

Bakersfield 99 Rehabilitation II (South)

State Route 99 between White Lane Overcrossing
and California Avenue Undercrossing in Bakersfield in Kern County

06-KER-99-21.15/24.60

06-0X370/0618000059

State Clearinghouse Number Pending

Initial Study with Proposed Negative Declaration

Volume 1 of 2



Prepared by the
State of California Department of Transportation

July 2023



General Information About This Document

What's in this document:

The California Department of Transportation (Caltrans) has prepared this Initial Study, which examines the potential environmental impacts of alternatives being considered for the proposed project in Kern County in California. The document explains why the project is being proposed, the alternatives being considered for the project, the existing environment that could be affected by the project, potential impacts of each of the alternatives, and proposed avoidance, minimization, and/or mitigation measures.

What you should do:

- Please read the document. Additional copies of the document and the related technical studies are available for review at the Caltrans District Office at 1352 West Olive Avenue, Fresno, California 93728 and the Kern County Library at 701 Truxtun Avenue, Bakersfield, California 93301.
- Tell us what you think. Send your written comments to Caltrans by the deadline. Submit comments via U.S. mail to: Shane Gunn, District 6 Environmental, California Department of Transportation, 2015 East Shields Avenue, Suite 100, Fresno, California 93726. Submit comments via email to: shane.gunn@dot.ca.gov.
- Submit comments by the deadline: September 4, 2023.

What happens next:

After comments are received from the public and the reviewing agencies, Caltrans may 1) give environmental approval to the proposed project, 2) do additional environmental studies, or 3) abandon the project. If the project is given environmental approval and funding is appropriated, Caltrans could design and construct all or part of the project.

Accessibility Assistance

Caltrans makes every attempt to ensure our documents are accessible. Due to variances between assistive technologies, there may be portions of this document that are not accessible. Where documents cannot be made accessible, we are committed to providing alternative access to the content. Should you need additional assistance, please contact us at the phone number in the box below.

For individuals with sensory disabilities, this document can be made available in Braille, in large print, on audiocassette, or on computer disk. To obtain a copy in one of these alternate formats, please write to or call Caltrans, Attention: Shane Gunn, District 6 Environmental, 2015 East Shields Avenue, Suite 100, Fresno, California 93726; phone number 559-832-0051 (Voice), or use the California Relay Service 1-800-735-2929 (Teletype to Voice), 1-800-735-2922 (Voice to Teletype), 1-800-855-3000 (Spanish Teletype to Voice and Voice to Teletype), 1-800-854-7784 (Spanish and English Speech-to-Speech), or 711. Voice to Teletype), 1-800-854-7784 (Spanish and English Speech-to-Speech), or 711.

State Clearinghouse Number Pending
06-KER-99-21.15/24.60
06-0X370/0618000059

Rehabilitate State Route 99 from post miles 21.15 to 24.60 in Kern County.

**INITIAL STUDY
with Proposed Negative Declaration**

Submitted Pursuant to: (State) Division 13, California Public Resources Code

THE STATE OF CALIFORNIA
Department of Transportation
and
Responsible Agency: California Transportation Commission



Philip Vallejo
Deputy District Director
Environmental
California Department of Transportation
CEQA Lead Agency

7/19/2023

Date

The following individual can be contacted for more information about this document:

Shane Gunn, 2015 East Shields Avenue, Suite 100, Fresno, California 93726; telephone:
(559) 832-0051; email: shane.gunn@dot.ca.gov



Proposed Negative Declaration

Pursuant to: Division 13, Public Resources Code

State Clearinghouse Number: Pending

District-County-Route-Post Mile: 06-KER-99-PM 21.15/24.60

EA/Project Number: 06-0X370/0618000059

Project Description

The California Department of Transportation (Caltrans) proposes to resurface, restore, and rehabilitate State Route 99 in Kern County from post miles 21.15 to 24.60. An auxiliary lane will be constructed between California Avenue and the southbound State Route 99 to eastbound State Route 58 connector ramp. The auxiliary lane will require the construction of a new retaining wall, widening of the California Avenue Undercrossing, and replacement of the Palm Avenue Overcrossing. Also, a soundwall will be constructed between the Wilson Road Overcrossing and the Wible Road Overcrossing.

Determination

An Initial Study has been prepared by Caltrans District 6. On the basis of this study, it is determined that the proposed action will not have a significant effect on the environment for the following reasons:

The project would have no effect on aesthetics, agriculture and forest resources, cultural resources, energy, geology and soils, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, paleontological resources, population and housing, public services, parks and recreational facilities, tribal cultural resources, utilities and service systems, and wildfire.

The project would have a less than significant impact on air quality, biological resources, greenhouse gas emissions, and noise.

Philip Vallejo
Deputy District Director
Environmental
California Department of Transportation

Date

Table of Contents

Chapter 1	Proposed Project	1
1.1	Introduction.....	1
1.2	Purpose and Need.....	1
1.2.1	Purpose.....	1
1.2.2	Need	2
1.3	Project Description.....	2
1.4	Project Alternatives.....	5
1.4.1	Build Alternative	5
1.4.2	No-Build (No-Action) Alternative	6
1.5	Standard Measures and Best Management Practices Included in All Build Alternatives.....	6
1.6	Discussion of the NEPA Categorical Exclusion	7
1.7	Permits and Approvals Needed	7
Chapter 2	CEQA Evaluation.....	9
2.1	CEQA Environmental Checklist	9
2.1.1	Aesthetics	9
2.1.2	Agriculture and Forestry Resources.....	10
2.1.3	Air Quality	11
2.1.4	Biological Resources.....	13
2.1.5	Cultural Resources.....	21
2.1.6	Energy.....	21
2.1.7	Geology and Soils	21
2.1.8	Greenhouse Gas Emissions	22
2.1.9	Hazards and Hazardous Materials	24
2.1.10	Hydrology and Water Quality	25
2.1.11	Land Use and Planning.....	26
2.1.12	Mineral Resources	27
2.1.13	Noise.....	27
2.1.14	Population and Housing	34
2.1.15	Public Services.....	34
2.1.16	Recreation.....	35
2.1.17	Transportation	35
2.1.18	Tribal Cultural Resources.....	36
2.1.19	Utilities and Service Systems.....	37
2.1.20	Wildfire	37
2.1.21	Mandatory Findings of Significance	38
Appendix A	Title VI Policy Statement.....	41

Chapter 1 **Proposed Project**

1.1 Introduction

The California Department of Transportation (Caltrans) proposes to resurface, restore, and rehabilitate a segment of State Route 99 in Kern County from just north of the White Lane Overcrossing to the California Avenue Overcrossing. The total length of the project is 3.45 miles. Figures 1-1 and 1-2 show the project location and vicinity maps.

This pavement rehabilitation 3R (resurfacing, restoration, and rehabilitation) project is included in the 2022 State Transportation Improvement Program and is funded from the 2020 State Highway Operations and Protection Program-Roadway Rehabilitation 3R 20.XX.201.120 for the 2025-2026 fiscal year. The City of Bakersfield has committed \$30 million of its State Transportation Improvement Program (Regional Improvement Program) funding for this project.

The project's estimated cost is \$66,000,000; construction is expected to begin in the spring of 2025 and end in 2026.

The existing State Route 99 roadway in the project area is an urban, 8-lane freeway on mostly level terrain. This portion of State Route 99 is a major highway and important travel link between the San Joaquin Valley and Southern California. It serves the major population centers in the San Joaquin Valley as well as the rural agricultural areas with smaller towns and communities. Commuter, recreational, and truck traffic uses State Route 99 within the project limits. The proposed project would improve operations and reduce congestion within the region.

1.2 Purpose and Need

1.2.1 Purpose

The purpose of the project is to restore this segment of State Route 99 to a state of good repair so that future maintenance efforts and expenditures are minimized. The project will improve safety and address operational and geometric deficiencies and relieve congestion between California Avenue and the State Route 99/58 interchange. The project will also improve Transportation Management System elements and ramp metering, and install a soundwall.

1.2.2 Need

The condition of the pavement within the project limits has severely deteriorated due to considerable storm damage and a heavy amount of truck traffic on this segment. This has resulted in increased costs to maintain existing pavement and the inability of state forces to maintain this section of freeway continuously in good condition for the travelling public. There is a need for a more permanent repair in the form of the reconstruction of the number four lanes to continuously reinforced concrete pavement and replacement of failed panels in lanes one through three.

Existing traffic congestion is being caused by inadequate spacing between the southbound California Avenue on-ramp and the State Route 99/State Route 58 interchange; an auxiliary lane is needed to improve queuing and safety for this segment. Additionally, there is a need for improving or installing new Traffic Management System and safety device elements to meet current Caltrans operational and safety standards throughout the project limits. Noise levels along southbound State Route 99 between Wilson Road and Grassotti Court have exceeded Federal Highway Administration standards and a soundwall is needed.

1.3 Project Description

Caltrans proposes to resurface, restore, and rehabilitate State Route 99 in Kern County from post miles 21.15 to 24.60. The project will rehabilitate the number four lane and outside shoulder in both directions with continuously reinforced concrete pavement and replace failing concrete slabs in the number one through number three lanes.

To relieve congestion and improve operational deficiencies, an auxiliary lane will be constructed between California Avenue and the southbound State Route 99 to eastbound State Route 58 eastbound connector ramp. An auxiliary lane is the portion of the roadway for weaving, truck climbing, speed change, or for other purposes supplementary to through movement.

The auxiliary lane will require construction of a new retaining wall, widening of the California Avenue Undercrossing, and replacement of the Palm Avenue Overcrossing.

A soundwall will be constructed between the Wilson Road Overcrossing and the Wible Road Overcrossing. The project will also upgrade or install new safety barriers, signs, and Traffic Management System elements throughout the project limits to meet current standards.

Figure 1-1 Project Vicinity Map

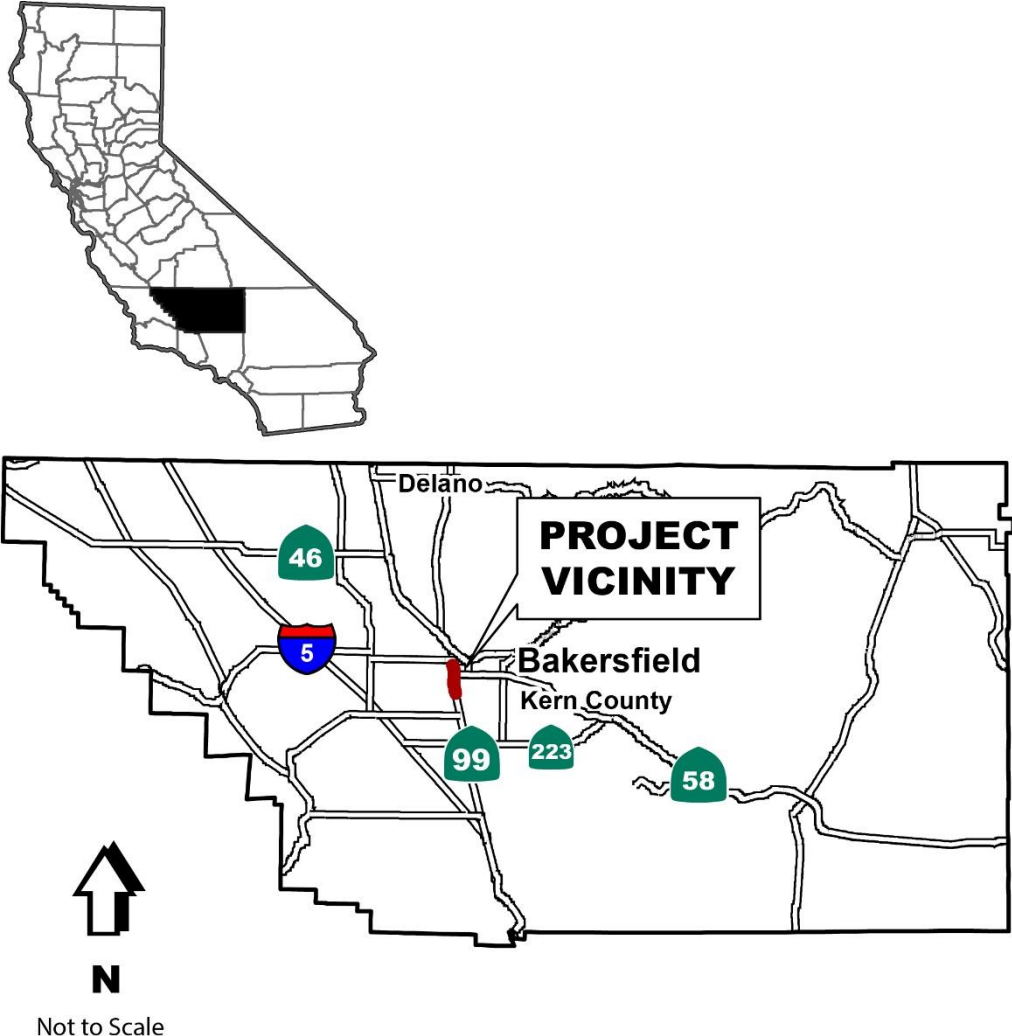
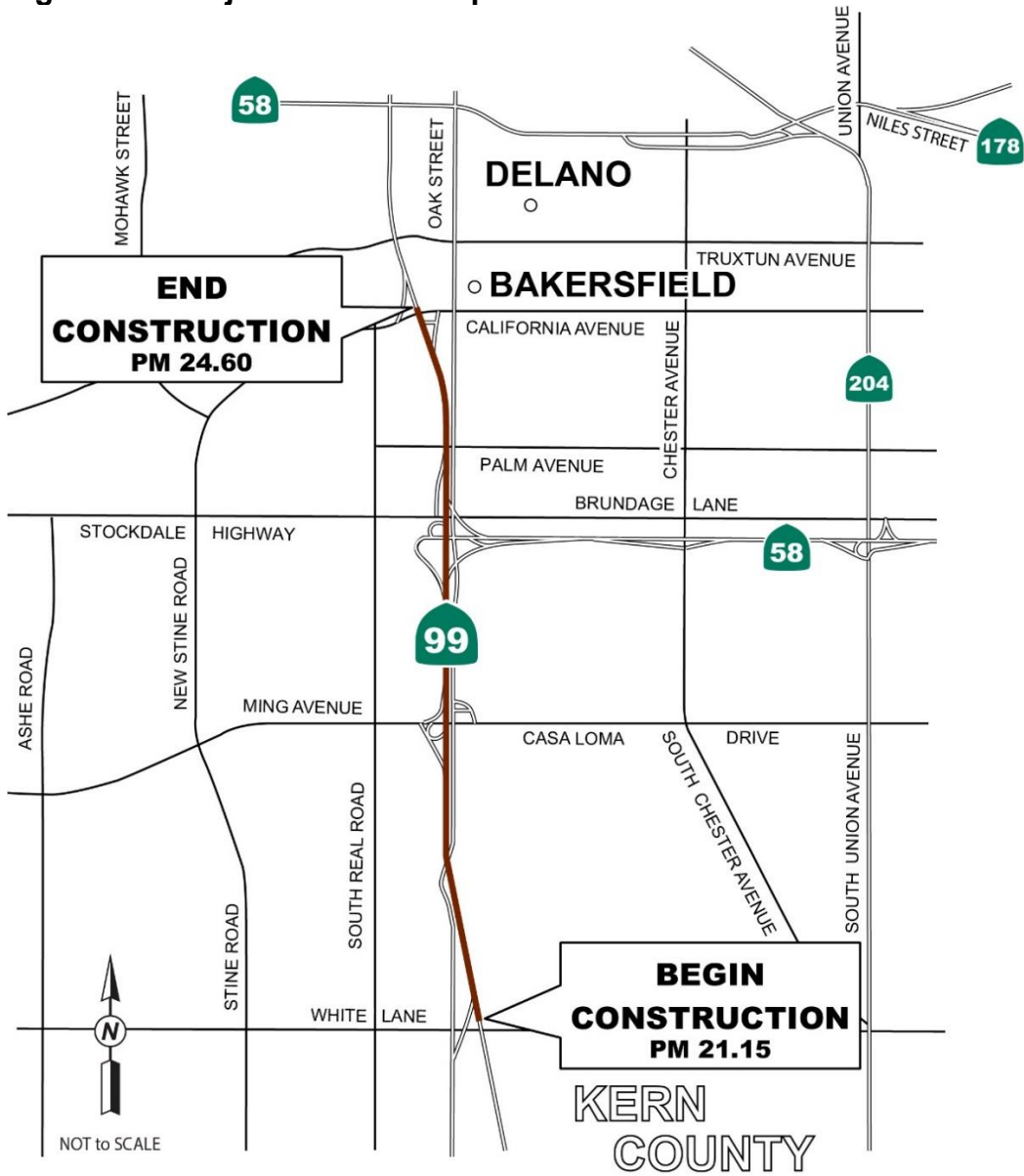


Figure 1-2 Project Location Map



1.4 Project Alternatives

Two alternatives—the Build Alternative and the No-Build Alternative—are being considered for the project.

1.4.1 Build Alternative

The Build Alternative will rehabilitate the roadway and improve drainage elements and Transportation Management Systems within the project limits. Work will include the following:

Pavement:

- Rehabilitate the number four lane with a 14-foot panel of continuously reinforced concrete pavement using 2 feet as part of the shoulder and widen and reconstruct the remaining outside shoulder with continuously reinforced concrete pavement to current standards where feasible.
- Replace the failed panels in the number one, two and three lanes with rapid strength concrete pavement in both the northbound and southbound directions.

Auxiliary Lane:

- Install a new 12-foot continuously reinforced concrete pavement southbound auxiliary lane between California Avenue and the eastbound State Route 58 connector. The new auxiliary lane is in a cut section of the freeway, and a new retaining wall, approximately 3,000 feet long and up to 14 feet tall, will be required.
- Replace the Palm Avenue Overcrossing structure to accommodate the auxiliary lane. The replacement structure will be designed to allow a future auxiliary lane in the northbound direction.

Soundwall:

- Install a soundwall west of State Route 99, approximately between Wilson Road and the Wible Road Overcrossing. The soundwall will be 10 feet high and approximately 820 feet long.

Other Safety Upgrades:

- Modify existing traffic count stations, vehicle detection and classification systems along with existing lighting systems. Install new closed-circuit television and fiber optic systems at various locations within the project limits.

- Replace and install 1,400 feet of drainage system pipe, replace or modify 29 lighting elements, and rehabilitate or replace 11 overhead sign structures.
- Replace 30 Traffic Management System elements, and install 17 new Traffic Management System elements within the project limits.
- Remove and upgrade the existing metal beam guardrail with the new Midwest Guardrail System.

Right-of-Way:

- Require temporary construction easements to install the soundwall and work on the Palm Street Overcrossing bridge.

Construction is scheduled to start in the spring of 2025 and is expected to take 400 working days, with about 50 days of nightwork.

1.4.2 No-Build (No-Action) Alternative

The No-Build Alternative would maintain the existing facility on State Route 99 in its present condition. The pavement would continue to deteriorate, which would result in ongoing costly maintenance and rough pavement for the travelling public. Heavy truck traffic and non-standard spacing between vehicles would continue operational deficiencies and increase congestion in the project area. Current sound levels for nearby receptors would remain the same; there would be no decrease in noise. This alternative does not meet the purpose and need of the project.

1.5 Standard Measures and Best Management Practices Included in All Build Alternatives

Air Quality—To effectively reduce and control emission impacts during construction, Caltrans Standard Specifications, Section 14-9.02 “Air Pollution Control” and Section 10-5 “Dust Control,” would be included in the bid package.

Biology—Caltrans Standard Specifications Section 14-6.03 Species Protection: Pertains to protecting regulated species and their habitat that occur within or near the job site. Upon discovery of a regulated species, notify the resident engineer.

Hazardous Waste—Applicable Standard Special Provisions that will be included in the bid package may include, but are not limited to, Standard Special Provisions Section 7-1.02K(6)(j)(ii) Lead Compliance Plan; Standard Special Provisions Section 7-1.02K (6)(j)(iii)—ground disturbance of

unregulated materials; Standard Special Provisions Section 14-11.08—ground disturbance of regulated Aerially Deposited Lead materials; Standard Special Provisions Section 14-11.12 Removal of Yellow Traffic Stripe and Pavement Marking with Hazardous Waste Residue; Standard Special Provisions Section 14-11.16 Asbestos-Containing Construction Materials in Bridges; Standard Special Provisions Section 14-11.14—disposal and handling of treated wood waste; Standard Special Provisions Section 36-4 Residue Containing Lead from Paint and Thermoplastic.

Noise Quality—Caltrans Standard Specifications Section 14-8.02 Noise Control, which pertains to controlling and monitoring noise resulting from work activities, will be included in the bid package. Noise levels must not exceed 86 A-weighted decibels at 50 feet from the job site from 9:00 p.m. to 6:00 a.m. All equipment must be fitted with adequate mufflers and operated according to the manufacturers' specifications.

1.6 Discussion of the NEPA Categorical Exclusion

This document contains information regarding compliance with the California Environmental Quality Act (CEQA) and other state laws and regulations. Separate environmental documentation, supporting a Categorical Exclusion determination, has been prepared in accordance with the National Environmental Policy Act. When needed for clarity, or as required by CEQA, this document may contain references to federal laws and/or regulations (CEQA, for example, requires consideration of adverse effects on species identified as a candidate, sensitive, or special-status species by the U.S. National Marine Fisheries Service and the U.S. Fish and Wildlife Service—that is, species protected by the Federal Endangered Species Act).

1.7 Permits and Approvals Needed

No permits, licenses, agreements, or certifications are required for project construction.

Chapter 2 CEQA Evaluation

2.1 CEQA Environmental Checklist

This checklist identifies physical, biological, social, and economic factors that might be affected by the proposed project. Potential impact determinations include Significant and Unavoidable Impact, Less Than Significant Impact with Mitigation Incorporated, Less Than Significant Impact, and No Impact. In many cases, background studies performed in connection with a project will indicate that there are no impacts to a particular resource. A “No Impact” answer reflects this determination. The questions in this checklist are intended to encourage the thoughtful assessment of impacts and do not represent thresholds of significance.

Project features, which can include both design elements of the project and standardized measures that are applied to all or most Caltrans projects such as Best Management Practices and measures included in the Standard Plans and Specifications or as Standard Special Provisions, are considered to be an integral part of the project and have been considered prior to any significance determinations documented below.

“No Impact” determinations in each section are based on the scope, description, and location of the proposed project as well as the appropriate technical report (bound separately in Volume 2), and no further discussion is included in this document.

2.1.1 Aesthetics

Considering the information in the Visual Impact Assessment dated July 2023, the following significance determinations have been made:

Except as provided in Public Resources Code Section 21099:

Question—Would the project:	CEQA Significance Determinations for Aesthetics
a) Have a substantial adverse effect on a scenic vista?	No Impact
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	No Impact

Question—Would the project:	CEQA Significance Determinations for Aesthetics
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	No Impact
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	No Impact

2.1.2 Agriculture and Forestry Resources

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department 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 the forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.

Considering the information in the California Department of Conservation’s California Important Farmland Finder visited in February 2023 and the U.S. Department of Agriculture’s Forest Service Map visited in May 2023, the following significance determinations have been made:

Question—Would the project:	CEQA Significance Determinations for Agriculture and Forest Resources
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?	No Impact

Question—Would the project:	CEQA Significance Determinations for Agriculture and Forest Resources
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	No Impact
c) Conflict with existing zoning, 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))?	No Impact
d) Result in the loss of forest land or conversion of forest land to non-forest use?	No Impact
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?	No Impact

2.1.3 Air Quality

Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations.

Considering the information in the Air Quality Memorandum dated November 9, 2022, the following significance determinations have been made:

Question—Would the project:	CEQA Significance Determinations for Air Quality
a) Conflict with or obstruct implementation of the applicable air quality plan?	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?	No Impact
c) Expose sensitive receptors to substantial pollutant concentrations?	No Impact

Question—Would the project:	CEQA Significance Determinations for Air Quality
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	Less Than Significant

Affected Environment

The project is on State Route 99 from 0.07 mile north of the White Lane Overcrossing to the California Avenue Overcrossing in the City of Bakersfield in Kern County. It lies within the San Joaquin Valley Air Basin. The San Joaquin Valley, almost 300 miles long, stretches from the Tehachapi Mountains in the south to the Sacramento-San Joaquin River Delta in the north. The Sierra Nevada Mountain Range forms the eastern boundary of the valley, while the lower Coastal Ranges form the boundary on the west. Kern County has an arid climate with very hot, dry summers, and winters that consist of mild days with cold nights. Precipitation in the San Joaquin Valley ranges from 8 to 13 inches annually, with about 70 percent of the annual rainfall occurring between December and April.

For particulate matter pollutants—broken down into particles of 2.5 micrometers and smaller (particulate matter 2.5) and particles of 10 micrometers or smaller (particulate matter 10)—the project area lies in a portion of the San Joaquin Valley Air Basin that is in nonattainment for particulate matter 2.5 and attainment/maintenance for particulate matter 10. According to the Environmental Protection Agency’s conformity guidance, particulate matter 2.5 hotspot analysis is required for Projects of Air Quality Concern in nonattainment and maintenance areas. Projects that are exempt or not Projects of Air Quality Concern do not require a hotspot analysis.

The project was submitted to Interagency Consultation Partners on October 14, 2022. Concurrence that the project is not a Project of Air Quality Concern was received on October 24, 2022 from the Environmental Protection Agency and on October 31, 2022 from the Federal Highway Administration.

Environmental Consequences

Build Alternative—Construction Phase

During construction, short-term degradation of air quality is expected from the release of particulate emissions (airborne dust) generated by excavation, grading, hauling, and other activities related to construction. Emissions from construction equipment powered by gasoline and diesel engines are also expected and would include carbon monoxide, nitrogen oxides, volatile organic compounds, directly emitted particulate matter 2.5 and particulate matter 10 and toxic air contaminants, such as diesel exhaust particulate matter. A temporary increase in traffic resulting from construction would create a localized increase in emissions from traffic.

Construction emissions were estimated for the Build Alternative. Construction emissions for the project were calculated using the Caltrans Construction Emissions Tool (CAL-CET) v1.1. Project construction is expected to generate about 2,739 tons of carbon dioxide during the 400 working days.

Avoidance, Minimization, and/or Mitigation Measures

Caltrans Standard Specifications pertaining to dust control and dust palliative requirements are a required part of all construction contracts and should effectively reduce and control emission impacts during construction. The provisions of Caltrans Standard Specifications Section 14-9.02 Air Pollution Control and Section 10-5 Dust Control require the contractor to comply with the air pollution control rules, ordinances, regulations, and statutes that apply to work performed under the contract, including those provided in Government Code Section 11017.

A Dust Control Plan approved by the San Joaquin Air Pollution Control District is needed if at least 2,500 cubic yards of material are moved in a day for at least 3 days of the project, or 5 or more acres of land will be disturbed during construction.

2.1.4 Biological Resources

Considering the information in the Natural Environment Study (Minimal Impacts) dated August 12, 2021 and the Biological Assessment dated January 3, 2023, the following significance determinations have been made:

Question—Would the project:	CEQA Significance Determinations for Biological Resources
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 Wildlife, U.S. Fish and Wildlife Service, or National Oceanic and Atmospheric Administration Fisheries?	Less Than Significant Impact
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	No Impact

Question—Would the project:	CEQA Significance Determinations for Biological Resources
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?	No Impact
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?	No Impact
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	No Impact
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?	No Impact

Affected Environment

For details of biological studies, please refer to the Natural Environment Study and the Biological Assessment in Volume 2.

The project limits extend between post miles 21.15 and 24.60 on State Route 99 in the City of Bakersfield in Kern County. The topography of the project area is relatively flat, and State Route 99 is set slightly lower than the surrounding developments. The Biological Study Area is defined as the immediate project area, plus a 200-foot buffer around it. The Biological Study Area encompasses about 173 acres of immediate project footprint and 212 acres of study area that is exposed to temporary impacts. The Biological Study Area spans across 3.5 miles of urban landscape and contains mostly disturbed ruderal habitat. Ruderal vegetation is typical of areas where the native vegetation has been heavily modified or completely removed due to human interference.

The City of Bakersfield is highly developed with residential and commercial buildings throughout. The surrounding land consists of paved sidewalks, paved roadways, and other residential and commercial buildings. Habitats within the study area consist mostly of ornamental species that are maintained on a regular basis. These include native, invasive, and landscaped shrubs and trees that have been planted to beautify portions of the freeway.

Special-Status Animal Species

Two special-status animal species were identified in species queries and have historical records of occurrence or potentially suitable habitats near the study area. No observations were made during in-the-field animal surveys. With implementation of avoidance and minimization measures, no permanent habitat impacts are expected, and compensatory mitigation is not proposed.

The project may affect but is not likely to adversely affect the following species and their habitats.

San Joaquin Kit Fox (*Vulpes macrotis mutica*)

The San Joaquin kit fox is a small canid native to the San Joaquin Valley and is listed as a federally endangered and state threatened species.

On average, this species weighs about 5 pounds and stands about 12 inches tall. The San Joaquin kit fox is mostly nocturnal (active at night) and feeds on small nocturnal rodents. These kit foxes typically use various types of agricultural land for denning sites and suitable prey bases. They can also use human-made structures such as culverts and pipes for denning. Historically, this species prefers alkali scrub/shrub, oak woodland, vernal pool communities, and arid grassland habitat.

The San Joaquin kit fox has been found in most of the San Joaquin Valley, ranging from the native valley and foothill grasslands to surrounding foothills. No San Joaquin kit foxes were seen during general wildlife surveys. Though denning and foraging habitat was not found in the action area, the San Joaquin kit fox could cross through the action area.

Swainson's Hawk (*Buteo swainsonii*)

Swainson's hawks are broad-winged hawks that migrate to the San Joaquin Valley during summer months from Central and South America. Swainson's hawks forage in grasslands and agricultural fields. Their main food sources are small mammals, birds, and insects. These hawks roost and nest typically in large trees. Breeding occurs from late March into late August.

Swainson's hawks are known to occur along State Route 99 throughout Central California, but no occurrences have been documented in or adjacent to the project area. The project limits were surveyed during the 2021 nesting season, and no Swainson's hawks or nesting structures were found. Though there are suitable nesting trees for raptors within the study area, the State Route 99 corridor through the City of Bakersfield offers little to no foraging habitat.

Environmental Consequences

San Joaquin Kit Fox

The ruderal habitat next to State Route 99 has very low habitat value, and the inner area of the ramp loops offers limited denning and foraging habitat. The

project will temporarily disturb up to the entire 173 acres of urban habitat within the project limits. These areas are near active kit fox sightings and have the potential to be used for kit fox dispersal and foraging.

Construction activities, such as noise from construction equipment and light pollution used during nighttime work, may affect the San Joaquin kit fox. The nighttime disturbance is expected to last for 50 working days. Installation of Type K temporary railing may also increase the risk of vehicle strikes in the active work zone or along State Route 99, but openings will be placed in the railing to allow for wildlife passage. Type K temporary railing is a modular concrete barrier used to separate lanes of traffic.

Night work increases the risk of San Joaquin kit foxes being exposed to hazardous and dangerous conditions because kit foxes are generally nocturnal. It is possible that dispersing San Joaquin kit foxes could move near or across work areas overnight. However, San Joaquin kit foxes will be expected to avoid active work sites due to human presence, lighting, and active machinery. Avoidance of the action area could cause a temporary reduction in movement. This impact is expected to be minimal since there are no current sightings or evidence of scat (kit fox droppings) or prey remains within the action area.

Swainson's Hawk

Tree and vegetation removal is anticipated where widening of the outside shoulder of State Route 99 is feasible and where the auxiliary lane will be added between California Avenue and the eastbound State Route 58 connector ramp. Other trees within the Biological Study Area would be suitable for nesting birds and raptors. If nests are found farther than 500 feet from the Biological Study Area, any noise or disturbance from construction would have no greater impact to a Swainson's hawk than the current disturbances from traffic along State Route 99.

No impacts to the Swainson's hawk are anticipated with the implementation of avoidance and minimization measures.

Avoidance, Minimization, and/or Mitigation Measures

San Joaquin Kit Fox

Caltrans and its contractor will implement the following measures to avoid adverse effects to the kit fox. A "qualified biologist," as referenced in this section, refers to an individual who, at a minimum, holds a four-year degree in a relevant biological field and who has demonstrated knowledge of, and experience with, this species.

- *Environmental Awareness Training.* Prior to the start of work/ground disturbance, a qualified biologist will provide worker environmental awareness training for all construction personnel, including contractors,

subcontractors, and contractors' representatives, covering the status of the species; how to identify the species and its habitat; the importance of avoiding impacts to the species; the laws that protect it; and what to do if an individual is encountered during construction. New construction personnel who are added to the project after the training is first conducted also will be required to take the training. Caltrans will keep documentation of the training on-file, including sign-in sheets, and will make these available to the Service upon request.

- *Staging.* Staging areas will be surveyed and approved for use by a qualified biologist prior to the start of construction and will be designated clearly with stakes or flagging.
- *Preconstruction Survey.* A qualified biologist will conduct a preconstruction survey no more than 30 days prior to the beginning of ground disturbance and/or construction activities. The survey for the kit fox will be performed throughout the project footprint, as well as in areas 200 feet out from the edge of the footprint that are accessible and/or visible with binoculars. Caltrans will provide the Service with written notification (email or letter) of the survey results.
- *Den Avoidance.* Disturbance to any known or natal dens identified during preconstruction surveys and/or construction will be avoided. Caltrans will implement the following for any potential, known, or natal dens discovered within, or outside of, the project footprint:
 - *Potential Dens.* Prior to the start of work, all potential dens detected within the project footprint will be monitored by a qualified biologist for kit fox presence for four consecutive nights using a remote sensor camera. If there is no detection of the kit fox or other animal activity, these potential dens will be either i) protected by 50-foot exclusion zones, or ii) plugged/blocked temporarily or collapsed to discourage the kit fox from denning during construction, and then re-checked immediately prior to groundbreaking to ensure they remain plugged/blocked or collapsed and do not show evidence of animal entry or use. A qualified biologist will check any plugged/blocked dens every two weeks to ensure the exclusion device remains intact throughout construction. If the kit fox is detected using any dens, sub-measure b) below will apply.
 - *Known and Natal Dens.* Any known dens will be protected by 100-foot exclusion zones, and natal dens will be protected by 200-foot exclusion zones. The exclusion zones will be demarcated by types of fencing or flagging that do not entangle the kit fox or prevent ingress/egress. A qualified biologist will ensure that this fencing/flagging is maintained for the duration of construction and is repaired or replaced as necessary. If either den type is detected onsite, Caltrans will contact the Service to discuss how to proceed, including possible initiation of formal

consultation if known and/or natal dens cannot be avoided by construction.

- *Monitoring.* A qualified biologist will be present onsite during initial ground-disturbing activities in proximity to any potential, known, or natal dens. The biologist also will be available on-call throughout construction if the kit fox is observed either onsite or near the project footprint.
 - *Nighttime Monitoring.* Where there is suitable habitat present for the kit fox (e.g., at the California Avenue, State Route 58, Ming Avenue, and White Lane interchanges; and along the shoulders), a qualified biologist will conduct at least two worksite monitoring checks for the kit fox per night between the hours of dusk and dawn (e.g., at least one half-hour in the period before sunset to one hour following sunset, and again for at least one half-hour in the period before sunrise to one hour following sunrise). Depending on the results of early monitoring efforts, Caltrans may decide to either increase or decrease the frequency of these checks. Caltrans may reduce its monitoring frequency once it detects no kit foxes during at least half of the proposed nights of work.
- *Inspection of Structures and Equipment.* All construction pipes or similar structures with a diameter of 4 inches or greater that are stored overnight on the construction site will be inspected thoroughly for the kit fox or other wildlife before burying, capping, moving, or using the structures. Vehicles and other equipment that could provide shade or shelter also will be inspected for animal presence prior to use. If an individual is discovered during these inspections, the structure or vehicle will not be disturbed until the individual leaves of its own accord.
- *Escape Ramps.* To prevent the inadvertent entrapment of the kit fox or other wildlife during construction of the project, all excavated, steep-walled openings (e.g., holes, basins, trenches) more than 1 foot deep will be covered at the close of each working day by plywood or similar materials or provided with one or more escape ramps constructed of earth fill or planks. Before any such openings are filled, they will be inspected thoroughly for trapped wildlife. If at any time a trapped or injured species is discovered, Caltrans will stop work immediately and contact the Service.
- *Limit Artificial Lighting.* The use of temporary artificial lighting at night will be limited, except when necessary for construction, or for driver and pedestrian safety. Any artificial lighting used during construction will be confined to areas within the construction footprint and directed away from surrounding sensitive habitat. Caltrans will limit non-target casting of stationary lights by using shielding around the light source to further confine the illumination.
- *Trash Disposal.* All food-related trash items such as wrappers, cans, bottles, and food scraps will be disposed of in closed, secured containers,

and removed daily from the project site to eliminate the potential for attracting predator species.

- *Prohibition of Pets, Firearms, and Pesticides.* To eliminate the potential for disturbance or injury to, or death of, the kit fox or any other species resulting from the presence of pets and firearms, neither will be allowed on the project site (except for firearms carried, or working animals handled, by authorized law enforcement officials). No rodenticides or herbicides will be used on the project site during construction.
- *Vehicle Speed Limits.* All project-related vehicles will observe a daytime speed of no more than 20 miles per hour and a nighttime speed of no more than 10 miles per hour in all project areas, except on the highway and local roads. Off-road travel outside of designated project areas will be prohibited. Project personnel will be provided with guidance on vehicle use and speed limits.
- A U.S. Fish and Wildlife Service-approved biologist will be present onsite during initial ground-disturbing activities occurring within 500 feet of any potential or known dens identified in the project footprint.
- Any newly discovered potential or atypical dens located within the project footprint will be monitored and, once they are verified to be unoccupied, they will be temporarily blocked (via sandbagging or installation of a one-way door) for the duration of the project, for no more than one season. A letter report will be submitted to the U.S. Fish and Wildlife Service and California Department of Fish and Wildlife prior to the start of ground disturbance and/or construction activities.
- Preconstruction surveys will be conducted within the study area no more than 30 days prior to the start of construction to determine any presence of kit fox dens. A letter report and map of known and potential kit fox dens will be submitted to the U.S. Fish and Wildlife Service and California Department of Fish and Wildlife prior to the start of ground disturbance and/or construction activities.
 - If a natal/pupping den is observed during preconstruction surveys, U.S. Fish and Wildlife Service will be notified to determine an appropriate course of action.
- A U.S. Fish and Wildlife Service-approved biologist will check the closed den site(s) every two weeks to ensure the exclusion device remains intact for the project duration, not to exceed one season. If animal activity is observed, the biologist will monitor the site, verify the den is unoccupied, and apply new temporary exclusion. The exclusion device would be removed after approval is received from the U.S. Fish and Wildlife Service.

- A U.S. Fish and Wildlife Service-approved biologist may monitor nighttime construction activities within 500 feet of any potential or known dens identified in the project footprint (if feasible) in the event the exclusion device is temporarily compromised. Once the exclusion device is intact, the monitoring will cease. Monitoring will take place for one-half hour before sunset up to one hour following sunset and again for one-half hour before sunrise up to one hour following sunrise.
- Temporary railing (Type K) modified with openings will be used in the project area to allow passage during nighttime construction activities.
- Fencing would be installed between any dens and work areas, which would be designated as Environmentally Sensitive Areas. The fencing would be placed to include a 20-foot buffer around the den openings and 3 feet beyond the edge of pavement. The fencing would also be checked every two weeks to ensure it remains intact for the project duration, not to exceed one season (in the case of dens only). The fencing would be removed upon approval from U.S. Fish and Wildlife Service.

With implementation of avoidance and minimization measures, compensatory mitigation is not proposed for the San Joaquin kit fox.

Swainson's Hawk

- Preconstruction surveys will be completed according to "Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley" (May 31, 2001) during nesting season (February 1 to September 30) the year prior to groundbreaking activities to ensure no nesting Swainson's hawks will be affected if construction is to occur during the nesting season.
- If nesting Swainson's hawks are observed onsite, then the nest site will be designated an Environmentally Sensitive Area, with a buffer zone of 500 feet until it has been determined that the young have fledged and are no longer reliant on the nest.
- A biologist will be present to monitor any active nests during construction activities.
- A special provision for migratory birds will be included to ensure that no potential nesting migratory birds are affected during construction activities.
- Removal of any trees within the project area should be done outside of the nesting season; however, if a tree within the project area needs to be removed during the nesting season, a qualified biologist will inspect the tree prior to removal to ensure that no nests are present.

With the implementation of avoidance and minimization measures, compensatory mitigation is not proposed for the Swainson’s hawk.

No-Build Alternative

No impacts to biological resources are expected under the No-Build Alternative.

2.1.5 Cultural Resources

Considering the information in the Cultural Screening Memorandum dated January 12, 2023, the following significance determinations have been made:

Question—Would the project:	CEQA Significance Determinations for Cultural Resources
a) Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?	No Impact
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	No Impact
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	No Impact

2.1.6 Energy

Considering the information in the Energy Memorandum dated March 9, 2023, the following significance determinations have been made:

Question—Would the project:	CEQA Significance Determinations for Energy
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation?	No Impact
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	No Impact

2.1.7 Geology and Soils

Considering the information in the California Department of Conservation Earthquake Zone Map visited February 2023, California Department of Conservation Landslide Map visited May 2023, Alquist-Priolo Earthquake Fault Zoning Map visited May 2023, and Caltrans Paleontological

Identification/Evaluation Report dated September 25, 2018, the following significance determinations have been made:

Question—Would the project:	CEQA Significance Determinations for Geology and Soils
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: <ul style="list-style-type: none"> 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. 	No Impact
ii) Strong seismic ground shaking?	No Impact
iii) Seismic-related ground failure, including liquefaction?	No Impact
iv) Landslides?	No Impact
b) Result in substantial soil erosion or the loss of topsoil?	No Impact
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 onsite or offsite landslide, lateral spreading, subsidence, liquefaction or collapse?	No Impact
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	No Impact
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?	No Impact
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	No Impact

2.1.8 Greenhouse Gas Emissions

Considering the information in the Climate Change Memorandum dated March 9, 2023, the following significance determinations have been made:

Question—Would the project:	CEQA Significance Determinations for Greenhouse Gas Emissions
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	Less Than Significant Impact
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	No Impact

Affected Environment

The project lies on State Route 99 in Kern County between the White Lane Overcrossing and the California Undercrossing in Bakersfield in Kern County. State Route 99 connects San Joaquin Valley cities and communities to areas north and south through the state. Within the southern San Joaquin Valley, State Route 99 is used heavily by truck traffic, with the surrounding areas offering light industrial, residential, and commercial land uses. The route in the project area is used heavily during peak hours.

The Kern Council of Governments 2022 Regional Transportation Plan/Sustainable Communities Strategy guides transportation and housing development in the project area. The Transportation Plan’s Sustainability element addresses greenhouse gases and their reduction strategy for the region. The Sustainable Communities Strategy by Kern Council of Governments strives to reduce air emissions from passenger vehicles and light-duty truck travel by better coordinating transportation expenditures with forecasted development patterns and helping to meet greenhouse gas targets for Kern County.

Environmental Consequences

Greenhouse gas emissions impacts of non-capacity-increasing projects like the Bakersfield 99 Rehabilitation II (South) project are considered less than significant under CEQA because there will be no increase in operational emissions. However, construction equipment, traffic delays, and material processing and delivery may generate short-term greenhouse gas emissions during construction. Greenhouse gas emissions for the project were calculated using the Caltrans Construction Emissions Tool v1.1. Estimated emissions will be 2,739 tons of carbon dioxide per 400 working days.

While some construction greenhouse gas emissions will be unavoidable, implementing standard conditions or Best Management Practices designed to reduce or eliminate emissions as part of the project will reduce impacts to less than significant.

Avoidance, Minimization, and/or Mitigation Measures

Caltrans Best Management Practices will be implemented during construction activities. Caltrans Standard Specifications that will be incorporated include the following:

- Caltrans Standard Specifications Section 14-9.02, Air Pollution Control, which requires contractors to comply with all air pollution control rules, regulations, ordinances, and statutes.
- Caltrans Standard Specifications Section 10-5, a Dust Control Plan approved by the San Joaquin Valley Air Pollution Control District, will be needed if at least 2,500 cubic yards of material are moved in a day for at least three days of the project or if 5 or more acres of land will be disturbed during construction.

No-Build Alternative

Avoidance, minimization, and/or mitigation measures will not be required for the No-Build Alternative.

2.1.9 Hazards and Hazardous Materials

Considering the information in the Initial Site Assessment dated June 7, 2021, the following significance determinations have been made:

Question—Would the project:	CEQA Significance Determinations for Hazards and Hazardous Materials
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	No Impact
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?	No Impact
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	No Impact

Question—Would the project:	CEQA Significance Determinations for Hazards and Hazardous Materials
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?	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?	No Impact
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	No Impact
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	No Impact

2.1.10 Hydrology and Water Quality

Considering the information in the Water Quality Compliance Memorandum dated August 2, 2021 and Floodplain Analysis Memorandum dated December 8, 2022, the following significance determinations have been made:

Question—Would the project:	CEQA Significance Determinations for Hydrology and Water Quality
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface water or groundwater quality?	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?	No Impact

Question—Would the project:	CEQA Significance Determinations for Hydrology and Water Quality
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 onsite or offsite;	No Impact
(ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding onsite or offsite;	No Impact
(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	No Impact
(iv) impede or redirect flood flows?	No Impact
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	No Impact
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	No Impact

2.1.11 Land Use and Planning

Considering the information in the 2009 Kern County General Plan, the following significance determinations have been made:

Question—Would the project:	CEQA Significance Determinations for Land Use and Planning
a) Physically divide an established community?	No Impact
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?	No Impact

2.1.12 Mineral Resources

Considering the information in the 2009 Kern County General Plan, the following significance determinations have been made:

Question—Would the project:	CEQA Significance Determinations for Mineral Resources
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?	No Impact
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?	No Impact

2.1.13 Noise

Considering the information in the Noise Study Report dated July 28, 2021, the following significance determinations have been made:

Question—Would the project result in:	CEQA Significance Determinations for Noise
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?	Less Than Significant Impact
b) Generation of excessive groundborne vibration or groundborne noise levels?	Less Than Significant Impact
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?	No Impact

Affected Environment

A Noise Study Report was completed for the project in July 2021; a Noise Abatement Decision section will be included in the Project Report.

A field noise investigation was done to identify land uses that could be affected by traffic noise impacts from the addition of the auxiliary lane on State Route 99.

For the study, single-family residences and a mobile home community are identified as Activity Category B land uses. Hotels, motels, and businesses are identified as Activity Category E land uses. Agricultural fields, light industrial facilities, truck stops, and warehousing have no noise impact criteria, and noise levels for this category are reported for informational use only. Most noise receivers used in the noise investigation represented by residences have existing soundwalls that protect them from highway noise, as discussed in detail within the Noise Study Report. The topography of the project area within the project limits is fairly level, but State Route 99 is lower at most residential locations.

During the field visit on May 11, 2021, a total of 21 potentially impacted noise receivers were identified within the project limits. Due to access limitations to properties, only four noise receivers were used to collect short-term field measurements to aid in noise model validation; the rest of the receivers were modeled accordingly. The purpose of the field noise measurements was to calibrate the Traffic Noise Model so that the prediction of future noise levels could be made more accurately. As shown in Table 2-1, the existing noise levels for the 21 studied receivers vary between 62 decibels and 79 decibels.

The areas within the project limits and next to the project area are urban and have numerous single-family homes, apartment complexes, mobile home communities, commercial buildings and service stations. In determining traffic noise impacts, consideration is given to residential exterior areas where frequent human use occurs that would benefit from a lowered noise level. In general, an area of frequent human use is an area where people are exposed to traffic noise for an extended period of time on a regular basis.

The proposed improvements under the Build Alternative would not impact the future traffic volumes, and the forecasted traffic volumes would be the same whether the project is built or not. Since an auxiliary lane is proposed, the project meets the criteria as a Type I project according to the Caltrans 2020 Noise Protocol. The Caltrans Noise Study Report focused on the potential noise impacts generated from the addition of the auxiliary lane.

Table 2-1 Predicted Future Noise and Barrier Analysis

Receiver Number	Address	Sound-Wall Number	Existing Noise Levels (Decibels)	Design Year Noise Level without Project (Decibels)	Design Year Noise Level with Project (Decibels)	Activity Category (Noise Abatement Criteria Decibel Threshold)	Predicted Noise Level with 8-Foot Wall (Decibels)	Predicted Noise Level with 10-Foot Wall (Decibels)	Predicted Noise Level with 12-Foot Wall (Decibels)	Noise Impact Requiring Abatement Consideration
Receiver 1	2700 White Lane, Bakersfield	N/A	70	70	70	E (72)	N/A	N/A	N/A	No
Receiver 2	3017 McCall Ave, Bakersfield	N/A	77	77	77	B (67)	N/A	69	N/A	Soundwall Exists
Receiver 3	3400 Wible Road, Bakersfield	N/A	75	75	75	C (67)	N/A	N/A	N/A	No Outdoor Gathering Location
Receiver 4	3101 Coventry Drive, Bakersfield	N/A	62	62	62	B (67)	N/A	N/A	N/A	No
Receiver 5	2600 Chandler Ct, Bakersfield	SW 1	74	74	74	B (67)	68	67	66	Yes, Included in Proposed Project
Receiver 6	1806 Westbrook Drive, Bakersfield	N/A	68	68	68	B (67)	N/A	59	N/A	Soundwall Exists
Receiver 7	2310 Wible Road, Bakersfield	N/A	70	70	70	B (67)	N/A	N/A	N/A	No

Receiver Number	Address	Sound-Wall Number	Existing Noise Levels (Decibels)	Design Year Noise Level without Project (Decibels)	Design Year Noise Level with Project (Decibels)	Activity Category (Noise Abatement Criteria Decibel Threshold)	Predicted Noise Level with 8-Foot Wall (Decibels)	Predicted Noise Level with 10-Foot Wall (Decibels)	Predicted Noise Level with 12-Foot Wall (Decibels)	Noise Impact Requiring Abatement Consideration
Receiver 8	704 Wible Road, Bakersfield	N/A	74	74	74	B (67)	N/A	66	N/A	Soundwall Exists
Receiver 9	3321 Granada Avenue, Bakersfield	N/A	75	75	75	B (67)	N/A	65	N/A	Soundwall Exists
Receiver 10	3117 Terrace Way, Bakersfield	N/A	68	68	68	B (67)	N/A	60	N/A	Soundwall Exists
Receiver 11	118 Oak Street, Bakersfield	N/A	73	73	73	F	N/A	N/A	N/A	No NAC for this Land Use
Receiver 12	316 Oakdale Drive, Bakersfield	N/A	75	75	75	B (67)	N/A	65	N/A	Soundwall Exists
Receiver 13	300 Oak Street, Bakersfield	N/A	73	73	73	E (72)	N/A	N/A	N/A	No Outdoor Gathering Location
Receiver 14	3289 Chester Lane, Bakersfield	N/A	64	64	64	B (67)	N/A	N/A	N/A	No
Receiver 15	828 Real Road, Bakersfield	N/A	70	70	70	E (72)	N/A	N/A	N/A	No

Receiver Number	Address	Sound-Wall Number	Existing Noise Levels (Decibels)	Design Year Noise Level without Project (Decibels)	Design Year Noise Level with Project (Decibels)	Activity Category (Noise Abatement Criteria Decibel Threshold)	Predicted Noise Level with 8-Foot Wall (Decibels)	Predicted Noise Level with 10-Foot Wall (Decibels)	Predicted Noise Level with 12-Foot Wall (Decibels)	Noise Impact Requiring Abatement Consideration
Receiver 16	3232 Mona Way, Bakersfield	N/A	63	63	63	B (67)	N/A	62	N/A	Soundwall Exists
Receiver 17	2801 Wible Road, Bakersfield	N/A	64	64	64	B (67)	N/A	N/A	N/A	No
Receiver 18	3309 Truman Avenue, Bakersfield	N/A	64	64	64	B (67)	N/A	N/A	N/A	No
Receiver 19	132 Oakdale Drive, Bakersfield	N/A	71	71	71	E (72)	N/A	62	N/A	Soundwall Exists
Receiver 20	2800 Larson Lane, Bakersfield	N/A	65	65	65	C (67)	N/A	N/A	N/A	No
Receiver 21	3231 Chester Lane, Bakersfield	N/A	79	79	79	F	N/A	N/A	N/A	No NAC for this Land Use

Environmental Consequences

The project is a Type 1 project defined by the Federal Highway Administration because it would increase the number of through-traffic lanes through the addition of an auxiliary lane and move traffic closer to receivers.

Within the project limits, 21 receivers were evaluated to determine if a soundwall was reasonable and feasible. Table 2-1 shows the receiver locations and their existing and future noise levels. Receiver 5 was the only location that qualified for noise abatement from a soundwall. The other 20 receivers did not qualify because of the lack of an outdoor gathering area, decibel levels not exceeding the threshold, land use of the receiver did not necessitate noise abatement, or a soundwall already exists in the area. The noise study concluded that one soundwall, as described in the project description, is needed adjacent to the auxiliary lane.

The proposed soundwall was not added to the project as a mitigation measure but was included in the project description as an identified need prior to the noise analysis.

Future Noise Environment and Impacts

The noise study was done to determine future traffic impacts of the project at frequent outdoor human use areas within the highway project limits. The future worst-case traffic noise impact at frequent outdoor human use areas along the project alignment was modeled for the Build Alternative to determine if included noise abatement measures were sufficient. This section discusses the future noise environment and feasible noise abatement measures for impacted locations.

Modeling results indicated that predicted traffic noise levels for the design year with-project conditions approach or exceed the noise abatement criteria of 67 decibels for land use (residential) at the Receiver 5 location within the project limits. Therefore, traffic noise impacts are predicted to occur within the study area, and noise abatement must be considered.

Receiver 5

Receiver 5 is for multi-family residence units (an apartment complex) on the west side of State Route 99 at 2600 Chandler Court. The noise level for the design year Build Alternative at Receiver 5, as shown in Table 2-1, is 74 decibels. This noise level is above the noise abatement criteria threshold of 67 decibels designated for this land use; therefore, appropriate abatement must be considered at this location.

Construction Noise

Temporary construction noise impacts would be unavoidable in areas next to the project. Noise from construction activities may intermittently dominate the noise environment in the immediate construction area.

Construction is expected to take 400 working days to complete; nightwork is anticipated. Temporary construction noise impacts would be unavoidable in areas immediately next to the project and would be minimized in residential areas during the evenings, weekend evenings, and holidays.

Certain construction activities could cause intermittent localized vibration in the project area. Processes such as earth-moving with bulldozers, use of vibratory compaction rollers, demolitions, or pavement breaking may cause construction-related vibration impacts such as human annoyance or, in some cases, building damages.

A combination of Caltrans mitigation techniques for equipment vibration control as well as administrative measures, when properly implemented, can be selected to provide the most effective means to minimize the effects of construction activity.

Application of standard minimization measures will reduce the construction impacts; however, temporary increases in vibration would likely occur at some locations within the project limits.

Avoidance, Minimization, and/or Noise Abatement Measures

The Noise Study Report analyzed noise barriers of heights ranging from 8 feet to 16 feet to determine feasible noise abatement. Soundwalls are considered feasible when they provide a noise reduction of at least 7 decibels. The Noise Reduction Design Goal, which is one measure in determining whether a soundwall is reasonable, is achieved when a noise barrier is predicted to provide a noise reduction of at least 7 decibels at one or more of benefitted receptors. Other considerations include topography, access requirements, other noise sources, and safety considerations.

Factors used in determining if a proposed noise abatement measure is reasonable include residents' acceptance and cost per benefitted home. From a cost perspective, the estimated cost of the noise barrier should be equal to or less than the total cost allowance calculated for the noise barrier to be considered reasonable.

Soundwall—Segment 1

This soundwall is proposed on the right-of-way west of State Route 99 between Wilson Road and the Wible Road Overcrossing with State Route 99 at 2600 Chandler Lane to provide noise attenuation for 10 units (total of 10 units in 5 buildings).

The soundwall is proposed for a height of at least 10 feet and would extend approximately 820 feet. A 10-foot soundwall would provide the required attenuation of 5 decibels and meet the required design goal attenuation of 7 decibels. The soundwall will be high enough to be able to break the line of sight of an 11.5-foot truck stack.

The estimated cost allowance per benefitted residence, in this case Receiver 5, is based on a cost allowance of \$1,070,000.

Because a soundwall is part of the proposed project description and construction noise is regulated by Caltrans Standard Specifications Section 14-8.02 Noise Control, no avoidance, minimization, and/or noise abatement measures are required.

2.1.14 Population and Housing

Considering the information in the 2009 Kern County General Plan (Housing Element Update 2015-2023) and the Caltrans Draft Project Initiation Report dated June 20, 2019, the following significance determinations have been made:

Question—Would the project:	CEQA Significance Determinations for Population and Housing
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)?	No Impact
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	No Impact

2.1.15 Public Services

Considering that the project will not affect any government facilities or trigger the need for new facilities or government services, the following significance determinations have been made:

Question:	CEQA Significance Determinations for Public Services
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?	No Impact
Police protection?	No Impact
Schools?	No Impact
Parks?	No Impact
Other public facilities?	No Impact

2.1.16 Recreation

Considering that the proposed project will not affect parks or recreational facilities or trigger the need for more recreational facilities to be constructed, the following significance determinations have been made:

Question—Would the project:	CEQA Significance Determinations for Recreation
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?	No Impact
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?	No Impact

2.1.17 Transportation

Considering the information in the Caltrans Traffic Management Plan dated May 24, 2019 and the Kern County General Plan, the following significance determinations have been made:

Question—Would the project:	CEQA Significance Determinations for Transportation
a) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	No Impact
b) Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?	No Impact
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	No Impact
d) Result in inadequate emergency access?	No Impact

2.1.18 Tribal Cultural Resources

Considering the information in the Cultural Screening Memorandum dated January 12, 2023, the following significance determinations have been made:

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:

Question:	CEQA Significance Determinations for Tribal Cultural Resources
a) 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	No Impact
b) 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.	No Impact

2.1.19 Utilities and Service Systems

Considering the information in the Caltrans Right-of-Way Data Sheet dated September 12, 2018 and the Caltrans Project Initiation Report dated June 20, 2019, the following significance determinations have been made:

Question—Would the project:	CEQA Significance Determinations for Utilities and Service Systems
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?	No Impact
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	No Impact
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	No Impact
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?	No Impact
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	No Impact

2.1.20 Wildfire

Considering the information in the California Department of Forestry and Fire Protection's Fire Hazard Severity Zone Maps, the following significance determinations have been made:

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones:

Question—Would the project:	CEQA Significance Determinations for Wildfire
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	No Impact
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?	No Impact
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?	No Impact
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?	No Impact

2.1.21 Mandatory Findings of Significance

Question:	CEQA Significance Determinations for Mandatory Findings of Significance
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?	No Impact

<p style="text-align: center;">Question:</p>	<p style="text-align: center;">CEQA Significance Determinations for Mandatory Findings of Significance</p>
<p>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.)</p>	<p style="text-align: center;">No Impact</p>
<p>c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?</p>	<p style="text-align: center;">No Impact</p>

Appendix A Title VI Policy Statement

CALIFORNIA STATE TRANSPORTATION AGENCY

GAVIN NEWSOM, GOVERNOR

California Department of Transportation

OFFICE OF THE DIRECTOR
P.O. BOX 942873, MS-49 | SACRAMENTO, CA 94273-0001
(916) 654-6130 | FAX (916) 653-5776 TTY 711
www.dot.ca.gov



September 2022

NON-DISCRIMINATION POLICY STATEMENT

The California Department of Transportation, under Title VI of the Civil Rights Act of 1964, ensures “No person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance.”

Caltrans will make every effort to ensure nondiscrimination in all of its services, programs and activities, whether they are federally funded or not, and that services and benefits are fairly distributed to all people, regardless of race, color, or national origin. In addition, Caltrans will facilitate meaningful participation in the transportation planning process in a non-discriminatory manner.

Related federal statutes, remedies, and state law further those protections to include sex, disability, religion, sexual orientation, and age.

For information or guidance on how to file a complaint, or obtain more information regarding Title VI, please contact the Title VI Branch Manager at (916) 639-6392 or visit the following web page: <https://dot.ca.gov/programs/civil-rights/title-vi>.

To obtain this information in an alternate format such as Braille or in a language other than English, please contact the California Department of Transportation, Office of Civil Rights, at PO Box 942874, MS-79, Sacramento, CA 94274-0001; (916) 879-6768 (TTY 711); or at Title.VI@dot.ca.gov.

A handwritten signature in black ink, appearing to read 'Tony Tavares', is written over a horizontal line.

TONY TAVARES
Director

“Provide a safe and reliable transportation network that serves all people and respects the environment”

List of Technical Studies Bound Separately (Volume 2)

Air Quality Memorandum, November 9, 2022

Noise Study Report, July 28, 2021

Water Quality Compliance Memorandum, August 2, 2021

Biological Assessment, January 3, 2023

Natural Environment Study (Minimal Impacts), August 12, 2021

Floodplain Analysis, December 8, 2022

Cultural Screening Memorandum, January 12, 2023

Initial Site Assessment, June 7, 2021

Caltrans Paleontological Identification/Evaluation Report, September 25, 2018

Climate Change Memorandum, March 9, 2023

Energy Memorandum, March 9, 2023

Visual Impact Assessment, July 2023

To obtain a copy of one or more of these technical studies/reports or the Initial Study, please send your request to:

Shane Gunn
District 6 Environmental Division
California Department of Transportation
2015 East Shields Avenue, Suite 100, Fresno, CA 93726

Or send your request via email to: shane.gunn@dot.ca.gov
Or call: (559) 832-0051

Please provide the following information in your request:

Project title: Bakersfield 99 Rehabilitation II (South)

General location information: On State Route 99 in Bakersfield in Kern County

District number-county code-route-post mile: 06-KER-099-21.50/24.60

Project ID number: 0618000059