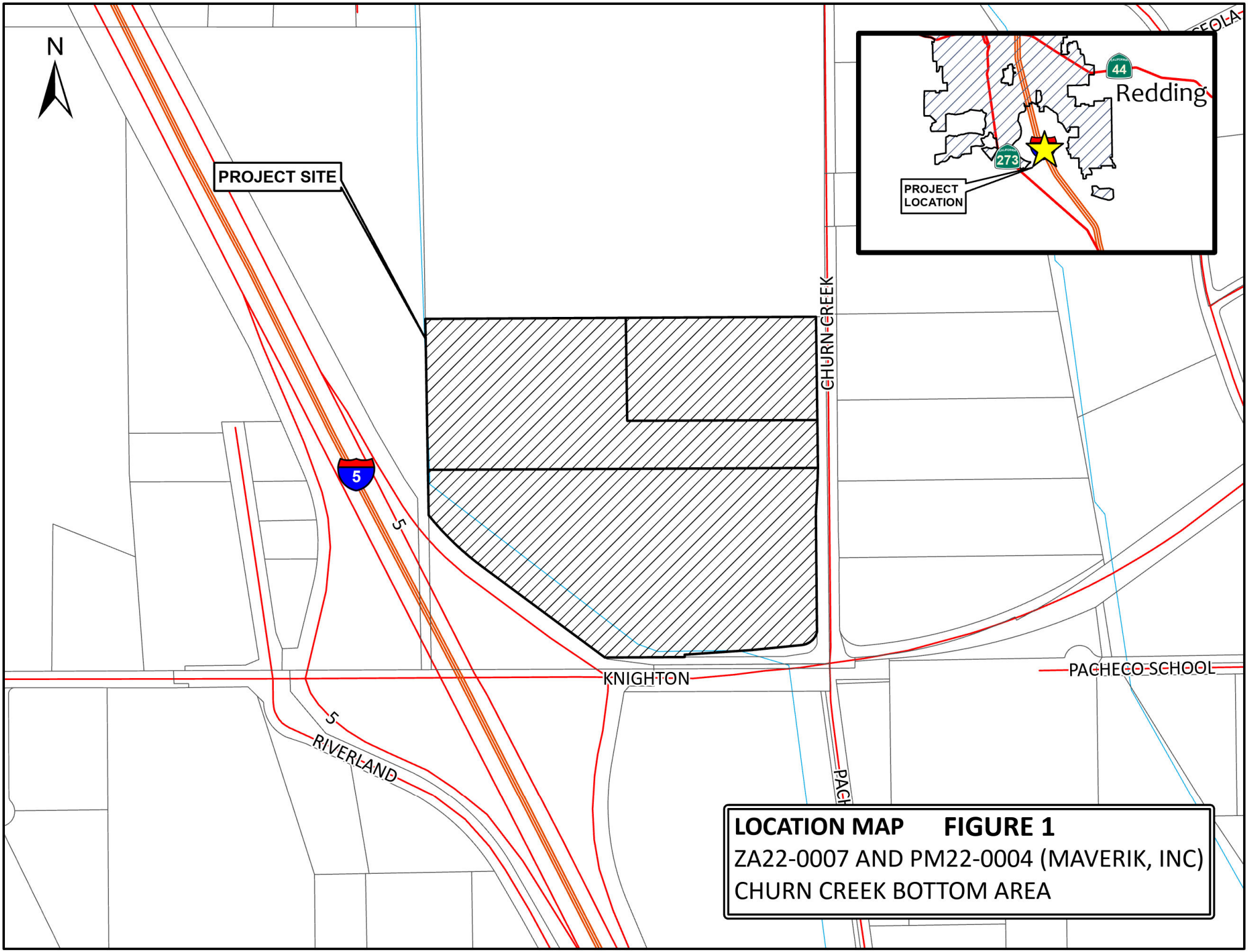
* *

Any questions may be directed to David Schlegel at (530) 225-5532, or dschlegel@co.shasta.ca.us

Sincerely,

[signature]

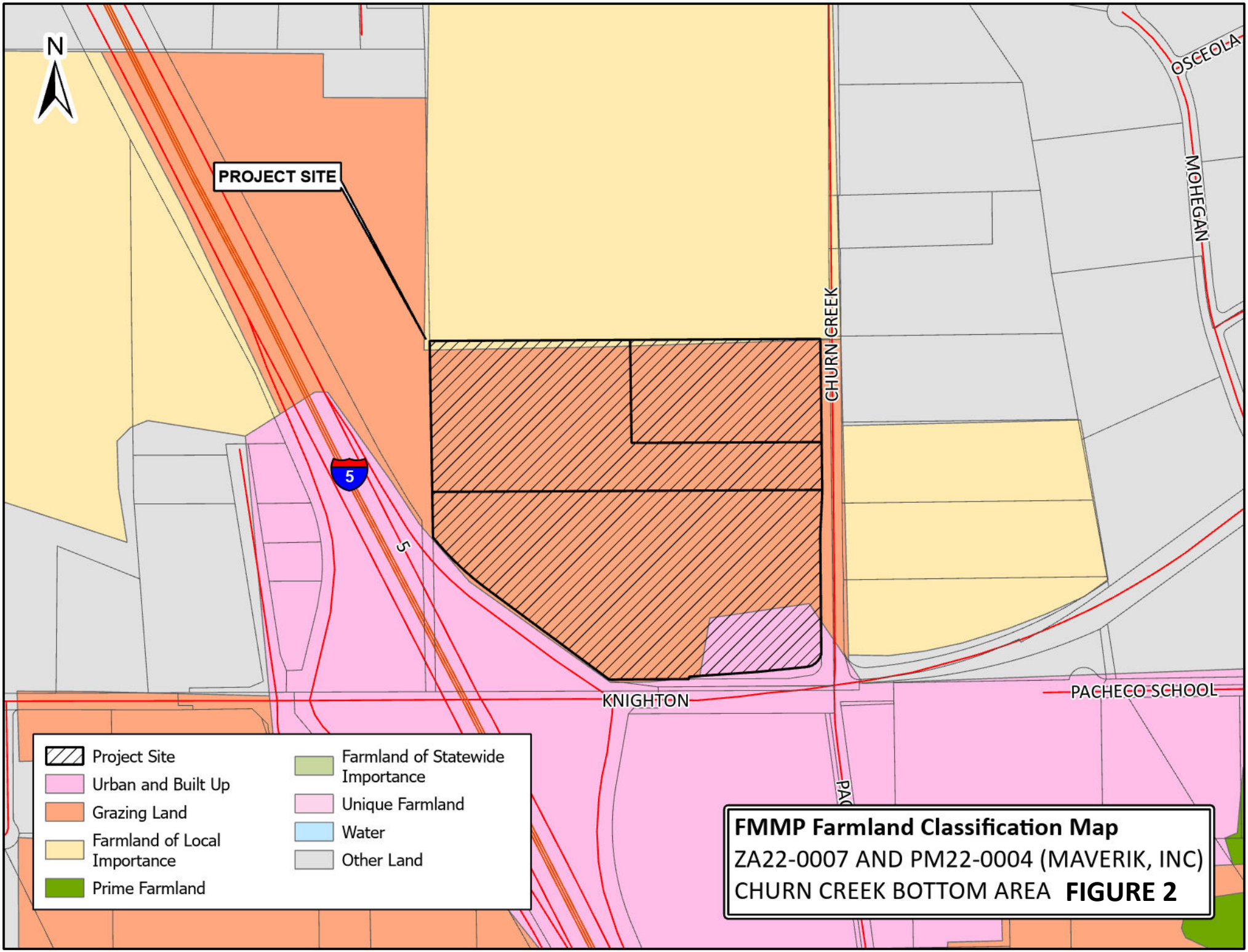
David Schlegel, AICP, Senior Planner
Planning Division
Department of Resource Management

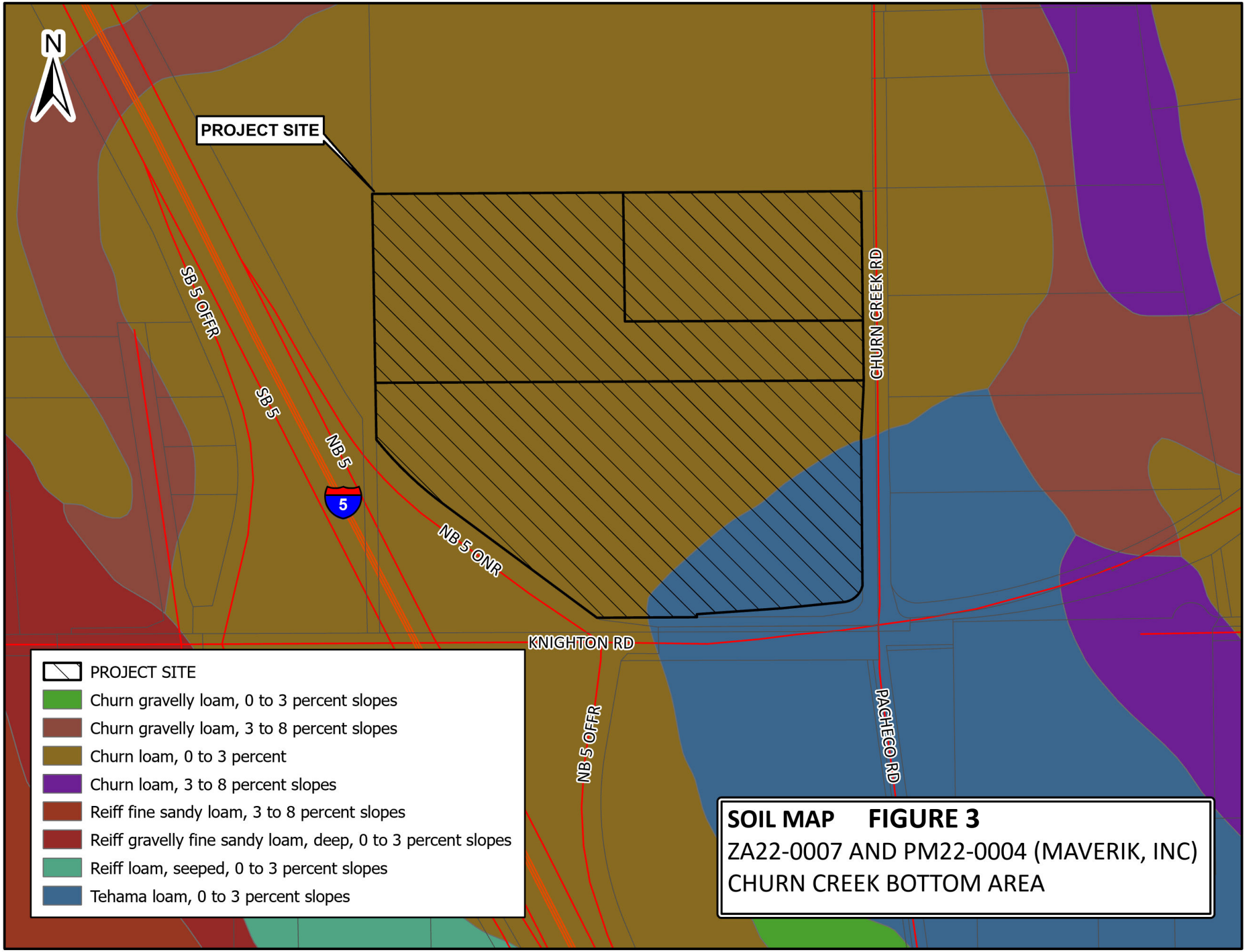


LOCATION MAP **FIGURE 1**

ZA22-0007 AND PM22-0004 (MAVERIK, INC)

CHURN CREEK BOTTOM AREA

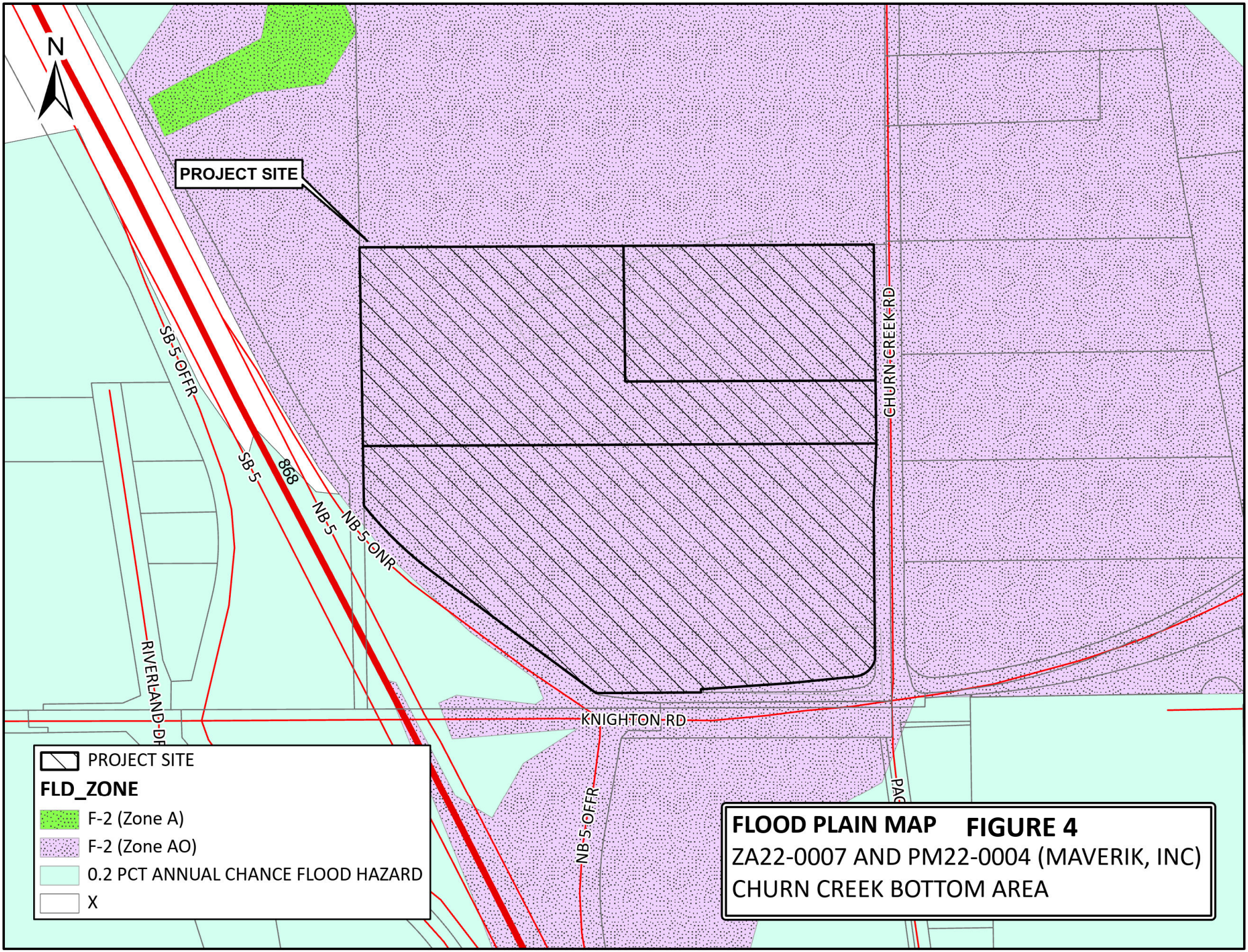

N
PROJECT SITE
CHURN CREEK
OSCEOLA
MOHEGAN
5
5
KNIGHTON
PACHECO SCHOOL
PAC
Project Site
Urban and Built Up
Grazing Land
Farmland of Local Importance
Prime Farmland
Farmland of Statewide Importance
Unique Farmland
Water
Other Land
FMMP Farmland Classification Map
ZA22-0007 AND PM22-0004 (MAVERIK, INC)
CHURN CREEK BOTTOM AREA FIGURE 2



SOIL MAP **FIGURE 3**

ZA22-0007 AND PM22-0004 (MAVERIK, INC)

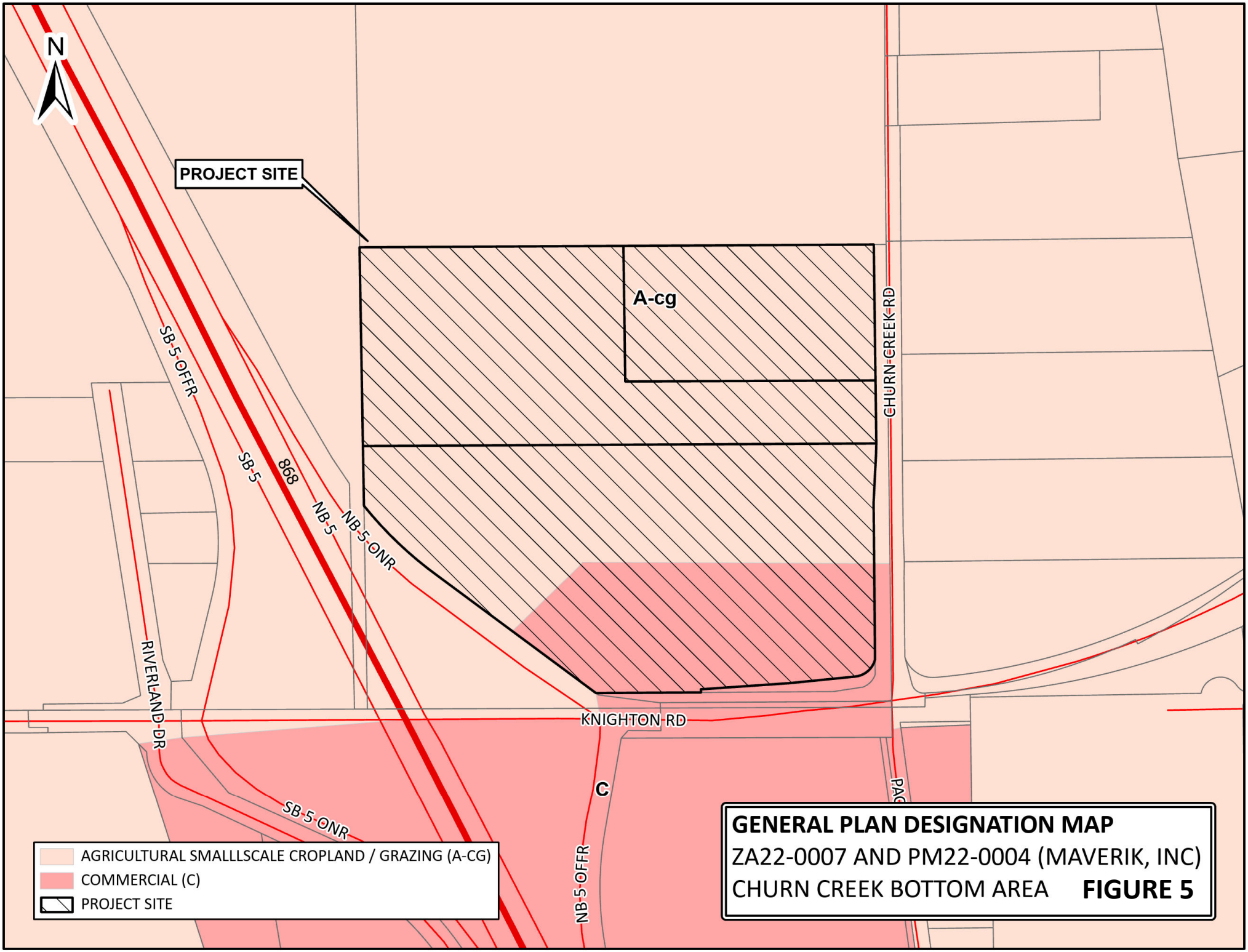
CHURN CREEK BOTTOM AREA

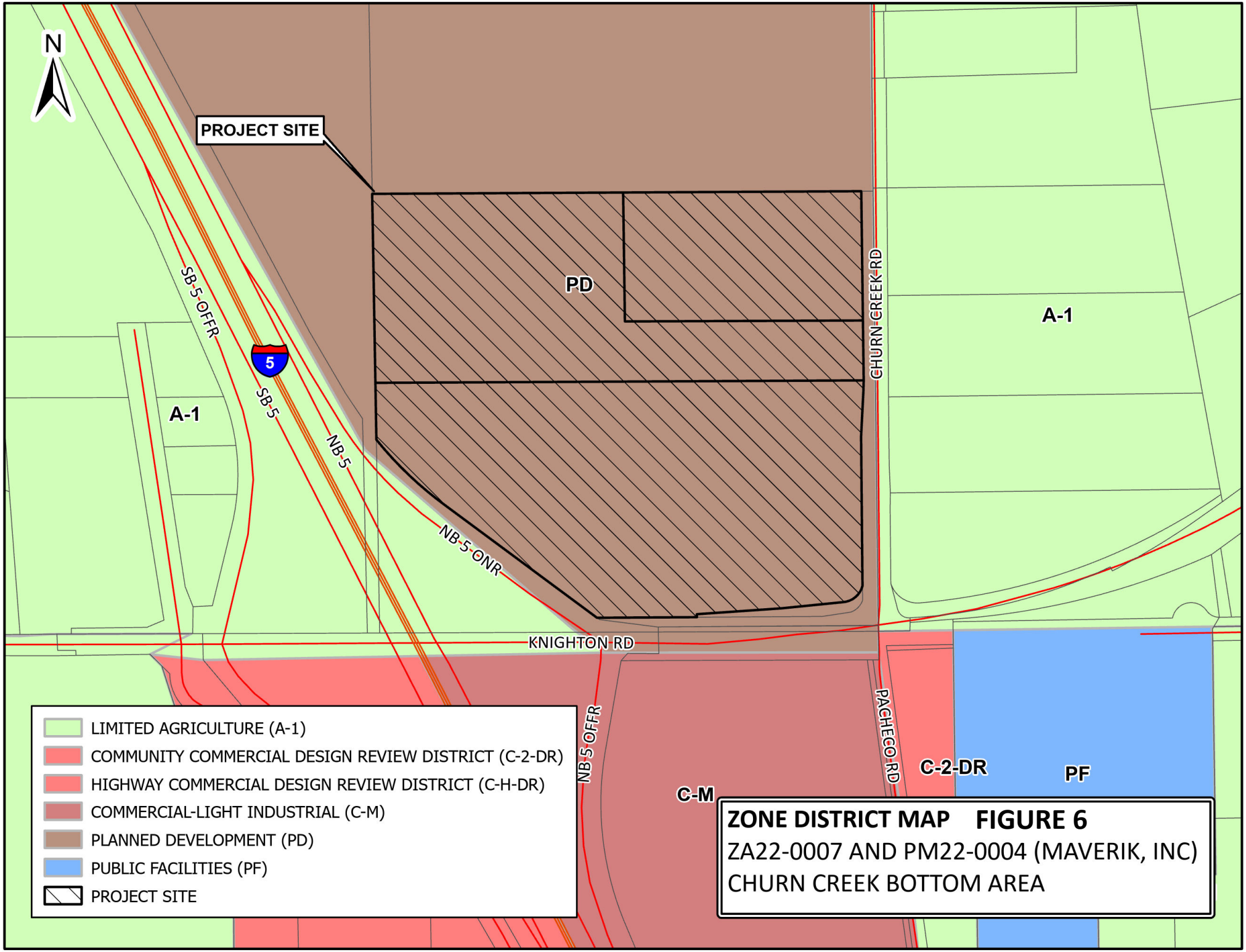


FLOOD PLAIN MAP **FIGURE 4**

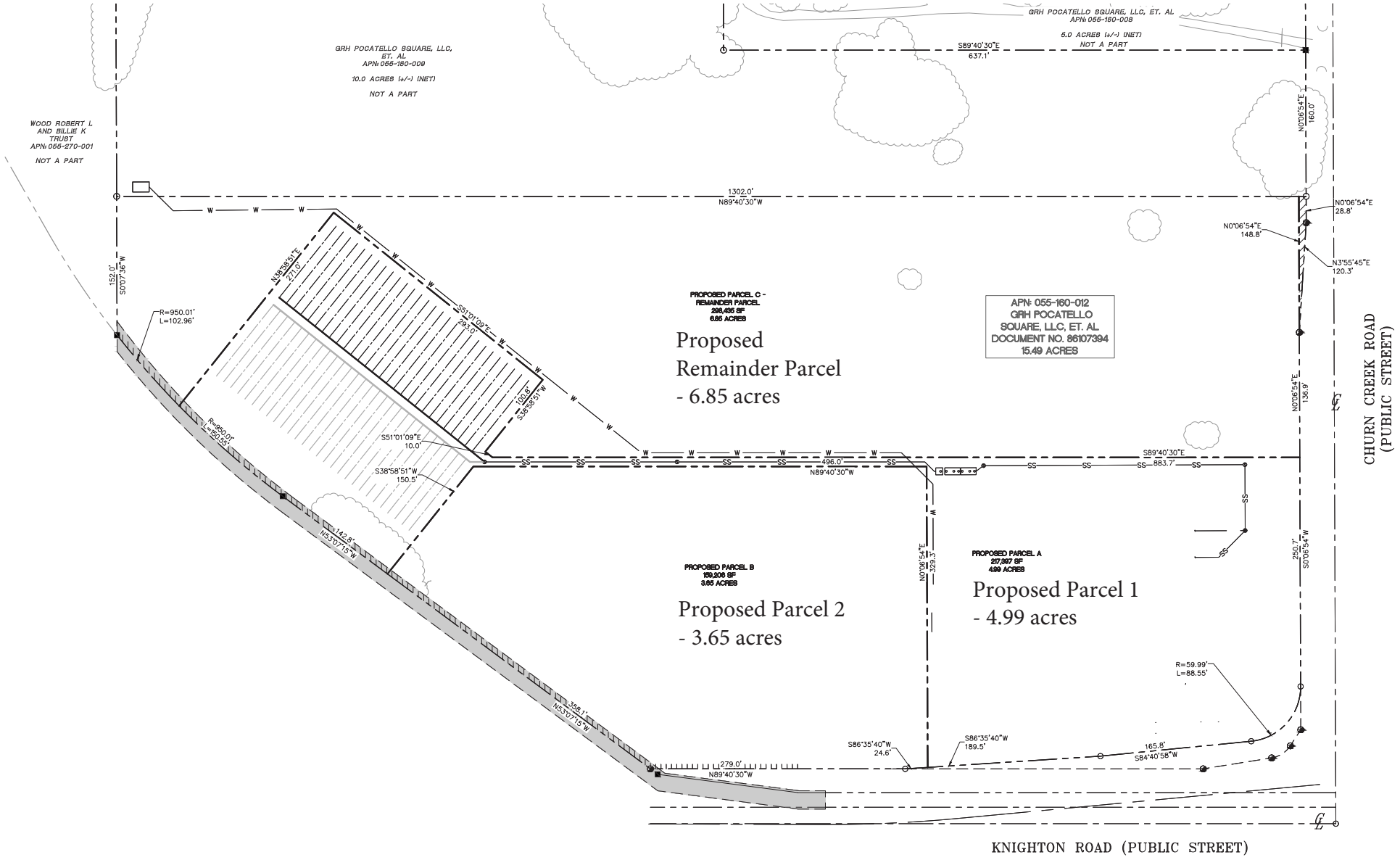
ZA22-0007 AND PM22-0004 (MAVERIK, INC)

CHURN CREEK BOTTOM AREA


N
PROJECT SITE
A-cg
SB-5-OFFR
SB-5
868
NB-5
NB-5-ONR
CHURN-CREEK-RD
RIVERLAND-DR
KNIGHTON-RD
SB-5-ONR
C
NB-5-OFFR
AGRICULTURAL SMALLLSCALE CROPLAND / GRAZING (A-CG)
COMMERCIAL (C)
PROJECT SITE
GENERAL PLAN DESIGNATION MAP
ZA22-0007 AND PM22-0004 (MAVERIK, INC)
CHURN CREEK BOTTOM AREA
FIGURE 5


N
PROJECT SITE
PD
A-1
A-1
SB-5-OFFR
SB-5
NB-5
NB-5-ONR
CHURN CREEK RD
KNIGHTON RD
NB-5-OFFR
PACHECO RD
C-2-DR
PF
C-M
LIMITED AGRICULTURE (A-1)
COMMUNITY COMMERCIAL DESIGN REVIEW DISTRICT (C-2-DR)
HIGHWAY COMMERCIAL DESIGN REVIEW DISTRICT (C-H-DR)
COMMERCIAL-LIGHT INDUSTRIAL (C-M)
PLANNED DEVELOPMENT (PD)
PUBLIC FACILITIES (PF)
PROJECT SITE
ZONE DISTRICT MAP FIGURE 6
ZA22-0007 AND PM22-0004 (MAVERIK, INC)
CHURN CREEK BOTTOM AREA

MAVERIK SHASTA SITE PLAN
19482 KNIGHTON ROAD
REDDING, CA 96002



SOURCE: Kimley-Horn, 2024

Figure 7: Proposed Parcel Map

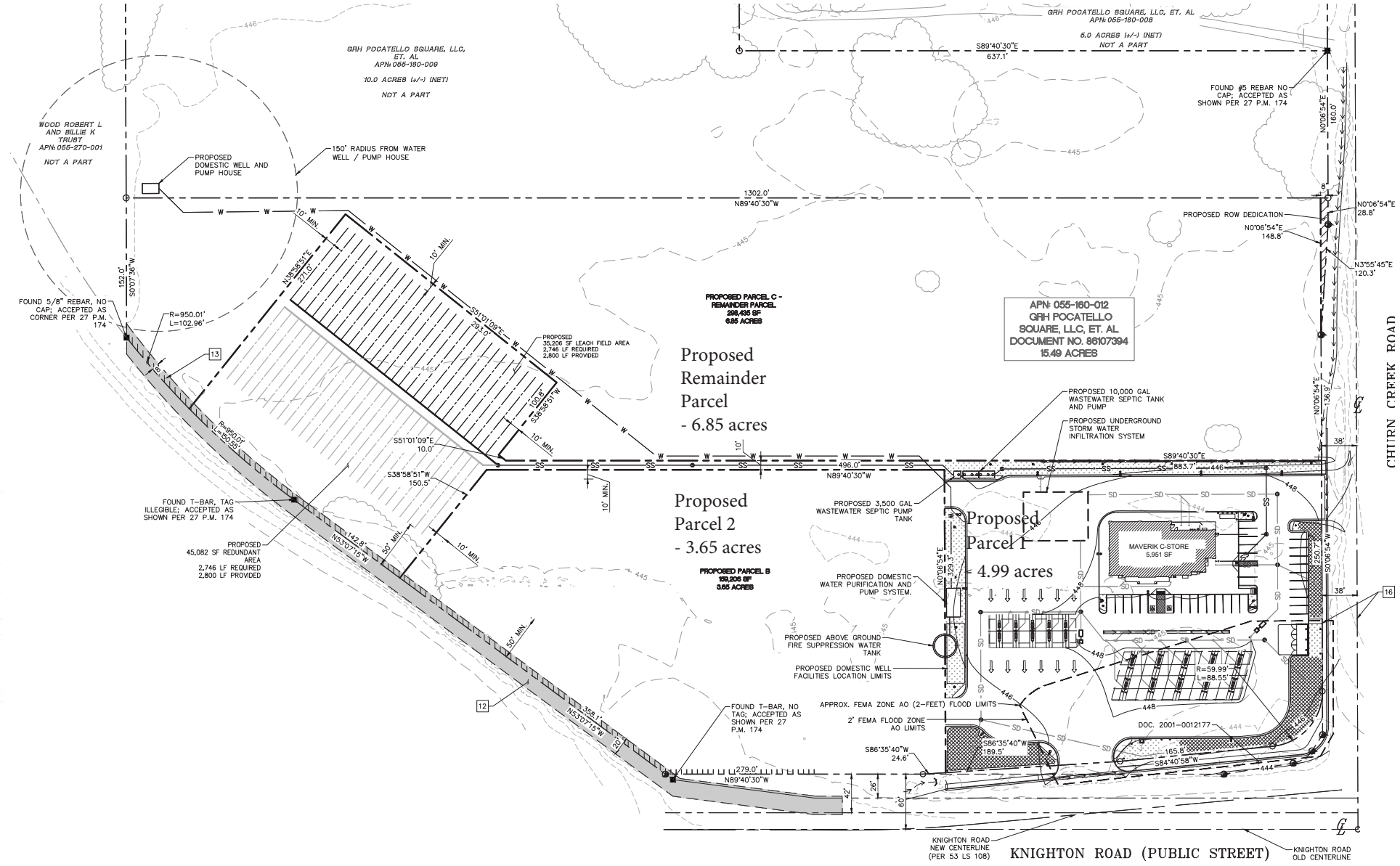
Maverik - Knighton Road
Initial Study/Mitigated Negative Declaration

Not to scale

Kimley»Horn

MAVERIK SHASTA SITE PLAN

19482 KNIGHTON ROAD
REDDING, CA 96002



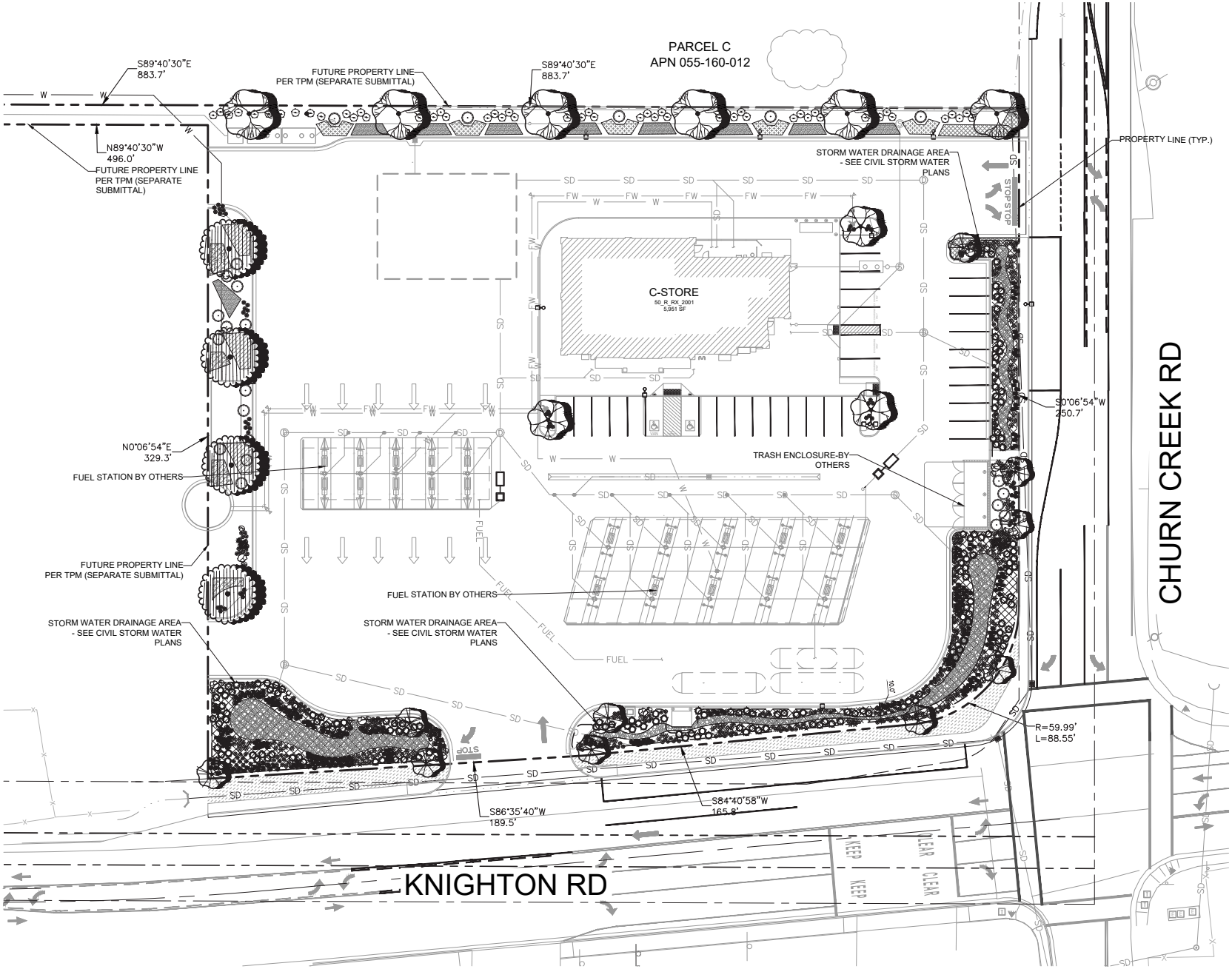
SOURCE: Kimley-Horn, 2024

Figure 8: Proposed Site Plan

Maverik - Knighton Road
Initial Study/Mitigated Negative Declaration

Not to scale

Kimley»Horn



SOURCE: Kimley-Horn, 2024

Figure 9: Landscape Plan

Maverik - Knighton Road
Initial Study/Mitigated Negative Declaration

Not to scale

Kimley»Horn

Existing Conditions

Proposed Conditions

SOURCE: Kimley-Horn, 2022

Figure 10: Visual Simulations A

Maverik - Knighton Road

Initial Study/Mitigated Negative Declaration

Not to scale

Kimley»Horn

Existing Conditions

Proposed Conditions

SOURCE: Kimley-Horn, 2022

Figure 11: Visual Simulations B

Maverik - Knighton Road

Initial Study/Mitigated Negative Declaration

Not to scale

Kimley»Horn

2 FRONT PERSPECTIVE - FRONT LEFT
SCALE:

1 BUILDING PERSPECTIVE - FRONT RIGHT
SCALE:

PROPOSED MAVERIK C-STORE

Figure 12a

Prototype Version: 50_R_XR_2101
Building Square Footage: 5,951 SF
Construction Type/Occupancy Classification: V-B / M

PERSPECTIVE VIEWS

MAVERIK

185 S. State Street
Salt Lake City, Utah 84111

KEYED NOTES

04.05	CULTURED STONE VENEER, SKYLINE, COUNTRY LEDGESTONE
04.06	CULTURED STONE VENEER CAP, SKYLINE, COUNTRY LEDGESTONE
05.01	PRE-FINISHED GUTTER, BRITE RED
05.69	STEEL AWNING, COLOR P-9
06.04	FIBER CEMENT BOARD & BATTEN SIDING, BB-2
06.05	FIBER CEMENT BOARD & BATTEN SIDING, BB-1
06.06	FIBER CEMENT TRIM BB-3
06.30	HORIZONTAL JOINT IN SIDING
08.02	ALUMINUM STOREFRONT SYSTEM, DARK BRONZE
08.04	HOLLOW METAL DOOR AND FRAME, PAINTED AGED PEWTER
08.05	WINDOW, SEE SCHEDULE
32.01	CHAIN LINK FENCE WITH PRIVACY SLATS. COLOR TO MATCH BUILDING FIELD COLOR

2 LEFT ELEVATION
SCALE: 1/4" = 1'-0"

1 FRONT ELEVATION
SCALE: 1/4" = 1'-0"

PROPOSED MAVERIK C-STORE

Figure 12b

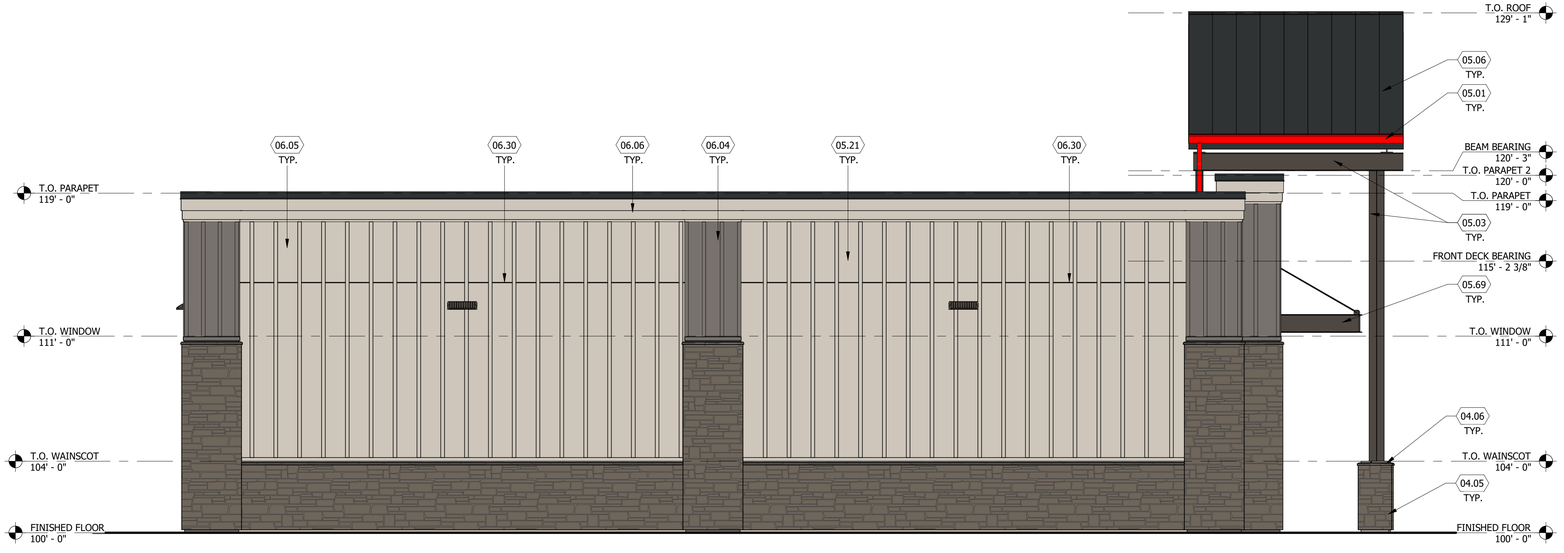
Prototype Version: 50_R_XR_2101
Building Square Footage: 5,951 SF
Construction Type/Occupancy Classification: V-B / M

EXTERIOR ELEVATIONS

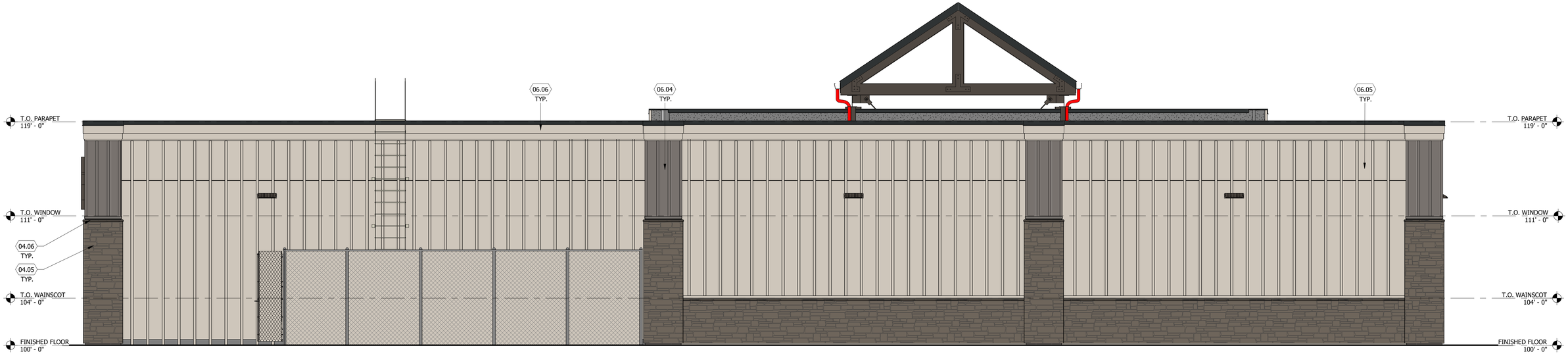
185 S. State Street
Salt Lake City, Utah 84111

KEYED NOTES

04.05	CULTURED STONE VENEER, SKYLINE, COUNTRY LEDGESTONE
04.06	CULTURED STONE VENEER CAP, SKYLINE, COUNTRY LEDGESTONE
05.01	PRE-FINISHED GUTTER, BRITE RED
05.03	PAINTED STEEL, BLACK FOX
05.06	MBCI PRE-FINISHED METAL ROOF, 1 3/4" STANDING SEAM, MIDNIGHT BRONZE
05.21	PRE-FINISHED METAL COPING, COLOR C-1
05.69	STEEL AWNING, COLOR P-9
06.04	FIBER CEMENT BOARD & BATTEN SIDING, BB-2
06.05	FIBER CEMENT BOARD & BATTEN SIDING, BB-1
06.06	FIBER CEMENT TRIM BB-3
06.30	HORIZONTAL JOINT IN SIDING



2 RIGHT ELEVATION
SCALE: 1/4" = 1'-0"



1 REAR ELEVATION
SCALE: 1/4" = 1'-0"

PROPOSED MAVERIK C-STORE

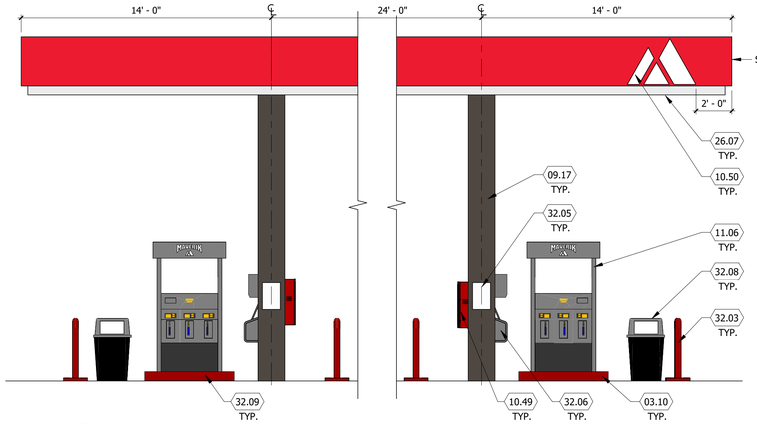
Figure 12c

Prototype Version: 50_R_XR_2101
Building Square Footage: 5,951 SF
Construction Type/Occupancy Classification: V-B / M

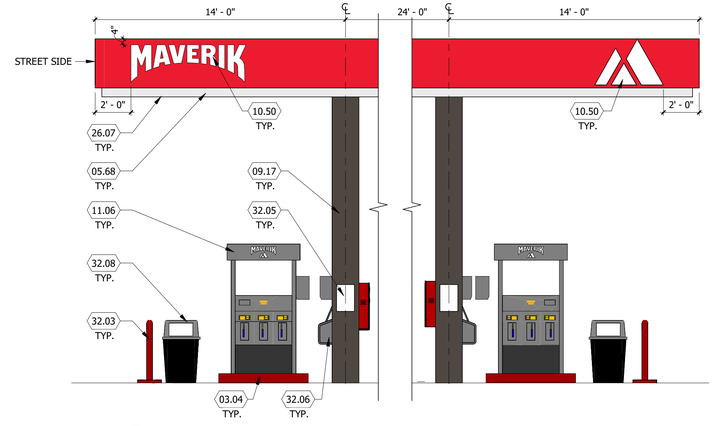
EXTERIOR ELEVATIONS

MAVERIK

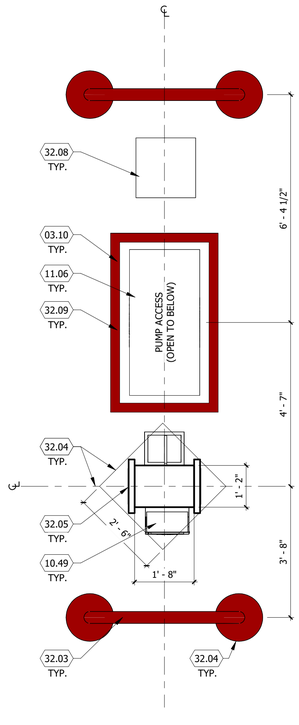
185 S. State Street
Salt Lake City, Utah 84111



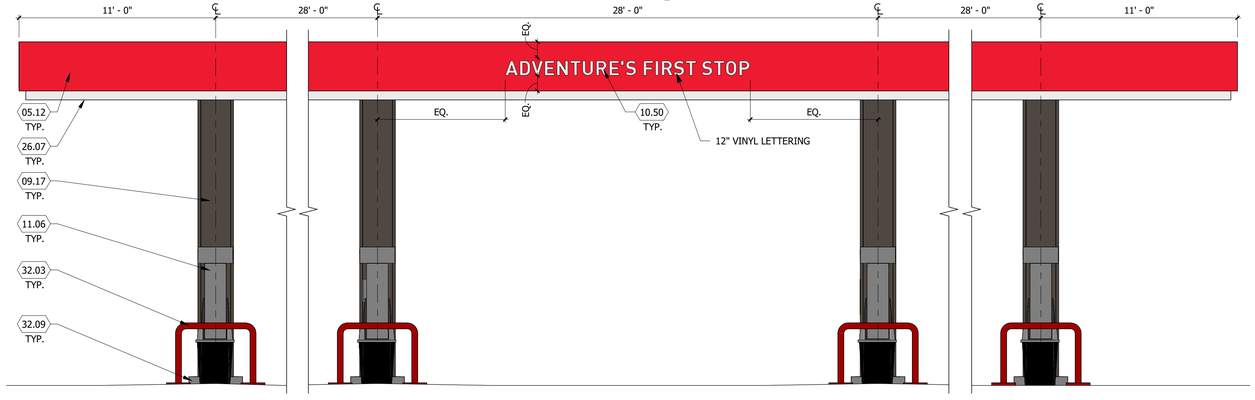
5 FUEL DISPENSING CANOPY - END ELEVATION
SCALE: 1/4" = 1'-0"



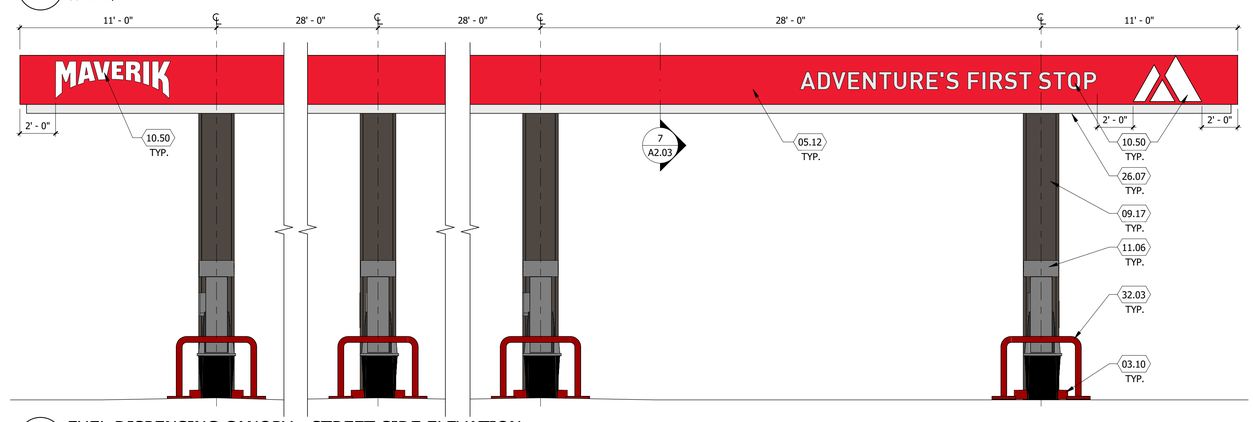
4 FUEL DISPENSING CANOPY - END ELEVATION
SCALE: 1/4" = 1'-0"



2 CANOPY COLUMN PLAN
SCALE: 1/2" = 1'-0"



3 FUEL DISPENSING CANOPY - BUILDING SIDE ELEVATION
SCALE: 1/4" = 1'-0"



1 FUEL DISPENSING CANOPY - STREET SIDE ELEVATION
SCALE: 1/4" = 1'-0"

KEYED NOTES

03.04	REINFORCED CONCRETE PAD
03.10	6" MIN. RAISED CONCRETE ISLAND W/ TOOLED EDGES AND CORNERS. VERIFY SIZE W/ DISPENSER SUPPLIER +/-5'-0" X 3'-0" (NO METAL FORM). ACCESSIBLE ISLAND TO BE 6"; SEE CIVIL DRAWINGS FOR LOCATION
05.12	ALUMINUM COMPOSITE METAL PANEL, EASTMAN RED
05.68	ALUMINUM COMPOSITE METAL PANEL, WHITE
09.17	PANEL COLUMN CLADDING, COLOR TO MATCH P-9
10.49	4A:40 BC FIRE EXTINGUISHER W/ CASE, LOCATE WITHIN 75' OF ALL PUMPS, DISPENSERS, OR STORAGE TANK. LOCATION TO BE FINALIZED BY FIRE MARSHAL
10.50	SIGNAGE TO BE COORDINATED BY FUEL CANOPY CONTRACTOR WITH OWNER
11.06	DISPENSING STATION (BY OTHERS)
26.07	ALL LIGHT FIXTURES (NOT SHOWN) TO BE FLUSH MOUNTED WITHIN THE DECK PANEL SOFFIT (SOFFIT COLOR P-7). SEE ELECTRICAL AND FUEL DISPENSING DRAWINGS
32.03	4" DIAMETER "U" BOLLARD, SET AND FILLED W/ CONCRETE, SEE CIVIL DRAWINGS PAINTED P-4
32.04	EXPANSION JOINTS, TO BE FILLED W/ "JET FUEL RESISTANT" SEALANT, SEE CIVIL DRAWINGS
32.05	SIGNAGE, BY OWNER, TO COMPLY WITH IFC 2305.6 AND POSTED ON EACH SIDE OF COLUMN
32.06	S.S.I. (WINDOW WASH/PAPER TOWEL) PROVIDED BY OWNER INSTALLED BY CONTRACTOR, MOUNTED TO COLUMN PER ADA REQUIREMENTS (4'-0" MAX A.F.F. TO PAPER TOWEL FOLD)
32.08	TRASH CONTAINER, PROVIDED BY OWNER
32.09	PAINT CONCRETE CURB EDGE P-4, SEE SCHEDULE ON SHEET A6.03

PROPOSED MAVERIK C-STORE

Figure 12d

Prototype Version: 50_R_XR_2101
Building Square Footage: 5,951 SF
Construction Type/Occupancy Classification: V-B / M

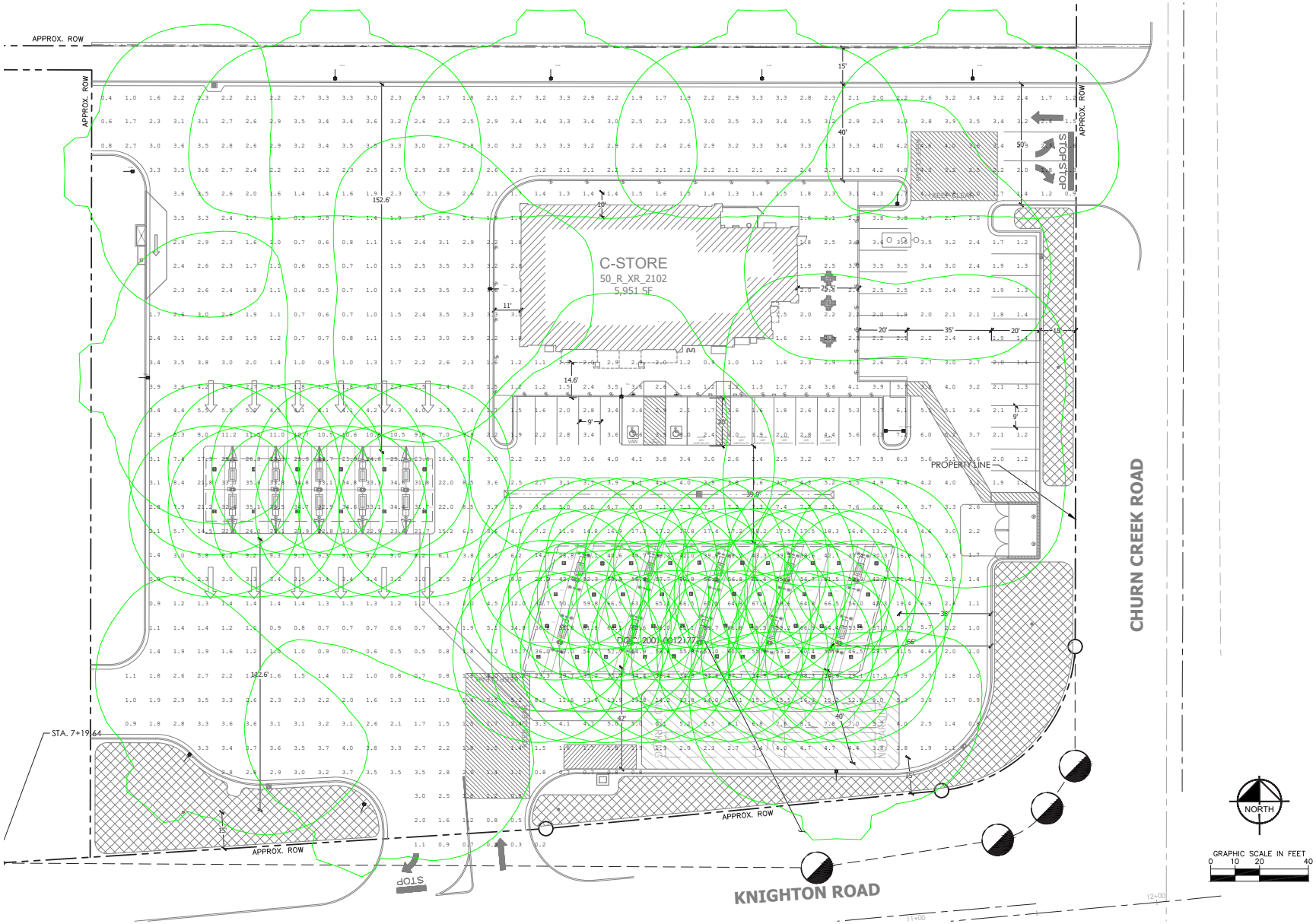
CANOPY ELEVATIONS

MAVERIK
185 S. State Street
Salt Lake City, Utah 84111

LEGEND:

0.3 FOOT-CANDLE

Calculation Summary						
Label	CalcType	Units	Avg	Max	Min	Avg/Min
Parking Lot	Illuminance	Foot-candle	8.61	67.6	0.2	43.05



SOURCE: Kimley-Horn, 2022

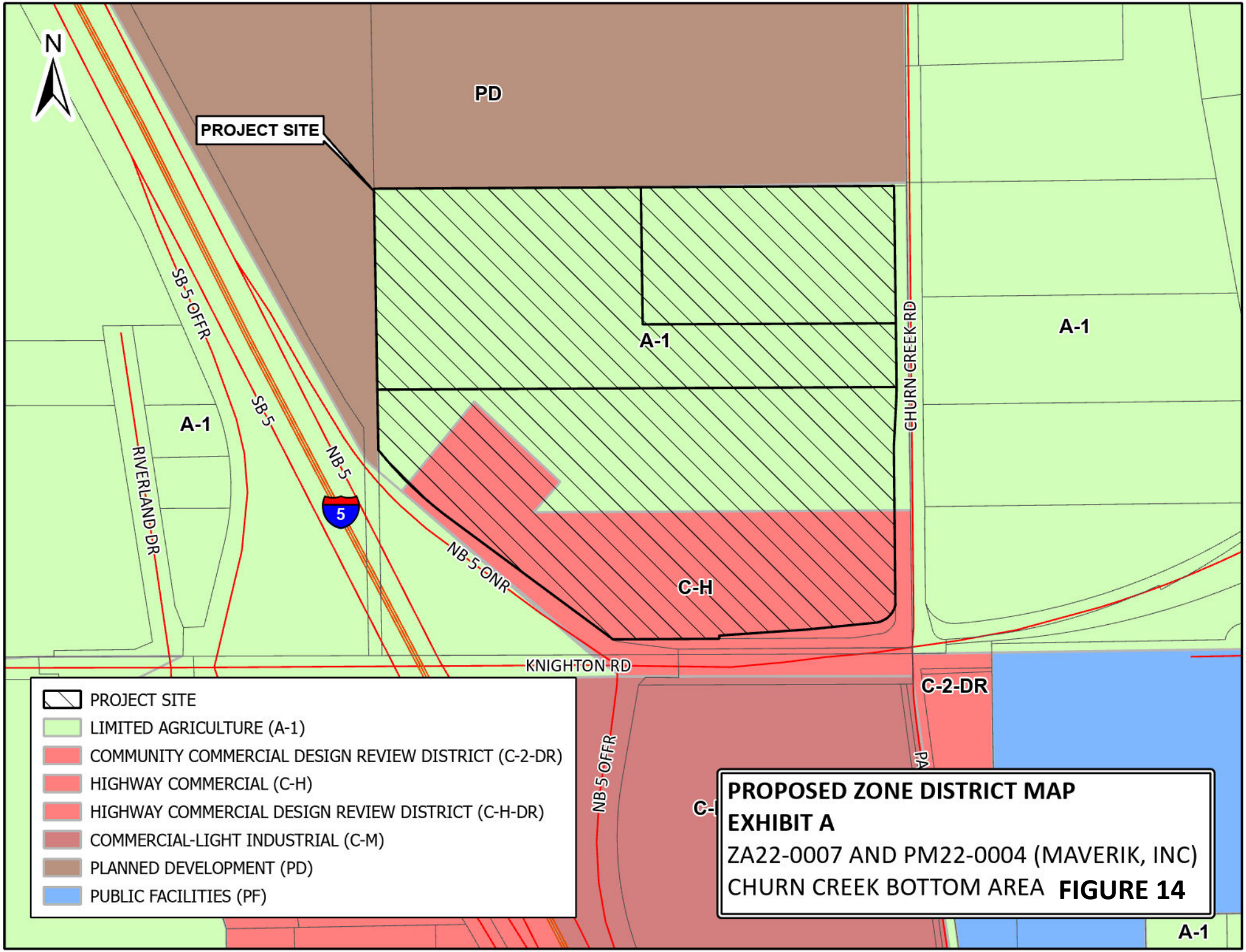
Figure 13: Photometric Plan

Maverik - Knighton Road

Initial Study/Mitigated Negative Declaration

Not to scale

Kimley»Horn


N
PD
PROJECT SITE
A-1
A-1
A-1
A-1
SB-5-OFFR
SB-5
NB-5
RIVERLAND-DR
CHURN-CREEK-RD
5
NB-5-ONR
C-H
KNIGHTON-RD
C-2-DR
NB-5-OFFR
C-
A-1
PROJECT SITE
LIMITED AGRICULTURE (A-1)
COMMUNITY COMMERCIAL DESIGN REVIEW DISTRICT (C-2-DR)
HIGHWAY COMMERCIAL (C-H)
HIGHWAY COMMERCIAL DESIGN REVIEW DISTRICT (C-H-DR)
COMMERCIAL-LIGHT INDUSTRIAL (C-M)
PLANNED DEVELOPMENT (PD)
PUBLIC FACILITIES (PF)
PROPOSED ZONE DISTRICT MAP
EXHIBIT A
ZA22-0007 AND PM22-0004 (MAVERIK, INC)
CHURN CREEK BOTTOM AREA
FIGURE 14