Initial Study – Environmental Checklist

Project Title & No. South Bay Boulevard Bridge Replacement Project, ED20-217 (300455)

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED: The proposed project could have a "Potentially Significant Impact" for environmental factors checked below. Please refer to the attached pages for discussion on mitigation measures or project revisions to either reduce these impacts to less than significant levels or require further study.

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

DETERMINATION: (To be completed by the Lead Agency)

On the basis of this initial evaluation, the Environmental Division Manager finds that:

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

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

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

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

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

Prepared by (Print)	Signature	Date
Reviewed by (Print)	Signature	Date

Initial Study – Environmental Checklist

Project Environmental Analysis

The County's environmental review process incorporates all of the requirements for completing the Initial Study as required by the California Environmental Quality Act (CEQA) and the CEQA Guidelines. The Initial Study includes staff's on-site inspection of the project site and surroundings and a detailed review of the information in the file for the project. In addition, available background information is reviewed for each project. Relevant information regarding soil types and characteristics, geologic information, significant vegetation and/or wildlife resources, water availability, wastewater disposal services, existing land uses and surrounding land use categories and other information relevant to the environmental review process are evaluated for each project. Exhibit A includes the references used, as well as the agencies or groups that were contacted as a part of the Initial Study. The County Public Works Department uses the checklist to summarize the results of the research accomplished during the initial environmental review of the project.

Persons, agencies or organizations interested in obtaining more information regarding the environmental review process for a project should contact the County of San Luis Obispo Public Works Department, 976 Osos Street, Rm. 206, San Luis Obispo, CA, 93408-2040 or call (805) 781-5252.

A. Project

DESCRIPTION: The San Luis Obispo County Department of Public Works proposes to replace the South Bay Boulevard Bridge (Bridge No. 49C-0351), which spans Los Osos Creek. The project is in unincorporated San Luis Obispo County, north of the community of Los Osos. South Bay Boulevard is approximately four miles long and extends from Los Osos Valley Road on the south to State Route (SR) 1 on the north in the City of Morro Bay (Figure 1). South Bay Boulevard is one of the two main access routes in and out of Los Osos and the only direct connector between Los Osos and Morro Bay. As such, South Bay Boulevard is a critical access corridor for local residents and emergency vehicles.

The purpose of the project is to replace the existing bridge with a modern concrete bridge that meets current design standards to maintain safe, reliable service for the public. The existing bridge was constructed in 1966, and is a three-span, pre-cast concrete bridge supported by two concrete pile piers. The new bridge and road approaches would be relocated to the east side of the existing bridge (Figures 2 and 3). This would allow the existing bridge to remain in service during construction of the new bridge. When the new bridge is opened for use, the existing bridge would be demolished.

The proposed replacement bridge would be a two-span bridge, 300 feet long and 50 feet wide with a single support pier located outside of the Los Osos Creek channel (above the high tide line). A pedestrian lane is proposed to be included, which would increase the bridge width (Figure 4). No permanent structures or fill are expected to extend below the high tide line. The road approaches along South Bay Boulevard would be realigned to meet the new bridge. The South Bay Boulevard - Turri Road intersection would remain as is.

Construction staging would be in the County right-of-way along South Bay Boulevard north and south of the bridge. A secondary staging and material storage area would be available at the east end of Santa Ysabel Avenue off South Bay Boulevard south of the bridge (east of Scenic Way).

Construction is expected to take approximately 30 months to complete, with in-water construction activities limited to the dry season (June 1 to October 31). Generally, construction of the new bridge is expected to occur in year 1 and demolition of the old bridge in year 2.

The proposed project would remove the existing bridge supports from Los Osos Creek (two concrete pile bents) and would include a single bridge bent located above the high tide line. The proposed project would

also relocate the southern bridge abutment 100 feet south of the current south abutment, widening the opening under the bridge (Figures 5a and 5b). The County considered longer-span bridge designs and determined these options were not feasible based on a number of factors including substantial increases in cost and increased impacts to existing environmentally sensitive natural communities that have developed on the historic fill.

The project would be funded by the Federal Highway Administration's Highway Bridge Program administered by the California Department of Transportation (Caltrans).

ASSESSOR PARCEL NUMBER(S): County right-of-way, 067-011-044 to northeast, 067-011-043 to northwest, 038-711-011 to southeast, and 038-701-004 to southwest (all State-owned parcels)

Latitude: 35º 20' 6.25" N **Longitude:** 120º 49' 23.18" W **SUPERVISORIAL DISTRICT #** 2

B. Existing Setting

Plan Area: Estero **Sub:** None **Comm:** NA

Land Use Category: Open Space

Combining Designation: Sensitive Resource Area Flood Hazard Archaeolgically Sensitive

Parcel Size: Not applicable

Topography: Nearly level to gently sloping

Vegetation: Wetland Shrubs Grasses

Existing Uses: Undeveloped

Surrounding Land Use Categories and Uses:

North: Open Space; ***East:*** Open Space;

South: Open Space; residential ***West:*** Open Space;

C. Environmental Analysis

The Initital Study Checklist provides detailed information about the environmental impacts of the proposed project and mitigation measures to lessen the impacts.

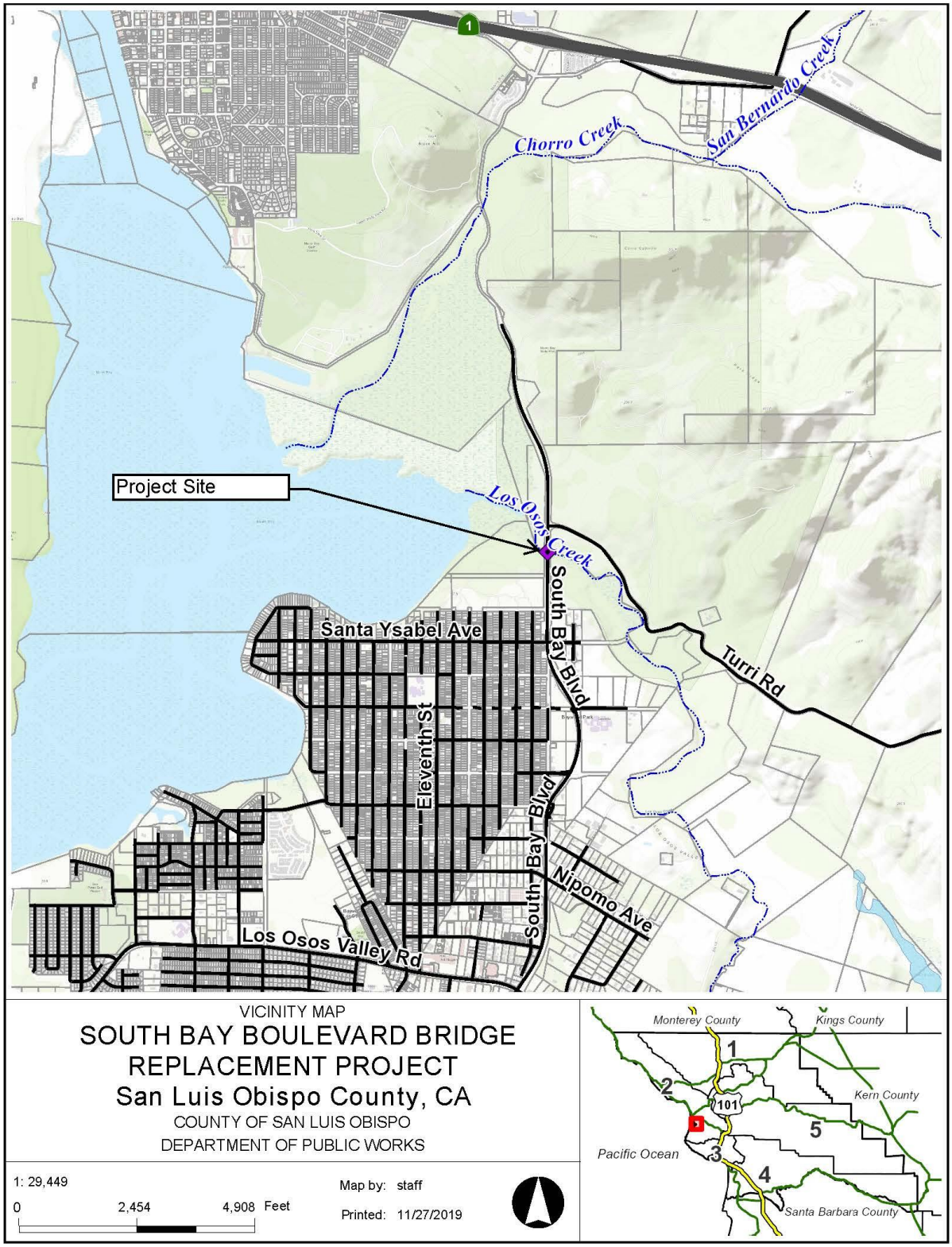

Figure 1 – Vicinity map

Figure 2 – Project impact areas

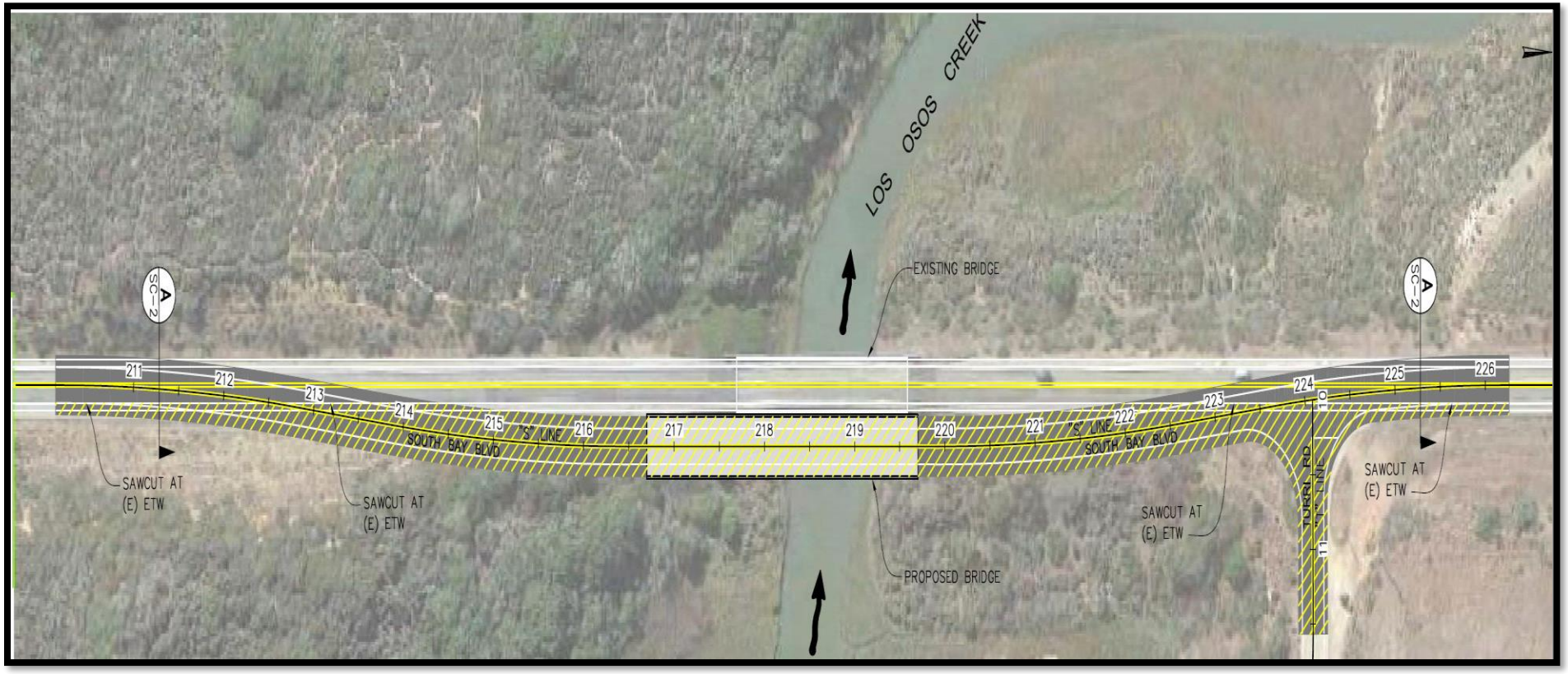

Figure 3 - Plan view of proposed bridge and realigned approach lanes

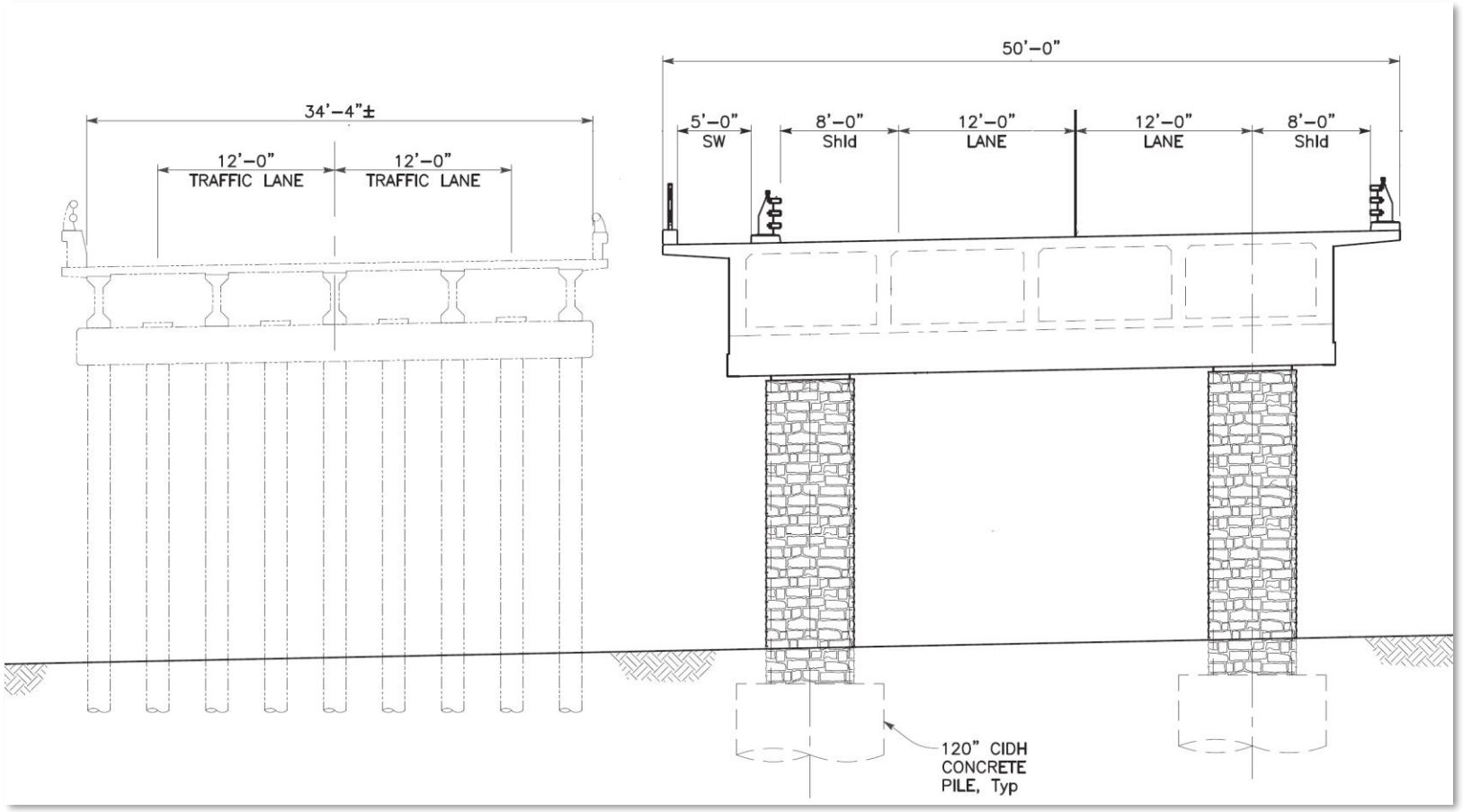

Figure 4 - Cross section views comparing existing and proposed bridge

Figure 5a – Photo of existing bridge looking west

Figure 5b – Photo rendering of proposed bridge

Initial Study – Environmental Checklist

I. AESTHETICS

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Except as provided in Public Resources Code Section 21099, would the project:					
(a)	Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐
(b)	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☒	☐	☐
(c)	In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☒	☐
(d)	Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

Setting

The project site is in an area designated as a critical viewshed in the Estero Area Plan. A portion of the iconic chain of volcanic peaks called the Nine Sisters or the Morros are visible from the bridge. As described in the Estero Area Plan, these peaks are considered a spectacular scenic backdrop and help define the character of the region when viewed from area roads, including South Bay Boulevard.

The terrain in the vicinity of the bridge consists of a gentle rise to the south of the bridge, and the flat valley of Los Osos Creek at the bridge and extending north to the hills containing the Morros. The drop in elevation for travelers headed north on South Bay Boulevard and crossing the bridge provides expansive views over the Los Osos Creek estuary and Morro Bay, a distant view of Morro Rock to the northwest, and closer views of Black Hill and Cabrillo Peak to the north and Hollister Peak to the northeast.

Travelers headed south on South Bay Boulevard have similar expansive views of the estuary and the coastal scrub hills to the south. The rise in the terrain for travelers headed south over the bridge blocks distant views to the south, including the developed areas of Los Osos immediately south.

South Bay Boulevard in the general vicinity of the bridge is bordered on both sides by predominantly undeveloped open space, including Morro Bay State Park and the Elfin Forest Preserve. Existing human-made

features in the vicinity are limited to electric distribution lines and poles, agricultural fences, and transportation infrastructure such as traffic signs.

The existing bridge is a low-profile structure with a concrete deck and low concrete guardrails and short sections of metal beam guardrail at the approaches. The right-of-way in the vicinity has mowed grasses and ruderal vegetation and the immediately adjacent lands generally consist of coastal scrub vegetation. One of several bear statues installed by the community of Los Osos is located at the northeast corner of the bridge; the statue is regarded as a community gateway icon.

A Visual Impact Assessment (VIA) was prepared for the project (Drake Haglan and Associates 2020), which characterized the visual quality of the project area high due to proximity to the natural areas described above.

Discussion

(a) Have a substantial adverse effect on a scenic vista?

The project site has scenic near-field views of Morro Bay and distant views of the Morros. The VIA concluded that maintaining the rural appearance of the bridge and incorporating appropriate architectural elements would ensure that the project does not appear too urbanized or detract from the visual quality of the surrounding parklands.

The project would replace the existing bridge with a similar, low-profile bridge structure that would not materially alter the character of the existing views in the vicinity of the bridge. The new bridge would be placed next to the existing bridge. Realignment of the bridge approaches would be minimal and would not impact existing road or bridge elevations or public views from the road. The proposed bridge railing would be similar in height and appearance to the existing bridge railing and would be an open structure that would not obstruct views for travelers. The existing bear statue would be replaced in a similar configuration close to the proposed bridge, maintaining its function as a community landmark.

As such, the project is not expected to have a substantial adverse effect on the scenic character of the views for travelers on South Bay Boulevard in the vicinity.

(b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

The project is not in a designated state scenic highway. The closest officially designated State Scenic Highway is State Highway 1, approximately two miles north of the project site. The project would not damage scenic resources such as rock outcroppings or historic structures. Areas to be impacted by the project consist of ruderal and coastal scrub vegetation in the existing right-of-way. Elfin oaks throughout Los Osos add to the scenic character of the community. The project would require removal of some of the native oaks in the County right-of-way for construction access and permanent road realignment. The County proposes to limit tree removal to the extent feasible, which would include pre-construction review of construction access and staging areas with the contractor. Native oak trees removed for the project would be replaced to maintain the aesthetic character of the project area. It is expected that there is sufficient suitable space available for replacement trees to be planted in County right-of-way within the project impact area, with an appropriate setback from pavement. Based on these measures, the project is not expected to result in substantial damage to scenic resources.

(c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

The VIA concluded that the project would be moderately compatible with the existing visual character of the project area. The project would not adversely affect the existing visual elements (rural residences, natural colors and textures) and would not interrupt existing open space. As described in (a) and (b), the bridge would be replaced with a similar structure, and natural vegetation communities that add to the scenic character of the project area would be restored or replaced upon completion of the project. Therefore, the project would not substantially degrade the existing visual character and quality of public views in the vicinity.

(d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

The project does not include installation of lights or surfaces that would create glare and therefore would not adversely affect day or nighttime views in the area.

Conclusion/Mitigation

The project would not materially change the scenic character of the project site or vicinity.

The aesthetic impacts of removal of native oak trees in temporary and permanent project impact areas are proposed to be mitigated by planting replacement trees upon completion of construction. Replacement trees would be located along the realigned approach road in the same general locations where trees have been removed and/or other suitable locations in the project impact area. With the incorporation of this mitigation measure (mitigation measure AR-1 in Exhibit B), the aesthetic impacts of the project would be reduced to a less than significant level.

II. AGRICULTURE AND FORESTRY RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:				
(a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
(b)	Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
(c)	Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒
(d)	Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
(e)	Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

Setting

The project is in the Los Osos Agricultural Preserve area and a short distance from the Chorro Valley Agricultural Preserve Area to the north. However, the project is not within or adjacent to any agricultural land uses. The project site is surrounded by a large contiguous block of open space and beyond that are agricultural lands approximately 1.3 miles to the north, 1 mile to the east, and 0.7 mile to the southeast. Some of these agricultural lands have parcels under Williamson Act contracts. However, none of these parcels are directly accessed from South Bay Boulevard; they can be accessed from Turri Road, Los Osos Valley Road, and SR 1.

The mapped soil units at the project site are Aquolls associated with Los Osos Creek and Baywood fine sands on the higher terrain to the south. Neither of these are prime farmland soils. There is also imported fill along South Bay Boulevard between the bridge and Turri Road.

There are no mapped or managed timberlands at or adjacent to the project site. The Elfin Forest Preserve, a 90-acre natural area under the stewardship of County Parks and California State Parks, borders the County right-of-way along the southwest approach to the bridge. The Preserve supports, among other native vegetation types, elfin oak woodland.

Discussion

(a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

There are no agricultural lands or prime farmland soils at or near the project site and the project would not convert any agricultural land to non-agricultural use.

(b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?

The project would not affect access to or use of nearby agricultural lands and/or Williamson Act contract properties, which are located beyond the open space parcels adjoining the project site.

(c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?

The project would not conflict with zoning for, or cause rezoning of any forest land or timberland. There are no managed timberlands in close proximity to the project site.

(d) Result in the loss of forest land or conversion of forest land to non-forest use?

The project would not convert managed forest land to non-forest use.

(e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

The project would impact disturbed land in existing County right-of-way surrounded by open space without any change in transportation networks or site access. No agricultural land, managed forest land, or timberland would be impacted or converted to a different use as a result of the project.

Conclusion/Mitigation

As described in (a) through (e) above, the project would not impact agricultural land, managed forest land, or timberland, and no mitigation measures are necessary.

III. AIR QUALITY

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:					
(a)	Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
(b)	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	☐	☐	☒	☐
(c)	Expose sensitive receptors to substantial pollutant concentrations?	☐	☒	☐	☐
(d)	Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☒	☐

Setting

San Luis Obispo County is in non-attainment status for ozone and particulate matter (PM_{10}) under the California standards for those pollutants, which means that the state air quality standards are not being met. Ozone is generated by, among other sources, fossil-fuel exhaust from vehicles and equipment. Particulate matter is generated by, among other sources, airborne dust from earth disturbance. The County's Clean Air Plan describes strategies to reduce emissions of these pollutants with the goal of improving air quality to meet the state standards by the earliest possible date.

APCD's Clean Air Plan provides guidance for long-term emissions, cumulative effects, and countywide programs, with the goal of reaching acceptable air quality levels. Clean Air Plan guidance that may potentially be applicable to Public Works projects are those aimed at reducing the use of fossil fuels and reducing vehicle travel. The APCD CEQA Air Quality Handbook (2012) provides air emissions thresholds and specifies mitigation measures to address threshold exceedances. These include diesel idling restrictions for on-road and off-road construction vehicles and equipment, control measures for any grading activities that would generate airborne dust or disturb naturally occurring asbestos (NOA), and control measures for disturbance of hydrocarbon-contaminated soils, demolition of asbestos-containing buildings and structures, and demolition of structures coated with lead-based paint.

NOA is identified as a toxic air contaminant by the CARB. Serpentine and other ultramafic rocks are abundant throughout the state and may contain NOA. The project is not located in the County APCD mapped NOA buffer area. However, due to proximity of rock formations with the potential to contain serpentine, soil samples in the proposed excavation areas were analyzed for NOA. No NOA was detected in any soil sample (Kleinfelder, 2015).

A project referral was submitted to the APCD and the County received a response on November 17, 2020. The APCD's recommendations are incorporated below.

Discussion

(a) Conflict with or obstruct implementation of the applicable air quality plan?

The project would not affect vehicle use such as by generating new traffic or increasing vehicle miles. Accordingly, the project would not conflict with the Clean Air Plan.

(b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

The project would not result in any permanent increase in vehicle emissions that would affect ozone or PM_{10} (dust) levels.

Construction activities could generate temporary, short-term exhaust and fugitive dust emissions. The ACPD has determined that emissions from project construction would likely be below applicable thresholds.

(c) Expose sensitive receptors to substantial pollutant concentrations?

In accordance with the APCD Handbook, sensitive receptors are people that have an increased sensitivity to air pollution or environmental contaminants and may include schools, parks and playgrounds, day care centers, nursing homes, hospitals, and residential dwelling units. The closest residences and a school are located approximately 1,000 feet south of the construction disturbance area. Recreational users could be within 1,000 feet of the project on the recreational trails in the Elfin Forest Preserve and boating in Morro Bay and the mouth of Los Osos Creek.

The diesel idling restrictions have been codified into law at Section 2485 of Title 13 of the California Code of Regulations. Contractors are required to comply with these measures, which would help minimize potential effects of construction-related diesel emissions to sensitive receptors. The main component of the regulation is a 5-minute limit on diesel engine idling.

Construction activities have the potential to expose sensitive receptors to airborne dust. Standard dust control measures would be implemented to minimize potential impacts to nearby residences, the school, and recreational users in the vicinity. These include, for example, covering all stockpiled materials, stabilizing disturbed soils, using wheel washers for construction vehicles, and preventing/sweeping visible soil material on adjacent paved roads.

NOA is not expected to be encountered at the project site and construction is not expected to pose any risk of NOA exposure to sensitive receptors.

Based on asbestos and lead sampling conducted for the existing bridge, asbestos-containing materials are present in the bridge concrete railing connection shims. The contractor(s) would be required to submit an asbestos demolition notification to the APCD prior to commencement of demolition. No lead-based paint was detected in bridge structures based on samples of pipe, guard rail, and concrete. Lead-based paint may be present in road striping paint on the bridge approaches. Pavement removal is not expected to be handled in a manner that would trigger air quality concerns (e.g., with sandblasting or heat gun), but if so, it would require pre-activity notification to APCD.

(d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

The project would not result in any odors beyond those typically associated with construction projects. Those odors would be short-term and limited to the immediate construction area.

Conclusion/Mitigation

The project is not expected to exceed applicable air emissions thresholds for ozone or particulate matter. Construction activities could occur within 1,000 feet of sensitive receptors with the potential for significant adverse effects. Use of standard dust control measures during construction and adherence to APCD requirements concerning demolition of asbestos-containing material and lead-based paint, if necessary,

would reduce potential project-related air quality effects to a less than significant level (mitigation measures AQ-1 through AQ-3, Exhibit B).

IV. BIOLOGICAL RESOURCES

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

Setting

A Natural Environment Study (NES; Padre Associates, Inc. 2021a) and a Biological Assessment (BA; Padre Associates, Inc. 2021b) were prepared for the project. The NES describes habitats and natural communities of special concern, special-status species of plants and wildlife, migratory birds, and jurisdictional areas. The BA focuses on federally protected species and designated critical habitat. These documents provide the basis for the analysis that follows. Sources of information included literature and database review, site inspections, and surveys and studies pertaining to vegetation communities and habitats, plants and wildlife, wetlands and jurisdictional waters, California black rail, marine mammals, tidewater goby (protocol survey), Morro shoulderband snail, and California red-legged frog (CRLF). Botanical surveys were conducted during the appropriate blooming period for species identified as potentially occurring in the area.

Habitat Types

The estuarine habitats at the project site support Essential Fish Habitat (EFH) as identified by Fisheries Management Plans, which includes tidal channels and salt marsh in the project vicinity. The estuary is also designated as a habitat area of particular concern (HAPC) for various federally managed fish species in the Pacific Coast Groundfish Management Plan. The tidal waters of Morro Bay and Los Osos Creek provide habitat for marine invertebrates, birds, and fish.

Estuarine habitats in general are designated by the County as Environmentally Sensitive Habitat Areas (ESHA) and occur throughout the project impact area. In addition to salt marsh, there are upland vegetation communities at the project site that meet the definition of ESHA, including Morro manzanita chaparral, Lompoc ceanothus chaparral, dune slope, coyote brush scrub, and coast live oak woodland. Lower-value vegetation communities in the project area include non-native ice plant stands and veldt grass stands.

Special-Status Species

Based on literature search, a number of special-status plant species have the potential to occur in the vicinity of the project. As a result of field surveys, five of these species were observed or are anticipated to occur in the area to be disturbed by the project. These include Morro Manzanita, Lompoc ceanothus, suffrutescent wallflower, southwestern spiny rush, and mature coast live oak trees. The remaining special-status plant species identified by the literature search were not observed on site and/or occur in specific habitats that are not present in the project area.

Based on literature review and database searches, a number of special-status animal species have the potential to occur in the vicinity. As a result of field surveys, species that were observed or are expected to occur on site include Morro shoulderband snail, California brackish water snail, tidewater goby, South Central California Coast steelhead, coast horned lizard, northern California legless lizard, and CRLF.

There is designated critical habitat in the project area for Morro shoulderband snail, tidewater goby, and steelhead. CRLF is not expected to occur in the saline waters at the project site but could be present upstream in Los Osos Creek and could be encountered in upland dispersal habitats at the site.

Special-status bird species could potentially use project areas for foraging (e.g., marine and aquatic birds, raptors, loggerhead shrike). These species are expected to avoid the project area during construction. Migratory bird species could potentially be affected by vegetation removal and bridge removal (e.g., cliff swallows). The bridge does not provide suitable roosting crevices for bats and no evidence of nighttime roosting on the underside of the bridge was observed.

Invasive plant species, including five plant species rated as “high” for invasiveness, were identified in the project area, including red brome, freeway iceplant, Cape ivy, veldt-grass, and sweet fennel.

Jurisdictional Areas and Permits

The limits of U.S. Army Corps of Engineers (USACE) jurisdiction are mean high water (MHW; 4.5 ft NAVD88) for structures (Section 10 of the Rivers and Harbors Act) and the high tide line (HTL; 7.0 ft NAVD88) or the landward limit of wetlands for fill (Section 404 of the Clean Water Act). [Tidal datums are from the nearest National Oceanic and Atmospheric Administration tide gage at Port San Luis.] The HTL is also the jurisdictional boundary for the Regional Water Quality Control Board (RWQCB) under Section 401 of the Clean Water Act. The jurisdictional boundary for California Department of Fish and Wildlife (CDFW) is the riparian zone and/or top of bank, whichever is more inclusive. Project permits would be required from the USACE, RWQCB, and CDFW. A jurisdictional determination for the project (refer to NES Appendix D) determined that the limit of Corps jurisdiction, landward limit of salt marsh, and top of bank coincide at the HTL elevation, 7.0 ft, in the project impact areas.

A U.S. Coast Guard permit is required to construct or modify a bridge over navigable waters, which include tidal waters. The Coast Guard provided an Advance Approval determination for the project on April 1, 2020.

The project is in the coastal zone and would require a coastal development permit from the California Coastal Commission (CCC) and the Local Coastal Program (County Department of Planning and Building). The County has requested approval for a Consolidated Permit Process, which would mean that a single coastal development permit would be issued by the CCC.

Discussion

(a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

There is potential for adverse effects to the special-status species listed above from temporary and permanent project impacts. Construction impacts would be configured to avoid and minimize habitat impacts, and fencing would be used to prevent inadvertent construction impacts in adjacent areas. The project would result in temporary construction impacts to approximately 0.6 acre and permanent impacts to approximately 0.24 acre of Morro manzanita chaparral. Temporary construction impacts would be restored to pre-existing conditions. Permanent impacts would be mitigated by creating replacement habitat at a 3:1 replacement ratio or as stipulated in applicable permits for the project.

Restoration of temporary construction impact areas and mitigation for the permanent Morro manzanita chaparral impacts would also compensate for unavoidable project impacts to habitat for Morro shoulderband snail, coast horned lizard, California legless lizard, and CRLF.

No permanent impacts would be required below the HTL. In-water construction activities and bridge demolition would be managed to avoid and minimize impacts to habitat for California brackish water snail, tidewater goby, and South-Central California Coast steelhead.

Impacts to individuals of these species, as well as migratory birds and California red-legged frog, would be avoided and minimized through implementation of appropriate pre-construction surveys and construction monitoring. Potential for adverse effects to steelhead and tidewater goby from pile-driving noise would be managed in accordance with NMFS requirements, including adherence to water column sound pressure thresholds and implementation of minimization measures if needed.

With incorporation of these standard species monitoring and habitat avoidance, restoration, and mitigation approaches, the project is not expected to result in substantial adverse effects to special-status species.

(b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?

The project has been designed to avoid and minimize temporary and permanent impacts to sensitive natural communities, including areas below the HTL in Los Osos Creek and upland ESHA communities.

Temporary construction impacts below the HTL would occur in separate locations during each of two approximately 5-month-long in-water construction seasons, one for bridge construction and one for demolition of the existing bridge. Temporary impacts to approximately 0.4 acre below the HTL, including up to 0.1 acre of salt marsh, would be restored to pre-existing conditions. Los Osos Creek would not be diverted. All temporary structures would be removed and temporary piles would be pulled or cut below the mudline.

Temporary construction impacts to upland ESHA communities would be restored to pre-existing conditions. Temporary construction impacts to salt marsh, Morro manzanita, and native oak trees would be further reduced if feasible based on a pre-construction review of construction access and staging areas with the contractor.

There would be no permanent adverse impacts below the HTL, and removal of the existing bridge supports from the channel would provide an incremental beneficial effect. Permanent impacts to upland ESHA communities include Morro manzanita chaparral and native oak woodland, which would be mitigated at a 3:1 replacement ratio for habitat areas, and 4:1 replacement for native oak trees, or as required by the applicable permits for the project.

(c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

As discussed in (b), temporary construction activities would impact up to 0.1 acre of salt marsh bordering Los Osos Creek in the project area. Salt marsh in the impact areas consists of narrow shoreline marsh with a patchy distribution of marsh vegetation, unvegetated substrate, and old rock slope protection. A pre-construction review would be conducted with the contractor to configure dewatering areas, trestle piles, and shoreline access to avoid and minimize marsh impacts to the greatest extent possible. All in-water structures would be removed from marsh areas upon completion of construction and the areas would be restored to pre-existing conditions.

(d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

Dewatering during construction would be conducted at specific work areas to avoid the more disruptive alternative of diverting flow in Los Osos Creek. This would maintain fish passage throughout the construction periods. Nursery activity is not expected to occur in the creek impact areas but could be located in suitable habitats upstream and downstream from the project site (e.g., freshwater steelhead spawning sites upstream). Impacts to use of native wildlife nursery sites would be avoided by conducting in-water construction at the time of year when steelhead are not migrating. Temporary construction piles would be sited to avoid marsh impacts to the extent feasible and would not block creek flow. Installation of cofferdams for dewatering areas would be in shoreline areas, which would maintain tidal flows in the creek and maintain sufficient waterway width for passage of fish.

Nesting bird activity could occur in vegetation communities in the project area during the nesting season (generally February 1 through September 1). Additionally, swallows are known to nest on the bridge. Impacts

to nesting birds would be accomplished by implementing nesting bird exclusion measures prior to bridge construction and demolition activities, and by conducting pre-construction surveys of vegetation communities in the vicinity during the appropriate nesting seasons and using appropriate measures to avoid impacts to active nests.

There is open space used by wildlife on all sides of the project area that may pass under the existing bridge and/or cross South Bay Boulevard in the vicinity. The ability of wildlife to pass under the bridge would be impeded by construction materials and disturbance during the in-water construction periods (June through October). The replacement bridge would restore improved undercrossing conditions compared to existing conditions, with an increased span width.

(e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

The project would require removal of up to approximately 25 native oak trees located in the County right-of-way for construction access and permanent road realignment. A pre-construction review of construction access and staging areas would be conducted with the contractor to minimize impacts to native oak trees to the maximum extent possible.

(f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

There are no Habitat Conservation Plans (HCP) or other conservation plans directly applicable to the project. The draft Los Osos HCP [being finalized by the USFWS in 2021] covers four species for projects located within the Los Osos Urban Reserve Line. Two of the covered species are known to occur or have the potential to occur in the project area: Morro shoulderband snail and Morro manzanita. While a portion of the project area is within the Urban Reserve Line, the bridge project was not included as one of the County maintenance projects intended to be covered by the HCP. The project would replace Morro shoulderband snail and Morro manzanita habitat areas impacted by the project and as such, would not conflict with the goals of the Los Osos HCP.

Conclusion/Mitigation

The project site is in a sensitive environmental location due to the proximity to Morro Bay, presence of tidal waters and the Los Osos Creek channel, as well as special-status vegetation communities that occur in upland areas. Project impacts have been reduced to avoid and minimize impacts to these areas. The project would not require any permanent impacts below the HTL. Temporary construction impacts in both tidal waters and in upland ESHA communities have been minimized in the project design, and would be further minimized if possible by conducting a pre-construction review of construction access and staging areas with the contractor.

The County has developed a draft Habitat Mitigation and Monitoring Plan (HMMP) that would be finalized as a result of the permit process. The proposed approach includes restoration of temporary impact areas to pre-existing or enhanced conditions, and mitigation for permanent impacts to ESHA. The mitigation measures described in this document and the NES and BA, and the restoration and mitigation measures described in the draft HMMP, would be implemented as appropriate and/or as modified as a result of the required permits.

Limiting in-water construction to the dry season (June through October) would reduce potential impacts to migrating steelhead and would help reduce sedimentation and erosion control concerns from rainfall events. Cofferdams would be designed to exclude anticipated high-water levels. Mitigation measures pertaining to protection of aquatic species and habitats from the NES and BA that would be implemented include prescribed Essential Fish Habitat measures (e.g., measures to avoid impacts to creek banks), NMFS measures

pertaining to installation and removal of piles, monitoring for and relocation of fish entrapped in dewatering areas, and water quality protection measures pertaining to use of cast-in-drilled hole borings and dewatering discharges.

Standard mitigation measures would be implemented during construction to protect sensitive habitats and special-status species. These include measures such as conducting pre-construction surveys for special status wildlife species; delineating environmentally sensitive areas beyond the approved project impact area as no-disturbance zones; implementing standard construction practices pertaining to sedimentation and erosion controls, equipment refueling and maintenance, spill response, trash management, dewatering, and minimizing noise from pile driving; and having a qualified biologist monitor construction activities to ensure compliance with all environmental measures.

Specific mitigation measures, as provided in the NES and BA, would be implemented to minimize the potential for harm to Morro shoulderband snail, tidewater goby, steelhead, CRLF, essential fish habitat, and nesting birds.

Implementation of these mitigation measures (see Exhibit B mitigation measures AR-1, and BR-1 through BR-27) would reduce potential adverse effects to Biological Resources to a less than significant level.

V. CULTURAL RESOURCES

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:					
(a)	Cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5?	☐	☐	☒	☐
(b)	Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?	☐	☒	☐	☐
(c)	Disturb any human remains, including those interred outside of dedicated cemeteries?	☐	☐	☒	☐

Setting

The following inventories were examined for cultural resources: historic topographic maps and aerial photographs, California Inventory of Historic Resources, California Archaeological Determinations of Eligibility, and the Historic Properties Directory, California Points of Historical Interest, California Historical Landmarks, National Register of Historic Places (NRHP), and the California Register of Historical Resources (CRHR). A records search of the Central Coast Information Center (CCIC) was conducted on August 27, 2015. The records search covered a one-half mile radius around the project area and included archaeological and historical resources, locations and citations for previous cultural resources studies, as well as a review of the State Office of Historic Preservation's historic properties directory. Seventy-six previously conducted cultural resource surveys were identified with a 1/2-mile buffer of the project area, of which eight were conducted

within the project area. Based on the findings of the CCIC records search, the area has heightened archaeological sensitivity.

No historical buildings, structures or sites listed in the California Register of Historical Resources are located in or near the project area (https://ohp.parks.ca.gov/listedresources/; search updated 4-13-2021). The Caltrans Historic Bridge Inventory lists the Los Osos Creek Bridge as ineligible for the National Register of Historic Places and it is not listed in the California Register of Historical Resources.

Morro Bay and the mouth of Los Osos Creek are considered particularly archaeologically sensitive because they were especially well suited for prehistoric resource procurement and settlement. The project vicinity is a very productive marine environment with an abundance of diversified food resources, providing an attractive location for prehistoric people to live and gather resources. The density of recorded sites in the vicinity of the project reflects this. A number of archaeological reports have been completed for past projects at or in the vicinity of the project area and many resulted in significant archaeological finds.

An Archaeological Survey Report (ASR) (Siskin, DeBaker, Kimsey, 2016), an ASR Addendum (Uva & Ballantyne, 2021), and an Extended Phase I Archaeological Investigation (Nicchitta & Murphy, 2019) were completed for the project. The cultural resource investigations included all areas of potential project effects. Cultural resource investigations in support of this project also included consultation with the Native American Heritage Commission regarding proximity of any designated sacred lands (August 24, 2015), outreach to Native American groups and/or individuals who may have knowledge of cultural resources in the project area, review of previously conducted studies in the vicinity, site-specific field surveys, and Extended Phase I archaeological excavation which was overseen by Native American monitor(s).

Discussion

(a) Cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5?

There are no historical resources listed in or eligible for listing in the California Register of Historical Resources (which can include resources such as buildings, structures, districts, or sites) in the project impact area. This includes the bridge itself, which was determined by Caltrans not to be an eligible resource. There are previously recorded eligible sites and potentially eligible sites in the project vicinity. The project would not result in direct or indirect impacts to these sites and would not cause an adverse change in their significance.

(b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?

Based on past site disturbance, lack of intact archaeological sites in the project impact area, and analysis of buried site sensitivity, the project is not expected to cause an adverse change in the significance of an archaeological resource. Previously identified and potentially eligible cultural resources in the vicinity would be avoided by the project. Because of the archaeological sensitivity of lands near Morro Bay and its tributaries, construction monitoring would be conducted during earth disturbance in sensitive areas.

(c) Disturb any human remains, including those interred outside of dedicated cemeteries?

As described in (b), there is low likelihood that the project would disturb cultural resources. However, due to the archaeological sensitivity of the area, it is appropriate to include mitigation measures requiring construction monitoring in potentially sensitive areas and measures to be followed in the event construction activities result in the discovery of cultural resources.

Conclusion/Mitigation

Because of past site disturbances, there is low likelihood of encountering archaeological resources during project construction. Listed or potentially eligible sites in proximity to the project impact areas would be avoided during construction activities. Additionally, based on the archaeological sensitivity of the area it is appropriate to include mitigation measures that require pre-construction cultural resources training for construction crews, construction monitoring during initial earth disturbance in potentially sensitive areas, and that prescribe actions to be taken in the event previously unanticipated resources are discovered during construction. As requested by the yak titᵸu titᵸu yak tiłhini – Northern Chumash Tribe and the Salinan Tribe, initial earth disturbance in sensitive areas would be monitored by an archaeologist and tribal representative(s) (see Tribal Cultural Resources).

With the inclusion of these mitigation measures, potential adverse impacts to cultural resources would be reduced to a less than significant level (see Exhibit B mitigation measures CR-1 through CR-5).

VI. ENERGY

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

Setting

Energy considerations under CEQA are intended to evaluate projects with respect to the goals of decreasing energy consumption and reliance on fossil fuels, and increasing reliance on renewable energy sources (CEQA Guidelines Appendix F). Relevant factors for consideration can include energy consumption required for the project, compliance with energy standards, and effects of the project on local and regional energy supplies, electricity demand, and transportation energy requirements.

Discussion

(a) Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

From an operational perspective, the project would not increase the capacity of the bridge or any regional roads. By including a separated pedestrian trail and standard width shoulders, the project would increase safety for pedestrian and bicycle travel over the bridge, which could encourage non-fossil-fuel based modes of local transportation that would reduce fossil fuel consumption.

Consideration of the project's energy requirements and energy use efficiencies primarily pertain to construction-generated vehicle and equipment consumption. Construction vehicle emissions have been evaluated for the project as part of the evaluation described in the Air Quality section, and would be designed and managed to avoid wasteful or unnecessary consumption of fuel that would contribute to air emissions. Therefore, the project is not expected to contribute to wasteful, inefficient, or unnecessary consumption of fossil fuels.

(b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

The County General Plan Conservation and Open Space Element (2010) outlines measures to achieve the County's energy efficiency goals. They pertain to sustainable energy supply, building efficiency and conservation practices, waste reduction, and increased use of renewable energy resources. These County goals are not directly relevant to the project.

However, as discussed in the Air Quality section, the County APCD's Clean Air Plan includes approaches for controlling transportation-related air emissions. The project is consistent with the Plan goal of increasing opportunities and convenience for bicycling and walking as a means of reducing vehicle traffic. The project would increase safety for bicycling and pedestrian alternatives to vehicle transit for local travel and is therefore consistent with the Clean Air Plan.

Conclusion/Mitigation

The project is not expected to result in significant impacts to energy resources. The project is consistent with the goals in the Clean Air Plan to encourage increased bicycle and pedestrian transportation modes and may have a beneficial effect by reducing vehicle-related energy consumption. The Air Quality section addresses construction-related consumption of fossil fuels and recommends project-specific mitigation measures that may avoid wasteful or unnecessary fuel consumption. No additional mitigation measures pertaining to energy use are required.

VII. GEOLOGY AND SOILS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
(a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:	☐	☐	☒	☐
(i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☒	☐

Initial Study – Environmental Checklist

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
(ii)	Strong seismic ground shaking?	☐	☐	☒	☐
(iii)	Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
(iv)	Landslides?	☐	☐	☒	☐
(b)	Result in substantial soil erosion or the loss of topsoil?	☐	☒	☐	☐
(c)	Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☒	☐
(d)	Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	☐	☐	☒	☐
(e)	Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒
(f)	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☒	☐

Setting

The project is not in the mapped Alquist-Priolo Fault Zone. There are numerous faults and shear zones in the region that could influence the project site, including the Los Osos Fault approximately 1.2 miles southwest, the San Luis Range South Margin Fault about 7 miles southwest, and the Oceanic-West Huasna Fault about 43 miles northwest (Kleinfelder, 2013).

The entire county is mapped as a seismically active area based on the USGS Seismic Design Standards, which means there is potential for soil liquefaction, settlement, and landslides resulting from seismically produced ground shaking. The project area is flat to gently sloping and is not mapped as a landslide risk area. Upland soils surrounding the road approaches to the bridge (Baywood fine sands) have low liquefaction risk. However, the estuarine soil unit associated with the creek (Aquolls) is characterized by high liquefaction risk The project has been proposed to address this issue. Geotechnical borings were conducted at the project site to characterize soil properties and inform the project design.

In terms of paleontological resources, the geotechnical borings conducted at each of the proposed abutment locations encountered 22 to 33 feet of historic fill placed, which would not contain such resources. The recent estuarine deposits associated with Los Osos Creek also have low potential to contain paleontological resources; these soils range from 58 to 80 feet deep. They are underlain by marine terrace deposits, which have the potential to contain vertebrate fossil remains (Jefferson et al. 1992). There is also a Franciscan metavolcanics rock unit encountered at depth, with a mapped surface unit along portions of Turri Road, that has no potential to contain paleontological resources.

Discussion

(a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

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

The purpose of the Alquist-Priolo Earthquake Fault Zoning Act is to mitigate the hazards of surface faulting by preventing the construction of buildings used for human occupancy over an area with known faults. The site is not within a currently established State of California Earthquake Fault Zone for surface fault rupture hazards. Consideration of other regional faults with potential to impact the bridge was incorporated into the design of the new bridge.

(a-ii) Strong seismic ground shaking?

Correcting the seismic hazard risk of the bridge is the primary purpose of the project. The USGS hazard zone designations are linked to design standards that would be incorporated into the bridge design to minimize the potential for significant adverse effects. The proposed bridge design is being developed using site-specific geotechnical borings and compliance with current seismic design standards to ensure it will be safe.

(a-iii) Seismic-related ground failure, including liquefaction?

Site-specific geotechnical investigations were used to develop the proposed bridge design to minimize the risk of ground failure posed by the creek sediments that pose a liquefaction risk.

(a-iv) Landslides?

The project is not within a landslide risk area.

(b) Result in substantial soil erosion or the loss of topsoil?

The project would likely result in the temporary disturbance of more than one acre and would be required to obtain coverage under the Construction General Permit, which requires preparation of a stormwater pollution prevention plan (SWPPP). The plan would describe how stormwater runoff and sedimentation and erosion controls would be used during construction to prevent adverse effects to adjacent resource areas.

Based on the site setting, erosion controls adjacent to tidal waters would be designed with consideration of the potential for infrequent, extreme high tide events to occur during construction. While the project area is in and adjacent to sensitive marine resource areas, there are no other unique conditions or constraints that would require non-standard approaches to sedimentation and erosion controls.

(c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

See response in (a); the primary purpose of the project is to ensure that the bridge is stable under potential seismic risks, including liquefaction collapse. Site-specific geotechnical information would be used in the project design to ensure the bridge and surrounding soils are stable.

(d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

The mapped soil units at the site have low shrink-swell potential. Substantial portions of the project area have historic fill, which is also presumed to have low shrink-swell potential as it was placed for construction of South Bay Boulevard and the existing bridge.

(e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

Not applicable; the project does not include installation of new septic tanks or alternative waste water disposal systems.

(f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Excavation for the abutments would be approximately 10 to 15 feet deep, and the CIDH pile shafts would be drilled over 50 feet deep in temporary casings. Therefore, project impacts are expected to be primarily in recent alluvial deposits with low paleontological sensitivity. Project impacts with the potential to impact the underlying marine terrace deposits with higher paleontological sensitivity would be limited to the CIDH pile shafts (i.e., small, individual disturbance area) at depth. Therefore, the project is not expected to adversely affect paleontological resources.

Conclusion/Mitigation

Development of the project is required to meet the current requirements of the American Association of State Highway and Transportation Officials (AASHTO) standards, which have been developed to establish the minimum requirements necessary for road design to safeguard the public health, safety and general welfare through structural strength, stability, access, and other standards.

Compliance with AASHTO, Caltrans, and other applicable standards would ensure that risks to people and structures, including those related to seismic hazards and unstable soil conditions, have been properly safeguarded against. Therefore, potential impacts related to geological hazards and soil conditions are considered less than significant.

The project would disturb geological units with low paleontological sensitivity that overlie marine terrace units with increased sensitivity for fossils. As proposed, project disturbance at depths up to roughly 50 feet would not be expected to impact these units. If CIDH drilling were to impact the unit, it would be for limited, isolated pile drill holes. In the event project disturbance to potential paleontological-bearing units is greater than currently anticipated, an evaluation of potential paleontological impacts may be required.

Standard construction measures would be implemented to control sedimentation and erosion (see Exhibit B mitigation measures BR-2, BR-7, BR-18, and BR-21). Additionally, based on the site setting, implementation of erosion control measures would include consideration of the potential for extreme high tide events to occur

during construction (BR-12). These measures would reduce potential impacts from soil erosion to a less than significant level. No other mitigation measures pertaining to geology and soils are necessary.

VIII. GREENHOUSE GAS EMISSIONS

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

Setting

Greenhouse Gas (GHG) Emissions are broadly recognized as contributing to an increase in the earth's average surface temperature and long-term changes in climate. Potential GHG emissions associated with the project would be limited to burning fossil fuels from construction vehicles and equipment.

The passage of Assembly Bill (AB) 32, the California Global Warming Solutions Act (2006), recognized the need to reduce GHG emissions and set the GHG reduction goal for the State of California into law. The law codifies the statewide goal of reducing GHG emissions to 1990 levels by 2020. This is to be accomplished by reducing GHG emissions from significant sources via regulation, market mechanisms, and other actions.

In January 2021, the APCD released interim Greenhouse Gas Guidance (APCD 2021). The interim guidance replaces previous thresholds of significance for GHG emissions that were based on a 2020 planning horizon. Current recommended options for CEQA consideration of GHG emissions include: (a) consistency with a qualified climate action plan; (b) no net increase; and (c) lead-agency-adopted defensible CEQA GHG emissions thresholds. Generally, these approaches generally pertain to new commercial and residential development and vehicle miles traveled (VMT), which are not relevant for the project.

Discussion

(a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

As described in the Air Quality section, a project referral was submitted to the APCD and their comments were incorporated into the evaluations in the Air Quality Section. The project is consistent with the Climate Action Plan, and will not result in new operational emissions or an increase in vehicle miles traveled. The proposed construction approach would leave the existing bridge operational to avoid a lengthy detour for traffic on Turri Road for the 30-month construction duration. While not quantified, this would avoid potential increases in vehicle emissions that would contribute to GHG emissions.

(b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

As described in the Air Quality section, the project is consistent with the Climate Action Plan, and will not result in new operational emissions or an increase in vehicle miles traveled.

Conclusion/Mitigation

The project would not generate operational emissions or increase VMT, either of which would contribute to GHG emissions. Construction emissions would be comparable to typical construction projects and for a temporary duration. The construction sequence avoids the need for a lengthy detour that would result in increased VMT for the approximate 30-month construction period. The project would enhance opportunities for alternative modes of transportation for local travel that could reduce vehicle emissions that contribute to GHG levels. Therefore, no mitigation measures specific to GHG emissions are required.

IX. HAZARDS AND HAZARDOUS MATERIALS

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:					
(a)	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
(b)	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☒	☐	☐
(c)	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☒	☐	☐
(d)	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☒	☐

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
(e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☒	☐
(f)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
(g)	Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☒	☐

Setting

Results of the Phase I ISA (2016) and review of the Envirostor and County databases (December 2019) did not identify any documented contaminated sites, underground storage tanks, or other potential sources of hazardous materials in the vicinity of the project. A potential contamination issue at the intersection of South Bay Boulevard and Turri Road was investigated by the Regional Water Quality Control Board. The site was investigated and the case was officially closed with no deed restrictions, which signifies that there are no contaminants of concern.

Results of an asbestos and lead survey of the existing bridge resulted in identification of asbestos-containing materials in the bridge rail shims. No lead paint was detected in bridge materials; however, lead may be present in pavement striping to be removed with the bridge and from the bridge approaches.

Aerially deposited lead is common in surface soils along roadways because of historical use of leaded gasoline. Based on a survey in the project area, soil lead concentrations in the vicinity of the project would be classified as non-hazardous waste, suitable for reuse or disposal, and not subject to hazardous waste handling and disposal requirements.

The site is not in close proximity to ultramafic rock outcrops known to contain asbestos. Additionally, soil samples from the proposed abutment and bent locations were analyzed for naturally occurring asbestos for appropriate handling, reuse, and disposal considerations. No asbestos was detected in any sample.

The project is in a high Fire Hazard Severity Zone. The California Department of Forestry and Fire Protection (CalFire) South Bay Station is located approximately 2.5 miles from the project site and the mapped response time is 0 to 5 minutes. The project site is not in a dam inundation zone and is not in an Airport Review area.

Discussion

(a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

The project is a bridge replacement and would not involve the routine transport, use, or disposal of hazardous materials.

(b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Construction activities have the potential to introduce hazardous materials into the area in the form of fuel in construction vehicles and equipment. Potential for spills or releases would be prevented with standard conditions regarding equipment and vehicle refueling and maintenance, and appropriate spill response preparedness.

Because asbestos-containing materials were identified in the existing bridge, the County or its contractor would be required to prepare an Asbestos Work Plan for bridge demolition and coordinate with APCD for its approval. Additionally, in the event there is lead-based paint present in the paving to be demolished, a Lead Compliance Plan would be required for disposal of the material.

Appropriate measures would be taken during bridge demolition to prevent bridge material from falling into the creek. This would include sheeting or other appropriate measures to capture any falling debris during demolition.

The former RWQCB investigation site at the intersection of South Bay Boulevard and Turri Road was closed by RWQCB and there is no expected risk of encountering hazardous materials during project construction.

(c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

The project site is within 0.2 mile of a private school at the corner of South Bay Boulevard and Santa Ysabel Avenue to the south of the project site. As described in (b), there is potential for asbestos- and lead-containing materials to be present in structures and pavement to be demolished. Appropriate plans would be developed and implemented during bridge demolition to prevent potential for airborne exposures in surrounding areas. The project is not expected to result in the generation of any other potentially hazardous materials, and the potential for fuel-related releases is addressed in (b). Construction-generated waste would be appropriately stored and disposed of to prevent dispersal from the construction area.

(d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

As described in (a), the project is not at or near a site that would create a significant hazard to the public or the environment.

(e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

The project is not in an airport review area or within two miles of a public use airport. The closest airport review area is in San Luis Obispo over nine miles away.

(f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Construction would be phased such that the new bridge is completed and operational before the existing bridge is demolished in order to maintain vehicle access through the project site. This would ensure that construction does not interfere with emergency response or evacuation procedures.

(g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

As described in (f), the project would not interfere with the ability to travel through the project site and therefore would not increase exposure risks to wildland fires. Standard construction measures to avoid parking vehicles in areas of dry vegetation would be implemented to reduce the potential for igniting brush fires (Exhibit B mitigation measure HZ-2).

Conclusion/Mitigation

The project's potential to have adverse effects due to presence and/or handling of hazardous materials or hazardous conditions is limited to construction-related fuels leaks and spills, which would be managed in accordance with the mitigation measures described in the Biological Resources section to ensure any effects are less than significant (Exhibit B mitigation measures BR-6, BR-14, and BR-20). Additionally, removal of roadway striping and bridge demolition would be managed in accordance with an Asbestos Work Plan and if necessary, a Lead Compliance Plan, which would ensure no significant effects from demolition and disposal activities (Exhibit B mitigation measure HZ-1). This includes specifying use of tarps or nets to trap any demolition-related debris to keep it out of Los Osos Creek (Exhibit B mitigation measure BR-27). Standard construction measures would be implemented to reduce risk of igniting vegetation fires (Exhibit B mitigation measure HZ-2). With these mitigation measures, project impacts would be reduced to a less than significant level.

X. HYDROLOGY AND WATER QUALITY

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:					
(a)	Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☒	☐	☐

Initial Study – Environmental Checklist

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

Setting

Surface Waters. Surface waters at the site include Los Osos Creek where it joins the Morro Bay estuary. Warden Creek joins Los Osos Creek approximately 3,000 feet upstream from the project site. Los Osos Creek, Chorro Creek, and the Morro Bay estuary are listed as impaired surface waters on the U.S. Environmental Protection Agency's Clean Water Act Section 303(d) list of impaired and threatened waters. Los Osos Creek is listed as impaired for nitrate, dissolved oxygen, turbidity, and fecal coliform bacteria. Morro Bay is listed for sedimentation, fecal bacterial indicators, arsenic, and dissolved oxygen. Contributing sources of pollutants include agricultural land uses, land development, septic systems, boats, pet waste, and natural sources.

Total Maximum Daily Loads (TMDLs). EPA has developed and approved TMDLs to address the impaired waterways with the potential to be impacted by the project as follows:

Morro Bay Sediment TMDL, covering Chorro Creek, Los Osos Creek, and the Morro Bay Estuary (approved January 2004) – identifies sediment sources and specifies numeric targets for waterway conditions (residual pool volume; sediment particle mean diameter, percent fines, and percent coarse fines in spawning gravels; tidal prism volume; and tributary load allocations in tons/year). Los Osos Creek is estimated to contribute substantially less sediment to Morro Bay (just under 10,000 tons/year) than Chorro Creek (60,000 tons/year). The predominant source of sediment contributed from Los Osos Creek is sheet and rill erosion (61%), with smaller percentages contributed from streambank erosion (21%), roads (16%), and gullies (1%). Sheet and rill contributions in Los Osos Creek are contributed from (in order of magnitude): brushland, rangeland, cropland, woodland, and urban land. The TMDL specifies wet and dry season targets for the water column in nephelometric turbidity units (NTUs; NTUs are measured with a nephelometer, an instrument that measures light scattering caused by particulates in the water).

Morro Bay Pathogen TMDL, covering Chorro Creek and Los Osos Creek, and the Morro Bay Estuary (January 2004), establishes numeric targets (counts per milliliter) for fecal coliform in tributaries to Morro Bay, for which the primary pathogen sources are wastewater and sewer facilities; domestic animals, marine animals, birds, and wildlife; urban runoff; rangeland and cattle operations; and boats with inadequate waste disposal capabilities.

Chorro Creek Nutrients and Dissolved Oxygen TMDL (July 2007); this pertains specifically to Chorro Creek, which will not be impacted by the project.

Los Osos Creek, Warden Creek and Warden Lake Wetland Nutrient TMDL (March 2005); this addresses the nitrate impairment in the Los Osos Creek watershed. The primary source of nitrates is identified as cropland and the management measures in the TMDL pertain to cropland management approaches.

Groundwater. The site is near, but not within any regional, mapped groundwater resources, which include the Chorro Valley Basin to the north/northwest, and the Los Osos Valley Basin – Los Osos Area Subbasin to the south. The Chorro Valley Basin is used for public water supply in Morro Bay, with restrictions on withdrawals depending on the surface flow in Chorro Creek. The Los Osos Basin is being actively managed to ensure adequate freshwater supplies for existing and future needs.

Tidal Exchange. Surface waters at the project site are tidal. Available tidal datums from the nearest tide gage, the Port San Luis tide gage, with reference to the NAVD88 datum, are:

- Mean low water (MLW) – 0.96 feet
- Mean high water (MHW) – 4.5 feet
- Mean higher high water (MHHW) – 5.3 feet
- High tide line (HTL) – 7.0 feet

Flood Hazard Zones. The project site is in the Federal Emergency Management Agency mapped 100-year flood zone with a base flood elevation at the project site of 12.2 feet (NAVD88).

Discussion

(a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

From the list of established water quality impairments in Los Osos Creek and Morro Bay, the project is most likely to have the potential for adverse impacts on sediment load and turbidity. Construction-related

disturbance has the potential to discharge sediment that increases water column turbidity. Proper use and maintenance of sediment and erosion control Best Management Practices (BMPs) during construction and until all disturbed areas have been adequately stabilized would prevent the project from violating applicable water quality standards pertaining to turbidity. Turbidity monitoring would be conducted during in-water construction activities in accordance with the applicable permits for the project. Turbidity monitoring of site stormwater runoff would also occur during qualifying storm events in accordance with the requirements of the Construction General Permit. Cofferdam dewatering discharges would be allowed to settle prior to discharge to the waterway, which would prevent discharge of turbid water.

For operational impacts, the State Construction General Permit stormwater requirements would ensure compliance with the requirements in the Morro Bay sediment TMDL and reduce the potential for discharging pollutants such as heavy metals, fuels, oil and grease. These include road design and maintenance measures (e.g., installing appropriate stormwater systems and conducting routine inspection and maintenance) and construction measures (e.g., BMPs for stockpiling, erosion and sediment control, spill prevention and cleanup, saw cutting, paving and striping, equipment maintenance, and proper fueling). These measures would more effectively remove pollutants from stormwater runoff, including sediment and metals, and prevent them from impacting the waterway. This is expected to result in a net reduction of sediment and metals inputs to Los Osos Creek and Morro Bay from road surfaces.

In regard to the other regional water quality issues of concern, the project would not generate sources of organic waste or use fertilizers that would impact nutrient and dissolved oxygen concentrations in the adjacent surface waters. The project would not involve wastewater treatment or septic system discharges that could affect fecal bacterial concentrations in adjacent surface waters.

The project would not involve a wastewater discharge. The project SWPPP would include spill response procedures for hazardous materials spills, and conditions regarding equipment and vehicle fueling and maintenance to prevent inadvertent releases that could adversely impact surface waters and groundwater. As such, the project is not expected to degrade groundwater quality.

(b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

The project would not rely on groundwater supplies and would not interfere with groundwater conditions or recharge.

(c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

(c-i) Result in substantial erosion or siltation on- or off-site?

As discussed in (a), construction activities have the potential to cause erosion and sedimentation from disturbed areas. Appropriate sedimentation and erosion controls would be used to ensure there is no substantial erosion or siltation. Operational impacts would be reduced compared to current conditions by incorporation of post-construction stormwater controls designed to updated standards.

(c-ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?

(c-iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

The project would replace an existing bridge and road approaches with a slightly realigned bridge and road approaches. The abandoned approach road sections and bridge would be removed and restored to vegetated conditions. Therefore, the project is not expected to result in a material increase in the amount of impervious surface. As described in (a), post-construction stormwater management features would be incorporated into the project design to prevent direct discharges of stormwater runoff from the road into the adjacent surface waters. The stormwater system would be appropriately sized to accommodate anticipated runoff in a manner that would prevent an increase of polluted runoff.

Construction is expected to disturb more than one acre and therefore a Construction Stormwater Pollution Prevention Plan (SWPPP) would be required. The SWPPP would identify potential pollutant sources that may affect the quality of discharges to stormwater and would include specific BMPs including operational practices and physical controls to prevent the discharge of pollutants from the site during construction. BMPs would include appropriate erosion control devices, dust control measures, fuel storage and handling requirements, and measures to cover and contain stockpiled materials.

(c-iv) Impede or redirect flood flows?

No fill in the 100-year floodplain would be required for the realigned approach lanes. The new bridge abutments would be above the 100-year base flood elevation (12.2 ft NAVD88). The replacement bridge would be designed to accommodate the base flood elevation with at least one foot of freeboard and therefore would not impede or redirect flood flows. Therefore, the bridge and realigned approach roads would not impede or redirect flood flows or contribute to flood-induced erosion.

The project would result in less structures and encroachment in the creek channel (i.e., below HTL) and 100-year floodplain than exist with current conditions. The project would remove the existing bridge piers consisting of 18 concrete piles below the HTL in Los Osos Creek. The project would install a single bent with two support columns at an elevation above the HTL on the south side of the creek. This would result in elimination of bridge-related fill below the HTL and an incremental decrease in the volume of bridge support fill in the 100-year floodplain.

Hydraulic modeling indicates that the new bridge would improve conditions for passage of flood flows in Los Osos Creek compared to the existing bridge, including 50-, 100-, and 200-year flood flows. Based on the hydraulic modeling results for the existing and proposed bridge, which address substantial volumes of water passing under the bridge, the County concludes that neither the existing nor the proposed bridge act as a restriction to tidal flows, which are of smaller magnitude. While tidal flows were not modeled, the project-related improvements are expected to result in increased capacity for unimpeded passage of tidal flows through the project area in the event of future sea level rise because of the removal of bridge piers from the creek channel and the increased setback of the south abutment.

(d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

The project would include temporary structures and fill (i.e., construction trestle piles and cofferdams) in the 100-year floodplain (i.e., below the base flood elevation). These would be clean materials free from pollutants that could otherwise leach out into the waterway during inundation. CIDH drilling would be done in dewatered

cofferdams that would be managed to prevent release of drilling fluids to the waterway. Cofferdams would be designed to withstand the highest anticipated tidal flows for the in-water construction period to prevent them from being overtopped. All in-water structures would be removed from the water column upon completion of construction, with piles to be pulled or cut below the mudline.

(e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Compliance of the project with TMDLs and related County stormwater plans to ensure no adverse effects to water quality are described in (a).

The project would not affect groundwater conditions and therefore would not conflict or obstruct management of the nearby groundwater resource.

Conclusion/Mitigation

The project is in direct proximity to surface waters that support a variety of sensitive habitats (see Biological Resources section) and that have been impaired over time from a variety of stressors and surrounding land uses. The project is also in the 100-year floodplain with potential for significant effects on flood storage and flood water conveyance. Operational impacts of the project would be minimized by designing the project to maintain or improve the existing flood capacity and conveyance conditions at the bridge, and to treat stormwater runoff prior to discharge to adjacent surface waters. The potential for significant construction-related impacts would be mitigated with use of sedimentation and erosion controls as well as BMPs for Good Housekeeping, waste management and materials management to prevent hazardous materials or waste and debris from getting into the waterway. These mitigation measures would ensure impacts to water quality and hydrology are less than significant (e.g., Exhibit B mitigation measures BR-1, BR-2, BR-6, BR-7, BR-13, BR-14, BR-19, BR-20, BR-21, BR-27, and HZ-1). No additional mitigation measures pertaining to hydrology and water quality are necessary.

XI. LAND USE AND PLANNING

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:					
(a)	Physically divide an established community?	☐	☐	☐	☒
(b)	Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☒	☐

Setting

Surrounding land uses consist of park lands and open space, with residential development within approximately 1200 feet to the south. The project was reviewed for consistency with policy and/or regulatory

documents relating to the environment and appropriate land use. Referrals were sent to outside agencies to review for policy consistencies (e.g., CalFire for Fire Code, APCD for Clean Air Plan).

The bridge crosses over a tidal portion of Los Osos Creek where it joins Morro Bay. The County right-of-way at the bridge crossing is bordered to the east by Morro Bay State Park, to the southwest by the El Moro Elfin Forest Preserve (managed by San Luis Obispo County Parks and California State Parks), and to the west by Morro Bay State Marine Reserve (prohibits damage or take of all marine resources) and the Morro Bay National Estuary.

The southern end of the project area is in the area covered by the draft Los Osos Habitat Conservation Plan (HCP), including the southern approach road realignment and the alternative staging area on Santa Ysabel Avenue. The HCP authorizes incidental take of two federally listed species (Morro shoulderband snail and Morro Bay kangaroo rat) pursuant to Section 10 of the Federal Endangered Species Act, as well as impacts to two federally listed plant species (Morro manzanita and Indian Knob mountainbalm). The project was not included in the maintenance projects anticipated to be covered under the HCP.

The project is in the Estero Planning Area. The Estero Area Plan does not have specific policies for road or bridge projects. Standard Caltrans and County policies and BMPs would apply to the project. Mitigation measures to ensure avoidance and minimization of impacts in various resource sections of this MND comply with the standards in the County General Plan and other applicable plans (e.g., the County Stormwater Management Program described in the Hydrology and Water Quality section). The project would require coastal zone approval from the California Coastal Commission and the Local Coastal Program.

Los Osos Creek flows into the Morro Bay estuary immediately west of the project. The Morro Bay National Estuary is part of the National Estuary Program, and is a local, non-profit organization that collaborates with local, state, and federal partners to further maintain a healthy estuary. There is a Comprehensive Conservation and Management Plan (2012) for the estuary that defines priority issues and conservation approaches.

Portions of Morro Bay have been designated as the Morro Bay State Marine Reserve. The Reserve includes areas below the mean high tide line in the eastern portion of the Bay, including the mouth of Los Osos Creek. These waters are managed by the California Department of Fish and Game for their wildlife value. No fishing or take of marine resources is allowed in this area.

Discussion

(a) Physically divide an established community?

The project would not physically divide an established community and would not alter existing transportation routes between communities. The project would help maintain an established, safe connector road between Los Osos and Morro Bay.

(b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

The project is compatible with the surrounding uses and would improve the safety of the bridge for the benefit of travelers. The project was found to be consistent with the applicable plans (listed in Exhibit A). The project would not conflict with the plans or policies of any of the referral agencies, with the incorporation of the air quality conditions recommended by the APCD and described in the Air Quality section (Exhibit B, mitigation measures AQ-1 through AQ-3).

The project would maintain the aesthetic character of the public views in the vicinity and would avoid, minimize, and mitigate impacts on wetlands and sensitive estuarine resources, in compliance with the Estero Area Plan (Exhibit B, mitigation measure AR-1, and BR-1 through BR-27).

The project would need to obtain a Coastal Development Permit and would be designed to be consistent with the County Local Coastal Program and California Coastal Act.

The project site has the potential to contain Morro shoulderband snails, and has documented occurrence of Morro manzanita. The project would not be covered under the draft Los Osos HCP, but would be consistent with the goals of the HCP. This includes minimizing the potential for incidental take of Morro shoulderband snails, and restoring temporary impacts and mitigating for permanent impacts to habitat areas for the species covered in the HCP (Exhibit B, mitigation measure BR-25).

Construction would be monitored to ensure no adverse effects to marine resources addressed under the management goals of the Morro Bay State Marine Reserve (e.g., tidewater goby, steelhead; mitigation measures BR-17 and BR-26 in Exhibit B).

The draft HMMP describes project-related impacts and proposed restoration of temporary impacts and mitigation for permanent impacts (Exhibit B mitigation measure BR-3). Construction impacts have been reduced as part of development of the environmental documents and draft HMMP; they would be evaluated for further reductions in impacts to salt marsh, Morro manzanita, and native oak trees prior to commencement of construction (Exhibit B mitigation measure BR-4). As such, the project design and draft HMMP are consistent with the goals of the Morro Bay National Estuary Program Comprehensive Conservation and Management Plan, including consideration of conservation and restoration of important estuarine habitats and vegetation communities.

Conclusion/Mitigation

The project would have no effect on land use and planning and would be consistent with applicable plans and programs with incorporation of the mitigation measures from other sections of the MND cited above. No additional mitigation measures are required.

XII. MINERAL RESOURCES

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:					
(a)	Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☒	☐
(b)	Result in the loss of availability of a locally- important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☒	☐

Setting

There are numerous active and past sand and gravel pits in the western portion of San Luis Obispo County. There are no active mines within one mile of the project site.

Discussion

(a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

The project would impact disturbed lands within the County right-of-way and is not located within or near any known mineral resources.

(b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

The project is not located within or near any delineated mineral resource recovery sites and would not affect access to any active recovery sites, which can be accessed from other more direct routes (e.g., Highway 1).

Conclusion/Mitigation

The project would not impact mineral resources and no mitigation measures are necessary.

XIII. NOISE

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project result in:					
(a)	Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☒	☐
(b)	Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
(c)	For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☒	☐

Setting

As described in the Air Quality section, the project within 1,000 feet of sensitive receptors including a school, residences, and recreational areas. South Bay Boulevard from the community of Los Osos north generally to

the vicinity of Turri Road (including the project site) is mapped as a 70-dB traffic zone in the County's noise contour maps.

The project is not in the vicinity of an airport plan area or a private airfield.

Discussion

(a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

The County noise standards (Title 23 at 23.06.040) provide an exception for construction noise sources provided such activities are limited to Monday through Friday from seven a.m. through nine p.m., and Saturday and Sunday from eight a.m. to five p.m. While County projects are not bound by the standards, the County strives to maintain consistency with them, and would require the contractor to follow them to the maximum extent possible. From an operational perspective, the project would relocate the existing bridge and approach lanes in generally the same location and orientation and would not increase or alter existing use of the road, so is not expected to increase operational noise levels associated with the project area.

(b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

The project would generate temporary construction noise for the duration of construction, which is expected to be approximately 30 months. Construction noise would be temporary in nature and would normally be limited to daylight hours. Some work may need to be done at night when traffic levels are low. The public would be notified in advance to the maximum extent feasible in the unlikely event that occasional night work would be necessary.

Sensitive receptors in the vicinity of the project site include residences and a school to the south, and recreational users on the tidal waters.

Heavy construction equipment may generate some ground-borne noise and vibration, but these activities would be limited in duration and consistent with other standard construction activities. Impacts related to exposure of persons or generation of excessive ground-borne vibration or ground-borne noise levels would be less than significant.

(c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

The project is not located in the vicinity of a private airstrip or a public airport.

Conclusion/Mitigation

Construction-generated noise would be temporary, would occur in a location where road-related noise is expected, and is not anticipated to be excessive. Recreational users in the vicinity may experience adverse effects but it would be for a temporary duration and they would have the option of using other areas located farther from the project site until construction activities are completed. No additional mitigation measures are required.

XIV. POPULATION AND HOUSING

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

Setting

Land uses surrounding the project site are open space and recreational uses. The densely developed residential neighborhoods of Los Osos exist to the south.

Discussion

(a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

The project purpose is to improve the safety of the bridge. The project would not create new transportation networks or increase the capacity of South Bay Boulevard. As such the project would not have any impact on regional population growth.

(b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

The project would not displace any housing.

Conclusion/Mitigation

The project would have no impacts on population and housing and no mitigation measures are necessary.

XV. PUBLIC SERVICES

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
(a)	Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:	☐	☐	☒	☐
	Fire protection?	☐	☐	☒	☐
	Police protection?	☐	☐	☒	☐
	Schools?	☐	☐	☒	☐
	Parks?	☐	☐	☒	☐
	Other public facilities?	☐	☐	☒	☐

Setting

The project is in a "high" Fire Hazard Severity Zone and is in the California Department of Forestry and Fire Protection's (Cal Fire) responsibility area. The closest Cal Fire station is on Bayview Heights Drive in Los Osos approximately 2.5 miles south of the project site. The mapped emergency response time to the site is 0 to 5 minutes.

As an unincorporated area of San Luis Obispo County, the community of Los Osos is under the police protection jurisdiction of the County Sheriff from the Coast Station, which is located in Los Osos.

There is a private school approximately 0.2 mile south of the project site on South Bay Boulevard, and two public schools in the Los Osos neighborhoods over 0.5 mile southeast and southwest of the project site.

The closest recreational areas and parks in the vicinity of the project are waterborne recreational use of Morro Bay and Los Osos Creek and walking trails at the Elfin Forest Preserve that borders the southwest portion of the project site, with trail access off residential roads off Santa Ysabel Avenue west of South Bay Boulevard.

Discussion

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

The proposed project would not substantially adversely affect police, fire, schools or other public services and would not result in the need for new services or facilities. Other than the replacement bridge, no new structures would be built, and there would be no increase in population or traffic as a result of the project.

Response time for emergency vehicles is not anticipated to be impacted as the existing bridge would remain open for two lanes of traffic during construction activities, maintaining access for emergency vehicles. This would also maintain access for all other non-emergency regional traffic as well. Periodic lane closures may be required for maneuvering construction vehicles or equipment; these would be brief and would be managed so as not to interfere with any unanticipated emergency vehicle access during construction.

Operational effects of the project on public services are expected to be positive by reducing the potential for catastrophic collapse of the bridge, which if it occurred, would create a public safety disaster/hazard, potentially resulting in loss of life and property damage and eliminating one of the two main access roads to the community of Los Osos until such time as the collapse could be repaired.

Conclusion/Mitigation

The project is not expected to adversely affect public services and no mitigation is required.

XVI. RECREATION

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

Setting

The closest recreational areas and parks in the vicinity of the project are waterborne recreational use of Morro Bay and Los Osos Creek, walking trails at the Elfin Forest Preserve that borders the southwest portion of the project site, and Morro Bay State Park to the north of the project site. There are no public facilities or access points for these recreational resource areas on State Parks- or County-owned land bordering the project area.

The project site is an area that has been identified for possible future California Coastal Trail segments. The California Coastal Trail is a project being managed by the California Coastal Conservancy to provide a network of public trails for walkers, pedestrians, equestrians, wheelchair riders, and others along the California coast. Potential trails in the vicinity of Los Osos and Morro Bay include a trail along the coastal dunes on the west side of Morro Bay and a bike route on SR 1. South Bay Boulevard is another potential corridor for a section of the trail network. The Los Osos Community Plan depicts a number of possible Coastal Trail alignments generally along and west of South Bay Boulevard as far north as the bridge. There are existing marked bike lanes on both sides of South Bay Boulevard to the north of the project site in Morro Bay.

Discussion

(a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

The project would replace an existing bridge and would not result in increased use of or demand for nearby recreational facilities.

(b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

The proposed project includes a single, 5-foot-wide separated pedestrian trail with concrete barrier. Additionally, the proposed project would use 8-foot-wide shoulders on the bridge. The pedestrian trail and wide shoulders increase the width of the bridge and results in incremental increases in temporary and permanent impacts.

The proposed pedestrian trail and shoulders would improve safety for pedestrian and bicycle traffic on the bridge and are therefore considered to have independent utility from a future Coastal Trail. In the event that the bridge trail is incorporated into a regional Coastal Trail segment north or south of the bridge in the future, the environmental impacts of such a trail leading connecting to the bridge trail would need to be evaluated.

In-water construction would interfere with recreational use of Los Osos Creek on a temporary basis. There would be no change to conditions for recreational use of the waterway when construction is complete.

Conclusion/Mitigation

The project would improve the safety of recreational travelers already using South Bay Boulevard on foot and bicycle in the vicinity. The project is not expected to have an adverse effect on existing recreational resources, with the exception of temporary impacts to waterborne recreation in Los Osos Creek during construction. As a public safety measure, signs would be posted to alert waterborne recreational users of the need to avoid the construction zone during the construction period (Exhibit B, mitigation measure Rec-1).

No additional mitigation measures are necessary.

XVII. TRANSPORTATION

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

Setting

Senate Bill 743, which was codified into the Public Resources Code section 21099, requires communities to achieve a 15% reduction in vehicle miles traveled. This resulted in a change in the CEQA Guidelines regarding the analysis of transportation impacts. As described in the December 2018 Technical Advisory on Evaluating Transportation Impacts in CEQA, vehicle miles traveled (VMT) is considered the most appropriate metric to evaluate a project's transportation impacts under CEQA, replacing level of service and other similar metrics for consideration of significant environmental effects.

Discussion

(a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

The project does not conflict with any program plans, ordinances, or policies addressing transportation facilities, including the Los Osos circulation study and the Los Osos Community Plan.

In regard to VMT, the proposed bridge replacement is not expected to affect VMT because it is designed to improve the safety of the bridge, not add or remove capacity. Replacement of bridges is listed in Section F of the December 2018 Technical Advisory as one of the transportation project types that would not likely lead to a substantial or measurable increase in VMT, and therefore should not require an induced traffic analysis. Although not analyzed for VMT, the proposed project would leave the existing bridge in use until the new bridge is operational. This avoids the need for a lengthy traffic detour on Turri Road for the 30-month duration of construction, which would otherwise increase VMT for routine traffic through the project site.

Community recommendations included consideration of leaving the existing bridge in place to serve as a multi-use trail. This is not considered a feasible option because the bridge does not meet current design standards and is subject to collapse, which would pose a continued safety hazard if it were to remain in place.

The project is expected to have positive effects for bicycle and pedestrian safety. The existing bridge does not have a separate pedestrian path so providing a separated pedestrian path on the new bridge would improve safety. The existing shoulders are 4 to 5 feet wide and the proposed shoulder widths would be 8 feet, increasing safety for bicycle traffic.

(b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

Section 15064.3(b) of the CEQA Guidelines states that transportation projects that reduce, or have no impact on, vehicle miles traveled should be presumed to cause a less than significant impact on transportation. The proposed would not change transportation routes or the capacity of the existing road and would not have any effect on vehicle miles traveled or traffic volumes. Therefore the project would be consistent with Section 15064.3(b).

(c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

The project would not appreciably change the existing road configuration or introduce new traffic uses. Relocating the bridge and road approaches to the east side of the existing bridge would not introduce sharp curves or dangerous intersections. The Turri Road intersection would be redesigned in accordance with traffic engineering standards to ensure appropriate line of sight for turning traffic.

Potential use of the east end of Santa Ysabel Avenue for construction staging would be limited to that portion of the road east of Scenic Way and east of an existing locked access gate that is approximately 130 feet east of the Scenic Way intersection. Use of this portion of the road for staging would increase traffic on Santa Ysabel Avenue during the construction period but would not block or impede access to any properties, including the church and residences on Scenic Way.

The proposed bridge would have 8-foot-wide shoulders compared to the existing approximately 4-foot-wide shoulders. This, and the proposed pedestrian path on the bridge, would improve safety for pedestrians and bicyclists compared to existing conditions.

(d) Result in inadequate emergency access?

Both lanes of access along the existing bridge would be maintained at all times during construction until the new bridge is operational and the existing bridge is demolished. Emergency access would be accommodated at all times during construction.

Conclusion/Mitigation

Implementation of the project would not result in significant impacts on transportation, and no mitigation measures are necessary.

XVIII. TRIBAL CULTURAL RESOURCES

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
(a)	Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
	(i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	☐	☒	☐	☐
	(ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☒	☐	☐

Setting

The Cultural Resources section describes the archaeological setting for the project site. There are archaeological resources in the vicinity, including properties that are eligible/potentially eligible for listing in the State Register of Historical Resources near the project impact areas.

With respect to tribal cultural resources, the project site lies in a region historically occupied by the Chumash and Salinan. The Chumash occupied the coast between San Luis Obispo and northwestern Los Angeles County, inland to the San Joaquin Valley. They were divided into two broad groups, of which the Obispeño were the northern group. The Chumash have a rich and complex history dating back as much as 10,000 years before present. The Northern Chumash had a complex system of social organization. They were hunter-gatherer-fishers and resided in numerous permanent villages and temporary camps, following annual cycles of hunting and gathering. Acorns provided a main staple of the diet, but archaeological evidence indicates

that the Chumash also relied on marine food resources, including pelagic fish, mussels, abalone, cockles, and clams.

There is also documentation of prehistoric Salinan ties to the project area (see Attachment E in ASR Addendum, County, 2021). The Salinan people followed annual cycles of fishing, hunting, and gathering, and relied on acorns as a main staple of the diet. The Salinan had trade relations with the Yokut and Chumash tribes, providing them with unworked shells and shell beads. The Salinan people used mussel and abalone shell beads as their form of currency.

Based on an inquiry to the California Native American Heritage Commission (August 24, 2015), no designated sacred lands occur in the project area. Consultation with Native American Tribes was initiated in 2015 based on the Native American Heritage Commission's recommended contact list. A representative from the Northern Chumash Tribal Council raised concerns with a possible staging area. The staging area was eliminated from the project and all project impact areas are within County right-of-way. A representative of the yak tit^{y}u tit^{y}u yak tiłhini – Northern Chumash Tribe recommended construction crew training and that all excavation activities be monitored by a Native American representative.

In order to meet AB 52 consultation requirements, consultation with updated project information was sent in November, 2020, to the Northern Chumash Tribal Council, Salinan Tribe of San Luis Obispo, Monterey and San Benito Counties, yak tit^{y}u tit^{y}u yak tiłhini – Northern Chumash Tribe, Xolon Salinan Tribe, Barbareno/Ventureno Band of Mission Indians, Santa Ynez Band of Chumash Indians, and the Coastal Band of the Chumash Nation. A representative of the Xolon Salinan Tribe requested copies of the studies that have been completed and stated that the project vicinity is considered a back and forth area for the tribe.

A representative of the Salinan Tribe stated concerns that the ethnography section of the ASR did not accurately reflect the Salinan presence in the project region. The ASR Addendum was prepared to address this concern. They also requested that a representative of the tribe be present to monitor excavation activities.

Discussion

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

(a-i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?

(a-ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

As described in the Cultural Resources section, no listed historical or archaeological resources have been identified in the project impact area. There are no designated sacred lands in the project area. Previously identified or potentially eligible cultural resources would be avoided by the project. Tribal consultation resulted in information being conveyed to the County about the archaeological sensitivity of the region and the recommendation that excavation activities be monitored by an archaeologist and tribal representatives.

Conclusion/Mitigation

Tribal consultation affirmed the archaeological sensitivity of the area as described in the Cultural Resources section. No additional resources pertaining to Tribal Cultural Resources were identified. Therefore, the mitigation measures described in the Cultural Resources section (see CR-1 through CR-5, Exhibit B) address tribal concerns related to the project. These include requirements for training construction crews and for conducting monitoring during construction activities in archaeologically sensitive areas with the participation of local Native American Tribe(s) who are known to be ethnographically and geographically affiliated with the project. No additional mitigation measures are required.

XIX. UTILITIES AND SERVICE SYSTEMS

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:					
(a)	Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☒	☐
(b)	Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☒	☐
(c)	Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☒
(d)	Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☒	☐
(e)	Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☒	☐

Setting

There are several underground communication utilities at the project site (ISA; Caltrans, 2016). The lines are buried on both sides of South Bay Boulevard and cross the existing bridge in conduits on both sides of the

structure. There are no overhead utility lines near the bridge, although there are overhead electrical and communication lines along Turri Road. The new bridge will have provisions for current or potential future utilities to be placed under or on the bridge.

Discussion

(a) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

The project would not require the construction of new water or wastewater treatment facilities or expansion of existing facilities. Portable chemical toilets would be available for use by construction crews. The project would require relocation of the existing communication lines, which would be undergrounded for the bridge approaches and placed in conduit on the new bridge without any expansion or change in use.

(b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

Project requirements for water would be limited to water for dust control during construction, which would be trucked to the site.

(c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

As described in (a), the project would not require wastewater treatment or affect the capacity of existing wastewater treatment services.

(d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

Project generation of solid waste would consist of construction and demolition debris, including demolition of the existing bridge and removal of pavement on the abandoned approach roads. These materials would be disposed of in accordance with applicable regulations and are not expected to be in excess of local standards or capacity.

(e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

See response to (d).

Conclusion/Mitigation

The County would relocate existing utilities and would coordinate with the project proponent regarding the location and installation of the proposed fiber optic cable to avoid conflicts. The project would have no significant effects on water, wastewater, or other utilities and no mitigation measures are necessary.

XX. WILDFIRE

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

Setting

As described under Hazards and Hazardous Materials, the project site is located in a "high" fire severity zone and the response time for the area is approximately 0 to 5 minutes.

Discussion

(a) Substantially impair an adopted emergency response plan or emergency evacuation plan?

(b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

(c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

(d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

In regard to (a) through (d), impacts of the project on emergency response are discussed under Hazards and Hazardous Materials, Public Services, and Transportation.

The project would relocate an existing bridge and road approaches with no material changes that would have adverse effects related to the occurrence of, or risks posed by, wildfires. Construction BMPs regarding parking vehicles in areas with dry vegetation would minimize the risk of igniting wildfires (Exhibit B mitigation measure HZ-2).

Conclusion/Mitigation

With incorporation of construction measures to reduce the risk of igniting brush fires (mitigation measure HZ-2), the project would have no significant effects on wildfire risk and no additional mitigation measures are necessary.

XXI. MANDATORY FINDINGS OF SIGNIFICANCE

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
(a)	Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐
(b)	Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☐	☒	☐
(c)	Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐

Setting

The project setting is described in terms of surrounding land uses on pages one through four of the Initial Study and from the perspective of environmental resources in each resource section of this document, including, for example, aesthetics, biological resources, and cultural resources.

Discussion

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

The project has the potential to substantially degrade the quality of the environment. Incorporation of the Biological Resources (BR) and Cultural Resources (CR) mitigation measures included in Exhibit B would ensure that the project would not substantially reduce the number of fish and wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of rare or endangered plant or animal species, and/or eliminate important examples of the major periods of California history or pre-history. Therefore, the anticipated project-related impacts are less than significant.

(b) *Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?*

The project does not propose a new or different use than the existing use of the bridge and approach sections along South Bay Boulevard. The project would be located within existing County right-of-way. Operational impacts would be comparable to the current conditions in terms of traffic, aesthetics, and environmental footprint. The project would not contribute to cumulative floodplain impacts and would provide an incremental improvement in flood conveyance by reducing the footprint of structures in Los Osos Creek. The project would also improve safety for pedestrian and bicycle traffic by including a separated pedestrian trail and 8-foot-wide shoulders on the bridge. These features have independent utility because they increase the safety of the bridge; however, they would potentially tie into a future Coastal Trail segment for which a separate environmental analysis would be required. Construction-related impacts of the project would be temporary and of limited duration and scope. The project is not expected to have impacts that would be individually limited, but cumulatively considerable. Therefore, project impacts, when considered together with past, on-going, and future projects in the vicinity, would not be cumulatively considerable and would not compound or increase other environmental impacts. Therefore, all project-related impacts would be less than significant.

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

The project has a substantial beneficial effect on human beings by replacing a bridge that is subject to seismic collapse and therefore poses a safety hazard to life and property. The proposed bridge would provide a safe bridge meeting current seismic standards and would increase safety for pedestrian and bicycle traffic. The project would not result in environmental effects that would cause substantial adverse effects on human beings, either directly or indirectly. Direct effects on human beings would be limited to the temporary need

to prohibit waterborne recreation in Los Osos Creek at/near the construction site. The normal traffic patterns over the existing bridge would be maintained throughout construction until the new bridge is operational, preventing substantial traffic delays. The anticipated effects of the project would not substantially conflict with any adjacent land uses. Therefore, the project is not expected to have adverse effects, and is expected to have some beneficial effects, on human beings.

Conclusion/Mitigation

With the implementation of the project-specific mitigation measures, including appropriate measures listed in Exhibit B, the project would have a less than significant impact on the environment.

Exhibit A - Initial Study References and Agency Contacts

The County Public Works Department has contacted various agencies for their comments on the proposed project. With respect to the subject application, the following have been contacted (marked with an ☒) and when a response was made, it is either attached or in the application file:

Contacted	Agency	Response
☐	County Public Works Department	**Not Applicable**
☒	County Environmental Health Services	**None**
☒	County Agricultural Commissioner's Office	**In File****
☐	County Airport Manager	**Not Applicable**
☐	Airport Land Use Commission	**Not Applicable**
☒	Air Pollution Control District	**In File****
☐	County Sheriff's Department	**Not Applicable**
☒	Regional Water Quality Control Board	**In File****
☒	CA Coastal Commission	**In File****
☒	CA Department of Fish and Wildlife	**None**
☒	CA Department of Forestry (Cal Fire)	**None**
☐	CA Department of Transportation	**Not Applicable**
☐	Community Services District	**Not Applicable**
☒	Other Los Osos Community Advisory Council; County Parks and Recreation; SWAP; MBNEP; California State Parks	**In File****
☒		**None**
	Other NMFS; USACE	

** "No comment" or "No concerns"-type responses are usually not attached

The following checked ("☒") reference materials have been used in the environmental review for the proposed project and are hereby incorporated by reference into the Initial Study. The following information is available at the County Public Works Department.

- ☒ Project File for the Subject Application

County Documents

- ☒ Coastal Plan Policies
- ☐ Framework for Planning (Coastal/Inland)
- ☒ General Plan (Inland/Coastal), includes all maps/elements; more pertinent elements:
  - ☒ Agriculture Element
  - ☒ Conservation & Open Space Element
  - ☐ Economic Element
  - ☐ Housing Element
  - ☒ Noise Element
  - ☒ Parks & Recreation Element/Project List
  - ☐ Safety Element
- ☒ Land Use Ordinance (Inland/Coastal)
- ☐ Building and Construction Ordinance
- ☐ Public Facilities Fee Ordinance
- ☐ Real Property Division Ordinance
- ☐ Affordable Housing Fund
- ☐ Airport Land Use Plan
- ☐ Energy Wise Plan
- ☒ Estero Area Plan
- ☐ Design Plan
- ☐ Specific Plan
- ☐ Annual Resource Summary Report
- ☒ Los Osos Circulation Study

Other Documents

- ☒ Clean Air Plan/APCD Handbook
- ☐ Regional Transportation Plan
- ☐ Uniform Fire Code
- ☒ Water Quality Control Plan (Central Coast Basin – Region 3)
- ☒ Archaeological Resources Map
- ☐ Area of Critical Concerns Map
- ☐ Special Biological Importance Map
- ☒ CA Natural Species Diversity Database
- ☒ Fire Hazard Severity Map
- ☒ Flood Hazard Maps
- ☒ Natural Resources Conservation Service Soil Survey for SLO County
- ☒ GIS mapping layers (e.g., habitat, streams, contours, etc.)
- ☒ Other See reference list below.

Initial Study – Environmental Checklist

The following project-specific information and/or reference materials have been considered as a part of the Initial Study:

County of San Luis Obispo Air Pollution Control District. 2021. Interim CEQA Greenhouse Gas Guidance for the San Luis Obispo County Air Pollution Control District's 2012 CEQA Air Quality Handbook. Accessible online at https://storage.googleapis.com/slocleanair-org/images/cms/upload/files/CEQA-GHGInterimGuidance_Final.pdf. January.

California Department of Transportation. 2016. Initial Site Assessment, South Bay Boulevard Over Los Osos Creek Bridge Replacement Project, Los Osos, San Luis Obispo County.

County of San Luis Obispo Department of Public Works. 2006 – 2007. Road Maintenance Water Quality Protection Manual.

County of San Luis Obispo Department of Public Works. 2021. Archaeological Investigations Addendum for the South Bay Boulevard Replacement Project, Los Osos, San Luis Obispo County, California.

Drake Haglan and Associates. 2020. Visual Impact Assessment South Bay Boulevard Bridge Replacement Project, approved by California Department of Transportation (Caltrans) District 5. November.

Insight Environmental, Inc. 2018. Limited preliminary asbestos and lead survey, South Bay Bridge, Bridge over Los Osos Creek, prepared for Drake Haglan and Associates, October.

Jefferson G.T., H.L. Fierstine, J.R. Wesling, and T. Ku. 1992. Pleistocene terrestrial vertebrates from near Point San Luis, and other localities in San Luis Obispo County, California. Bulletin of the Southern California Academy of Science 91(I): 26-38.

Kleinfelder. 2013. Geotechnical Report, South Bay Boulevard Bridge, State Bridge No. 49C-0351. Prepared for Drake Haglan and Associates, Rancho Cordova, CA. May.

Kleinfelder. 2015. Naturally Occurring Asbestos, South Bay Boulevard Over Los Osos Creek, Los Osos, San Luis Obispo County, California. Letter and analytical report to Drake Haglan and Associates. October.

Moffatt & Nichol. 2018. Sea level rise adaptation strategy report, prepared for the City of Morro Bay, January.

Padre Associates, Inc. 2021a. Natural Environment Study, South Bay Boulevard Bridge (49C-0351) Replacement Project. May.

Padre Associates, Inc. 2021b. Biological Assessment, South Bay Boulevard Bridge at Los Osos Creek, San Luis Obispo County, California. April.

Seed, H.B. 1979. Soil Liquefaction and Cyclic Mobility Evaluation for Level Ground During Earthquakes. Journal of Geotechnical Engineering Division, ASCE 105(GT2): 201-255.

Exhibit B - Mitigation Summary

Mitigation Monitoring Plan

The purpose of a Mitigation Monitoring Plan is to provide a program to examine, document and record compliance with the environmental plans and specifications pertinent to the proposed project, in order to comply with Section 21081.6 of the California Environmental Quality Act (CEQA). This plan provides the standards and methods necessary to ensure and document the implementation of the environmental mitigation measures which have been included in the project description as well as with the conditions of approval placed on project permits. Responsibility for ensuring successful implementation of the Mitigation Monitoring Plan lies with the County of San Luis Obispo, as the project proponent and Lead Agency for the project under CEQA. If the recommended mitigation measures and monitoring plan are implemented successfully, the potential significant adverse effects stemming from project construction will be reduced to a level of insignificance.

Mitigation monitoring will be carried out by the County's Environmental Programs Division. Upon approval of the CEQA document and issuance of all required permits, the Environmental Programs Division will assign internal responsibility for compliance with each mitigation measure to one or more members of the project team. Responsible parties include the Environmental Programs Division, the Project Manager (PM), the Resident Engineer (RE), and/or on-site monitors.

Mitigation measures are organized into project design, pre-construction, construction, and post-construction tasks. Compliance with mitigation measures is documented in the project file through written reports, accompanied by project photos where necessary. Post-construction monitoring of revegetation and other project components is documented by yearly reports, on a schedule typically determined by one or more of the project permits. Depending on the complexity of the post construction mitigation effort, tasks will be carried out by county staff or technical experts under contract to the County. Post-construction monitoring is typically conducted for three to five years, depending on permit requirements and success criteria.

Details of post-construction habitat restoration and mitigation, monitoring, and success criteria have been incorporated into a draft Habitat Mitigation and Monitoring Plan (HMMP) for the project. The HMMP would be finalized based on permit requirements. Implementation and oversight of the HMMP would be provided by the County's Environmental Programs Division.

Mitigation Measures

Aesthetic Mitigation Measures

[AR-1] Upon completion of construction, the aesthetic impacts of removal of native oak trees would be mitigated by replacing the trees at a 4:1 ratio. Replacement trees would be located along the realigned approach roads in the same general locations where trees have been removed and nearby ruderal habitats in the County right-of-way.

Air Quality Mitigation Measures

[AQ-1] During construction, the County and/or its contractors will implement the following mitigation measures to minimize nuisance impacts and to significantly reduce fugitive dust emissions:

- Reduce the amount of disturbed area where possible.
- Use water trucks or sprinkler systems in sufficient quantities to prevent airborne dust from leaving the site. Increased watering frequency would be required whenever wind speeds exceed 15 mph. Reclaimed (non-potable) water should be used whenever possible.
- When drought conditions exist and water use is a concern, the County or its contractor should consider the use of an APCD-approved dust suppressant where feasible to reduce the amount of water used for dust control.
- All dirt stock-pile areas should be sprayed daily and covered with tarps or other dust barriers as needed.
- Permanent dust control measures identified in the approved project revegetation and landscape plans should be implemented as soon as possible following completion of any soil disturbing activities.
- Exposed ground areas that will be reworked at dates greater than one month after initial grading should be sown with fast-germinating non-invasive grass seed and watered until vegetation is established.
- All disturbed soil areas not subject to revegetation should be stabilized using approved chemical soil binders, jute netting, or other methods approved in advance by the APCD.
- All roadways, driveways, sidewalks, etc. to be paved should be completed as soon as possible, and building pads should be laid as soon as possible after grading unless seeding, soil binders or other dust controls are used.
- Vehicle speed for all construction vehicles will not exceed 15 mph on any unpaved surface at the construction site.
- All trucks hauling dirt, sand, soil, or other loose materials are to be covered or should maintain at least two feet of freeboard (minimum vertical distance between the top of the load and the top of the trailer) in accordance with California Vehicle Code Section 23114.
- Install wheel washers where vehicles enter and exit unpaved roads onto streets, or wash off trucks and equipment leaving the site (if applicable).
- Sweep streets at the end of each day if visible soil material is carried onto adjacent paved roads. Water sweepers with reclaimed water should be used where feasible.

- All fugitive dust mitigation measures will be shown on grading and building plans.
- The County or its contractor will designate a person or persons to monitor the fugitive dust emissions and enhance the implementation of the mitigation measures as necessary to minimize dust complaints, reduce visible emissions below 20% opacity, and to prevent transport of dust offsite. Their duties will include holidays and weekend periods when work may not be in progress.

[AQ-2] Asbestos-containing material has been identified in portions of the bridge to be demolished. Asbestos-containing materials will be removed and disposed of in accordance with the Caltrans Standard Special Provisions and the pertinent requirements of the National Emission Standard for Hazardous Air Pollutants (40 CFR R61 Subpart M – Asbestos). In addition, a Notification of Demolition and Renovation Form will be submitted to the APCD at least ten business days prior to the start of the removal and disposal activities.

[AQ-3] If sandblasting or heat gun removal will be used to remove lead-based paint, a Lead Work Plan will be provided to APCD for approval at least ten work days before the start of demolition. The County will coordinate with APCD prior to commending any activities involving sandblasting or heat gun removal of lead-based paint.

Biological Resources Mitigation Measures

[BR-1] Prior to construction, a Storm Water Pollution Prevention Plan will be prepared for the project in accordance with County of San Luis Obispo Public Works Department requirements. Provisions of this plan will be implemented during and after construction as necessary to avoid and minimize erosion and stormwater pollution in and near the work area.

[BR-2] Prior to construction, the County will obtain coverage under Order R3-2011-0223 (or order current at commencement of construction) as required by the RWQCB for construction dewatering (low threat discharge).

[BR-3] Prior to construction, the County of San Luis Obispo Public Works Department will prepare a conceptual Habitat Mitigation and Monitoring Plan that provides for a 1:1 restoration ratio for temporary impacts, a 3:1 mitigation ratio for permanent impacts to environmentally sensitive habitat areas (ESHA), and a 4:1 replacement ratio for native oak trees removed for construction, unless otherwise directed by regulatory agencies. Any revegetation will be conducted using only native plant species. The final Habitat Mitigation and Monitoring Plan will identify the specific mitigation sites and it will be implemented immediately following project completion.

[BR-4] Prior to initiation of any construction activities, including vegetation clearing or grubbing, the County will conduct an on-site review with the contractor of the proposed construction disturbance areas to determine if impacts to salt marsh, Morro manzanita, and native oak trees can be reduced. Any revisions to the construction limits resulting from this coordination will be clearly marked on the Project plans, incorporated into the construction disturbance fencing (mitigation measure BR-5), and the Project's Habitat Mitigation and Monitoring Plan (HMMP).

[BR-5] Prior to initiation of any construction activities, including vegetation clearing or grubbing, sturdy high-visibility fencing will be installed to protect Morro manzanita chaparral, native oak woodland, and areas below the high tide line, including salt marsh, adjacent to the designated work areas. This fencing will be placed so that unnecessary adverse impacts to the adjacent habitats are avoided. No construction work (including storage of materials) will occur outside of

the specified project limits. The fencing will remain in place during the entire construction period, will be monitored periodically by a qualified biologist, and will be maintained as needed by the contractor.

[BR-6] Prior to construction, the County will prepare a Hazardous Materials Response Plan to allow for a prompt and effective response to any accidental spills. Workers will be informed of the importance of preventing spills and of the appropriate measures to take should a spill occur.

[BR-7] In-water construction activities will be limited to the dry season (June through October) to minimize potential impacts to migrating fish and to minimize the potential for sedimentation and erosion control issues due to precipitation events. The construction schedule will be managed to achieve removal of instream structures at the end of the dry season to the maximum extent practicable.

[BR-8] If feasible, vegetation within the PIA will be removed during the fall or winter (September 2 to January 31) prior to construction, to minimize the potential for construction impacts to nesting birds.

If construction activities are proposed during the typical nesting season (February 1 to September 1), pre-construction nesting bird surveys will be conducted by qualified biologists no more than two weeks prior to the start of construction to determine presence/absence of nesting birds. If no occupied nests are observed, construction may commence and no further mitigation is required.

Nesting swallows may use the existing bridge commencing in March or April; appropriate exclusion methods may be implemented prior to the start of nesting season to deter active nesting during the proposed construction period (applicable to both construction and demolition construction phases).

[BR-9] If active nests are encountered on site during the pre-construction nesting bird surveys, an appropriate avoidance buffer (likely 100 feet from active passerine nests and 250 feet from active raptor nests) will be established around the occupied nest(s). If the identified nest(s) belongs to a special-status species CDFW will be consulted. The species-specific requirements for nesting birds in the NES will be implemented. Avoidance will be accomplished by installation of high visibility orange construction fencing or flagging around the occupied areas with the appropriate setback. A qualified biological monitor will facilitate installation of the fence or flagging and will conduct periodic site visits to ensure that the fencing remains intact for the duration of development activities in proximity to the active nest(s) and he or she will continue to monitor the nest(s). Construction activities will not occur within the nesting bird avoidance buffer area(s) until the biological monitor determines that either: a) all young have fledged and that the nest(s) are no longer occupied, or b) construction activity is not precluding nesting activity. Any and all active nests will be appropriately documented by the monitoring biologist and a letter-report will be submitted to CDWF, documenting project compliance with the Migratory Bird Treaty Act and the California Fish and Game Code Section 3513.

[BR-10] Prior to construction, all personnel will participate in an environmental awareness training program conducted by a qualified biologist. The program will include a description of the special-status aquatic resources and federally designated critical habitat within the project boundary. If appropriate, the biologist may train and designate a representative of the County

of San Luis Obispo Public Works Department or other designee to provide training to subcontractors or personnel that will be onsite for short durations during the project.

[BR-11] Prior to construction, the County of San Luis Obispo Public Works Department will retain a qualified biological monitor(s) to monitor construction and ensure compliance with the avoidance and minimization efforts outlined in all project environmental documents. At a minimum, monitoring will occur during initial ground disturbance activities and vegetation removal.

[BR-12] Cofferdams will be designed to exclude anticipated high-water conditions (predicted astronomical tides for the construction period based on the National Oceanic and Atmospheric Administration Port San Luis tide gage or appropriate Morro Bay data source) with an additional reasonable margin of safety.

[BR-13] In-water structures will be composed of clean materials and will be limited to the minimum necessary footprint to support construction activities.

[BR-14] Cast-in-drilled-hole boring techniques will be used in dewatered cofferdams. The drilling mitigation measures provided in the NES and BA will be implemented or as otherwise specified in the regulatory permits for the project, including measures to contain drilling fluid and prevent discharge of turbid water to Los Osos Creek.

[BR-15] Pile installation and removal mitigation measures from Section 17 of Appendix D of the 2019 Pacific Coast Groundfish FMP will be implemented (as provided in the NES and BA) or as otherwise specified in the regulatory permits for the project.

[BR-16] Piles will not be installed using an impact hammer, except to test vertical pile capacity. Hollow steel piles will not be used unless required to meet engineering requirements. Peak sound pressure levels will be monitored during any driving of steel piles using an impact hammer. If monitored sound pressure levels exceed 180 dB, additional measures will be implemented, for example, including an air bubble curtain, dewatering the area using a cofferdam, or use of a smaller hammer. All temporary piles and old bridge piles will be removed completely, to the extent feasible, or cut below the mudline.

[BR-17] If a work site is to be temporarily dewatered by pumping, intakes will be completely screened with wire mesh not larger than 0.2 inch to prevent steelhead, tidewater goby, or California red-legged frogs from entering the pump system or being impinged on intake screening. Pumps will release the diverted water downstream so that suspended sediment will not re-enter the stream. The form and function of pumps used during the dewatering activities will be checked daily, at a minimum, by a qualified biological monitor to ensure a dry work environment and minimize adverse effects to aquatic species and habitats. Upon completion of construction activities, any diversions or barriers to flow will be removed in a manner that would allow flow to resume with the least disturbance to the substrate. Alteration of the streambed will be minimized to the maximum extent possible; any imported material will be removed from the streambed upon completion of the project.

[BR-18] In order to reduce the potential for sediment entering the stream, sediments will be removed from the water that is pumped out of the dewatering areas, prior to the water reentering the stream/estuarine system. Potential methods for removing the sediments from the pumped water include use of one or a combination of the following methods: a sediment capture tank (e.g., BakerTank), filtration basin system, and/or sediment filter bags. If a sediment capture tank

is used, the pumped water will be stored in the sediment capture tank(s) for a sufficient amount of time for the suspended sediments to settle. The sediment-free water may then be discharged downstream. If an infiltration basin is used, the pumped water may be discharged into a sediment basin that is excavated downstream of the dewatering area, within the project area, and in sand substrates. The pumped water can be discharged into the infiltration basin and allowed to percolate back into the system. This would allow the native substrates to capture the sediments during percolation. If sediment bags are used, the pumped water will be discharged into the sediment bag(s), allowed sufficient time for the sediment to settle in the bag, then the water may be discharged downstream.

[BR-19] During construction, trash will be contained, removed from the work site, and disposed of regularly. Following construction, trash and construction debris will be removed from the work areas. Vegetation removed from the construction site will be taken to a certified landfill to prevent the spread of invasive species. If soil from weedy areas (such as areas with poison hemlock or other invasive exotic plant species) must be removed offsite, the top 6 inches (152 millimeters) containing the seed layer in areas with weedy species will be disposed of at a permitted landfill.

[BR-20] During construction, the cleaning and refueling of equipment and vehicles will occur only within a designated staging area and at least 60 feet (20 meters) from riparian habitat, wetlands, or other aquatic areas. At a minimum, equipment and vehicles will be checked and maintained on a daily basis to ensure proper operation and avoid potential leaks or spills.

[BR-21] During construction, erosion control measures (e.g., silt fencing, fiber rolls, and barriers) will remain available onsite and will be utilized as necessary to prevent erosion and sedimentation in jurisdictional areas. No synthetic plastic mesh products will be used for erosion control and use of these materials onsite is prohibited. Erosion control measures and other suitable Best Management Practices used will be checked to ensure that they are intact and functioning effectively and maintained on a daily basis throughout the duration of construction. The contractor will also apply adequate dust control techniques, such as site watering, during construction to protect water quality.

[BR-22] During construction, no pets will be allowed on the construction site.

[BR-23] Prior to project completion, all oak trees removed as a result of the development of the project will be replaced at a 4:1 ratio, and any trees impacted but not removed (e.g., by root or branch pruning) will be replaced at a 2:1 ratio. Replanting will be completed as soon as it is feasible (e.g. irrigation water is available, grading has been completed in replant area(s)). Replanted areas will be either in native topsoil or areas where native topsoil has been reapplied. Only designated trees will be removed. Trees scheduled for removal will be marked.

[BR-24] During construction, the mitigation measures pertaining to California red-legged frog from the U.S. Fish and Wildlife Service Programmatic Biological Opinion for Projects Funded or Approved under the Federal Highway Administration's Federal Aid Program (8-8-10-F-58) will be implemented (as provided in the NES and BA) or as otherwise provided by the regulatory permits for the project.

[BR-25] During construction, the mitigation measures pertaining to Morro shoulderband snail will be implemented as provided in the NES and BA or as otherwise provided by the regulatory permits for the project.

[BR-26] During construction, the mitigation measures pertaining to tidewater goby and steelhead from the Tenera Environmental protocol survey report (Teneral 2016) will be implemented (as provided in the NES and BA) or as otherwise provided by the regulatory permits for the project.

[BR-27] During bridge demolition, appropriate measures, such as tarps or nets, will be used to trap any demolition-related debris to keep it out of Los Osos Creek.

Cultural Resources Mitigation Measures

[CR-1] Prior to construction, an archaeologist will provide a pre-construction archaeological briefing to all construction crews prior to initiating ground disturbing activities. The briefing will provide guidance on historical and archaeological resources and appropriate procedures to follow if such finds are inadvertently exposed during the project.

[CR-2] Prior to construction, an archaeological site bordering the project area will be clearly delineated as an Environmentally Sensitive Areas using high-visibility orange fencing. The fence installation will be monitored by a qualified archaeologist to ensure no impact to any cultural resources. The fence will remain in place throughout the duration of construction and will be periodically monitored by an environmental monitor to ensure that it remains in place.

[CR-3] During construction, a qualified archaeologist and representative(s) of local Native American Tribe(s) who are known to be ethnographically and geographically affiliated with the project area will monitor initial ground disturbance activities within the project impact area(s) considered to be archaeologically sensitive.

[CR-4] During construction, if previously unidentified cultural materials are unearthed, work will be halted in that portion of the project area until a qualified archaeologist can assess the significance of the find. Additional archaeological surveys will be needed if the project limits are extended beyond the present survey limits.

[CR-5] During construction, as specified by California Health and Safety Code Section 7050.5, if human remains are found on the project site, the person responsible for the excavation, or his or her authorized representative, will immediately notify the San Luis Obispo County Coroner's office, and the County Environmental office by telephone. No further excavation or disturbance of the discovery or any nearby area reasonably suspected to overlie adjacent remains (as determined by an Archaeologist and/or Native American monitor) will occur until the Coroner has made the necessary findings as to origin and disposition pursuant to Public Resources Code 5097.98.

Hazards and Hazardous Materials Mitigation Measures

[HZ-1] During construction, removal of roadway striping and bridge demolition will be managed in accordance with an Asbestos Work Plan and a Lead Compliance Plan to ensure no significant effects from demolition and disposal activities.

[HZ-2] Any staging or equipment/vehicle parking areas will be free of combustible vegetation and work crews will have shovels and fire extinguishers on site during all construction activities.

Recreation Mitigation Measures

[Rec-1] Signs will be posted upstream and downstream of the project area along Los Osos Creek to alert waterborne recreational users of the need to avoid the construction zone during the construction period.