ELEM INDIAN COLONY FEE-TO-TRUST AND TRAVEL CENTER PROJECT CITY OF CLEARLAKE, CALIFORNIA

Environmental Assessment (Updated)

Federal Lead Agency Department of Interior February 2023

Bureau of Indian Affairs, Pacific Region



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Preparing Entity
Environmental Science Associates

February 2023

2600 Capitol Avenue Suite 200 Sacramento, CA 95816 916.564.4500 esassoc.com

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TABLE OF CONTENTS

Elem Indian Colony Fee-To-Trust and Travel Center Project Environmental Assessment

			<u>Page</u>
Chapter 1.	Propo	osal and Need for Proposal	1-1
	1.1	Introduction	
	1.2	Project Site and Vicinity	
	1.3	Purpose and Need	
	1.4	Overview of the Environmental Review Process	
Chapter 2.	Alterr	natives	2-1
,	2.1	Proposed Action	
	2.2	No Action Alternative	
Chapter 3,	Envir	onmental Impacts	3.0-1
• •		uction	
	Cumu	lative Impacts	3.0-2
	Indire	ct Impacts	3.0-2
	3.1	Land Resources	3.1-1
	3.2	Water Resources	3.2-1
	3.3	Air Quality	3.3-1
	3.4	Biological Resources	3.4-1
	3.5	Cultural Resources	3.5-1
	3.6	Socioeconomic Conditions and Environmental Justice	3.6-1
	3.7	Land Use	3.7-1
	3.8	Transportation	3.8-1
	3.9	Public Services and Utilities	
	3.10	Noise	3.10-1
	3.11	Hazards	3.11-1
	3.12	Visual Resources	3.12-1
Chapter 4,	Cons	ultation, Coordination and List of Preparers	4-1
		u of Indian Affairs, Pacific Region (Lead Agency)	
		Indian Colony of Pomo Indians (Applicant)	
	Enviro	onmental Science Associates (EA Consultant)	4-1
Chapter 5.	Refer	ences	5-1

List of Tables	s	<u>Page</u>
Table 3.3-1	Air Quality Data Summary (2017-2019) for the Project Site Vicinity	3 3-2
Table 3.3-2	Annual Construction Emissions (Tons per year)	
Table 3.3-3	Operational Emissions (Tons per year)	
Table 3.3-4	Estimated Annual GHG Emissions	
Table 3.4-1	Federally-listed Species Recorded in the Region of the Project Site	
Table 3.5-1	Previous Cultural Resources Studies in Vicinity	
Table 3.5-2	Previous Cultural Resources in Records Search Radius	
Table 3.8-1	Existing Intersection Operating Conditions	
Table 3.8-2	Net Automobile Trip Generation Estimates	
Table 3.9-1	Estimated Water Demands/Wastewater Flows	
Table 3.10-1	Noise Level Performance Standards For Projects Affected by or	
	Including Non-Transportation Noise Sources	3.10-3
Table 3.10-2	Typical Noise Levels From Construction Equipment	
Table 3.10-3	Vibration Levels from Construction Equipment	
Table 3.11-1	Databases Searched	
List of Figure	es	
Figure 1	Regional Location	1-2
Figure 2	Project Site Aerial	
Figure 3a	Conceptual Site Design – Overview	
Figure 3b	Conceptual Site Design – View from Lakeshore Drive	
Figure 3c	Conceptual Site Design – View from Golf Avenue	
Figure 4	Preliminary Grading, Drainage, and Stormwater Management Plan	
Figure 5	Soils Map	3.1-2
Figure 6	FEMA Flood Hazard Map	3.2-2
Figure 7	CNDDB Occurrences	3.4-3
Figure 8	Surrounding Land Uses	3.7-3
Figure 9	General Plan Land Use	3.7-4
Figure 10	Zoning	
Figure 11	Project Study Area Roadways	3.8-2

Attachment

1. Mitigation, Monitoring and Reporting Program

List of Appendices

- A. Regulatory Setting
- B. CalEEMod Output & Emissions Calculations
- C. Phase I and II Environmental Site Assessments
- D. Cultural Resources Inventory Report
- E. State Historic Preservation Officer Concurrence

CHAPTER 1

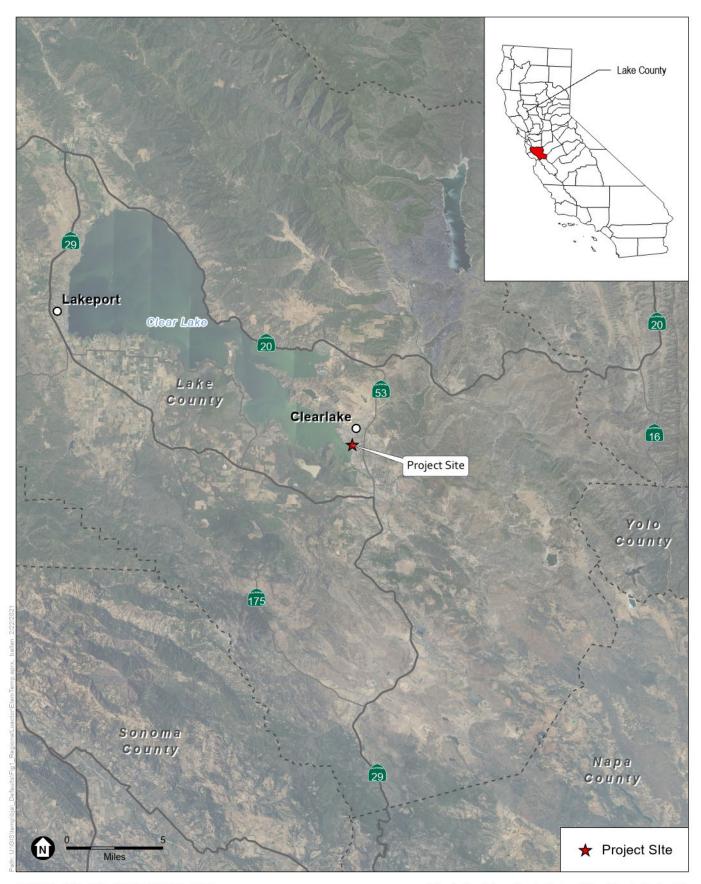
Proposal and Need for Proposal

1.1 Introduction

This Environmental Assessment (EA) has been prepared on behalf of the U.S. Department of Interior (DOI), Bureau of Indian Affairs (BIA), Pacific Region for a Fee-To-Trust (FTT) land conveyance proposal by the Elem Indian Colony of Pomo Indians (Tribe) to transfer approximately one acre of land in the City of Clearlake, California (Proposed Action). The BIA, Pacific Region is the lead federal agency to review and approve the Tribal FTT actions pursuant to 25 Code of Federal Regulations (C.F.R) Part 151. This document has been completed in accordance with the requirements of the National Environmental Policy Act (NEPA) of 1969 (42 United States Code [U.S.C.] § 4321 et seq.); the Council on Environmental Quality (CEQ) Guidelines for Implementing NEPA (40 CFR Parts 1500–1508); and the BIA's NEPA Guidebook (59 IAM 3-H). NEPA requires federal agencies to review and analyze the environmental consequences associated with proposed federal actions. This document provides a detailed description of the Proposed Action and analysis of the potential consequences associated with the Proposed Action. This document also includes a discussion of the proposed No Action Alternative, along with impact avoidance and minimization efforts to mitigate impacts.

1.2 Project Site and Vicinity

The approximately one-acre project site is located in the City of Clearlake (City), in south-central Lake County, California, adjacent to Lakeshore Drive. **Figure 1** depicts the regional setting of the project site. The project site is located near the southern shore of Clear Lake, the largest natural freshwater lake within California (City of Clearlake, 2016). Clear Lake, the largest freshwater lake in California, is located 0.15 miles to the west of the project site. The project site is approximately 1,350 feet above mean sea level. The project site is located in Township 13 North, Range 7 West, Mount Diablo Meridian. The project site consists of two contiguous parcels of land as shown on **Figure 2**. The project site is bounded by: Lakeshore Drive to the north; commercial buildings to the east; the Clearlake Youth Center and a baseball field and park to the south; and Golf Avenue to the west.



SOURCE: NAIP, 2016; ESRI, 2012; ESA, 2020

Figure 1
Regional Location



SOURCE: Esri, 2018; SSURGO, 2019; Lake County, 2020; ESA, 2020.



1.3 Purpose and Need

The statutory authority for acquiring lands in trust status for Indian tribes is provided in the Indian Reorganization Act of 1934 (IRA), with regulations under 25 U.S.C. § 465 and codified as 25 CFR Part 151. The Land Acquisition Policy presented in 25 CFR § 151.3 states that, "land may be acquired for a tribe in trust status when that land is within the tribe's reservation boundaries; or is already owned by the tribe; or the Secretary of the Interior determines that land acquisition is necessary to facilitate tribal self-determination, economic development or Indian housing." The BIA is the lead federal agency to review and approve the FTT action pursuant to 25 CFR Part 151.3. The Tribe has submitted an application to BIA for land conveyance of approximately one acre into federal trust for tribal economic development.

One of the Tribe's objectives is to generate income that will enable the Tribal government to better address the needs of the Tribal membership and those of future generations. A sustained revenue base would provide funding for Tribal government operations and programs, thereby strengthening the self-sufficiency of the Tribe. Additionally, increased revenue would improve the socioeconomic condition of Tribal members and reduce dependence on public assistance programs. As such, implementation of the Proposed Action would assist the Tribe in meeting the following objectives:

- Achieving economic self sufficiency
- Providing employment opportunities for Tribal members
- Providing funding for administrative, health and welfare, housing, educational, social, and other Tribal services

1.4 Overview of the Environmental Review Process

This EA has been prepared to analyze and document the environmental consequences associated with the Proposed Action. The BIA will use this EA to determine (1) if the Proposed Action would result in significant impacts to the environment and (2) whether a Finding of No Significant Impact (FONSI) or an Environmental Impact Statement should be prepared. The BIA published a newspaper notice and circulated the EA for a 30-day public review period in January 2022 and a draft FONSI was also circulated for public review. The BIA received three comment letters on the EA for the Proposed Action. This revised EA addresses the commenters concerns and provides updates to clarify specific resource topics and issue areas, i.e., Socioeconomic and Environmental Justice. Based on this revised and updated EA, the BIA has determined that a FONSI is applicable, the BIA will publish a newspaper notice and circulate the EA/FONSI. This revised EA, the public review EA and all review documents will be made available online.

CHAPTER 2

Alternatives

This EA analyzes the Proposed Action and a No Action Alternative. These alternatives are described below.

2.1 Proposed Action

2.1.1 Commercial Development

In addition to the aforementioned FTT action, the Proposed Action includes the redevelopment of two parcels (Assessor Parcel Numbers [APNs] 040-240-07 and 040-240-08), comprising approximately one acre. The parcel with APN-040-240-08 is undeveloped with a gravel parking lot and mixed non-native vegetation. The parcel with APN-040-240-07 contains a First Loan commercial building and associated paved parking lot. The existing First Loan building and parking lot would be demolished, removed, and disposed of in accordance with federal, State, and local regulations, and the redevelopment of the project site with construction and operation of a multi-use travel center owned and operated by the Tribe including fueling station, electric vehicle (EC) charging stations, and associated infrastructure and landscaping improvements (**Figures 3a, 3b, and 3c**).

Travel Center

The proposed multi-use travel center would consist of a one-story, approximately 8,000 square foot structure containing a 6,000 square foot convenience center and a 2,000 square foot office space. The 2,000 square foot office space is anticipated to accommodate the existing First Loan office and its employees. The exterior of the proposed building would be finished using natural tones to the extent feasible, in keeping with the visual setting provided by the adjacent Redbud Park. The project site would be improved to include a paved parking lot with up to 28 parking spaces. Eight to ten parking spaces along the backside of the project site (adjacent to Redbud Park) would include electric vehicle (EV) charging stations, further discussed below.

There are existing paved access connections from the project site onto Lakeshore Drive and Golf Avenue. The existing right of ways and ingress and egress routes are sufficient for the Proposed Action and no road realignments or alterations of existing access points are necessary to implement the Proposed Action.

The wider paved connection from Lakeshore Drive would be maintained and improved as a joint ingress/egress route while the paved connection from Golf Avenue would be maintained and improved as an ingress route onto the project site. Curbs and sidewalks adjacent to the entire project site would be upgraded to current City standards along Lakeshore Drive and Golf Avenue.



SOURCE: Paragon Solutions, 2022





SOURCE: Paragon Solutions, 2022





SOURCE: Paragon Solutions, 2022





Fueling Station and Electric Vehicle (EV) Charging Stations

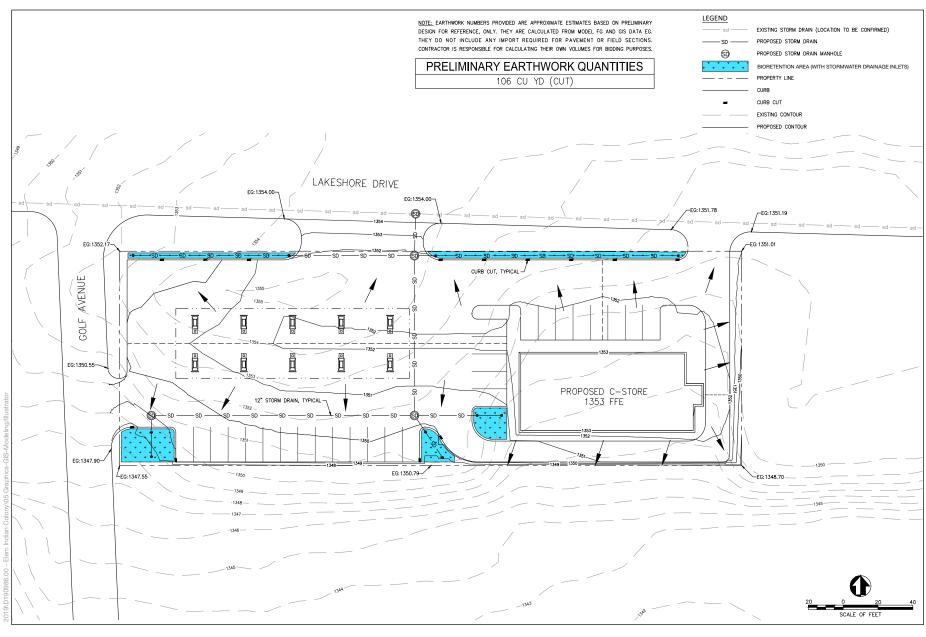
The fueling station would consist of a fuel island with up to ten dispensers and associated new underground fuel storage tanks. Each dispenser would require three underground double-walled fuel storage tanks (UST) for different grades of fuel including regular gas and diesel, each with capacity to store up to 10,000 gallons of fuel. As further discussed in Section 3.11.1.1, the fueling station would conform to federal regulations (40 CFR Part 280) for new underground storage tank systems including requirements for tank design, the installation and maintenance of leak detection and prevention systems, and spill and overfill controls to minimize the risk of release of petroleum into the environment. Leak prevention measures required under 40 CFR Part 280 include corrosion resistant and double-walled tanks and piping, inclusion of spill and overflow prevention equipment, and use of leak detection equipment. 40 CFR 280 also includes requirements for tank installation, monitoring and reporting, corrective action, remediation and site cleanup, and tank closure and removal. Standard vapor recovery systems would be installed, as required by Lake County Air Quality Management District (LCAQMD), to prevent dissipation of petroleum fumes during fueling.

As proposed, the travel center would generally operate from 6 a.m. to 11 p.m. daily and would employ 20-25 persons. Daily staffing would vary depending on local market conditions, time of day, weekdays versus weekends, as such, it is expected that employees would work various shifts and would not all be on-site every day. The First Loan would operate during normal business hours and may have up to two employees on-site based on local conditions, such as, workload, use of office equipment and need for in-person meetings. Staffing needs for First Loan business is currently unknown at this time. The Proposed Action also includes installation and occasional operation of an emergency generator to during regional power outages.

2.1.3 Grading, Drainage, and Stormwater Management

The Proposed Action would import up to 1,600 cubic yards of fill for backfilling and compaction around the new fuel storage tanks, convenience store foundation base, aggregate base (Type 2 Roadbase) for grading and compaction, to level and prepare the ground surface for construction and finishing with asphalt pavement. Approximately 106 cubic yards of overburden (spoils) material would be removed from the project site for the installation of storm drains, curb cuts, and related stormwater infrastructure (**Figure 4**). Spoils and overburden materials would be off-hauled and disposed of in accordance with federal State, and local regulations. The project site would be re-graded to direct and convey stormwater flows towards new curbs, new on-site stormwater bioretention areas equipped with drainage inlets and/or gutters. New stormwater drop-inlets and stormwater drains would be routed to City-managed stormwater facilities.

Several bioretention areas would be developed on the project site to allow for stormwater retention and water quality improvements prior to discharge to City-managed stormwater systems and facilities. These bioretention areas include curb cuts to collect on-site stormwater runoff and stormwater drainage inlets to capture excessive runoff during storm events. The bioretention areas would be installed along the improved sidewalk adjacent to Lakeshore Drive, surrounding the travel center building, and along the backside of the parking lot, adjacent to Redbud Park. Refer to Figure 4 for preliminary grading, drainage, and stormwater management plans.



SOURCE: PSOMAS, 2022





2.1.4 Construction

Construction of the travel center, fueling station and associated infrastructure improvements would begin after the one-acre project site has been placed into federal trust. Construction of the travel center would involve demolition of the existing on-site building, earthwork, placement of concrete foundations, steel and wood structural framing, masonry, electrical and mechanical work, and building finishing, among other construction trades. The aforementioned construction activities are anticipated to occur in 2024. Construction of the Proposed Action is anticipated to occur six days a week and would comply with applicable construction standards identified and discussed in this NEPA EA.

All proposed development would adhere to the building standards of the California Building Code (CBC). As further discussed in Section 3.11.1.1, a Phase I Environmental Site Assessment (ESA) and Phase II ESA were completed for the project site, with the Phase I ESA completed in 2019 and the Phase II ESA completed in 2020. The Phase I and II ESAs identified and evaluated one potential onsite recognized environmental condition (REC): a former structure containing asbestos materials was demolished and the demolished materials were removed from the property in 2018. The Phase I and II ESAs concluded that the threat to human health from historic and potential RECs is considered low. Nevertheless, an updated Phase I ESA will be prepared to address the existing commercial building onsite. During demolition and construction of the Proposed Action, the Tribe will follow applicable federal, State and local guidelines for waste containment and disposal, and any hazardous materials identified during demolition would be disposed of in a landfill capable of receiving those materials.

To avoid and minimize effects of the Proposed Action, Best Management Practices (BMPs) have been incorporated into the Proposed Action. BMPs included as part of the Proposed Action are relatively standardized and compulsory; and they represent sound and proven methods to reduce the potential effects of an action. The rationale behind including BMPs is that the project applicant commits to undertake and implement these measures in advance of impact findings and determinations in good faith to improve the quality and integrity of the Proposed Action, streamline the environmental analysis, and demonstrate responsiveness and sensitivity to environmental quality. BMPs include but are not limited to the following:

- A worksite safety plan would be prepared prior to construction
- Preparation and implementation of the Stormwater Pollution Prevention Plan
- Water would be applied to the site during construction in sufficient quantities to prevent the generation of visible dust plumes
- Soil binders would be applied to uncovered areas/exposed soils, as needed
- On-site vehicle speeds would be limited to 15 miles per hour or less

2.1.5 Public Services and Utilities

The new development associated with the Proposed Action would connect to existing or upgraded water, wastewater, and energy utility lines at the project site. Potable water at the project

site is provided by the Highlands Mutual Water Company though its appropriative water rights to surface water diversions from Clear Lake. The Southeast Regional Wastewater System provides wastewater service to the City, including the project site. The Tribe will coordinate with Pacific Gas and Electricity (PG&E) for electrical service to be extended to the project site.

Law enforcement services would be provided by the City's Police Department or the Lake County Sheriff's Office. Fire protection services would be provided by the Lake County Fire Protection District.

2.2 No Action Alternative

Under the No Action Alternative, the project site would not be placed into federal trust for the benefit of the Tribe. For purposes of environmental analysis of the No Action Alternative in this EA, it is assumed that the existing commercial/office use (First Loan building) would continue as is. The No Action Alternative would not meet the purpose and need of the Tribe or meet its objectives, specifically:

- Achieve economic self sufficiency
- Provide employment opportunities for Tribal members
- Provide funding for administrative, health and welfare, housing, educational, social, and other Tribal services.

CHAPTER 3

Environmental Impacts

Introduction

This chapter includes an analysis of the environmental impacts for the following issues:

- Land Resources
- Water Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Socioeconomic Conditions and Environmental Justice

- Land Use
- Transportation
- Public Services and Utilities
- Noise
- Hazards
- Visual Resources

For each issue area, a brief environmental setting is provided and followed by a discussion of environmental impacts that would result from the development of the Proposed Action Alternative and No Action Alternative. The CEQ's Regulations for Implementing NEPA (40 CFR § 1508.27) define significance of effects in terms of context and intensity. Context refers to society as a whole, the affected region or interests, and the locality. The significance of effects varies depending on the setting of a proposed action. Intensity refers to the severity of effect. The following issues were considered in evaluating intensity:

- Effects may be both beneficial and adverse
- Degree of public health or safety effects
- Unique resource characteristics of the geographic area
- Degree of controversy over environmental effects
- Uncertainty and unknown risks of effects
- Degree to which the action may set a precedent
- Cumulative effects
- Effects on scientific, cultural, or historic resources
- Effects to endangered or threatened species or its habitat
- Violation of federal, state, or local environmental regulations

Cumulative Impacts

Cumulative effects analysis broadens the scope of analysis to include effects beyond those directly attributable to the implementation of the Proposed Action and the alternatives. Cumulative effects are defined in 40 CFR § 1508.7 as the impacts "...on the environment which result from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless what agency (federal or non-federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time."

The cumulative analysis in **Sections 3.1** through **3.12**, expands the geographic and temporal borders to include the effects on specific resources, ecosystems, and human communities that occur incrementally when combined with other actions, projects and trends. The purpose of the cumulative effects analysis, as stated by CEQ "is to ensure that federal decisions consider the full range of consequences" (1997). Unless otherwise specified, the cumulative analysis in **Sections 3.1** through **3.12** considers the Proposed Action and build-out of the City's General Plan (2017). The No Action Alternative would not alter existing site uses and is not anticipated to result in new significant cumulative impacts; as such, cumulative impacts from the No Action Alternative are not discussed further in this EA.

Indirect Impacts

Under NEPA, indirect and growth-inducing effects of a Proposed Action must be analyzed (40 CFR § 1508.8(b)). The CEQ Regulations define indirect effects as effects that are caused by the action and are later in time or further removed in distance, but are still reasonably foreseeable. Growth-inducing effects are defined as effects that foster economic or population growth, either directly or indirectly. Direct growth inducement could result, for example, if a Proposed Action includes the construction of a new residential development. Indirect growth inducement could result if a project establishes substantial new permanent employment opportunities or if it removes obstacles to population growth (e.g., expansion of public utilities or roadway capacity).

Although the Proposed Action would establish new permanent employment opportunities, it is not expected to have an impact on indirect growth because of the small number of employment opportunities generated (20-25 employees) needed to staff the convenience store. Moreover, it is anticipated that new employees will largely be Tribal members or other people already residing in the City or vicinity of the Proposed Action. Additionally, the Proposed Action is not expected to be directly growth-inducing as it would not provide new residential housing on the project site.

3.1 Land Resources

The following section describes the existing setting and analyzes impacts related to topography, geology, soils, mineral resources, and seismicity.

3.1.1 Setting

3.1.1.1 Environmental Setting

Topography and Geology

The project site is located on the United States Geological Survey (USGS) 7.5 Minute, Clearlake Highlands, California Quadrangle map. The elevation of the project site is approximately 1,350 feet above mean sea level. The City is located within the San Andreas Fault system. However, according to the City's General Plan Local Seismic Hazard Area map, the project site is not situated within a fault zone (City of Clearlake, 2016).

The City lies atop a geologic setting of tectonic activity within the San Andreas Fault system. The Clear Lake volcanic field contains lava dome complexes, cinder cones and maars of basaltic-to-rhyolitic composition (City of Clearlake, 2016).

Soils

The project site is underlain by the Late Pleistocene-aged Lower Lake Formation (QII). The Lower Lake Formation is composed of siltstone, claystone, tuff and conglomerate. Soils on the project site are shown in **Figure 5**. The soil beneath the project site consists of Asbill Clay Loam, 5 to 8 percent slopes, and Manzanita Loam, 2 to 5 percent slopes.

Mineral Resources

Mineral resources in the City include mercury, borax, manganese, sand and gravel, and naturally occurring asbestos. The Sulphur Bank Mine, located just outside the City limits was in operation until 1957 and contains hazardous materials (City of Clearlake, 2016). No known active mines are located within the project site.

Classification of land within California takes place according to a priority list that was established by the State Mining and Geology Board (SMGB) in 1982, or when the SMGB is petitioned to classify a specific area. The SMGB has also established Mineral Resources Zones (MRZ) to designate lands that contain mineral deposits. Clearlake County and the project site are not located within a mapped MRZ (California Department of Conservation, 2015).

Seismicity

The Uniform Building Code (UBC) Seismic Zone Map divides the United States into zones of potential earthquake damage. The four UBC Seismic Zones are Zone 0 (no damage), Zone 1 (minor damage), Zone 2 (moderate damage), Zone 3 (major damage), and Zone 4 (major damage caused by near-by fault movements). The City, including the project site, is located in Seismic Zone 4 (NRC, 2015).



SOURCE: Esri, 2018; SSURGO, 2019; Lake County, 2020; ESA, 2020.



The nearest fault zone to the project site is the San Andreas Fault, located 55 miles to the west. Motion along the San Andreas Fault zone is primarily lateral (i.e., strike-slip faulting), although a vertical component is likely present. The San Andreas Fault zone is considered active, with major ruptures occurring between 20 and 300 year intervals, at magnitudes of 6.8-8.0 (SCEDC, 2020).

Liquefaction is a phenomenon in which loose, water-saturated, granular soils temporarily behave like a fluid when subjected to high-intensity ground shaking such as seismic events. Liquefaction occurs when three general conditions exist: 1) shallow groundwater, 2) low-density silty or fine sandy soils, and 3) high-intensity ground motion. According to the City's General Plan, the City could experience liquefaction during an earthquake (City of Clearlake, 2016).

3.1.1.2 Regulatory Setting

Relevant regulatory setting information is included in Appendix A.

3.1.2 Impact Analysis

3.1.2.1 Proposed Action

Topography and Geology

Construction of the Proposed Action would require clearing and grading within the project site. The proposed development is located in a developed and disturbed area with minor topographic variation and thus would require only minor alterations to site topography. As such, impacts would be less than significant.

Soils

Construction would likely expose soil and has the potential to increase the risk of erosion and sedimentation, which is a potentially significant impact. A Stormwater Pollution Prevention Plan (SWPPP) is included as **Mitigation Measure 3.2-1** in Section 3.2, Water Resources. Preparation of a SWPPP, would outline BMPs and other measures that would be taken to reduce or eliminate impacts arising from erosion and sedimentation. With implementation of the SWPPP, impacts to soils and erosion would be less than significant.

Mineral Resources

No known mineral resources are located within the project site boundaries; therefore, no impact to mineral resources would occur.

Seismicity

The project site is located 55 miles east of the active San Andreas Fault Zone. The potential seismic hazards as discussed above include ground shaking, liquefaction, and earthquake-induced settlement. As discussed in the project description in Chapter 2, construction would adhere to the building standards of the California Building Code (CBC) in Seismic Zone 4. Construction to these standards would reduce the risk of seismic hazards to a less-than-significant level.

3.1.2.2 No Action Alternative

Under the No Action Alternative, the project site would not be placed into federal trust for the benefit of the Tribe. Under the No Action Alternative, the existing commercial/office use (First Loan building) would continue as is. Operations and maintenance of the existing commercial office use on the project site would not result in significant impacts with respect to land resources. Any new development must be consistent with the CBC Seismic Zone 4 requirements, the Clean Water Act and City development regulations.

3.1.3 Cumulative Impact Analysis

Impacts associated with land resources would be limited geographically to the site itself and temporally to the construction phase. If concurrent construction activities are underway or planned in the immediate vicinity of the project site, those project sites would be implemented under similar or more rigorous regulations and building codes. In addition, all new construction and land uses would be consistent with City's construction standards, zoning codes and land resources policies outlined in its Municipal Code and/or General Plan. As such, the Proposed Action is not anticipated to contribute to cumulative impacts. The potential for stormwater runoff from construction is addressed in Section 3.2., Water Resources.

3.2 Water Resources

This section describes the existing setting and analyzes impacts related to surface water and drainage, flooding, groundwater hydrology, and water quality.

3.2.1 Setting

3.2.1.1 Environmental Setting

Section 1.2, "Project Site and Vicinity" provides a discussion on the location and elevation of the project site. Annual precipitation in the vicinity averages about 27 inches. Precipitation in the project site primarily falls as rainfall between October and April (Lake County Watershed Protection District, 2006a).

Surface Water and Drainage

The project site is located within the Cache Creek/Lower Arm watershed drainage basin. Main tributaries to the Lower Arm include Burns Creek and Siegler Canyon-Copsey Creeks and the main source of inflow is Clear Lake (City of Clearlake, 2016). Surface water within the project site flows overland to the south toward a drainage swale along the southern boundary of the project site (LACO, 2019). Flows in this drainage are routed to City-managed stormwater facilities.

Flooding

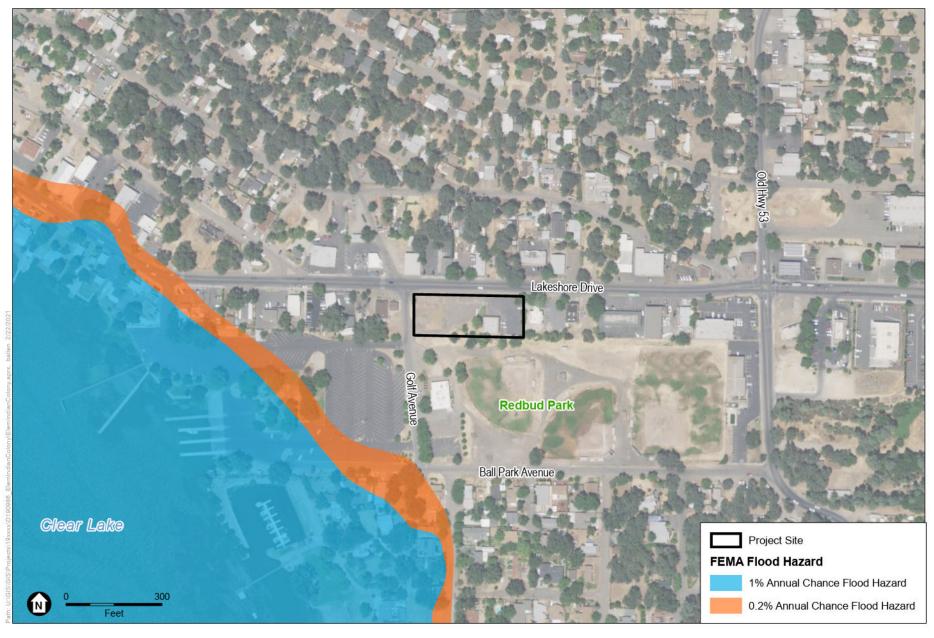
The Federal Emergency Management Agency (FEMA) is responsible for delineating areas that are expected to be subject to flooding during a 100-year flood event. A 100-year flood event is defined as the area that is expected to be inundated by flood flows during a rainfall event that would have an annual probability of occurrence of one percent. FEMA creates and maintains Flood Insurance Rate Maps that identify areas located within the 100-year floodplain. Based on a review of FEMA maps, the project site is not within a 100-year floodplain (**Figure 6**).

Groundwater

The project site overlays the Clear Lake Cache Formation Groundwater Basin. The Clear Lake Cache Formation Groundwater Basin is located east of Clear Lake and shares a boundary with the Burns Valley Groundwater Basin in the southwest. Groundwater in the vicinity of the project site is used primarily for agricultural, with average-year demand of approximately 85 acre-feet per year (Lake County Watershed Protection District, 2006b). There are no groundwater wells located within the project site.

3.2.1.2 Regulatory Setting

Relevant regulatory setting information is included in Appendix A.



SOURCE: USDA, 2018; FEMA, 2005; Lake County, 2020; ESA, 2020.



3.2.2 Impact Analysis

3.2.2.1 Proposed Action

Surface Water, Drainage and Flooding

Construction of the Proposed Action would involve grading, which would temporarily disturb surface sediments, which could become entrained in stormwater during a storm event. Additionally, oils, greases, fuels, and other construction-related fluids could be released during construction, become entrained in stormwater flows, and contribute to water quality degradation. These impacts during construction are considered potentially significant. **Mitigation Measure 3.2-1** includes the development of a SWPPP, which will include BMPs for erosion and sediment control to protect water quality and meet local water quality objectives. Implementation and adherence to these BMPs would substantially reduce or prevent soil or chemicals from entering local waters and downstream water bodies. With **Mitigation Measure 3.2-1**, impacts related to water quality degradation would be reduced to a less-than-significant level.

The Proposed Action could increase the amount of impervious surfaces on site, primarily through the conversion of the graveled surfaces to paved surfaces. As the project site has been previously developed with hardscape materials, on existing building and demolished structure as noted in Section 3.11 Hazardous. The increase in new impervious surface is minor, particularly since the graveled area is largely impervious under existing conditions due to previous development and paved and impervious areas underneath the gravel surfaces. Surface waters within the project site currently flow overland and drain into the City-managed stormwater system. The Proposed Action would include several bioretention areas throughout the project site to allow for stormwater retention and water quality improvements prior to discharge into the City-managed stormwater system. These bioretention areas would include curb cuts to collect on-site stormwater and several stormwater drainage inlets to capture excessive runoff during storm events. Consistent with existing conditions, stormwater flows from the project site would be routed to existing City-managed stormwater facilities. The bioretention areas would reduce, minimize and/or eliminate additional stormwater runoff from new impervious surfaces installed through development of the Proposed Action. Furthermore, the City-managed stormwater system is designed to manage and convey similar flow rates and volumes from the project site, as well as flows from adjacent properties and parcel throughout the City. The additional impervious surfaces, if any, associated with the Proposed Action is a very small portion of the larger watershed, which is characterized by this type of urban development. As shown in Figure 6, the development of the Proposed Action is located outside of the 100-year floodplain. Thus, the Proposed Action would not result in significant impacts related to increased stormwater runoff or flooding during operations.

Groundwater

The Proposed Action would not involve pumping or use of groundwater as supply source. The increase in impervious surface is minor, particularly since the graveled area is largely impervious under existing conditions due to previous development and paved and impervious areas underneath the gravel surfaces. The minor addition of impervious surfaces represents a very small portion of the larger groundwater basin and thus would not substantially interfere with

groundwater recharge. Therefore, impacts to groundwater from the Proposed Action would be less than significant.

Mitigation Measure 3.2-1: Prior to the initiation of construction activities on site disturbing an acre or more, the Tribe shall prepare a SWPPP, and shall implement the SWPPP during construction on site. BMPs shall target minimization of erosion, minimization of sedimentation, and minimization of the release of stormwater pollutants from construction equipment and activities. BMPs may include, but are not limited to the following:

- Prepare a spill prevention and control plan;
- Inspect work area and surrounding area, identify existing pollutants, keep the worksite clean to prevent loss of accumulated debris into stormwater channels.
- Any material stored outside that is susceptible to "wash-off" when it rains shall be
 protected from the effects of wash off through the use of covers and/or secondary
 containment as necessary.
- All material will be stored in specified lay down areas and secured after every work shift.
- Any construction debris and/or waste will be cleaned up after every work shift.
- Stockpile soil under cover in a manner that minimizes contact with process water or storm water. Keep covered end secured at all times except when adding or removing soil. Store in containers or in the following manner:
 - O Underlay the soil with a continuous impervious sheet of plastic with a thickness sufficient to contain the soil with a minimum thickness of 0.254 millimeters (10 mils). Thicker or reinforced plastic or other measures to protect the integrity of the plastic underlayment may be required if there is a danger that the plastic will be punctured or torn during accumulation. Weld, heat seal or continuously tape (on both sides) all seams. Protect the plastic from perforation during loading and handling operations.
 - Install an impervious continuous sheet of plastic of 0.254 millimeters (10 mils) thickness, over the pile. Weld, heat seal or continuously tape (on both sides) all seams.
 - Secure the top cover to ensure that wind will not balloon the cover or blow it aside leaving the pile exposed to weather.
- Street sweep as necessary.
- Install physical barriers (e.g. setbacks/buffers, silt fencing and/or straw wattles) to prevent erosion and sedimentation.
- Establish protocols for vehicle refueling and maintenance.
- Minimize work during the storm season.
- Stabilize construction equipment entrance/exit.

Revegetate disturbed soils.

3.2.2.2 No Action Alternative

Maintenance of the existing commercial office use on the site would not result in significant impacts with respect to water resources. Any future development would need to be consistent with the federal Clean Water Act and City development regulations.

3.2.3 Cumulative Impact Analysis

Impacts associated with water resources would be limited geographically to the drainage and groundwater basins which capture water from the project site and temporally to construction and operational phases. The Proposed Action is not located within a designated floodplain and thus would not contribute to cumulative flooding impacts. The Proposed Action would represent a negligible increase in impervious surfaces within the larger, developed drainage and groundwater basins and thus is not anticipated to significantly increase runoff or reduce groundwater recharge. Mitigation Measure 3.2-1 is proposed to reduce potential impacts to water quality during construction. If concurrent construction activities are underway or planned in the immediate vicinity, those project sites would likely have similar BMPs, and/or more rigorous mitigation measures to protect water quality objectives. Furthermore, projects in the vicinity are likely to be developed on previously developed parcels with similar urbanized and impervious surfaces and similar to existing conditions would also convey stormwater runoff to the City-managed stormwater system for attenuation and discharge. The City-managed stormwater system currently collects and manages stormwater flows throughout the City and as previously discussed, additional stormwater flows from the Proposed Action would be minor or negligible, for these reasons, the Proposed Action is not anticipated to contribute to cumulative impacts.

		Impacts

3.2 Water Resources

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3.3 Air Quality

This section describes the air quality of the project site and addresses the impacts of the alternatives on ambient air quality and the exposure of people, especially sensitive individuals, to unhealthy pollutant concentrations.

3.3.1 Setting

3.3.1.1 Environmental Setting

Regional Topography, Climate and Meteorology

The project site is located in Clearlake, California within the boundaries of the Lake County Air Basin (LCAB). The 1,200 square mile air basin is surrounded by mountains and is characterized by hot, dry summers and cool, wet winters. Temperatures range from about 90 degrees Fahrenheit in the summer to mid-50s in the winter months. The LCAB is dominated by synoptic weather patterns typical of the northern California intermountain coastal climate (LCAQMD, 2002). The Lake County Air Quality Management District (LCAQMD) is the regional agency responsible for protecting public health from air pollution within the LCAB.

Existing Ambient Air Quality

The ambient concentrations of air pollutants are determined by the volume of emissions released by sources and the atmosphere's ability to transport and dilute such emissions. Natural factors that affect transport and dilution include terrain, wind, atmospheric stability, and sunlight. Therefore, existing air quality conditions in the area are determined by topography, meteorology, and climate, and the volume of emissions released by existing air pollutant sources.

The California Air Resources Board (CARB) collects ambient air quality data locally through a network of air monitoring stations throughout the State. The closest monitoring station to the project site is located at 2617 South Main Street in Lakeport, CA, approximately 15 miles northwest of the project site. This station monitors ambient concentrations of 8-hour ozone, 1-hour ozone, PM_{2.5}, and PM₁₀. There are no monitoring stations within the LCAB that measure concentrations of NO₂ or CO, and measurements of these pollutants outside of the air basin would not be representative of ambient air quality in the vicinity of the project site. **Table 3.3-1** identifies the most recent available data for federal and State ambient air quality standards for the relevant air pollutants, along with the ambient pollutant concentrations that were measured between 2017 and 2019.

Sensitive Receptors

Some receptors are considered more sensitive than others to air pollutants. Reasons for greater sensitivity include pre-existing health problems, proximity to emissions source, or duration of exposure to air pollutants. Sensitive receptors nearest to the project site include the existing residential homes to the north and the south of the project site, and Redbud Park to the west of the project site. In addition, there is a baseball diamond adjacent to the southern boundary of the project site, as well as the Clearlake Youth Center, located approximately 140 feet south of the project site. Children would likely use these facilities and are typically considered to be more

sensitive to air pollutants due to their higher breathing rate and their higher sensitivity to the effects of TACs due to their age of development. However, they would not be spending significant amounts of time at the locations and their exposure duration would be limited. Potential operational impacts of the project on air quality are addressed in Section 3.3.2.1 of this chapter.

Table 3.3-1
Air Quality Data Summary (2017-2019) for the Project Site Vicinity

		•			,
Pollutant		National/ State Standard	Monitoring Data 2017	Monitoring Data 2018	Monitoring Data 2019
	Highest 1 Hour Average (ppm) ^b	0.09 ^d	0.103	0.080	0.060
	Days over State Standard ^a		1	0	0
Ozone	Highest 8 Hour Average (ppm) ^b	0.070 ^e /0.070 ^d	0.069	0.064	0.055
	Days over National Standard ^a		0	0	0
	Days over State Standard ^a		0	0	0
Particulate Matter (PM10)	Highest 24 Hour Average – State/ National (μg/m³) ^b	150.0 ^e /50.0 ^d	118.9 /120.0	180.1/176.7	21.9/21.8
	Estimated Days over National Standard ^{a,c}		0	1	0
	Estimated Days over State Standard ^{a,c}		1	2	0
	State Annual Average (μg/m³)a,b	20 ^d			10.1
Particulate Matter (PM2.5)	Highest 24 Hour Average (μg/m³) ^b – National Measurement	35 ^e	85.3	157.9	8.3
	Estimated Days over National Standard ^{a,c}		2	3	0
	State Annual Average (μg/m³) ^b	12.0 ^d			3.1

NOTES:

- ^a Generally, state standards and national standards are not to be exceeded more than once per year.
- b ppm = parts per million; μ g/m3 = micrograms per cubic meter.
- ^c PM10 and PM2.5 is not measured every day of the year. Number of estimated days over the standard is based on 365 days per year.
- d State standard
- e National standard

Values in Bold exceed the respective air quality standard.

-- indicates that information was unavailable.

SOURCE: CARB, 2020a; CARB, 2020b; CARB, 2020c; CARB, 2020d.

Greenhouse Gases

Gases that trap heat in the atmosphere are called greenhouse gases (GHGs). The accumulation of GHGs in the atmosphere has been linked to global climate change. Global climate change is the acceleration of change in weather conditions on earth that can be measured by wind patterns, storms, precipitation, and temperature. Potential climate change impacts include seasonal shifts in vegetation which could affect the distribution of flora and fauna species. Forest dieback poses risks to carbon storage (known as carbon sinks), biodiversity, wood production, water quality, and economic activity. Wildfires, which are an important control mechanism in many ecosystems, are becoming more severe and more frequent, making it difficult for native plant

species to repeatedly re-germinate. Continued emissions of GHGs will cause further warming and long-lasting changes in all components of the climate system, increasing the likelihood of severe, pervasive, and irreversible impacts for people and ecosystems (IPCC, 2014b).

Carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), sulfur hexafluoride (SF₆), perfluorocarbons (PFCs), hydrofluorocarbons (HFCs), and nitrogen trifluoride (NF₃) are the principal GHGs. CO₂ is the reference gas for climate change, as it is the GHG emitted in the highest volume. The effect that each of the GHGs have on global warming is the product of the mass of their emissions and their global warming potential (GWP). GWP indicates how much warming would be predicted to be caused by the same mass of CO₂. For example, CH₄ and N₂O are substantially more potent GHGs than CO₂, with GWPs of approximately 30 and approximately 275 times that of CO₂, which has a GWP of 1 (U.S. EPA, 2020b). To account for the warming potential of GHGs, and to combine emissions of gases with differing properties, GHG emissions are typically quantified and reported as CO₂ equivalents (CO₂e). A GHG analysis is included in Section 3.3.3, Cumulative Impact Analysis.

3.3.1.2 Regulatory Setting

Relevant regulatory setting information is included in Appendix A.

3.3.2 Impact Analysis

3.3.2.1 Proposed Action

Construction Criteria Pollutant Emissions

The LCAB is designated as an attainment area for both the State and national ambient air quality standards (see Appendix A, Table A-2). Because there are no de minimis thresholds that are applicable to attainment areas, the de minimis thresholds for nonattainment areas were used for a conservative analysis of air quality impacts. Therefore, the applicable General Conformity de minimis thresholds are 50 tons per year of reactive organic gases (ROG), 100 tons per year of NO_x, 100 tons per year of PM₁₀, and 100 tons per year of PM_{2.5} (U.S. EPA, 2020a). If the Proposed Action would result in total direct and indirect emissions in excess of the de minimis emission rates, it must be demonstrated through conformity determination procedures that the emissions conform to the applicable State Implementation Plan for each affected pollutant.

Construction activities associated with the Proposed Action would generate emissions of ROG, NO_x, PM_{2.5}, and PM₁₀ from operation of heavy equipment, use of employee vehicles, excavation for infrastructure and building foundations, paving, and application of architectural coatings. The analysis of daily construction emissions has been prepared using the California Emissions Estimator Model (CalEEMod) version 2016.3.2. CalEEMod was used to determine whether short-term construction-related emissions of criteria pollutants associated with the Proposed Action would exceed the General Conformity de minimis thresholds. Modeling inputs used project-specific information, where available. When project-specific information was not available, CalEEMod defaults were used. Detailed modeling assumptions are included in Appendix B. Estimated annual emissions that would be generated from construction of the Proposed Action are presented in **Table 3.3-2**.

Table 3.3-2
Annual Construction Emissions (Tons per year)

Construction	ROG	NO _x	PM ₁₀	PM _{2.5}
2022 Construction Emissions	0.26	1.14	0.07	0.06
De minimis Threshold	50	100	100	100
Exceeds Threshold?	No	No	No	No

SOURCE: U.S. EPA, 2020a; Appendix B.

These calculations assume the use of the standard dust control measures incorporated into Section 2.1.4, Construction. Standard dust control measures may include but are not limited to applying water in sufficient quantities to prevent the generation of visible dust plumes, applying soil binders to uncovered areas, reestablishing ground cover as quickly as possible to maintain effective cover over exposed areas, and limiting vehicle speeds onsite to 15 miles per hour or less. As depicted in Table 3.3-2, construction of the Proposed Action would result in emissions below the General Conformity de minimis thresholds; therefore, emissions from construction of the Proposed Action would be less than significant.

Construction Health Risks

Toxic air contaminants (TACs) are State of California designated airborne substances that are capable of causing short-term (acute) and/or long-term (chronic or carcinogenic) adverse human health effects. TACs include both organic and inorganic chemical substances and may be emitted from a variety of common sources including gas stations, automobiles, diesel engines, painting operations, and more. The primary TAC of concern from construction of the Proposed Action is diesel particulate matter (DPM), which is generated from diesel engines such as those that would be used during construction of the Proposed Action. As discussed under the Environmental Setting section, above, the nearest sensitive receptor is the Clearlake Youth Center located approximately 140 feet south of the project site. Due to the short-term duration of the project construction, approximately eight months, residents would not be exposed to significant amounts of TACs during construction of the Proposed Action. Construction health risks would not be significant. Similarly, exposure of individuals at the nearby park to DPM emissions from the construction of the Proposed Action, would be negligible due to the short-term duration of construction and, additionally, because individuals visiting the nearby park would not be continuously present for a long-periods of time.

Operational Criteria Pollutant Emissions

Table 3.3-3 shows that operational emissions resulting from the Proposed Action would be below General Conformity de minimis thresholds. Thus, the Proposed Action would have a less than significant impact from operational emissions.

TABLE 3.3-3
OPERATIONAL EMISSIONS (TONS PER YEAR)

Operational	ROG	NO _x	PM ₁₀	PM _{2.5}
Annual Operational Emissions	1.56	2.97	0.74	0.21
De minimis Thresholds	50	100	100	100
Exceeds threshold?	No	No	No	No

SOURCE: U.S. EPA, 2020a; Appendix B.

Operational Health Risks

Operation of the Proposed Action would generate TAC emissions from mobile sources as well as from operation of the eight fueling dispensers. Mobile sources such as diesel fueled trucks would emit DPM and the main concern from DPM is from cancer risk due to long-term exposure. The majority of trips generated by the Proposed Action would be made by passenger vehicles, most of which are gasoline fueled and would not generate DPM emissions. Therefore, DPM emissions associated with mobile sources would be minimal. Furthermore, individuals visiting the nearby park and youth center would not be continuously present for a long-term period, so this risk would be minimized and operational DPM emissions are not likely to generate a significant adverse health risk.

Gasoline stations emit TACs that can be a contributor to adverse health impacts for people residing near gas stations. Of the TACs in gasoline, benzene is a TAC of concern emitted during gas station operation, due to its short-term (acute) health effects. CARB's Air Quality and Land Use Handbook: A Community Health Perspective recommends siting sensitive land uses at least 50 feet from a typical dispensing facility, which is a gas station with a throughput of less than 3.6 million gallons per year (CARB, 2005). This recommended distance is based primarily on data showing that the air pollution exposures can be reduced as much as 80 percent with the recommended separation. (CARB, 2005). The fueling station that would be developed as part of the Proposed Action would have eight to ten fueling dispensers and, based on an analysis of other similarly sized fueling stations, would not have a throughput that would exceed 3.6 million gallons per year (Blue Stone Strategy Group, 2020). The nearest residential receptor is located approximately 120 feet north of the project site boundary, farther than the distance recommended by CARB to protect receptors from TAC emissions from gas stations. Therefore, the Proposed Action would be consistent with CARB's recommendation of a separation of 50 feet between a typical fuel station and sensitive uses. In addition, the baseball diamond at Redbud Park just south of the site is located greater than 50 feet from the project boundary and at this time eight to ten EV stations could be installed along the southern boundary of the project site; therefore, children at the baseball diamond would be located at least 80 feet from the fueling area. Thus, the gasoline fueling dispensers would be located beyond the recommended siting distance between large gasoline dispensing facilities and sensitive receptors.

The new facility would also be required to obtain an Authority to Construct (ATC) and permit to operate (PTO) approval from the LCAQMD, which will review the facility for compliance with leak testing requirements and implementation of certified vapor recovery equipment (Phase I and

Phase II), as required by LCAQMD Rule II Section 439.5 (LCAQMD, 2006). Phase I vapor recovery refers to the collection of gasoline vapors displaced from storage tanks when fuel tanker trucks make gas deliveries. Phase II vapor recovery systems control the vapors displaced from vehicle fuel tanks during fueling. CARB-certified Phase I systems collect 95 to 98 percent of displaced vapors for return to the delivery truck, while Phase II systems capture 90 to 95 percent of vapors resulting from fueling (CARB, 2022). Therefore, the TAC emissions resulting from operation of the fueling station that would be developed under the Proposed Action would be minimized.

The CARB and CAPCOA have developed their Gasoline Service Station Industrywide Risk Assessment Technical Guidance (Technical Guidance) to provide a uniform methodology for preparing gas station emissions inventories and risk assessments. Using information from gas stations in the 35 air districts, CARB and CAPCOA gathered information that was used to develop source parameters for modeling that could be applied to a wide range of gas station configurations. The results of the modeling efforts were used to calculate the risk tables contained in the Technical Guidance that can be used to identify potential risk from gas stations with underground storage tanks (CARB, 2022). The risk from individual gas stations is determined based on the throughput of the facility, the control scenario used by the gas station, whether the station is located in an urban or rural environment, and the location of the nearest receptor. Although the LCAQMD does not have a threshold of significance for cancer risk, the Yolo-Solano Air Quality Management District (YSAQMD) recommends a TAC threshold of 10 in 1 million. A conservative estimate of the facility throughput was based on the throughput of other, similarly sized gas station facilities within the vicinity of the Proposed Action (Blue Stone Strategy Group, 2020). Based on the throughput of the facility (less than 3.6 million gallons per year), the required Phase I and Phase II controls that would be required, and the distance to the nearest sensitive receptor 120 feet north of the project site, the cancer risk that would be associated with the operation of the gas station would be approximately 4 in 1 million. This resulting cancer risk would not exceed the applicable YSAQMD threshold of significance of 10 in 1 million.

Operation of the Proposed Action would not lead to significant adverse health risks from DPM mobile source emissions. Furthermore, based on the distance of the proposed fueling stations from nearby sensitive receptor locations, as well as the project's compliance with LCAQMD retail gasoline transfer and storage (Phase I) requirements and retail dispensing (Phase II) requirements for vapor recovery, health effects from operational TAC emissions generated during operation of the gasoline fueling station would be minimized and would not exceed the thresholds of significance for cancer risk. Therefore, TAC emissions and associated health risks from operation of the Proposed Action would be less than significant.

3.3.2.2 No Action Alternative

Under the No Action Alternative, it is assumed that the existing commercial office use on the site would remain and would therefore not generate new sources of criteria air pollutants or GHGs. Any future development would be required to be consistent with federal, State and local air quality regulations discussed in Appendix A, as well as City development requirements.

3.3.3 Cumulative Impact Analysis

3.3.3.1 Criteria Pollutant Emissions

Impacts associated with criteria pollutant emissions would be limited geographically to the air basin and temporally to construction and operational phases. As discussed above, construction of the Proposed Action would result in direct, short-term effects on air quality due to use of construction equipment, while operation would result in emissions from energy use, water use, waste generation, stationary sources, and mobile sources. As shown in Table 3.3-2 and Table 3.3-3, criteria pollutant emissions from construction and operation would not exceed the de minimis thresholds of significance. These thresholds are cumulative in nature in that they consider development throughout the air basin. If concurrent construction activities are underway or planned in the immediate vicinity of the project site, those project sites would be implemented under similar air quality regulations. In addition, all new construction would be consistent with City's construction regulations and LCAQMD policies outlined for construction activities. Therefore, the Proposed Action would not result in a cumulatively considerable air quality impact.

3.3.3.2 Greenhouse Gas Emissions

While the emissions of one single project will not cause global climate change, GHG emissions from multiple projects throughout the world could result in a cumulative effect with respect to global climate change. Construction and operation of the development would generate emissions of GHGs that contribute to climate change. During construction, GHGs would be emitted from fuel combustion of off-road equipment, haul trucks, vendor vehicles, and worker vehicles. After construction activities have been completed, the Proposed Action would generate GHG emissions during operation from water use, energy use, waste generation, area sources (i.e., use of consumer products, application of architectural coatings, and landscaping activity), and mobile sources (i.e., vehicles and delivery trucks traveling to and from the project site). There is no adopted quantitative threshold for determining the significance of climate change impacts under the NEPA. The CEO has issued guidance to assist federal agencies in their assessment of the effects of GHG emissions and climate change (Final Guidance for Federal Departments and Agencies on Consideration of Greenhouse Gas Emissions and the Effects of Climate Change in National Environmental Policy Act Reviews [The Final Guidance]). The Final Guidance recommends that GHG emissions resulting from projects are quantified using available data and quantification tools. Therefore, GHG emissions that would result from construction and operation of the Proposed Action were estimated using CalEEMod.

GHG emissions that would result from construction were amortized over the life of the project (assumed to be 30 years). Total construction-related GHG emissions were calculated to be approximately 174 MT CO₂e per year. Amortized over 30 years, construction-related GHG emissions resulting from the Proposed Action would be approximately 5.8 CO₂e MT CO₂e per year. As shown in **Table 3.3-4**, the total annual GHG emissions resulting from amortized construction and operational activities associated with the Proposed Action, would be approximately 975 MT CO₂e per year.

As shown in Table 3.3-4, the majority of GHG emissions associated with the Proposed Action would be generated from mobile sources including employees and customers traveling to and from the project site. Transportation-related GHG emissions would be reduced as regulations become increasingly more stringent and fuel efficiency is improved as newer models become available. The Proposed Action represents a negligible portion of global GHG emissions and thus would not result in a cumulatively considerable impact.

TABLE 3.3-4
ESTIMATED ANNUAL GHG EMISSIONS

Emission Source	CO₂e (MT/year)
Annual Proposed Action Construction (Amortized over 30 years)	5.78
Area	<0.01
Energy	14.14
Mobile	921.71
Stationary	31.77
Waste	0.94
Water	0.92
Total Annual Operational Emissions	969.48
Total Annual Emissions (Amortized Construction + Operation)	975.26

NOTES: CO₂e= carbon dioxide equivalent; MT/yea = metric tons per year; see Appendix B for CalEEMod model outputs.

SOURCE: Appendix B

3.4 Biological Resources

This section describes the existing setting and analyzes impacts related to biological resources.

3.4.1 Setting

3.4.1.1 Environmental Setting

Study Methods

Biological resources within the vicinity of the project site were identified through a field reconnaissance visit, a review of pertinent literature, and database queries. A reconnaissance-level field survey was conducted by ESA biologist Laura Dodson on October 16, 2020. The field reconnaissance visit focused on identifying and characterizing jurisdictional aquatic resources or potential habitat for special-status plant and wildlife species. The primary sources of data referenced for this report included the following:

- California Native Plant Society List (CNPS, 2020).
- Official Species List for the Project Site (U.S. Fish and Wildlife Service [USFWS], 2020).
- California Natural Diversity Database (CNDDB), (CDFW, 2020).

Regional and Project Site Setting

The City is situated in rural Lake County and sits on the on southern shore of Clear Lake, the largest natural freshwater lake within the State (City of Clearlake, 2016). The elevation of the project site is approximately 1,350 feet above mean sea level. The project site is surrounded by urban development and park and recreational space for at least one mile.

Vegetation Communities and Wildlife Habitats

Vegetation communities are assemblages of plant species that occur together in the same area. The project site lacks natural vegetation communities and consists of approximately 0.6 acre of developed area and 0.4 acre of ruderal/disturbed area.

Ruderal/Disturbed

Ruderal and disturbed habitat is located along the western and southern portions of the project site. Vegetation observed in the ruderal landscape includes ornamental (non-native) trees and shrubs and non-native grasses. The entire understory consists of bare compacted ground or gravel surfaces.

Developed

The central and eastern portions of the project site are developed. Developed areas are characterized by impermeable surfaces associated with the existing structure and the paved parking lot and gravel surfaces.

Common Wildlife

During the reconnaissance-level field survey on the project site, no native wildlife species were observed.

Wetlands and Other Waters of the U.S.

Regulated wetlands and other waters of the United States are subject to jurisdiction under Section 404 of the Clean Water Act. Wetlands are ecologically complex habitats that support a variety of both plant and animal life. In a jurisdictional sense, the federal government defines wetlands in Section 404 of the Clean Water Act as "areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support (and do support, under normal circumstances) a prevalence of vegetation typically adapted for life in saturated soil conditions" (33 CFR §328.3[b] and 40 CFR §230.3). "Other waters of the U.S." refers to those hydric features that are regulated by the Clean Water Act but are not wetlands (33 CFR §328.4). Examples of other waters of the U.S. include rivers, creeks, intermittent and ephemeral channels, ponds, and lakes.

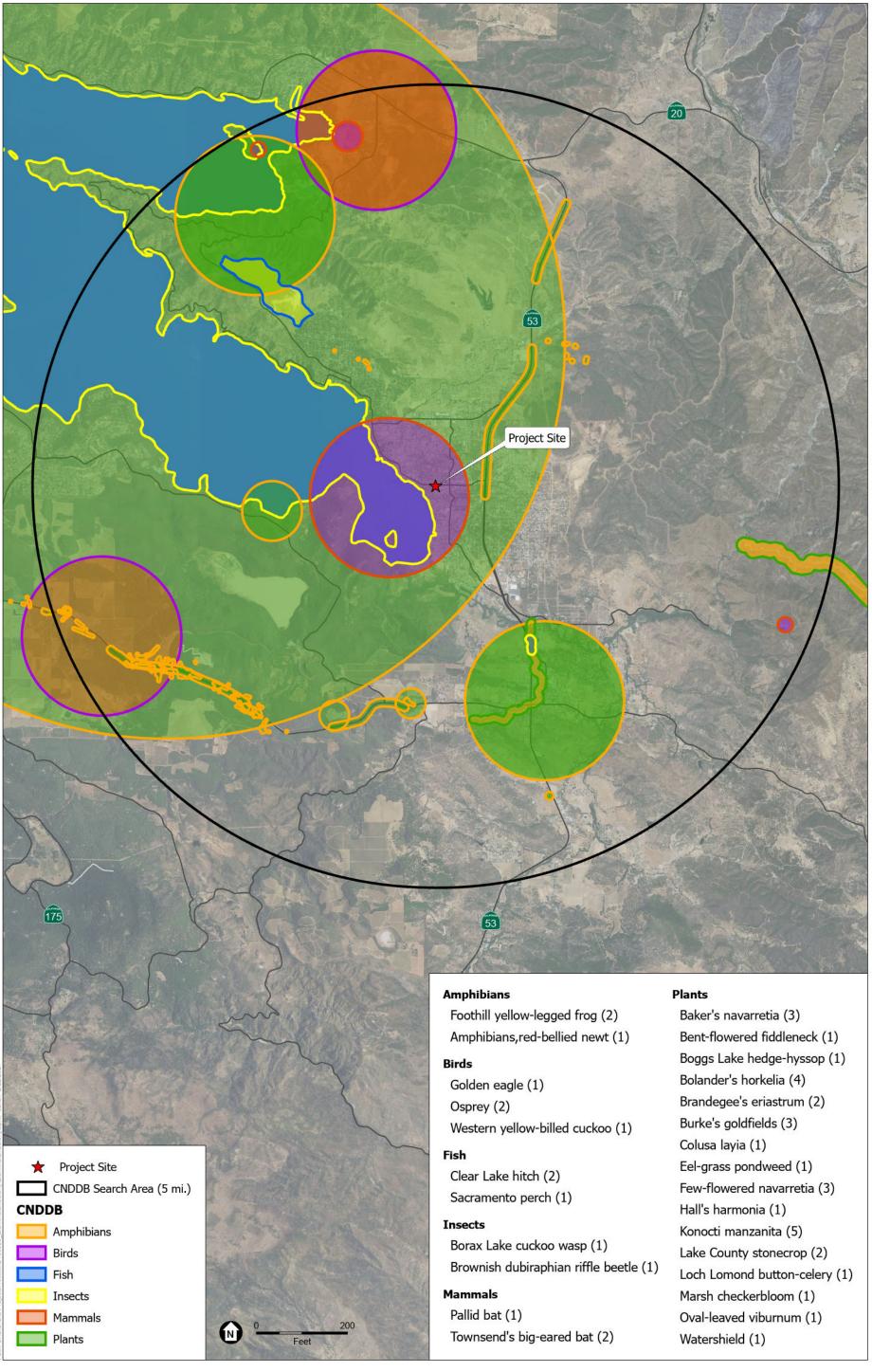
There are no wetlands or waterways within or in the immediate vicinity of the project site.

Potentially Affected Species

Table 3.4-1 identifies the regionally occurring federally listed species based on the CDFW California Natural Diversity Database (CDFW, 2020), the CNPS Society List (2020), and the USFWS Official Species List for the Project Site (USFWS, 2020). The table identifies the protective status of each species, their preferred habitat, and the quality of habitat located within the project site. Also indicated is the probability of the species to occur within the project site. The "Potential for Occurrence" category is defined as follows:

- None: No suitable habitat is present within or immediately adjacent to the project site.
- Low Potential: The project site and/or immediate vicinity provides low-quality habitat for a particular species, such as improper soils, disturbed or otherwise degraded habitat, improper assemblage of desired vegetation, and/or the site is outside of the known elevation range of the species.
- Medium Potential: The project site and/or immediate vicinity provides marginal habitat for a particular species. For example, proper soils may be present, but the desired vegetation assemblage or density is less than ideal; or soils and vegetation are suitable, but the site is outside of the known elevation range of the species.
- **High Potential:** The project site and/or immediate vicinity provide high-quality or ideal habitat (i.e., soils, vegetation assemblage, and topography) for a particular species and/or there are known occurrences in the general vicinity of the project site.
- **Present:** The species or vegetation community/habitat was observed within the project site and/or immediate vicinity during surveys or the species has been previously reported within the project site in the recent past.

Known occurrences of federally-listed species recorded within 5 miles of the project site are depicted in **Figure 7**.



SOURCE: USDA, 2018; CNDDB, 2020; Esri, 2020; Lake County, 2020; ESA, 2020

ESA

3. E	nvironmental Impacts
3.4	Biological Resources

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3.4-4

TABLE 3.4-1
FEDERALLY-LISTED SPECIES RECORDED IN THE REGION OF THE PROJECT SITE

Organism	Common Name	Scientific Name	Status (Federal)	Habitat	Potential to Occur
	Burke's goldfields	Lasthenia burkei	Endangered	Dicot found in meadows and seeps, vernal pools, and wetlands.	None. No suitable habitat for this species occurs on the project site.
	Few-flowered navarretia	Navarretia leucocephala ssp. pauciflora (=N. pauciflora)	Endangered	Dicot found in vernal pools and wetlands.	None. No suitable habitat for this species occurs on the project site.
	Lake County stonecrop	Parvisedum leiocarpum	Endangered	Dicot found in cismontane woodland, valley and foothill grasslands, vernal pools, and wetlands.	None. No suitable habitat for this species occurs on the project site.
Plants	Loch Lomond button-celery	Eryngium constancei	Endangered	Dicot found in vernal pools and wetlands.	None. No suitable habitat for this species occurs on the project site.
	Many-flowered navarretia	Navarretia leucocephala ssp. plieantha	Endangered	Dicot found in vernal pools and wetlands.	None. No suitable habitat for this species occurs on the project site.
	Slender Orcutt grass	Orcuttia tenuis	Threatened	Annual grass found in vernal pools, often in gravelly soil, from 100–5,800 feet. Blooms May through September, and occasionally into October.	None. No suitable habitat for this species occurs on the project site.
	Delta smelt	Hypomesus transpacificus	Threatened	Euryhaline (tolerant of a wide salinity range) species that is confined to the San Francisco Estuary, principally in the Delta and Suisun Bay.	None. No suitable habitat for this species occurs on the project site.
Fish	Central California coast steelhead	Oncorhynchus mykiss	Threatened	Russian River to and including Aptos Creek, and all drainages of San Francisco and San Pablo Bays eastward to Chipps Island at the confluence of the Sacramento and San Joaquin Rivers.	None. No suitable habitat for this species occurs on the project site.
Amphibians	California red- legged frog	Rana draytonii	Threatened	Aquatic, artificial flowing waters, artificial standing waters, freshwater marsh, marsh and swamp, riparian forest, riparian scrub, riparian woodland, south coast flowing or standing waters, and wetland.	None. No suitable habitat for this species occurs on the project site.
	western yellow- billed cuckoo	Coccyzus americanus occidentalis	Threatened	Riparian habitat associated with large river systems.	None. No suitable habitat for this species occurs on the project site.
Birds	Northern spotted owl	Strix accidentalis caurina	Threatened	Resides in dense, old-growth, multi-layered mixed conifer, redwood, and Douglas-fir habitats, from sea level up to 7,545 feet. Feeds in forest habitats.	None. No suitable habitat for this species occurs on the project site.

As shown in Table 3.4-3, the project site does not provide habitat for any federally-listed species.

Critical Habitat

Critical habitat is defined in Section 3(5)A of the federal Endangered Species Act as the specific portions of the geographic area occupied by the species in which physical or biological features essential to the conservation of the species are found and that may require special management considerations or protection.

There is <u>no</u> critical habitat designated within or adjacent to the project site.

3.4.2 Impact Analysis

3.4.2.1 Proposed Action

Special-Status Species

The project site does not provide habitat for federally protected species and does not occur within designated Critical Habitat for federally listed species. Migratory birds with a medium or higher potential for occurrence with the project site are discussed below. It is assumed for this analysis that the entire project site would be disturbed.

Nesting Birds

Under the Migratory Bird Treaty Act (MBTA) most bird species and their nests and eggs are protected from injury or death. The project site supports suitable habitat for nesting birds within the ornamental landscape trees. Direct impacts on nesting birds during the breeding season (generally between February 15 and September 14) could occur during initial site preparation, demolition of existing structures and active construction. Nesting birds could be adversely affected if an active nest is either removed or exposed to a substantial increase in noise or human presence during project activities. Disturbance that causes nest abandonment by migratory birds or raptors and subsequent loss of eggs or developing young may violate the MBTA and is considered a potentially significant impact. With implementation of **Mitigation Measure 3.4-1** and **3.4-2**, impacts would be reduced to a less-than-significant level.

Mitigation Measure 3.4-1: Vegetation clearing operations, including initial grading and tree removal, should occur outside of the nesting season (September 1 through February 14) to the extent feasible. If vegetation removal begins during the nesting season (February 15 to August 31), a qualified biologist will conduct a preconstruction survey for active nests within a 500-foot buffer around the project site. The pre-construction survey will be conducted within 7 days prior to commencement of ground disturbing activities. If the pre-construction survey shows that there is no evidence of active nests, then a letter report will be prepared, and no additional measures are required. If construction does not commence within 7 days of the pre-construction survey, or halts for more than 7 days, an additional pre-construction survey is required (if working during the nesting season).

Mitigation Measure 3.4-2: If any active nests are located in the vicinity of the project site, an appropriate buffer zone will be established around the nests, as determined by the biologist. The biologist will mark the buffer zone with construction tape or pin flags and

maintain the buffer zone until the end of breeding season or until the young have successfully fledged or the nest is determined to be no longer active. Buffer zones are typically 50-100 feet for migratory bird nests and 250-500 feet for raptor nests. If active nests are found within the vicinity of the construction area, a qualified biologist will monitor nests weekly during construction to evaluate potential nesting disturbance by construction activities. If establishing the typical buffer zone is impractical, the qualified biologist may reduce the buffer depending on the species and daily monitoring would be required to ensure that the nest is not disturbed and no forced fledging occurs. Daily monitoring will occur until the qualified biologist determines that the nest is no longer occupied.

3.4.2.2 No Action Alternative

Maintenance of the existing commercial office use on the site would not result in significant impacts with respect to biological resources. Any future development would need to be consistent with federal, State and local regulations concerning the protection of biological resources.

3.4.3 Cumulative Impact Analysis

Impacts associated with biological resources would be limited geographically to within 500 feet of the project site (where nesting birds may be affected). Cumulative impacts would be limited to times when the active nesting season overlaps with site preparation, demolition, and construction. Mitigation Measures 3.4-1 and 3.4-2 are proposed to reduce impacts during construction. If concurrent construction activities are underway or planned in the immediate vicinity of the project site, those project sites would be implemented under similar or more rigorous environmental regulations, mitigation measures and policies for the protection of local biological resources. For these reasons, the Proposed Action is not anticipated to contribute to cumulative impacts to biological resources.

3. E	nvironmental Impacts
3.4	Biological Resources

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3.5 Cultural Resources

This section describes the cultural resources that could be affected by the alternatives under consideration. ESA conducted a cultural resources investigation of the project site in January 2021, March 2022 and October 2022, the results of which are provided below.

Federal regulations require the identification of historic properties in the Area of Potential Effects (APE). The APE is defined as the geographic area within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties (36 CFR 800.16[d]). The APE includes the one-acre project site (depicted on Figure 2).

Setting

Environmental Setting

Pre-Contact Setting

Categorizing the pre-contact period into cultural stages allows researchers to describe a broad range of archaeological resources with similar cultural patterns and components during a given timeframe, thereby creating a regional chronology. Milliken et al. (2007) provide a framework for interpreting the pre-contact period and have divided human history of the region into four periods: the *Paleoindian Period* (11,500 to 8000 B.C.), the *Early Period* (8000 to 3500 B.C.), the *Middle Period* (500 B.C. to A.D. 1050), and the *Late Period* (A.D. 1050 to 1550).

The Paleoindian Period was characterized by big-game hunters occupying broad geographic areas. One of the earliest known sites in California, the Borax Lake site, has been identified near Clear Lake. The earliest component of the site dates to approximately 12,000 years ago (10,000 B.C.) and is represented by fluted points, similar to the Clovis points found in association with extinct Pleistocene mammals in the southwest.

During the Early Period, geographic mobility continued from the Paleoindian Period and is characterized by the millingslab and handstone, and by large wide-stemmed and leaf-shaped projectile points. The first cut shell beads and the mortar and pestle are documented in burials during the Early Period, indicating the beginning of a shift away from mobility to a practice of remaining in one location over time.

During the Middle Period, geographic mobility may have continued, although groups began to establish longer term base camps in localities from which a more diverse range of resources could be exploited. The addition of milling tools and obsidian and chert concave-base projectile points, and the occurrence of sites in a wider range of environments suggest that the economic base was more diverse. By the Upper Middle Period, mobility was being replaced by the development of numerous small villages.

During the Late Period, social complexity developed toward lifeways of large, central villages with resident political leaders and specialized activity sites, which are locations where archaeological sites may be discovered. Artifacts associated with the period include the bow and arrow, small corner-notched projectile points, and a diversity of beads and ornaments.

Ethnographic Setting

Distributed over the lands of Mendocino, Lake, Sonoma, and portions of Glenn Counties are many independent bands of Pomo Indians. Pomo (Powers, 1877) is a construction used by ethnographers to describe a series of similar, but not identical cultures. The Pomo never were a single consolidated tribe, but instead are more accurately represented by numerous politically independent bands. The Elem Pomo Tribe is one of six Pomo groups in Lake County and one of 20 federally-recognized Pomo tribes in California.

The primary sociopolitical unit of the Pomo was the village community, sometimes referred to as a tribelet. Pomo village communities consisted of a principal village, at which the chief resided, surrounded by secondary settlements. Each village community averaged around 100 to 2,000 people (Bean and Theodoratus, 1978). Within the territory of each Pomo village community, people were allowed to freely hunt, fish, and gather plant foods. Village community boundaries, however, were clearly defined in regards to rights of utilization of their territory by other groups (Kroeber, 1925). Ethnographic village sites on the east side of Lower Clear Lake included *Kulái*, *Kuúlbidai*, and *Xubé* (Barrett, 1908).

As with other California Native American groups, the Gold Rush of 1849 had a devastating effect on the Southeastern Pomo. Those who survived were subjected to violence and prejudice at the hands of the miners and settlers, and the Pomo were pushed out of their ancestral territory. Although this contact with settlers had a profound negative impact on the Pomo population through disease and violent actions, the Pomo people survived and continue to maintain strong communities and action-oriented organizations.

Research Methods

Cultural Resources Record Search

Staff completed a records search of the APE and vicinity at the Northwest Information Center (NWIC) of the California Historical Resources Information System on January 4, 2021 (File No. 20-1157). The records search consisted of an examination of the following documents:

- **NWIC digitized base maps** (USGS Clearlake Highlands 7.5-minute topographic map), to identify recorded archaeological sites and studies within a 0.25-mile radius of the APE.
- **NWIC digitized base maps** (USGS Clearlake Highlands 7.5-minute topographic map), to identify recorded historic-era resources of the built environment (building, structures, and objects) within and adjacent to the APE.
- Resource Inventories: California Inventory of Historical Resources, California Historical Landmarks, Built Environment Resources Directory for Lake County (through April 2020).

The purpose of the records search was to (1) determine whether known cultural resources have been recorded within or adjacent to the APE; (2) assess the likelihood for unrecorded cultural resources to be present based on historical references and the distribution of nearby sites; and (3) develop a context for the identification and preliminary evaluation of cultural resources.

Results

Eight cultural resources investigations have been completed in the vicinity of the project site (**Table 3.5-1**). None of these studies included the APE.

TABLE 3.5-1
PREVIOUS CULTURAL RESOURCES STUDIES IN VICINITY

Study No.	Title	Author	Year	Resources Identified (None within APE)
S-000462	Cultural Resource Assessment of the Clear Lake Sanitation Assessment District 1-4, Lake County, California.	Robert A. Gerry	1976	
S-000675	An Archaeological Survey of Redbud Park, Clearlake Highlands, Lake County, California.	Roger Werner	1977	17-000731, 17-000732
S-007624	An Archaeological Survey of the Eagle Property, Situated Along Lakeshore Drive, City of Clearlake, Lake County, California (letter report) City of Clearlake, Lake County, California.(letter report)	Jay M. Flaherty	1985	
S-027942	City of Clearlake, Old Highway 53 Bikepath Project, Survey and Evaluation of Potential Historic Properties Located Within the Area of Potential Impact.	Dennis E. Harris	1993	17-002194, 17-002195, 17-002196, 17-002197, 17-002198, 17-002199
S-038954	Archaeological Survey Report Safe Routes to Schools Old Hwy 53 Bike Lane Project, Clearlake, Lake County, California, 01-Lake, SRTSL-5427(022)	Vicki Beard	2012	
S-038954	Historic Property Survey Report, State Routes to Schools Old Hwy 53 Bike Lane Project, Clearlake, Lake County, California, SRTSL(022)	Vicki Beard	2012	
S-044237	Cultural Resources Constraints Report: Highlands 1104 Blitz, Electric Distribution, Clearlake, Lake County	Michella Rossi	2013	
S-048437	A Cultural Resources Study for the Clearlake Subway Drive-Through 15060 Lakeshore Drive, Clearlake, Lake County, California	Jacqueline Farrington and Thomas M. Origer	2016	
S-049932	Cultural Resource Evaluation of 15105 Lakeshore Drive, Clearlake CA, APN 040-330-32	John W. Parker	2017	

Source: NWIC, 2021

Results of the records search indicate that no cultural resources have been previously recorded within the APE. Thirteen cultural resources have been previously recorded within the 0.25-mile records search radius (**Table 3.5-2**).

Based on the Phase I Environmental Assessment completed for the project (LACO, 2019), there are no buildings or structures in the APE that are older than 50 years and would therefore meet the minimum age threshold for consideration to the National Register of Historic Places (National Register).

TABLE 3.5-2
PREVIOUS CULTURAL RESOURCES IN RECORDS SEARCH RADIUS

Designation	Trinomial	Age	Description	Recording Event
P-17-000563	CA-LAK-626	Pre-contact	"Midden"	1976 (D. Branscomb)
P-17-000579	CA-LAK-657	Pre-contact	"Obsidian scatter"	1975 (D. Branscomb)
P-17-000731	CA-LAK-886	Pre-contact	Large site of a "midden deposit with obsidian flakes and tools" including groundstone tools	1975 (D. Branscomb); 1976 (D. Branscomb); 1977 (Roger Werner)
P-17-000732	CA-LAK-887	Pre-contact	Large site of a "midden deposit with obsidian flakes and tools" including groundstone tools	1976 (D. Branscomb)
P-17-001560	CA-LAK-664	Pre-contact	Originally described as "obsidian flakes" and determined to not be a site	1975 (D. Branscomb); 2000 (Roger Werner)
P-17-001571	CA-LAK-683	Pre-contact	"Obsidian flakes and basalt tools"	1975 (D. Branscomb)
P-17-002102		Pre-contact, Historic	Originally described as an "obsidian workshop" and determined to not be a site	1976 (D. Branscomb); 2000 (Roger Werner)
P-17-002103		Historic	1930s stone wall	2000 (Roger Werner)
C-149		Pre-contact	"Midden"	1975 (D. Branscomb)
C-180		Pre-contact	"Workshop"	1976 (D. Branscomb)
C-193		Pre-contact	"Workshop, midden, obsidian scatter"	1976 (D. Branscomb)
C-521		Pre-contact	"Obsidian scatter"	1977 (D. Branscomb)
C-536		Pre-contact	"Obsidian flake"	1977 (D. Branscomb)

Source: NWIC, 2021

Cultural resources recorded in the records search radius include locations of isolated midden, concentrations of obsidian debitage, and widespread scatters of tools and other artifacts. All of these resources were originally recorded by D. Branscomb between 1975 and 1977, have very little information about resource components, and their locations have poor accuracy. For example, Roger Werner revisited many of the sites near the APE in 2000 (P-17-000731, -000732, -001560, -002102, -002103), finding that many of the sites were not located correctly or were not, in fact, cultural resources. The two nearest previously recorded resources to the APE are C-149 and P-17-002102.

C-149 was informally recorded by Branscomb in 1975. The documentation for this resource describes it as a large pre-contact midden site. The notes also state that an obsidian sample was taken from the site. No other information is included in the documentation. The site has not been re-recorded since this informal recordation.

P-17-002102 was first formally recorded by Branscomb in 1976 as a pre-contact obsidian workshop several feet thick. Branscomb noted that the site had been partly destroyed and that an obsidian sample was taken from the site. In 2000, Werner revisited the recorded location of the resource, and no evidence of the site was identified. Werner stated that he found, "numerous locations with gravel fill that contained obsidian chunks and detritus, none of which was prehistoric in age. I do not believe this location is an archaeological site. I think Branscomb saw

obsidian in fill and thought it was a prehistoric site. His description of the deposit as several feet thick is absurd as he provides no bases for the depth. He often gauged depth from exposed cuts I saw nothing like that in this location" (Werner, 2000). Werner goes on to argue that the location is not a cultural resource and that the obsidian identified is part of fill taken from the Borax Lake area.

The APE is underlain by Late Pleistocene-aged Lower Lake Formation (Qll). The Lower Lake Formation is composed of siltstone, claystone, tuff and conglomerate (Manson, 1989). This geological formation does not have the potential for pre-contact archaeological sites to be buried by natural alluvial processes; archaeological sites in this context would be at or very near to the surface and would be identifiable through a pedestrian survey or shallow subsurface survey.

On March 18, 2022, an ESA archaeologist conducted a pedestrian survey of the APE. A concentration of obsidian was observed, which included primarily non-cultural shatter. Some potential obsidian scraper tools were identified. Modern refuse was also scattered throughout the APE.

On October 20, 2022, three ESA archaeologists conducted a subsurface survey in the vicinity of the potential obsidian scrapper tools identified during the pedestrian survey. Elem Indian Colony of Pomo Indians Tribal Historic Preservation Officer conducted a brief site visit during the subsurface survey. The archaeologists determined that only one of the previously identified potential obsidian tools was potentially culturally modified and was designated as an isolate. Isolates are not eligible for listing in the National Register and no further consideration of this resource is necessary for the Proposed Action. All other surface obsidian material was determined to not be culturally modified and was intermixed with gravel fill. Subsurface survey consisted of four 40-centimeter (cm)-diameter shovel probes in a 10-meter square to determine if there were any subsurface archaeological deposits and to determine the stratigraphy of the APE. All excavated sediment was dry-screened through ¼-inch wire mesh. Shovel probes were excavated to a depth of at least 30 cm, if possible, or until sterile soil has been reached. No cultural material was identified in any of the shovel probes. Based on these results, there are no archaeological resources in the APE that could be considered historic properties.

Impact Analysis

Proposed Action

Based on the cultural resources assessment, there are no cultural resources in the APE and the finding for the Proposed Action is **No Historic Properties Affected**.

While unlikely, ground disturbing activity could impact previously unidentified cultural resources. **Measures 3.5-1** through **3.5-3** are provided to reduce effects to previously unidentified cultural resources.

Mitigation Measure 3.5-1: Construction Worker Cultural Resources Sensitivity Training. Prior to any earth moving activities, a qualified archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for Archeology shall conduct cultural resources sensitivity training in coordination with a tribal representative.

The Tribe shall coordinate the training. Construction personnel will be informed of the types of cultural resources that may be encountered, and of the proper procedures to be enacted in the event of an inadvertent discovery of archaeological resources or human remains. The construction contractor will ensure that construction personnel are available for and attend the training and retain documentation demonstrating attendance.

Mitigation Measure 3.5-2: Inadvertent Discoveries. If pre-contact or historic-era archaeological resources are encountered during project implementation, all construction activities within 100 feet shall halt, and a qualified archaeologist, defined as an archaeologist meeting Secretary of the Interior's Professional Qualifications Standards (SOI PQS) for Archeology, shall inspect the find within 24 hours of discovery and notify the BIA of their initial assessment. Pre-contact archaeological materials might include: obsidian and chert flaked-stone tools (e.g., projectile points, knives, scrapers) or toolmaking debris; culturally darkened soil (midden) containing heat-affected rocks, artifacts, or shellfish remains; stone milling equipment (e.g., mortars, pestles, handstones, or milling slabs); and battered stone tools (e.g., hammerstones, pitted stones). Historic-era materials might include building or structure footings and walls, and deposits of metal, glass, and/or ceramic refuse.

If the BIA determines, based on recommendations from the archaeologist and, if the resource is indigenous and a Native American tribe has expressed interest, a Native American tribe, that the resource may qualify as a historic property (for NHPA purposes), the resource shall be avoided, if feasible. Consistent with Section 15126.4(b)(3), this may be accomplished through planning construction to avoid the resource; incorporating the resource within open space; capping and covering the resource; or deeding the site into a permanent conservation easement.

If avoidance is not feasible, the BIA shall consult with appropriate Native American tribes (if the resource is pre-contact and a tribal government has requested consultation), and other appropriate interested parties to determine treatment measures to avoid, minimize, or mitigate any potential adverse effects to the resource pursuant to 36 CFR Section 800.5. This shall include documentation of the resource and may include data recovery, if deemed appropriate, or other actions such as treating the resource with culturally appropriate dignity and protecting the cultural character and integrity of the resource.

Mitigation Measure 3.5-3: Discovery of Human Remains. If human remains are encountered during construction, the qualified archaeologist in coordination with the tribal monitor shall have the authority to halt or redirect construction activities in the immediate vicinity of the find (within approximately 100 feet). The Tribe will contact the County Coroner to determine that no investigation of the cause of death is required. The Coroner will contact the Native American Heritage Commission within 24 hours, if the Coroner determines the remains to be Native American in origin. The Commission will then identify the person or persons it believes to be the most likely descendant from the deceased Native American (PRC Section 5097.98), who in turn would make recommendations for the appropriate means of treating the human remains and any associated funerary objects (CEQA Guidelines Section 15064.5[d]). Human remains will be treated in accordance with the provisions of the Native American Graves Protection and Repatriation Act of 1990.

No Action Alternative

Since no historic properties were identified, and since any future development would be implemented in a manner consistent with federal, State, and local land use regulations, there would be No Historic Properties Affected from the No Action Alternative.

Cumulative Impact Analysis

As described above, the Proposed Action would not result in adverse effects to historic properties; therefore, it would not contribute to a cumulative adverse effect to historic properties. Cumulative impacts to undiscovered cultural resources would be reduced for the Proposed Action by the included mitigation measures, and compliance with federal, State and local regulations.

	3.	Environmental	Impacts
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3.5 Cultural Resources

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3.6 Socioeconomic Conditions and Environmental Justice

The following section provides a setting for socioeconomic conditions (population, employment, and housing) and environmental justice issues in the project area and evaluates the potential effects from implementation of the alternatives under evaluation.

3.6.1 Setting

3.6.1.1 Environmental Setting

Population Characteristics

In 2018, Lake County (County) had an estimated population of approximately 64,382 people of which 15,323 lived within the City (City) (U.S. Census Bureau, 2018). The ethnic makeup of the City in 2018 was 10,347 (65.9%) White; 778 (5%) African American; 703 (4.5%) Native American; 29 (0.1%) Asian; 2,985 (19.4%) from other races; and 481 (3.13%) from two or more races (U.S. Census Bureau, 2018). The Tribe has approximately 100 adult citizens.

Employment

In 2018, the median household income was \$48,554 in the County and approximately \$28,888 in the City, while the percentage of the population living in poverty was 17.6% in the County and 34.1% in the City. In 2018, the unemployment rate for the County was 5.6% and the City's unemployment rate was 17.9% (U.S. Census Bureau, 2018).

Housing

In 2018, the City contained 8,042 housing units, of which 5,979 were occupied and 2,063 units were vacant. The City had a homeowner vacancy rate of 2.9% and a rental vacancy rate of 6.1% (U.S. Census Bureau, 2018).

Environmental Justice

Federal agencies are directed by Executive Order 12898, Federal Actions to Address Environmental Justice in Minority and Low Income Populations, as amended, to develop an Environmental Justice Strategy that identifies and addresses disproportionately high and adverse human health or environmental effects of their programs, policies, and activities on minority populations and low-income populations. The CEQ Environmental Justice Guidance under the National Environmental Policy Act advises agencies to consider the composition of the affected area, to determine whether minority populations, low-income populations, or Indian tribes are present in the area affected by the proposed action, and if so whether there may be disproportionately high and adverse environmental effects. Approximately 34 percent of the City's population is composed of minority ethnicities. The City is not considered a low-income population since over 70 percent of the population is above the poverty line. The Elem Indian Colony Pomo Tribe Reservation is considered a nearby environmental justice community.

3.6.1.2 Regulatory Setting

Executive Order 12898 is discussed above.

3.6.2 Impact Analysis

3.6.2.1 Proposed Action

Socioeconomic Conditions

The Proposed Action would result in a beneficial socioeconomic effect for the Tribe by providing Tribal economic self-sufficiency, employment opportunities for Tribal members, and funding for Tribal services. Additionally, the Proposed Action would create a small number of short-term construction jobs and full-time, permanent 20-25 employees at the proposed travel center. It is anticipated that construction workers and operational employees would come from the local or regional work force. While it is acknowledged that the proposed travel center and fueling station may provide services competing with other local gas stations, the Proposed Action would benefit the local economy overall via the creation of new employment opportunities for the Tribe and local employment pool, and the increased sales and profits for other nearby businesses as potential patrons, residents, travelers, and shoppers are attracted to the features provided by the new travel center and fueling station.

Environmental Justice

The Tribe would be classified as a minority population and the Proposed Action would benefit this community by providing needed housing for Tribal members. No disproportionate, adverse impacts to low-income or minority populations are anticipated from the Proposed Action. Sensitive receptors near the project site include existing residential homes to the north of the project site across Lakeshore Drive, Redbud Park to the west of the project site, the Clearlake Youth Center and adjacent ball park located approximately 140 feet south of the project site, and residential homes south of the ball park fronting Ball Park Avenue. Residents and visitors would not be exposed to significant amounts of fumes or toxic air contaminants (TACs) during the short-term construction period, approximately eight months, of the Proposed Action due to the limited construction term and implementation of standard construction best practices.

As discussed in Section 3.6, Air Quality, CARB's Air Quality and Land Use Handbook: A Community Health Perspective recommends siting sensitive land uses at least 50 feet from a typical dispensing facility, which is a fueling station with a throughput of less than 3.6 million gallons per year (CARB, 2005). The nearest residential receptor is located approximately 120 feet north of the project site boundary. In addition, the baseball diamond at Redbud Park south of the site is located more than 50 feet from the project boundary. As shown in Figures 3a, 3b and 3c, up to ten fuel dispensers would be sited closer to the intersection of Lakeshore Drive and Golf Avenue to allow for easier access and ingress and egress from the project site. Therefore, it is likely that children at the park would be located 80 to 100 feet from the fuel dispensers. Therefore, the Proposed Action would be consistent with CARB's recommendation of a separation of 50 feet between a typical fuel station and sensitive uses.

3.6.2.2 No Action Alternative

Maintenance of the existing commercial office use on the site would not result in significant impacts with respect to socioeconomic conditions or environmental justice. Any new development would likely have a beneficial socioeconomic effect from increased employment opportunities; however, no specific project has been proposed.

3.6.3 Cumulative Impact Analysis

The Proposed Action is more likely to benefit the City and its local economy and is not expected to result in adverse impacts for socioeconomic conditions or environmental justice issues; therefore, the Proposed Action would not contribute to cumulative impacts for these issues.

Environmental Impacts Socioeconomic Condition	ons and Environmental Ju	stice		

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3.7 Land Use

This section discusses the land use setting for the project site and vicinity and any potential impacts with respect to land use from the alternatives considered.

3.7.1 Setting

3.7.1.1 Environmental Setting

As described in Section 1.2, Project Site and Vicinity, Parcel 040-240-08 is undeveloped with a gravel parking lot and mixed non-native vegetation. Parcel APN 040-240-07 contains a First Loan commercial building and paved parking lot. The project site is surrounded by: Lakeshore Drive to the north; commercial buildings to the east; the Clearlake Youth Center and a ball park to the south; and Golf Avenue to the west (**Figure 8**). Clear Lake is located 0.15 miles to the west of the project site.

Land uses on the project site are currently guided by the Land Use Element of the City's General Plan (City of Clearlake, 2017), and corresponding zoning laws. The project site has a General Plan land use designation of Commercial (**Figure 9**). The project site is zoned MUX District: Mixed Use (**Figure 10**). The purpose of the MUX designation allows for a meaningful blend of residential and nonresidential uses that enhance and build upon the City's commercial base (City of Clearlake, 2021).

3.7.1.2 Regulatory Setting

The Land Use Element of the City's General Plan (City of Clearlake, 2017), and corresponding zoning are discussed above.

3.7.2 Impact Analysis

3.7.2.1 Proposed Action

Transfer of the project site into federal trust would exempt the project site from local land use regulations, and land use would be regulated by the Tribe. However, the proposed commercial use would be consistent with the existing City land use designation and zoning of Mixed Use, which allows for eating establishments, businesses, parking lots, and retail trade and services. The proposed commercial development of a travel center and gas station is compatible with existing commercial buildings adjacent to the project site. Thus, land use impacts from the Proposed Action would be less than significant.

3.7.2.2 No Action Alternative

Under the No Action Alternative, the project site would remain subject to City land use regulations and there would be no land use impacts.

3.7.3 Cumulative Impact Analysis

As described above, the Proposed Action would be consistent with applicable land use regulations and compatible with surrounding developments. In addition, all new construction and proposed land uses would be consistent with City's construction standards, zoning and municipal codes, and land use policies outlined in its General Plan. Therefore, the Proposed Action is not anticipated to contribute to cumulative impacts.



SOURCE: Esri, 2018; Lake County, 2020; ESA, 2020.







SOURCE: Esri, 2018; City of Clearlake, 2019; Lake County, 2020; ESA, 2020.







SOURCE: Esri, 2018; City of Clearlake, 2019; Lake County, 2020; ESA, 2020.





3.	Environmental	Impact
3	7 Land Use	

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3.8 Transportation

This section is focused on existing transportation conditions near the project site and potential transportation impacts from the evaluated alternatives.

3.8.1 Setting

3.8.1.1 Regional Roadway System

The project site is located in the City. Regional access to the project site is provided by State Route (SR) 53, which is an approximately 7.5-mile-long north-south roadway that connects SR 29 to the south with SR 20 to the north. SR 53 is designated as a principal arterial in the General Plan with two lanes in each direction south of Lakeshore Drive and one lane in each direction north of Lakeshore Drive. The posted speed limit is 55 miles per hour (mph).

3.8.1.2 Local Roadway System

The project site is located at the southeast corner of the intersection of Lakeshore Drive and Golf Avenue. As shown in **Figure 11**, principal access to the project site is from Lakeshore Drive, which is primarily accessed via Old Highway 53, approximately 1,000 feet to the east, and SR 53, approximately 0.5 miles to the east. The key characteristics of these roadways, with the exception of SR 53, which is described above, are summarized below:

Old Highway 53 is a north-south roadway that connects SR 53 to the south with Olympic Drive to the north. It is designated in the General Plan as a minor arterial with one lane in each direction, and has a posted speed limit of 35 mph.

Lakeshore Drive is an east-west roadway that connects SR 53 to the east with the City/County line to the west, where it becomes County Road 205 and continues along the east shore of Clear Lake. Lakeshore Drive is designated in the General Plan as a minor arterial with one-lane in each direction and has a posted speed limit of 30 mph.

Golf Avenue is a north-south roadway that connects Lelabelle Boulevard to the south with Uhl Avenue to the north. It is an undesignated local roadway in the General Plan with one-lane in each direction, and does not have a posted speed limit.

3.8.1.3 Existing Traffic Operating Conditions

Average Daily Traffic (ADT) counts for state facilities (i.e., SR 53) are maintained by the California Department of Transportation (Caltrans). In 2018, SR 53 experienced an ADT of approximately 18,300 at Lakeshore Drive (Caltrans, 2018). Based on the capacity of a four-lane (two lanes in each direction) State signalized arterial, the Level of Service (LOS) at this location is currently LOS C or better (FDOT, 2020). LOS is a qualitative measure of traffic operating conditions, whereby a letter grade, from A to F is assigned, based on quantitative measurements of delay per vehicle. The grades represent the perspective of drivers and are an indication of the comfort and convenience associated with driving. In general, LOS A represents free-flow conditions, and LOS F represents severe delay under stop-and-go conditions.



SOURCE: Esri, 2018; Lake County, 2020; ESA, 2020.





ADT counts for local facilities are not available; however, peak hour (i.e., AM peak hour, PM peak hour, Saturday peak hour) traffic counts/ intersection analysis were conducted as part of a recently completed EIR for the Walmart Expansion Project at the two intersections that would be most affected by traffic generated by the Proposed Action (City of Clearlake, 2017a). The results are reported below in **Table 3.8-1**. As shown in the table, both intersections currently operate at acceptable LOS during weekday AM and PM peak hours as well as the Saturday peak hour, according to the target LOS established in the General Plan (City of Clearlake 2017b).

Table 3.8-1
Existing Intersection Operating Conditions

Intersection	General Plan Target LOS	AM Peak Hour LOS	PM Peak Hour LOS	Saturday Peak Hour LOS
Old Highway 53/ Lakeshore Drive	D	В	С	С
SR 53/Lakeshore Drive	D	С	С	С

SOURCE: Omni-Means, 2016; ESA, 2020.

Transit Service

Lake Transit Authority provides bus transit service to the project site. Clearlake City Routes 10 and 11 offer hourly service 7 days a week, while Clearlake City Route 12 only offers hourly weekday service (Lake Transit Authority, 2020). All three routes operate in one-way loops (Lakeshore Drive, Olympic Drive, and Old Highway 53) near the project site, meaning that inbound and outbound trips to/from the project site may require two different bus routes. The nearest bus stops are located on Lakeview Drive west of Golf Avenue, approximately 300 feet to the west of the project site.

Pedestrian and Bicycle Facilities

There are bicycle lanes on both sides of Lakeshore Drive adjacent to the project site. The project site is lacking sidewalks along the Golf Avenue frontage and along approximately two-thirds of the Lakeshore Drive frontage.

3.8.2 Impact Analysis

3.8.2.1 Proposed Action

As shown in the preliminary site overview for the Proposed Action (see Figure 3a, 3b, and 3c), vehicular access to the project site would be provided by a total of three two-way driveways. The principal driveway would be located on Lakeshore Drive would be 70 feet wide, which is wide enough to accommodate turns by large trucks. Additional access would be provided by a 24-footwide driveway at the east end of the project site (near the proposed convenience store) on Lakeshore Drive, and a 28-foot-wide driveway on the north side of the project site on Golf Avenue. Internal circulation would provide access between the proposed convenience store and the fuel dispensers, as well as to the back side of the proposed convenience store for access by service vehicles (e.g., garbage trucks, deliveries, etc.) and emergency vehicles. Up to 28 parking

stalls would be provided throughout the site to serve employees and visitors including charging stations for EVs.

The Institute of Transportation Engineers (ITE) Trip Generation, 10th Edition was used to calculate the daily, AM Peak Hour, and PM Peak Hour vehicle trip generation for the Proposed Action (ITE, 2017). In addition, the following two vehicle trip reductions were applied to the Proposed Action trip generation: existing office use to be removed (to be replaced as part of the Proposed Action), and pass-by/diverted trips. By making these adjustments, the analysis more accurately focuses on net new vehicle trips generated by the Proposed Action. The pass-by/diverted trips reduction was only applied to the gas station/convenience center land use, as most visitors to this use would either shift from an existing gas station/convenience center land use along Lakeshore Drive, or would simply make a stop at the project site en route to another destination. As shown below in **Table 3.8-2**, the Proposed Action would generate up to 345 daily vehicle trips, 21 AM peak hour vehicle trips, and 23 PM peak hour vehicle trips.

Table 3.8-2
NET AUTOMOBILE TRIP GENERATION ESTIMATES

ITE Land Use (Code)	Units	Daily Number of Vehicle Trips	AM Peak Hour Number of Vehicle Trips	PM Peak Hour Number of Vehicle Trips
Gas Station with Convenience Market (945)		1,643	100	112
pass-by/diverted reduction ^a	8-10 fueling positions	-1,298	-79	-89
Subtotal		345	21	23
Single-Tenant Office Building (715)	2,000 square feet	32	4	5
Existing Office to be Removed	2,000 square feet	-32	-4	-5
	Total	345	21	23

NOTE:

SOURCES: ITE Trip Generation Manual, 10th Edition, 2017; SANDAG Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region, 2002; ESA, 2021.

The Caltrans Guide for the Preparation of Traffic Impact Studies (Caltrans, 2002) indicates that a traffic study is needed if a project would generate over 100 peak hour trips assigned to a State highway facility. The nearest State highway facility is SR 53 and, as shown above in Table 3.8-2, the Proposed Action would generate fewer than 100 peak hour trips to this or any other project study area roadway. For this reason, a quantitative traffic analysis was not conducted for the Proposed Action.

As shown in Table 3.8-1, the main roadways that would be used to access the project site (Lakeshore Drive, Old Highway 53, and SR 53) currently operate at an acceptable LOS based on the targets established in the General Plan. Other roadways near the project site that serve local neighborhoods and Redbud Park (e.g., Golf Avenue, Ball Park Avenue) would likely see very

^a Total reduction is 79 percent, which includes 51 percent diverted and 28 percent pass-by.

little traffic as a result of the Proposed Action, due to fact that the proposed land uses would mostly attract regional vehicle trips using the roadways noted above, or vehicle trips that are already traveling on surrounding roadways (pass-by/diverted trips). Considering the relatively low number of new vehicle trips estimated to be generated by the Proposed Action, and the fact that there is capacity on study area roadways/intersections to accommodate these trips without causing operating conditions to deteriorate below acceptable levels, the impacts to transportation on existing roadways would be less than significant.

With respect to transit and bicycle conditions, the Proposed Action would not require the removal or relocation of an existing bicycle lane or bus stop, nor would it impede access to an existing bicycle lane or bus stop. Furthermore, the relatively low increase in traffic volumes on Lakeshore Drive that would be generated by the Proposed Action would not noticeably affect transit or bicycle operating conditions. As noted in the project description (Section 2.1.4) sidewalks would be upgraded to current City standards along the entire project site frontages on Lakeshore Drive and Golf Avenue. This would result in improved pedestrian safety and accessibility or a beneficial impact.

With respect to parking conditions, as described above the Proposed Action would provide vehicular parking to accommodate up to 28 vehicles. The Proposed Action would adhere to any local or state requirements related to the provision parking stalls to accommodate Americans with Disabilities Act (ADA) and/or electric vehicle charging as part of the final design/project approvals process. Based on the number of employees that would be onsite at any given time (per shift) and the quick turnover of visitors parking to access the proposed convenience store, the proposed parking capacity would accommodate the demand, and it is not anticipated that parking would spill out onto the adjacent roadways or into the nearby Rosebud Park parking lot.

Construction activities associated with the Proposed Action would generate fewer vehicle trips than described above for project operation. Therefore, the discussion and conclusions provided above with respect to potential transportation impacts during project operation would also apply to project operation. As required by the City, an encroachment permit must be issued for any work conducted with the public right-of-way and connections to City infrastructure. Among other things, the encroachment permit would ensure that appropriate measures are taken by the construction contractor to maintain access and provide construction area traffic control, which would ensure minimal interruptions to vehicles, bicyclists, and pedestrians traveling on affected roadways.

The Proposed Action would not affect the jurisdiction of public roads or the ability of law enforcement personnel to access local communities. Access to the residential communities near the project site would remain unimpeded.

3.8.2.2 No Action Alternative

Maintenance of the existing commercial office use and potential future development of lowdensity commercial uses (consistent with City land use designations and zoning) have been included in long-range transportation planning and therefore no significant impacts to transportation would occur.

3.8.3 Cumulative Impact Analysis

The General Plan did not identify any circulation improvements needed in the project study area within the 2040 planning horizon. The Proposed Action is consistent with the assumptions for long-range transportation planning; thus, is not anticipated to result in significant, adverse cumulative effects.

3.9 Public Services and Utilities

The following section describes the existing setting and analyzes impacts related to public services, including water, wastewater, solid waste, energy, police, fire, and emergency services.

3.9.1 Setting

3.9.1.1 Water Supply

As the largest, natural, freshwater lake located entirely in California, Clear Lake is a valuable natural, recreational, and economic resource for county residents. Yolo County Flood Control and Water Conservation District (YCFCWCD) owns and operates the Cache Creek Dam and hydropower facility. The dam is operated to generate hydroelectric power and to regulate YCFCWCD's appropriative water. On May 1, when Clear Lake is full, the maximum diversion available to YCFCWCD for consumptive purposes is 150,000 acre-feet. This is approximately three times the total water use in Lake County as estimated in the 2006 water inventory (CDM 2006c). Two water purveyors, the Highlands Water Company and the City of Lakeport, have limited water rights to divert surface water from Clear Lake for distribution and consumption to its customers. Several other water purveyors purchase surface water from YCFCWCD.

Highlands Mutual Water Company diverts raw water from Clear Lake and conveys it to its water treatment plant (WTP), at 14774 Hillcrest Avenue in the City. The WTP is capable of producing 2.5 million gallons per day (MGD). After treatment and disinfection, treated water is pumped to six storage tanks. Highlands Mutual Water Company has a combined storage capacity of 4.9 million gallons (MG). Treated water in storage is distributed to residential and non-residential customers throughout Highlands Mutual Water Company's service area including the project site and the central portion of City. The WTP is approximately 1,500 feet from the project site and consistent with existing conditions would continue to convey treated water through its existing facilities and pipelines.

3.9.1.2 Wastewater Service

The Southeast Regional Wastewater System provides wastewater service to the City, including the project site. Wastewater is conveyed to the Southeast Treatment Plant, which has an average dry weather flow of approximately 1.9 million gallons per day (MGD) and an average wet weather flow of 6.1 MGD. All of the treated waste water from the Southeast Treatment Plant is recycled to the Geysers geothermal field, sustaining the energy production complex (Lake County Special Districts Administration, 2017).

3.9.1.3 Solid Waste Service

Solid waste collection and disposal for the project site would be provided by Clearlake Waste Solutions. Clearlake Waste Solutions offers garbage, recycling, and green waste collection to residential and commercial services (Clearlake Waste Solutions, 2020). The City disposes solid waste at the Eastlake Sanitary Landfill, located at 16015 Davis Avenue. The landfill has a maximum permitted capacity of 6,050,000 cubic yards and a remaining capacity of 2,859,962 cubic yards (CalRecycle, 2019).

3.9.1.4 Energy

PG&E supplies electricity for the City. There are no natural gas services within the City. There are several propane retailers that provide service to residents and businesses.

3.9.1.5 Police Services

The City's Police Department provides law enforcement services. The police station is located at 14050 Olympic Drive. The Police Department has approximately 47 staff, including 25 sworn officers. The Police Department logs an average of 21,000 incidents per year, with dispatch receiving between 60,000 to 70,000 calls (City of Clearlake, 2016).

3.9.1.6 Fire and Emergency Services

The project area is served by the Lake County Fire Protection District. The nearest fire station to the project site is Headquarter Station 70, located at 14815 Olympic Drive in Clearlake, approximately 0.75 miles north of the project site. The Lake County Fire Protection District is provided with mutual aid from the Department of Forestry and Fire Protection (Cal Fire) authority, an available resource for both structure and wilderness response. The nearest Cal Fire Units, managed by Cal Fire Lake, Napa, and Sonoma County (Cal Fire LNU) are located in the communities of Kelseyville and Clearlake Oaks. These facilities are approximately 15 miles and 5 miles away, respectively, from the city.

Emergency health care in the vicinity of the project site is provided by Adventist Health Clearlake, located at 15630 18th Avenue in Clearlake, approximately 1.2 miles southeast of the project site. American Medical Response provides emergency medical transportation for the project area.

3.9.1.7 Public Schools

The project site is located within the Konocti Unified School District. The nearest school is Burns Valley Elementary School, located 0.85 miles northwest of the project site (Konocti Unified School District, 2020).

3.9.1.8 Recreation

The Public Works Department maintains the City's parks, playground, and other public facilities. The nearest recreational facility is Redbud Park located directly to the west of the project site. The 15-acre park includes a boat launch, softball fields, fishing pier, picnic area, tennis courts and playground (Lake County, 2020).

3.9.2 Impact Analysis

3.9.2.1 Proposed Action

Water Supply

Water for the Proposed Action would be supplied to the proposed development by the Highlands Mutual Water Company. The 2006 Lake County Water Demand Forecast addresses future water demands of the County. In 2000, the average water use for urban demand was 10,903 acre-feet per year (afy). In 2040, average water use is expected to be approximately 19,738 afy during

average years and 21,716 afy during dry years. The Proposed Action would be within these planning assumptions as it is consistent with the existing City land use designation and zoning of Community Commercial. Based on the available water supplies through surface water diversions Highland Mutual Water Company would be able to meet the future demand in years of normal precipitation as well as single dry and multiple-dry years (Lake County Watershed Protection District, 2006). In addition, Highland Mutual Water Company treats up to 5.0 MGD and currently treats about 4.9 MGD. Conservatively, demand generated by the Proposed Action would be approximately 4,210 gallons per day (gpd) based on the water demand methodology for a similar convenience store project (**Table 3.9-1**). Water demand is likely to be slightly less as the project consists of an approximately 6,000 square foot convenience store and a 2,000 square foot office space. Based on this information, there is sufficient remaining capacity within Highland Mutual Water Company water treatment plant to accommodate demand generated by the Proposed Action. Therefore, it is not anticipated that new or improved water facilities (which could cause environmental impacts) would be needed to continue to provide water service to the project site. Therefore, this impact would be less than significant.

TABLE 3.9-1
ESTIMATED WATER DEMANDS/WASTEWATER FLOWS

Wet Utilities	Proposed Project	
Water Demand	4,210 gpd	
Wastewater Generation	4,000 gpd	
NOTES: a Water demands= wastewater flows/0.96 b 8,000 sf development x 0.5(gpd/sf)		
SOURCE: Blue Stone Strategy Group, 2020.		

Wastewater Service

Wastewater service to the Proposed Action would be provided by Southeast Regional Wastewater System, the SRWTP has a permitted monthly average wet weather flow of 6.1 MGD with a capacity of 8.5 MGD. Average wet weather flows are 2-3 MGD during wet weather months.

As shown in Table 3.9-1, up to 4,000 gpd of wastewater could be generated by the Proposed Action, which is 95 percent of the treated water use at the travel center. The SRWTP has sufficient capacity to serve the Proposed Action and the Proposed Action would be within long range planning assumptions, as it is consistent with the existing City land use designation and zoning of Community Commercial. Therefore, it is not anticipated that new or improved wastewater facilities (which could cause environmental impacts) would be needed to continue to provide water service to the project site. Therefore, this impact would be less than significant.

Solid Waste Service

Solid waste collection and disposal for the project site would be provided by Clearlake Waste Solutions. Solid waste in Clearlake is transported to Eastlake Sanitary Landfill in Clearlake. The landfill has a maximum permitted capacity of 6,050,000 cubic yards and a remaining capacity of

2,859,962 cubic yards (CalRecycle, 2019). Development of the travel center would incrementally increase the demand for solid waste collection and disposal. The daily solid waste generated by the Proposed Action would represent a minimal contribution to the landfill waste stream. With sufficient capacity at nearby landfills, the Proposed Action would have less than significant impacts to solid waste services.

Energy

Electricity and natural gas services would be provided by service providers who currently provide service to the Reservation and nearby areas. The Tribe would coordinate with PG&E for electrical service to the project site. If natural gas is needed, the Tribe would coordinate with a propane provider. The Proposed Action would represent a minimal portion of energy demands within the region and thus a less than significant impact is anticipated.

Police Services

Law enforcement services would be provided by either the City or Lake County Sheriff's Department through an agreement for service with the Tribe. The Proposed Action would include private security and surveillance to deter criminal activities. As there is an existing commercial use at the project site and the Proposed Action is consistent with the City land use designation and zoning of Community Commercial, the Proposed Action, as a travel center and gas station is not anticipated to create significant new demands on law enforcement services. It is not anticipated that the law enforcement agencies will require new or improved facilities (which could cause environmental impacts) to continue to provide a similar level of service to the project site. Therefore, this impact is considered less than significant.

Fire and Emergency Services

Fire protection and emergency services would be provided by the Lake County Fire Protection District through an agreement for service with the Tribe. As there is an existing commercial use at the project site and the Proposed Action is consistent with the City land use designation and zoning of Community Commercial, the Proposed Action is not anticipated to create significant new demands on fire and emergency services. It is not anticipated that the fire agency will require new or improved facilities (which could cause environmental impacts) to continue to provide a similar level of service to the project site. Therefore, this impact is considered less than significant. Wildfires are discussed under Section 3.11, Hazards.

Public Schools and Recreation

The Proposed Action would allow for the construction of a travel center and would create a small number of construction and permanent jobs. It is anticipated that construction workers and travel center employees would come from the local or regional work force and would not represent new residents to the area. Therefore, no significant increase in demand for recreation/parks and schools would occur.

3.9.2.2 No Action Alternative

Under the No Action Alternative, the project site would remain as is; all existing uses and utility connections, public services and utilities are anticipated to have sufficient capacity for operation and maintenance of the existing commercial office at the project site.

3.9.3 Cumulative Impact Analysis

Impacts associated with public services and utilities would be limited geographically to the service areas of the providers and temporally to construction and operational phases. As described above, the Proposed Action would result in minimal impacts to public services and utilities. The Proposed Action represents a small portion of future growth and would be within planning assumptions as it is consistent with the existing City land use designation and zoning of Community Commercial. Therefore, the Proposed Action would not result in a cumulatively considerable impact to public services and utilities.

3. Eı	nvironmental Impacts
3.9	Public Services and Utilities

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3.10 Noise

The following section discusses the noise environment at the project site and vicinity and assesses the potential for the alternatives under evaluation to impact the noise environment.

3.10.1 Setting

3.10.1.1 Environmental Setting

Fundamentals of Noise

Noise can be generally defined as unwanted sound. Sound, traveling in the form of waves from a source, exerts a sound pressure level (referred to as sound level) which is measured in decibels (dB), with zero dB corresponding roughly to the threshold of human hearing and 120 to 140 dB corresponding to the threshold of pain. Sound pressure fluctuations can be measured in units of hertz (Hz), which correspond to the frequency of a particular sound. The typical human ear is not equally sensitive to all frequencies of the audible sound spectrum. As a consequence, when assessing potential noise impacts, sound is measured using an electronic filter that de-emphasizes the frequencies below 1,000 Hz and above 5,000 Hz in a manner corresponding to the human ears decreased sensitivity to low and extremely high frequencies instead of the frequency mid-range. This method of frequency weighting is referred to as A-weighting and is expressed in units of A-weighted decibels (dBA).

An individual's noise exposure is a measure of noise over a period of time. A noise level is a measure of noise at a given instant in time. Community noise varies continuously over a period of time with respect to the contributing sound sources of the community noise environment. Community noise is primarily the product of many distant noise sources, which constitute a relatively stable background noise exposure, with the individual contributors unidentifiable. The background noise level changes throughout a typical day, but does so gradually, corresponding with the addition and subtraction of distant noise sources such as traffic and atmospheric conditions. What makes community noise constantly variable throughout a day, besides the slowly changing background noise, is the addition of short duration single event noise sources (e.g., aircraft flyovers, motor vehicles, sirens), which are readily identifiable to the individual.

Community noise varies continuously over a period of time with respect to the contributing sound sources of the community noise environment. Frequently used community noise descriptors are summarized below:

L_{eq}: the energy-equivalent sound level is used to describe noise over a specified period of time, typically one hour, in terms of a single numerical value. The Leq is the constant sound level which would contain the same acoustic energy as the varying sound level, during the same time period (i.e., the average noise exposure level for the given time period).

L_{max}: the instantaneous maximum noise level for a specified period of time.

L_{dn}: 24-hour day and night A-weighted noise exposure level which accounts for the greater sensitivity of most people to nighttime noise by weighting noise levels at night ("penalizing"

nighttime noises). Noise between 10:00 p.m. and 7:00 a.m. is weighted (penalized) by adding 10 dBA to take into account the greater annoyance of nighttime noises. As a general rule, in areas where the noise environment is dominated by traffic, the L_{eq} during the peak-hour is generally equivalent to the L_{dn} at that location. L_{dn} is also referred as DNL.

CNEL: similar to DNL, the Community Noise Equivalent Level (CNEL) adds a 5-dBA "penalty" for the evening hours between 7:00 p.m. and 10:00 p.m. in addition to a 10-dBA penalty between the hours of 10:00 p.m. and 7:00 a.m.

As a general rule, in areas where the noise environment is dominated by traffic, the L_{eq} during the peak-hour is generally within one to two decibels of the L_{dn} at that location.

Vibration

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. Several different methods are used to quantify vibration. The peak particle velocity (PPV) is defined as the maximum instantaneous peak of the vibration signal. The PPV is most frequently used to describe physical vibration impacts on buildings. Typical groundborne vibration generated by human activities attenuates rapidly with distance from the source of the vibration. Sensitive receptors to vibration include people (especially residents, the elderly, and sick people), structures (especially older masonry structures), and vibration-sensitive equipment (FTA, 2018).

Sensitive Receptors

Some land uses are considered more sensitive to ambient noise levels than others, due to the amount of noise exposure (in terms of both exposure duration and insulation from noise) and the types of activities typically involved. Residences, motels and hotels, schools, libraries, churches, hospitals, nursing homes, auditoriums, and parks and other outdoor recreation areas generally are more sensitive to noise than are commercial (other than lodging facilities) and industrial land uses.

Nearest sensitive receptors in the form of single family residences are located along Palmer Avenue approximately 200 feet north of the project site boundary. The Clearlake Church of God is located approximately 150 feet to the east of the project site. Single family residences are also located to the south of the project site along Ball Park Avenue.

Existing Noise Levels

As described in the City's General Plan Noise Element, traffic, commercial and industrial activity, recreational activities, and periodic nuisances such as construction are the major sources of noise in the City. Industrial and commercial land uses in the City are located primarily along State Route (SR) 53 and Lakeshore Drive; traffic on SR 53 and Lakeshore Drive is the primary source of noise in the City (City of Clearlake, 2017b). Noise levels in the project vicinity are influenced by traffic on Lakeshore Drive and activities at neighboring land uses including use of the baseball diamond to the south of the project site. Based on traffic noise contours included in the Noise Element, the existing ambient noise level at the project site is between 60 to 65 dB, L_{dn} (City of Clearlake, 2016b).

3.10.2 Impact Analysis

3.10.2.1 Proposed Action

The Proposed Action will result in a short-term increase in ambient noise levels during construction and long-term increase in noise from traffic generated by the Proposed Action and the Proposed Action's operational activities. Construction-related noise and vibration impacts are evaluated based on typical levels generated by construction equipment, distance to nearest sensitive uses in the project vicinity, and standards established by the City to address noise and vibration. The Proposed Action would result in a long-term increase in noise from traffic generated to the proposed land uses and operational activities associated with the project, including the operation of an emergency generator for testing and maintenance purposes. Traffic noise increase is assessed qualitatively while noise impacts to the nearest residential uses from the proposed emergency generator was assessed by comparing the attenuated noise level at the residences to the standard in the Noise Element of the General Plan (**Table 3.10-1**).

TABLE 3.10-1

NOISE LEVEL PERFORMANCE STANDARDS FOR PROJECTS AFFECTED BY OR INCLUDING NONTRANSPORTATION NOISE SOURCES

Type of Use	Interior Noise Level Standard, dBA L _{max}	Daytime Exterior Noise Level Standard, dBA L _{eq} (7 a.m. to 10 p.m.)	Nighttime Exterior Noise Level Standard, dBA L _{eq} (10 p.m. to 7 a.m.)
Residential Uses	55	55	45

NOTES:

- Exterior noise level standard to be applied at the property line of the receiving land use or at a designated outdoor activity area (at the discretion of the Planning Director) of the new development.
- b For mixed-use type projects, the exterior noise level standard may be waived (at the discretion of the Planning Director) if the project does not include a designated activity area and mitigation of property line noise is not practical. In this case, the interior standard would still apply.
- Interior noise level standards are applied within noise-sensitive areas of residential land uses, with windows and doors in the closed positions.
- d Each of the exterior noise levels specified above shall be lowered by five dB for simple tone noises, noises consisting primarily of speech or music, or for recurring impulsive noises (e.g., humming sounds, outdoor speaker systems). These noise level standards do not apply to residential units established in conjunction with industrial or commercial uses (e.g., caretaker dwellings).

SOURCE: City of Clearlake, 2017b.

Construction Noise

Construction would involve the use of heavy equipment that can generate substantial noise at and in the vicinity of the project site. Construction noise levels would fluctuate at any given receptor depending on the type of construction activity being undertaken, equipment type and duration of use, distance between the noise source and receptor, the presence or absence of barriers between the noise source and receptor, and the existing noise levels at the receptors. The likelihood for noise impacts from construction tend to be greatest when construction activities occur during the noise-sensitive times of the day (early morning, evening, or nighttime hours), in areas immediately adjacent to sensitive receptors, or when construction noise lasts for extended periods of time.

Table 3.10-2 shows typical noise levels produced by various types of construction equipment that could be used as part of project construction activities. Not all equipment listed in the table may

be used for construction, but this analysis considers the entire range of equipment that could be potentially be used. As shown in Table 3.10-2, typical construction equipment generates maximum noise levels (L_{max}) ranging from 55 to 90 dBA at a distance of 50 feet from the source. Impact equipment such as pile drivers would generate higher levels of noise but are not anticipated to be used for construction of this project.

TABLE 3.10-2
TYPICAL NOISE LEVELS FROM CONSTRUCTION EQUIPMENT

Type of Equipment	L _{max} , dBA (at 50 feet)	Acoustical Usage Factor (%)	L _{eq} , dBA (at 50 feet)
Backhoe	80	40	76
Crane	85	16	77
Dozer	85	40	81
Compactor	80	20	73
Excavator	85	40	81
Roller	85	20	78
Paver	85	50	82
Grader	85	40	81
Generator	82	50	79
Jackhammer	85	20	78
Dump Truck	84	40	80
Pickup Truck	55	40	51
Concrete Mixer Truck	85	40	81
Concrete Pump Truck	82	20	75
Loader	80	40	76
Pump	77	50	74
Pneumatic Tools	85	50	82
Air Compressor	80	40	76
Concrete Saw	90	20	83

NOTE: Values in **bold** show the two noisiest construction equipment.

SOURCE: FHWA, 2017.

Over a typical work day, equipment would operate at different locations on the project site and would not always be operating concurrently. This is accounted for in the acoustical usage factor (also shown in Table 3.10-2). The L_{eq} noise levels shown in the table are the hourly L_{eq} levels taking into account the acoustical usage factors for each equipment. For a conservative approximation of noise from construction sites, the FTA in its *Transit Noise and Vibration Assessment Manual* (FTA, 2018) recommends an evaluation approach that considers the two loudest pieces of construction equipment to be operating at the same time at the center of the project site. Based on this approach, the combined noise level from the operation of a **concrete saw** and a **paver** would be 85.5 dBA, L_{eq} at 50 feet. This would attenuate to 70 dBA, L_{eq} at the

nearest residences to the north of the project site along Palmer Avenue, approximately 300 feet from the center of the project site.

The Noise Element does not provide quantitative noise limits for construction activities, but restricts construction activities to the hours of 7 a.m. to 7 p.m. on weekdays, and 8 a.m. to 7 p.m. on Saturdays. No construction on Sundays. Policy NO 1.3.1 identifies several BMPs to reduce noise impacts from construction. The City's Municipal Code restricts noise from construction activities occurring during daytime hours to a maximum of 80 dBA when measured at a distance of 100 feet from the source. At a distance of 100 feet, the simultaneous operation of a concrete saw and a paver, the two highest noise generating equipment, would generate 79.5 dBA, less than the 80 dBA limit.

Implementation of **Mitigation Measure 3.10-1** identified below would ensure compliance with the standards and requirements in the General Plan Noise Element resulting in a less than significant impact.

Mitigation Measure 3.10-1: The construction contractor shall be required to implement the following measures to reduce noise impacts during construction.

- Construction activities shall be limited to the daytime hours of 7 a.m. to 7 p.m. on weekdays, and 8 a.m. to 7 p.m. on Saturdays. Construction shall not take place on Sundays and legal holidays.
- The construction contractor shall utilize "quiet" models of air compressors and other stationary noise sources where technology exists and is feasible.
- At all times during grading and construction, stationary noise-generating equipment shall be located as far as practicable from sensitive receptors and placed so that emitted noise is directed away from residences.
- Unnecessary idling of internal combustion engines shall be prohibited.
- Construction staging areas shall be established at locations that will create the
 greatest distance between the construction-related noise sources and noise-sensitive
 receptors nearest the project site during all project construction activities, to the
 extent feasible.
- Neighbors located adjacent to the construction site shall be notified of the
 construction schedule in writing. The construction contractor shall designate a "noise
 disturbance coordinator" who will be responsible for responding to any local
 complaints about construction noise. The disturbance coordinator shall be responsible
 for determining the cause of the noise complaint (e.g., starting too early, poor
 muffler, etc.) and instituting reasonable measures as warranted to correct the
 problem. A telephone number for the disturbance coordinator shall be conspicuously
 posted at the construction site.

Construction Vibration

Construction activities that generate detectable levels of groundborne vibration off-site include impact, drilling and vibratory compaction equipment. No such equipment is anticipated to be used for construction of this project. The highest vibration generating equipment that could be

potentially used at the site are bulldozers, loaded trucks and jackhammers. The PPV levels associated with these equipment are identified in **Table 3.10-3**. This table presents the reference vibration level at a distance of 25 feet as published by FTA. There are no historic structures in the vicinity of the project site that would be affected by construction vibration. The Noise Element identifies a vibration limit of 0.30 in/sec PPV to minimize the potential for cosmetic damage at buildings of normal conventional construction. The nearest off-site structure of conventional construction is located approximately 25 feet from the eastern boundary of the project site. As shown in Table 3.10-7, vibration levels at 25 feet from construction equipment that could potentially be used at the project site would be less than 0.3 in/sec PPV. Therefore, the Proposed Action would have a less than significant impact with respect to generation of excessive groundborne vibration levels from construction.

Table 3.10-3
VIBRATION LEVELS FROM CONSTRUCTION EQUIPMENT

Equipment	Approximate PPV (in/sec) 25 Feet (Reference Vibration Level)
Vibratory Roller	0.21
arge Bulldozer	0.089
Loaded Truck	0.076
SOURCES: FTA, 2018.	

Operational Noise

Operational noise generated by the Proposed Action would be primarily from an increase in traffic to the Proposed Action new land uses, i.e., convenience store and/or gas station. The transportation section estimates that the project would generate approximately 50 new vehicle trips during the PM peak hour and 21 new vehicle trips during the AM peak hour. These trips to the project site would be distributed over the roadway network leading to the project site and not all take place along any one particular roadway. Generally, it requires a doubling of traffic volumes to increase the noise level to a potentially significant range of 3 dBA above the existing noise level. Given that the Proposed Action would generate a maximum of 50 trips in an hour distributed over the roadway network leading up to the site, the relatively small increase in vehicle trips along the affected roadway segments is not anticipated to double existing traffic volumes. Therefore, increase in noise along roadway segments affected by project traffic would be less than 3 dBA. As discussed earlier, the existing noise level at the project site is between 60 to 65 dBA, L_{dn}. The Noise Element considers an increase of 3 dB L_{dn} in roadway noise levels to be significant where existing traffic noise levels range between 60 and 65 dB L_{dn}. Therefore, traffic generated by the project would lead to a less than significant noise impact.

The Proposed Action includes an emergency generator to provide power during power shut offs from the grid. Based on the frequency of power shut offs in the project area, it is anticipated that the generator could be used up to 10 days per year for about 17 hours per day. In addition, the generator would need to be operated routinely for maintenance and testing purposes. This would

result in an occasional increase in ambient noise levels. Program NO 1.1.1.8 of the General Plan Noise Element exempts emergency warning devices and equipment operated in conjunction with emergency situations, such as sirens and generators which are activated during power outages. The routine testing of such warning devices and equipment is also exempt provided such testing occurs during daytime hours and does not occur for periods of more than one hour per week. Due to the proposed use (for emergency purposes or testing only) and limited number of hours of operation, this impact is considered less than significant.

Operational Vibration

The project would not include any operational sources of vibration. Hence there would be no impact.

3.10.2.2 No Action Alternative

As discussed in Section 2.2, under the No Action Alternative, the project site would not be placed into federal trust for the benefit of the Tribe and land jurisdiction would remain with the City. It is assumed that the site would remain in its existing condition and therefore not generate new sources of noise. Any future development would be required to be consistent with the City's General Plan Noise Element and noise ordinance regulations.

3.10.3 Cumulative Impact Analysis

Impacts associated with noise would be limited geographically to off-site areas where construction noise would be perceptible and along roadways carrying project traffic. Impacts would be limited temporally to construction phases and also operation of the Proposed Action. If concurrent construction activities are underway or planned in the immediate vicinity of the project site, those project sites would be implemented under similar or more rigorous noise and vibrations regulations. Moreover, all new construction would be consistent with City's construction standards, local codes and regulations in addition to policies outlined in its General Plan. The Proposed Action represents a very small portion of traffic on local roadways and is also consistent with the existing land use designation/zoning for the project site of commercial development; therefore, the Proposed Action is within the long-range transportation and transportation-related noise assumptions for the project area. For these reasons, the Proposed Action would not result in cumulatively considerable noise impacts.

3. Environmental Impacts		
3.10 Noise		

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3.11 Hazards

Phase I and II Environmental Site Assessments (ESAs) were prepared for the project site and are included as **Appendix** C (LACO, 2019 and LACO, 2020). The following section discusses the potential for hazards at the project site and potential effects from implementation of the alternatives under evaluation.

3.11.1 Setting

3.11.1.1 Environmental Setting

Hazardous Materials

A material is considered hazardous if it appears on a list of hazardous materials prepared by a federal, state, or local agency, or if it has characteristics defined as hazardous by such an agency. A hazardous waste is any hazardous material that is discarded, abandoned, or to be recycled. The criteria that render a material hazardous also apply to wastes that are determined to be hazardous. Factors that influence the health effects of exposure to hazardous material include the dose to which the person is exposed, the frequency of exposure, the exposure pathway, and individual susceptibility.

The project site was investigated for Recognized Environmental Conditions (RECs) by completing a Phase I ESA under the American Society for Testing and Materials (ASTM) *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process*, Designation E1527-13 in 2019. A Phase II ESA was performed in general accordance with LACO's Standard Operating Procedure No. 1, as a screening level evaluation to identify if impacts are present from the HREC and potential REC Phase I ESA findings that may pose a threat to human health and/or the environment. The Phase II ESA was completed in 2020.

A review of available environmental databases maintained by the State Water Resources Control Board (SWRCB) and Department of Toxic Substances Control (DTSC) for sites that have been impacted by leaking underground storage tanks (LUST); non-fuel related cases known as Spills, Leaks, Investigative Cleanup (SLIC); and other cleanup sites was conducted. In addition, other state and federal databases were reviewed to determine if the property or adjacent properties were listed as hazardous waste generators, LUST releases, or as having other environmental concerns (i.e., spill, leak, or aboveground tank [AST]). The project site was not listed on any of the databases researched, however, 42 sites were identified in the search radius. **Table 3.11-1** provides a list of the databases included in the search. The project site was not listed on any of the databases as having environmental concerns.

TABLE 3.11-1 DATABASES SEARCHED

Database	Type of Record	Agency
NPL	National Priority List	EPA
Delisted NPL	Delisted National Priority List	EPA
CA UST	Active UST facilities gathered from local regulatory agencies	State Water Resources Control Board
CERCLIS ^a	Sites currently or formerly under review by US EPA	EPA
CERCLIS/NFRAPb	CERCLIS site where no further remedial action is planned	EPA
Indian LUST	LUST facilities on Indian land in California	EPA
LUST	Leaking Underground Storage Tanks	STATE
RCRA	RCRA violations/ enforcement actions	EPA
ERNS	Emergency Response Notification System of spills	EPA
RCRIS	RCRA treatment, storage and disposal facilities	EPA
AWP°	State/Tribal equivalent to NPL	Cal-EPA
DTSC Properties needing further evaluation (Cal-NFE)	State/Tribal equivalent to CERCLIS	Cal-PEA
VCP	Low level threat properties where project proponents have requested DTSC involvement.	Cal-EPA
Engineering Controls Site List	List of site with engineering controls in place.	US EPA
Institutional Controls Site List	List of site with institutional controls in place	US EPA
Brownfields Site List	Listing of Brownfields properties	US EPA

NOTES:

SOURCE: LACO, 2019

The Phase I and II ESAs identified and evaluated one potential REC and two historical RECs (HRECs):

- Subject Property HREC: A former structure containing asbestos materials was demolished and the demolished materials were removed from the property in 2018. The threat to human health is considered low.
- Nearby Property HREC: A former LUST environmental regulated case known as Nott's
 Liquor concerns a nearby property. The threat to human health is considered low as the Nott's
 Liquor case was closed by a regulatory agency following years of groundwater monitoring
 and remediation at the site and the project site is connected to a public water supply.
- Nearby Property REC at 14961 Lakeshore Drive: Due to the site's proximity to the project site, being located hydraulically up to cross-gradient from the project site, the violation records on file, and the lack of information for removal of historical USTs, the site located at 14961 Lakeshore Drive was further evaluated as a potential REC for waste oil and historical

^a CERCLIS: Comprehensive Environmental Response, Compensation & Liability Information System

^b RCRA: Resource Conservation and Recovery Act

^c AWP: Annual Workplan Sites

^d VCP: Voluntary Cleanup Program

gasoline constituents. For the Phase II ESA, groundwater samples were collected from the site. The samples showed presence of TPHmo and heavy oil range organics; however, the threat to human health is considered low and at a de minimus level because the constituents detected are non-volatile and the site is connected to a public water supply.

Wildland Fire

The City is surrounded by rural and undeveloped foothills that are designated as moderate to very high severity zones (City of Clearlake, 2016). Cal Fire is required by law to map areas of significant fire hazard based on fuels, terrain, weather, and other relevant factors (PRC 4201-4204 and Govt. Code 51175-89). Factors that increase an area's susceptibility to fire hazards include slope, vegetation type and condition, and atmospheric conditions. The project site is located in an unmapped Cal Fire, Fire Hazard Severity Zone (CAL FIRE, 2012). However, the project site is located within a highly urbanized area and considered low risk for wildland fires. Therefore, this issue is not discussed or analyzed further.

3.11.2 Impact Analysis

3.11.2.1 Proposed Action

Hazardous Materials

As described above in the Environmental Setting section, the Phase I and II ESAs concluded that the threat to human health from historic and potential RECs is considered low. Thus, these issues are not discussed further.

During construction, there is a potential for accidental release of hazardous materials, such as fuels, paints, and cleaning solvents. Section 3.2, Water Resources, discusses **Mitigation Measure 3.2-1**, which includes the development of a Stormwater Pollution Prevention Plan which will include best management practices (BMPs) to prevent accidental releases and other pollutants from entering waterways.

Operation of the gas station portion of the Proposed Action would include storage of gasoline and/or diesel fuel. The Tribe will conform to federal regulations under 40 CFR 280, Technical Standards and Corrective Action Requirements for Owners and Operators of USTs. Part 280.20, Performance Standards for new underground storage tank systems, includes requirements for tank design, the installation and maintenance of leak detection and prevention systems, and spill and overfill controls to minimize the risk of release of petroleum into the environment. Compliance with the provisions of 40 CFR Part 280 would ensure that the impacts to public safety and environmental quality from accidental release of petroleum products, fire, explosion, and vapor intrusion hazards are minimized.

Operation of the convenience store and office space portion of the Proposed Action may involve use and storage of small quantities of common hazardous wastes such as cleaning products, paints, and fuels. The Tribe would adhere to the typical safety guidelines and standards for the storage and handling of these products.

Upon final design, the Tribe will ensure compliance with Clean Air Act permitting requirements for new Gas Station Construction on Tribal Lands under the Clean Air Act Federal Indian Country Minor New Source Review (NSR) program for gasoline dispensing facilities (GDFs) located in Indian country within the geographical boundaries of California. The primary pollutant of concern for GDFs is volatile organic compounds, which are emitted from storage tanks and gasoline dispensing units at GDFs. Permitting under the NSR program will require controls to limit emissions to a less-than-significant level.

3.11.2.2 No Action Alternative

Maintenance of the existing commercial office use on the site would not result in significant impacts with respect to hazards and hazardous materials. Any future development would be required to comply with federal, State, and local environmental laws, ensuring the risk of exposure to hazardous materials is minimized.

3.11.3 Cumulative Impact Analysis

Impacts associated with hazards and hazardous materials would be limited geographically to the drainage and groundwater basins which capture stormwater releases from the project site and temporally to construction and operational phases. If concurrent construction activities are underway or planned in the immediate vicinity of the project site, those project sites would be implemented under similar i.e., SWPPP and/or more rigorous regulations to manage hazards and hazardous materials on each site. Moreover, all new construction would be consistent with City's construction standards, local codes and regulations in addition to policies outlined in its General Plan. During operations, the Proposed Action as discussed above, would comply with federal laws regulating fuels storage and emissions. For these reasons, the Proposed Action is not anticipated to contribute to cumulative impacts.

3.12 Visual Resources

The following section describes the existing setting and analyzes impacts related to visual resources.

3.12.1 Setting

3.12.1.1 Environmental Setting

The project site is located near the shore of Clear Lake, within an urban environment. The elevation range of the project site is approximately 1,350 feet above mean sea level and the site slopes gently to the southeast.

The project site is developed with a First Loan office building, paved parking lot, and gravel parking lot. The project site contains minimal vegetation, including non-native grasses and several small trees. The project site is immediately surrounded by: Lakeshore Drive to the north; commercial buildings to the east; the Clearlake Youth Center and a baseball diamond and park to the south; and Golf Avenue to the west (Refer to Figures 1 and 2). The project site is not located near an officially designated state scenic highway (Caltrans, 2016).



Photo 1
Project site facing east.



Photo 2 Project site facing southwest.

3.12.2 Impact Analysis

3.12.2.1 Proposed Action

Transfer of the project site into tribal trust would exempt the site from local land use and design regulations, and land use and design would be regulated by the Tribe; however, the proposed commercial use is consistent with the existing City land use designation and zoning of Community Commercial. The Proposed Action includes a one-story, 8,000 square foot building containing a 6,000 square foot convenience store and a 2,000 square foot office space, an eightto ten dispenser fuel island, EV charging stations and associated parking, infrastructure, and landscaping improvements. The scale and design of Proposed Action is anticipated to be compatible with surrounding commercial development. The exterior of the proposed convenience store would be finished using natural tones to the extent feasible, in keeping with the visual setting provided by the adjacent Redbud Park. The structures on-site would not affect any designated scenic viewsheds or corridors. As such, impacts would be less than significant.

3.12.2.2 No Action Alternative

Maintenance of the existing commercial office use on the site would not result in significant impacts with respect to visual resources. Any future development would be consistent with City land use, design, and zoning regulations.

3.12.3 Cumulative Impact Analysis

Impacts associated with visual resources would be limited geographically to approximately 800 feet from where the project site can be seen from the surrounding area, and temporally to the construction and operational phase. If concurrent construction activities are underway or planned

in the immediate vicinity of the project site, those project sites would be implemented under similar or more rigorous regulations and building codes to meet City standards, zoning codes and land use designation and/or policies outlined in its Municipal Code and General Plan. As such, the Proposed Action is not anticipated to contribute to cumulative impacts.

3. Environmental Impa
3.12 Visual Resources

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CHAPTER 4

Consultation, Coordination and List of Preparers

Bureau of Indian Affairs, Pacific Region (Lead Agency)

Chad Broussard, Environmental Protection Specialist Dan Hall, Regional Archaeologist

Elem Indian Colony of Pomo Indians (Applicant)

Agustin Garcia, Tribal Chairman Hiram Campbell, Tribal Administrator Jack Duran, Counsel

Environmental Science Associates (EA Consultant)

Erich Fischer, Project Director David Beauchamp, Project Manager, Water Resources Tiffany Edwards, Project Coordinator, Environmental Planner

Additional Technical Staff

Brad Allen/Fred Marquez, GIS
Rachael Carnes, Environmental Planner
Laura Dodson, Biological Resources
Jyothi Iyer, Noise
Brandon Carrol, Hazards
Heidi Koenig, Cultural Resources
Ashleigh Sims, Cultural Resources
Shadde Rosenblum, Transportation
Logan Sakai & Kristine Olsen, Publications
Bailey Setzler, Air Quality
Cheri Velzy, Air Quality

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CHAPTER 5

References

- Blue Stone Strategy Group, 2020. *Elem Indian Colony Convenience Store & Gas Station Bank Ready Feasibility Study*. November 2020.
- California Air Resources Board (CARB), 2005. *Air Quality and Land Use Handbook: A Community Health Perspective*. April 2005. Available: https://www.arb.ca.gov/ch/handbook.pdf. Accessed August 24, 2022.
- California Air Resources Board (CARB), 2008. *Climate Change Scoping Plan*. December 2008. Available: https://ww2.arb.ca.gov/sites/default/files/classic//cc/scopingplan/document/adopted scoping plan.pdf. Accessed December 2020.
- California Air Resources Board (CARB), 2014. First Update to the Climate Change Scoping Plan. May 2014. Available: https://ww2.arb.ca.gov/sites/default/files/classic//cc/scopingplan/2013_update/first_update_climate_change_scoping_plan.pdf. Accessed December 2020.
- California Air Resources Board (CARB), 2016. Ambient Air Quality Standards. Available: https://www.arb.ca.gov/research/aaqs/aaqs2.pdf. Standards last updated May 4, 2016. Accessed February 28, 2020.
- California Air Resources Board (CARB), 2017a. *California's 2017 Climate Change Scoping Plan*. November 2017. Available: https://ww2.arb.ca.gov/sites/default/files/classic/cc/scopingplan/scoping plan 2017.pdf. Accessed December 2020.
- California Air Resources Board (CARB), 2017b. *California's Advanced Clean Cars Midterm Review*. January 18, 2017. Available: https://ww2.arb.ca.gov/our-work/programs/advanced-clean-cars-program/advanced-clean-cars-midterm-review. Accessed February 2021.
- California Air Resources Board (CARB), 2018. *Maps of State and Federal Designations, State Area Designations*. Available: https://ww2.arb.ca.gov/resources/documents/maps-state-and-federal-area-designations. Accessed January 2021.
- California Air Resources Board (CARB), 2019. *Maps of State and Federal Designations, Federal Area Designations*. Available: https://ww2.arb.ca.gov/resources/documents/maps-state-and-federal-area-designations. Accessed January 2021.
- California Air Resources Board (CARB), 2020a. *Top 4 Summary: Highest Daily 24-Hour PM2.5 Averages*. Available: https://www.arb.ca.gov/adam/topfour/topfourdisplay.php. Accessed December 2020.

- California Air Resources Board (CARB), 2020b. *Top 4 Summary: Highest 4 Daily 24-Hour PM10 Averages*. Available: https://www.arb.ca.gov/adam/topfour/topfourdisplay.php. Accessed December 2020.
- California Air Resources Board (CARB), 2020c. *Top 4 Summary: Highest 4 Daily Maximum 8-Hour Ozone Averages*. Available: https://www.arb.ca.gov/adam/topfour/topfourdisplay.php. Accessed December 2020.
- California Air Resources Board (CARB), 2020d. *Top 4 Summary: Highest 4 Daily Maximum Hourly Ozone Measurements*. Available: https://www.arb.ca.gov/adam/topfour/topfourdisplay.php. December 2020.
- California Air Resources Board (CARB), 2021. *Sources of Air Pollutants*. Available: https://ww2.arb.ca.gov/resources/sources-air-pollution. Accessed February 2021.
- California Air Resources Board (CARB), 2022. *Gasoline Service Station Industrywide Risk Assessment Technical Guidance*. February 18, 2022. Available: https://ww2.arb.ca.gov/sites/default/files/2022-03/Draft%202022%20Gas%20Station%20IWG%20-%20 Technical%20Guidance ADA%20Compliant.pdf. Accessed August 24, 2022.
- California Department of Conservation, 2015. Mineral Lands Classification. Available: https://maps.conservation.ca.gov/cgs/informationwarehouse/index.html?map=mlc. Accessed May 12, 2020.
- Cal Fire, 2020. Fire Hazard Severity Zone Maps. Available: https://osfm.fire.ca.gov/divisions/wildfire-planning-engineering/wildland-hazards-building-codes/fire-hazard-severity-zonesmaps/. Accessed May 11, 2020.
- Caltrans, 2016. Officially Designated County Scenic Highways. Available: https://dot.ca.gov/media/dot-media/programs/design/documents/od-county-scenic-hwys-2015-a11y.pdf. Accessed May 7, 2020.
- California Department of Transportation (Caltrans), 2002. Guide for the Preparation of Traffic Impact Studies. Available: https://nacto.org/wp-content/uploads/2015/04/guide_preparation_traffic_impact_studies_caltrans.pdf. Accessed November 10, 2020.
- California Department of Transportation (Caltrans), 2013. Transportation and Construction Vibration Guidance Manual. Available: https://www.cityofdavis.org/home/showdocument?id=4521. September 2013.
- California Department of Transportation (Caltrans), 2018. 2018 Traffic Volumes on California State Highways. Available: https://dot.ca.gov/programs/traffic-operations/census. Accessed November 10, 2020.
- CalRecycle, 2019. Eastlake Sanitary Landfill. Available: https://www2.calrecycle.ca.gov/swfacilities/Directory/17-AA-0001/. Accessed April 24, 2020.
- City of Clearlake, 2021. MUX District: Mixed Use Zoning Ordinance Excerpt. Available: https://clearlake.municipal.codes/CMC/18-7. Accessed September 14, 2022.

- City of Clearlake, 2016. 2040 General Plan Update Draft Environmental Impact Report.

 November 2016. Available: https://clearlake.ca.us/DocumentCenter/View/589/Clear

 LakeRevised 2040-GP-DEIR November-7-2016pdf?bidId=. Accessed May 11, 2020.
- City of Clearlake, 2016. 2040 General Plan Update Background Report, November 2016. Available: https://clearlake.ca.us/DocumentCenter/View/592/General-Plan-Background-Reportpdf.
- City of Clearlake, 2017a. Clearlake Walmart Center Expansion. Available: https://www.clearlake.ca.us/DocumentCenter/View/669/2_Clearlake-Walmart-Center-Expansion-Draft-EIR-Volume-I-Chapters-411-8-amp-Appendices-A-Cpdf. Accessed November 10, 2020.
- City of Clearlake, 2017b. 2040 General Plan Update. Available: https://clearlake.ca.us/Document Center/View/608/A Clearlake 2040 General Planpdf. Accessed November 10, 2020.
- Clearlake Waste Solutions, 2020. Commercial Services. Available: https://candswaste.com/locations/california/lake-county/clearlake-waste-solutions/#commercial. Accessed April 24, 2020.
- Federal Highway Administration (FHWA), 2006. Roadway Construction Noise Model User Guide. Available: https://www.fhwa.dot.gov/Environment/noise/construction_noise/rcnm/rcnm.pdf. 2006.
- Federal Transit Administration (FTA), 2018. Transit Noise and Vibration Impact Assessment Manual. Available: https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123 0.pdf. September 2018.
- Florida Department of Transportation (FDOT), 2020. FDOT Quality/Level of Service Handbook Tables. Available: https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/planning/systems/programs/sm/los/pdfs/fdot_qlos_handbook_june-2020.pdf?sfvrsn=98f689a7 2. Accessed November 10, 2020.
- Highlands Water Company, 2022. Clearlake Water System Consumer Confidence Report on Water Quality for 2022. Available: https://highlandswater.com/documents/1098/CCR 2022.pdf. Accessed September 1, 2022.
- Institute of Transportation Engineers (ITE), 2017. Trip Generation Manual. Not publicly available online.
- Intergovernmental Panel on Climate Change (IPCC), 2014a. Climate Change 2014: Synthesis Report Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change. Available: https://www.ipcc.ch/site/assets/uploads/2018/02/SYR AR5 FINAL full.pdf. Accessed February 2021.
- Intergovernmental Panel on Climate Change (IPCC), 2014b. *Climate Change 2014, Synthesis Report Summary for Policymakers, Fifth Assessment Report.* Available: https://www.ipcc.ch/site/assets/uploads/2018/02/AR5_SYR_FINAL_SPM.pdf. Accessed February 2021.

- Konocti Unified School District, 2020. Schools. Available: https://konoctiusd.org/schools. Accessed April 24, 2020.
- LACO, 2019. Phase I Environmental Site Assessment for 14825 and 14855 Lakeshore Drive, Clearlake, CA. Prepared on September 6, 2019.
- LACO, 2020. Phase II Environmental Site Assessment for 14825 and 14855 Lakeshore Drive, Clearlake, CA. Prepared on December 23, 2020.
- Lake County Air Quality Management District (LCAQMD), 2002. *Smoke Management Plan*. February 2002. Available: https://ww3.arb.ca.gov/smp/district/lc.pdf. Accessed December 2020.
- Lake County Air Quality Management District (LCAQMD), 2006. *Rules and Regulations*. August 9, 2006. Available: https://ww2.arb.ca.gov/sites/default/files/classic/technology-clearinghouse/rules/RuleID1555.pdf. Accessed August 24, 2022.
- Lake County, 2020. Redbud Park. Available: https://lakecounty.com/place/redbud-park/. Accessed April 24, 2020.
- Lake County Special Districts Administration, 2017. Southeast Regional Wastewater System. Available: http://www.lakecountyca.gov/Government/Directory/Special_Districts/About_Us/Wastewater_Systems/Southeast_Regional_Wastewater_System.htm. Accessed April 27, 2020.
- Lake County Watershed Protection District, 2006a. Lake County Water Inventory and Analysis. Available: https://www.lakecountyca.gov/Assets/Departments/WaterResources/IRWMP/Lake+County+Water+Inventory+and+Analysis.pdf. Accessed April 27, 2020.
- Lake County Watershed Protection District, 2006b. Lake County Groundwater Management Plan. Available: https://www.lakecountyca.gov/Assets/Departments/WaterResources/IRWMP/Lake+County+Groundwater+Management+Plan.pdf. Accessed May 13, 2020.
- Lake County Watershed Protection District, 2006c. Lake County Water Demand Forecast. Available: http://www.lakecountyca.gov/Assets/Departments/WaterResources/IRWMP/Lake+County+Water+Demand+Forecst.pdf. Accessed May 13, 2020.
- Lake Transit Authority, 2020. Routes and Schedules. Available: https://laketransit.org/routes-schedules/. Accessed November 11, 2020.
- Nuclear Regulatory Commission (NRC), 2015. United States Seismic Zones Map. Available: https://www.nrc.gov/docs/ML1523/ML15239B038.pdf. Accessed May 12, 2020.
- San Diego Association of Governments (SANDAG), Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region. Available: https://www.sandag.org/uploads/publicationid/publicationid 1140 5044.pdf. Accessed November 10, 2020.
- Southern California Earthquake Data Center (SCEDC), 2020. San Andreas Fault Zone. Available: https://scedc.caltech.edu/significant/sanandreas.html. Accessed May 12, 2020.

- U.S. Census Bureau, 2018. Clearlake, California. Available: https://data.census.gov/cedsci/table? q=clearlake,%20ca%20race&g=1600000US0613945&tid=ACSDT5Y2018.B02001& layer=VT_2018_160_00_PY_D1&cid=DP05_0001E&vintage=2018. Accessed April 27, 2020.
- U.S. Environmental Protection Agency (U.S. EPA), 2017. *Climate Impacts on Human Health*. Available: https://19january2017snapshot.epa.gov/climate-impacts/climate-impacts-human-health_.html#:~:text=A%20warmer%20climate%20is%20expected,threaten%20 human%20health%20and%20safety. Accessed December 2020.
- U.S. Environmental Protection Agency (U.S. EPA), 2020a. *De Minimis Tables*. Available: https://www.epa.gov/general-conformity/de-minimis-tables. Available: February 2021.
- U.S. Environmental Protection Agency (U.S. EPA), 2020b. *Understanding Global Warming Potentials*. Available: https://www.epa.gov/ghgemissions/understanding-global-warming-potentials#:~:text=The%20Global%20Warming%20Potential%20(GWP,carbon%20dioxide%20(CO2). Accessed February 2021.
- U.S. Environmental Protection Agency and National Highway Traffic Safety Administration (U.S. EPA and NHSTA), 2010. Federal Register 40 CFR Parts 85, 86, and 600; 49 CFR Parts 531, 533, 536, et al. Light-Duty Vehicle Greenhouse Gas Emission Standards and Corporate Average Fuel Economy Standards; Final Rule. Available: https://www.govinfo.gov/content/pkg/FR-2010-05-07/pdf/2010-8159.pdf. Accessed February 2021.
- U.S. Environmental Protection Agency and National Highway Traffic Safety Administration (U.S. EPA and NHSTA), 2019. *One National Program Rule on Federal Preemption of State Fuel Economy Standards*, 2019. Available: https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P100XI4W.pdf. Accessed February 2021.

5. References

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Attachment 1 Mitigation Monitoring and Reporting Program

Resource Area	Mitigation Measures	Implementing Actions/ Responsible Party	Timing
Land Resources	N/A		
	Mitigation Measure 3.2.1: Best Management Practices.	Elem Indian Colony of Pomo	Developed prior to the
	Prior to the initiation of construction activities on site disturbing an acre or more, the Tribe shall prepare a SWPPP, and shall implement the SWPPP during construction on site. BMPs shall target minimization of erosion, minimization of sedimentation, and minimization of the release of stormwater pollutants from construction equipment and activities. BMPs may include, but are not limited to the following:	Indians (Project Applicant) / Construction Contractor	initiation of construction activities disturbing an acre or more Implemented during construction on site
	Prepare a spill prevention and control plan;		Construction on site
	 Inspect work area and surrounding area, identify existing pollutants, keep the worksite clean to prevent loss of accumulated debris into stormwater channels. 		
	 Any material stored outside that is susceptible to "wash-off" when it rains shall be protected from the effects of wash off through the use of covers and/or secondary containment as necessary. 		
	All material will be stored in specified lay down areas and secured after every work shift.		
	Any construction debris and/or waste will be cleaned up after every work shift.		
	 Stockpile soil under cover in a manner that minimizes contact with process water or storm water. Keep covered end secured at all times except when adding or removing soil. Store in containers or in the following manner: 		
Water Resources	o Underlay the soil with a continuous impervious sheet of plastic with a thickness sufficient to contain the soil with a minimum thickness of 0.254 millimeters (10 mils). Thicker or reinforced plastic or other measures to protect the integrity of the plastic underlayment may be required if there is a danger that the plastic will be punctured or torn during accumulation. Weld, heat seal or continuously tape (on both sides) all seams. Protect the plastic from perforation during loading and handling operations.		
	 Install an impervious continuous sheet of plastic of 0.254 millimeters (10 mils) thickness, over the pile. Weld, heat seal or continuously tape (on both sides) all seams. 		
	 Secure the top cover to ensure that wind will not balloon the cover or blow it aside leaving the pile exposed to weather. 		
	Street sweep as necessary.		
	 Install physical barriers (e.g. setbacks/buffers, silt fencing and/or straw wattles) to prevent erosion and sedimentation 		
	Establish protocols for vehicle refueling and maintenance		
	Minimize work during the storm season		
	Stabilize construction equipment entrance/exit		
	Revegetate disturbed soils		
Air Quality	N/A		

Resource Area	Mitigation Measures	Implementing Actions/ Responsible Party	Timing
Biological Resources	Mitigation Measure 3.4-1: Avoid and Minimize Impacts to Nesting Birds. Vegetation clearing operations, including initial grading and tree removal, should occur outside of the nesting season (September 1 through February 14) to the extent feasible. If vegetation removal begins during the nesting season (February 15 to August 31), a qualified biologist will conduct a preconstruction survey for active nests within a 500-foot buffer around the project site. The pre-construction survey will be conducted within 7 days prior to commencement of ground disturbing activities. If the preconstruction survey shows that there is no evidence of active nests, then a letter report will be prepared, and no additional measures are required. If construction does not commence within 7 days of the pre-construction survey, or halts for more than 7 days, an additional pre-construction survey is required (if working during the nesting season).	Qualified biologist	Survey will be conducted within 7 days prior to commencement of ground disturbing activities
	Mitigation Measure 3.4-2: Avoid and Minimize Impacts to Nesting Birds. If any active nests are located in the vicinity of the project site, an appropriate buffer zone will be established around the nests, as determined by the biologist. The biologist will mark the buffer zone with construction tape or pin flags and maintain the buffer zone until the end of breeding season or until the young have successfully fledged or the nest is determined to be no longer active. Buffer zones are typically 50-100 feet for migratory bird nests and 250-500 feet for raptor nests. If active nests are found within the vicinity of the construction area, a qualified biologist will monitor nests weekly during construction to evaluate potential nesting disturbance by construction activities. If establishing the typical buffer zone is impractical, the qualified biologist may reduce the buffer depending on the species and daily monitoring would be required to ensure that the nest is not disturbed and no forced fledging occurs. Daily monitoring will occur until the qualified biologist determines that the nest is no longer occupied	Qualified biologist	Daily monitoring will occur until the qualified biologist determines that the nest is no longer occupied.
Cultural Resources	Mitigation Measure 3.5-1: Construction Worker Cultural Resources Sensitivity Training. Prior to any earth moving activities, a qualified archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for Archeology shall conduct cultural resources sensitivity training in coordination with a tribal representative. The Tribe shall coordinate the training. Construction personnel will be informed of the types of cultural resources that may be encountered, and of the proper procedures to be enacted in the event of an inadvertent discovery of archaeological resources or human remains. The construction contractor will ensure that construction personnel are available for and attend the training and retain documentation demonstrating attendance.	Elem Indian Colony of Pomo Indians and a qualified archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for Archeology	Prior to earthmoving or ground-disturbing construction activities
	Mitigation Measure 3.5-2: Inadvertent Discoveries. If pre-contact or historic-era archaeological resources are encountered during project implementation, all construction activities within 100 feet shall halt, and a qualified archaeologist, defined as an archaeologist meeting Secretary of the Interior's Professional Qualifications Standards (SOI PQS) for Archeology, shall inspect the find within 24 hours of discovery and notify the BIA of their initial assessment. Pre-contact archaeological materials might include: obsidian and chert flaked-stone tools (e.g., projectile points, knives, scrapers) or toolmaking debris; culturally darkened soil (midden) containing heat-affected rocks, artifacts, or shellfish remains; stone milling equipment (e.g., mortars, pestles, handstones, or milling slabs); and battered stone tools (e.g., hammerstones, pitted stones). Historic-era materials might include building or structure footings and walls, and deposits of metal, glass, and/or ceramic refuse.	Elem Indian Colony of Pomo Indians representative and a qualified archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for Archeology	During active construction especially during earthmoving or ground-disturbing construction activities
	If the BIA determines, based on recommendations from the archaeologist and, if the resource is indigenous and a Native American tribe has expressed interest, a Native American tribe, that the resource may qualify as a historic property (for NHPA purposes), the resource shall be avoided, if feasible. Consistent with Section 15126.4(b)(3), this may be accomplished through planning construction to avoid the resource; incorporating the resource within open space; capping and covering the resource; or deeding the site into a permanent conservation easement.		

Resource Area	Mitigation Measures	Implementing Actions/ Responsible Party	Timing
Cultural Resources (cont.)	If avoidance is not feasible, the BIA shall consult with appropriate Native American tribes (if the resource is precontact and a tribal government has requested consultation), and other appropriate interested parties to determine treatment measures to avoid, minimize, or mitigate any potential adverse effects to the resource pursuant to 36 CFR Section 800.5. This shall include documentation of the resource and may include data recovery, if deemed appropriate, or other actions such as treating the resource with culturally appropriate dignity and protecting the cultural character and integrity of the resource.		
	Mitigation Measure 3.5-3: Discovery of Human Remains. If human remains are encountered during construction, the qualified archaeologist in coordination with the tribal monitor shall have the authority to halt or redirect construction activities in the immediate vicinity of the find (within approximately 100 feet). The Tribe will contact the County Coroner to determine that no investigation of the cause of death is required. The Coroner will contact the Native American Heritage Commission within 24 hours, if the Coroner determines the remains to be Native American in origin. The Commission will then identify the person or persons it believes to be the most likely descendant from the deceased Native American (PRC Section 5097.98), who in turn would make recommendations for the appropriate means of treating the human remains and any associated funerary objects (CEQA Guidelines Section 15064.5[d]). Human remains will be treated in accordance with the provisions of the Native American Graves Protection and Repatriation Act of 1990.	Elem Indian Colony of Pomo Indians, tribal monitor and a qualified archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for Archeology	During active construction especially during earthmoving or ground-disturbing construction activities
Socioeconomic Conditions and Environmental Justice	N/A		
Land Use	N/A		
Transportation	N/A		
Public Services and Utilities	N/A		
	Mitigation Measure 3.10-1: The construction contractor shall be required to implement the following measures to reduce noise impacts during construction.	Construction Contractor	During all phases of project construction.
	Construction activities shall be limited to the daytime hours of 7 a.m. to 7 p.m. on weekdays, and 8 a.m. to 7 p.m. on Saturdays. Construction shall not take place on Sundays and legal holidays.		
	The construction contractor shall utilize "quiet" models of air compressors and other stationary noise sources where technology exists and is feasible.		
	At all times during grading and construction, stationary noise-generating equipment shall be located as far as practicable from sensitive receptors and placed so that emitted noise is directed away from residences.		
Noise	Unnecessary idling of internal combustion engines shall be prohibited.		
	• Construction staging areas shall be established at locations that will create the greatest distance between the construction-related noise sources and noise-sensitive receptors nearest the project site during all project construction activities, to the extent feasible.		
	Neighbors located adjacent to the construction site shall be notified of the construction schedule in writing. The construction contractor shall designate a "noise disturbance coordinator" who will be responsible for responding to any local complaints about construction noise. The disturbance coordinator shall be responsible for determining the cause of the noise complaint (e.g., starting too early, poor muffler, etc.) and instituting reasonable measures as warranted to correct the problem. A telephone number for the disturbance coordinator shall be conspicuously posted at the construction site.		

Resource Area	Mitigation Measures	Implementing Actions/ Responsible Party	Timing
Hazards	Mitigation Measures 3.2.1: See Water Resources above	Elem Indian Colony of Pomo Indians (Project Applicant)/ Construction Contractor	Developed prior to the initiation of construction activities disturbing an acre or more Implemented during construction on site